

UNICEF Evaluation of the Multiple Indicator Cluster Surveys (MICS) -Round 4

Evaluation Part 1: Response to lessons learned in prior rounds and preparations for Round 5

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List of Abbreviations and Acronyms

CEE/CIS	UNICEF Regional Office for Central and Eastern Europe/Commonwealth of Independent States
CO	UNICEF Country Office
D1/D2	Director, senior professional level UN post with minimum of 15 years experience
DHS	Demographic and Health Surveys
DQT	Data Quality Table
EAPRO	UNICEF Regional Office for East Asia and the Pacific
ECD	Early Childhood Development
ESARO	UNICEF Regional Office for East and Southern Africa
FCT	Field check tables
FP	(MICS) Focal Point
FW	Survey field workers
GMC	Global MICS Consultation
HIV/AIDS	Human immunodeficiency virus/Acquired immunodeficiency syndrome
HQ	UNICEF Headquarter offices
ICT	Information and Communications Technologies
ILO	International Labor Organization
MDGs	Millennium Development Goals
MENA	UNICEF Regional Office for the Middle East and North Africa
M&E	Monitoring and evaluation
MICS	Multiple Indicator Cluster Surveys
MOU	Memorandum of Understanding
NSO	National Statistics Office (or MICS' Implementing Agency)
PME	Planning, Monitoring and Evaluation
P3	Entry level professional UN post, minimum of 5 years experience
RO	UNICEF Regional Office
ROSA	UNICEF Regional Office for South Asia
SMS	UNICEF Statistics and Monitoring Section
TACRO	UNICEF Regional Office for the Americas and the Caribbean
ToRs	Terms of Reference
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WCARO	UNICEF Regional Office for West and Central Africa
WFFC	World Fit for Children Declaration and Plan of Action
WSC	World Summit for Children

Executive Summary

In recent years, demand for quality, internationally comparable data has grown considerably as part of the aid effectiveness agenda, greater accountability for results of development partnerships and in advance of the Millennium Development Goals (MDGs) target date of 2015. UNICEF plays an important role in data generation for these purposes through its implementation of the Multiple Indicator Cluster Surveys (MICS), an international household survey program. UNICEF serves as the lead agency for reporting on six MDGs related to children. Of the 48 indicators of progress toward the MDGs, the MICS provides data on twenty-three. Together with a separate but related household survey program, the Demographic and Health Surveys (DHS), MICS is a fundamental source for assessing progress towards national and global development achievements and challenges.

Over four rounds, 240 MICS surveys have been conducted in more than 100 countries. By late 2012, Round 4 was nearly complete and Round 5 preparations underway for an early 2013 commencement. The imminent conclusion of the MDG period in 2015 makes MICS Round 5 an important source for estimating the success of the MDG efforts over the period 1990-2015.

Owing to its importance and size, the MICS program is periodically evaluated. Global evaluations followed MICS1 and MICS3 (2007-08). The current evaluation seeks to provide UNICEF with an independent external view of its current management and utilization of the MICS program. The evaluation has been strategically divided into two distinct clusters – the first to examine immediate needs related to Round 5 preparations and the second focused on whether MICS design, management and data utilization ensures maximum value from the considerable investments made. The first component (Cluster 1) of the evaluation examines the corporate response to the 2007-08 evaluation recommendations; how far lessons drawn from prior rounds have been acted on; and the degree to which technical preparations for Round 5 are appropriate and sufficient.

Based on the main findings and recommendations from the MICS3 evaluation and interviews conducted during the inception phase of the current evaluation, four main themes were prioritized for examination. These themes include: (i) availability, allocation, function and effectiveness of human resources including technical support (i.e. UNICEF staff and UNICEF-hired consultants); (ii) management and decision-making processes around MICS implementation at all levels (i.e. HQ/SMS/MICS, RO, CO and implementing agencies); (iii) survey implementation including threats to data quality (i.e. adherence to protocols and standards) across all phases of survey operations; and (iv) quality of MICS4 data.

The evaluation was conducted by two international consultants selected through competitive process by the UNICEF Evaluation Office. The evaluation drew on mixed methods including structured document review, interviews and group discussions with 65 key informants and stakeholders, country visits, an on-line expert-practitioner panel and data quality assessment using standard (published) tabulations from 47 MICS4 surveys from 40 countries, some of which allowed comparison with MICS3 or a DHS survey. The evaluation team had opportunity to conduct two country visits (Madagascar and Costa Rica) and to attend the following meetings: a Planning, Monitoring and Evaluation workshop convened by the UNICEF Eastern and Southern Africa Regional Office for country offices in the region (12-16 November 2012, Nairobi), the Global MICS Consultation which brought together Regional MICS Coordinators and the UNICEF/SMS/MICS team (Dakar,

Senegal 9-12 January 2013) as well as a MICS Sampling Experts Workshop (Dakar, Senegal 14-18 January 2013).

Findings

Technical Support and Human Resources

The 2008 evaluation identified a number of areas in which limited human resources served as an important impediment to the quality and timeliness of the MICS. The current evaluation found that UNICEF has significantly expanded the envelope of technical support resources available to guide MICS implementation. This has been accomplished through the placement of Regional MICS Coordinators in the Regional Offices, use of HQ/SMS/MICS- and regionally-based expert consultants, and UNICEF MICS consultants working with Country Offices. To highlight a few of these developments:

- All regions had a Regional MICS coordinator albeit with some turn-over and transitioning¹. They play a crucial role in facilitating technical assistance, providing support directly and ensuring that quality standards are applied in the MICS surveys. The team noted that the regionally-developed position descriptions for the Coordinators vary considerably in key elements including purpose, placement of the MICS within the major duties and responsibilities, and relationships with HQ/SMS/MICS and Country Offices.
- UNICEF substantially expanded a pool of expert consultants to support MICS implementation. As a result, more Country Offices used expert consultant services in Round 4 compared to Round 3, particularly for sampling and data processing. UNICEF staff and others typically rated this external technical support as timely and effective. However, MICS implementation was hindered, in some cases, by limited supply and availability of expert consultants.
- The program introduced the use of national consultants (UNICEF MICS Consultants) to coordinate the MICS surveys in individual countries, advise implementing agencies at all stages, and ensure that MICS quality standards are used throughout. Regional MICS Coordinators spoke consistently of the importance of having the UNICEF MICS Consultants in place as they provide a consistent and informed point of contact and reduced turn-around times.
- UNICEF developed and introduced a more structured approach to technical review and quality assurance processes. A comprehensive set of steps now depicts when materials are to be reviewed and by whom thereby formalizing an important system of technical oversight and quality control. While interviewees in country offices and implementing agencies recognized the value of the reviews, difficulties were consistently cited about length of time required for RO and/or HQ/SMS/MICS to review and feedback to the country office.

Preparations for Round 5 including on-going efforts to identify and recruit additional expert consultants. Some Regional Offices remain interested in contracting with regional institutions capable of providing some of the needed support. In Round 5, UNICEF is seeking greater consistency in approach and messages among the expert consultants. To this end, HQ/SMS/MICS has organized expert workshop where all MICS tools and materials are reviewed in detail and experts have opportunity to share experiences and lessons based on

¹ EAPRO and ROSA shared a MICS Coordinator at the start of Round 4. When that post was shifted to ROSA, EAPRO operated without a Regional MICS Coordinator.

their work in Round 4. Many Regional Coordinators would like to see country offices compelled to hire a MICS Consultant for in-country coordination. Finally, the technical review and quality assurance process is being re-examined and revised with greater emphasis on early stage agreement with implementing agencies. Newly acquired external funding will allow HQ/SMS/MICS team to add much needed staff.

Decision-making and governance

The 2008 evaluation found that UNICEF's organizational structure and governance was suboptimal for the achievement of the MICS objective in several ways. Two notable challenges were: (i) a "mismatch" wherein survey expertise resided at HQ/SMS/MICS and, to a lesser extent, at regional levels, while the locus of technical decision making was at country level, and (ii) limited accountability around strategic measurement choices among senior management at country office level. The current evaluation found that although the technical support envelope has clearly been expanded, organizational structure, communication channels and decision-making authorities remain unchanged. Recommendations arising from the prior evaluation (i.e. clarifying accountabilities and shifting the locus of technical decision-making) have not been addressed. Perhaps best reflective of this dynamic, is the following:

- As reported by several Regional Coordinators, when the Country Office accepts the MICS as a package of guidelines, technical support and technical review/quality assurance processes, the entire survey can move relatively smoothly. However, most described cases in which Country Offices chose not to comply with the guidelines most frequently those related to quality assurance processes. Two important areas in which Country Offices press ahead against the concerns of Regional Coordinators are larger samples and the use of non-MICS questions and modules. Moreover, there is no feedback loop to inform Regional Coordinators whether RO and HQ/SMS/MICS advice was followed.

Several of the issues identified in this section are embedded in UNICEF's organizational structure and the respective roles of HQ, regional and country level and are beyond the ability of the HQ/SMS/MICS team or individual Regional Offices to address. Foremost among these are the Country Office's discretion around compliance with quality assurance steps and accountability for strategic measurement choices such as sample sizes that are beyond a manageable level. The team found no evidence that these issues are on the agenda of senior managers at either HQ or regional levels. Several elements amenable to the efforts of the global MICS team (HQ/SMS/MICS and Regional Coordinators) and were discussed in the Global MICS Consultation (January 2013). Noteworthy is the revision of the MOU between UNICEF and implementing agencies. However, the team did not find plans in place for either (i) improved documentation of the Global MICS Consultations nor (ii) methods to better assess risk in situations where compliance with the data sharing clause is anticipated to be a problem. Regional Office M&E Chiefs were attuned to the demands of the coming round with priorities tailored to their regions. Based on Round 4 experience, several anticipate being more forceful in discussions with countries on their understanding of the MICS package including quality assurance and data sharing.

Findings: Quality Assurance and timeliness

The 2008 evaluation found that UNICEF had put in place several mechanisms that contributed to acceptance of best practices and improved data quality (e.g. MICS Manuals and regional training workshops). However,

areas of concern were noted as well specifically related to sample sizes, timeliness of reports, adherence to data collection guidelines and content/length of the questionnaire. In the current evaluation, improvements were seen in some areas but not others. Among the highlighted findings:

- The evaluation team found almost universal adherence to the standards on training duration for MICS4, a great improvement from MICS3.
- By contrast, there was no consistent evidence that observations of interviews and spot checks were implemented during MICS4 data collection. A number of UNICEF CO staff and consultants acknowledged they did not know whether and how the NSOs implemented the spot checks and interview observations. Likewise, for the field check tables, a newly-introduced quality assurance procedure, the evidence was inconsistent as its implementation and use to improve the quality of data during field work.
- In the countries implementing both MICS3 and MICS4, the average sample size was 18,122 in MICS4, compared to 14,041 in MICS3, an increase of nearly 30%. At the base of this increase is the demand by UNICEF Country Offices and countries to have survey estimates at lower levels (e.g. districts and sub-districts) for the purposes of planning and programming. To implement some of the larger samples, surveys employed a number of teams and field workers far greater than the recommended, manageable levels and compromised quality assurance efforts.
- For a set of countries with MICS3 and MICS4 final reports available, our analysis shows that the time between the end of field work and final report publication declined from an average of 21 months in MICS3 to 14 months in MICS4, for a decrease of about seven months. Despite these improvements, the interval between the end of field work and the release of final reports remains long, beyond the 12-month recommendation.

Looking forward to Round 5, plans are in place to address the timeliness of Final Reports by revising the Memorandum of Understanding between UNICEF and implementing agencies to include a stipulation on timeliness. Newly-introduced tools such as the field check tables will be more thoroughly incorporated into MICS workshops and guidelines. Other quality assurance methods will be reinforced through the continued work of the household survey expert consultants and UNICEF MICS consultants. As evidenced in the Round 5 pilot, a more systematic process is being used to test new modules or revise existing ones. UNICEF priority sectors, working with a range of development partners, have also stepped up efforts to conduct more rigorous testing and development of new modules.

Data Quality Assessment

The prior evaluation concluded that MICS3 data was, generally, of good quality, although in several instances data quality was found to be poor or very poor. Compared to the DHS, the MICS showed greater variability in data quality on a country-by-country basis linked to UNICEF decentralized organization and the corresponding difficulties in ensuring adherence to international standards. In the current evaluation, three clear findings emerge from the data quality assessment conducted by the team, as follows:

- First, there has been a dramatic improvement between MICS3 and MICS4 across all quality indicators covered in the analysis.

- Second, the comparison between MICS4 and DHS reveals that both programs have comparable data quality in many indicators. A visible MICS4 advantage is noted in a few indicators, notably the incompleteness of weight and height measurements, while DHS had substantially lower displacement of reported ages from 4 years to 5 years.
- Third and finally, the improvements from MICS3 to MICS4 notwithstanding, the quality of some of MICS data still need a great deal of improvement.

The marked improvements in data quality between MICS3 and MICS4 have various sources, chief of which are the improvements in human resources and technical support, and as a result, a more systematic adherence to the standards on training of field workers, which are all key ingredients for data quality. There are no specific preparation in place for data quality in Round 5. Rather, all of the elements discussed above (technical support, decision-making, quality assurance mechanism) work together to improve the quality of MICS data.

Recommendations

The evaluation team has framed a set of recommendations based on the findings and conclusions above. For maximum utility, the recommendations are grouped according to their anticipated impact on survey operations, quality and timeliness as well as pacing.

High-impact, immediate

(1) Country offices should be compelled to hire a UNICEF MICS Consultant for the conduct of the MICS.

(2) Highest priority should be placed on increasing the regional consultant pool through a combination of efforts.

(3) Far greater effort is needed to fully integrate the technical review and quality assurance process into key guidance materials including the Design Workshop and Manual. The global MICS team should develop more realistic time standards for review and a means to track turn-around times and a standard communications package to provide regular feedback to ROs and COs on the status of the review process.

(4) Where MICS final reports are lagging, the UNICEF CO, with support of the Regional Coordinator, should either bring on an additional implementing agency or consultant to prepare the report. The MOU template should be modified to reflect this priority (e.g. in those cases when a draft report is not well-advanced six months after the completion of field work, UNICEF reserves the right to x, and z...").

(5) Within the current arrangements, the MICS survey program has gone about as far as is possible to contain unmanageably large samples. UNICEF should address the country-level demand for lower-level survey estimates (e.g. at district and sub-district) by investing in the development and testing of alternative data collection tools and support. The efforts should be positioned as complementary to the MICS and other large-scale household survey programs.

High impact, mid-term

(6) Based on our findings, it appears that additional data processing staff is needed. If qualified regional consultants or institutions cannot be identified, then a global level contract should be awarded to make DP experts available as needed.

(7) Implementing agencies should be encouraged to make the best possible use of the field check tables. UNICEF should take steps to: a) see that the tool is duly covered during the design workshops, in MICS Manuals and on-line resources and in discussions with NSOs prior to the start of data collection; b) have the final data entry program and logistics in place in time to allow the start of data entry a few days after the beginning of field work; and c) see that CO and RO staff members have tools and capacity to do a summary quality check of the problems identified by the implementing agencies through the field check tables, follow-up actions that were taken and any unresolved problems in survey field work that require CO/RO attention.

Medium impact, immediate

(8) Increased guidance and support is needed for Regional Coordinators and their supervisors to gauge risk *in advance of the MOU* in countries where compliance issues are a concern and to negotiate with CO senior managers on those concerns. In addition, guidance should be provided which outlines the potential for either course-corrections or withdraw from the global MICS program when warranted. These materials are needed in advance of Round 5 MOU negotiations.

(9) CO and RO senior managers should be provided with a brief high-level “*Do’s and “don’ts”*”. A session on the role of UNICEF and MICS in MDG reporting should be prepared for the regional management team meetings to reinforce the key messages of the Executive Directive.

(10) As a follow-up to global expert consultations (i.e. sampling and data processing), tools should be developed for on-going monitoring of their work to assure standardization of approaches. Moreover, a set of standardized documentation protocols for consultants should be developed, consistently used and an electronic file created.

Medium impact, mid-term

(11) A protocol for documentation of sample design and implementation in the field should be developed and included in Country Survey Plans and ToRs for sampling experts. This type of documentation was lacking in several cases and resulted in long delays as the information was slowly pieced together.

(12) UNICEF should ensure that spot checks and observations of interviews during field work are implemented according to the Manuals and guidelines, and are properly documented (e.g. number, outcomes and decisions made) by supervisors in the field.

(13) While the implementation of the recommendations above on sample size and number of teams, spot checks and observations of interviews, and field check tables will go a long way in improving the quality of data, in particular the extent of out-transference from age 15 to 14 and from age 4 to age 5, as well as the heaping of, and missingness in anthropometric measurements, UNICEF should consider revisiting the training and the supervision of the measurers in order to further improve the quality of anthropometric data.

(14) Global MICS Consultations, particularly decision points, should be carefully documented -- even if it means hiring a rapporteur for that purpose.

(15) Experience shows that Regional Coordinator turn-over (and post left vacate in the interim) can have detrimental effects on multiple surveys within the region. Regional Offices should see that these intervals are avoided in the future and, ideally, that there is overlap between in-coming and out-going Coordinators. Again, Regional Directors and PME Chiefs should be well-informed of the importance of continuity in this role for the purpose of relatively short-term, time-intensive survey operations. This recommendation is more anticipatory as opposed to needed immediate action.

Section 1 Introduction

i. Background

In recent years, demand for quality, internationally comparable data has grown considerably as part of the aid effectiveness agenda, greater accountability for results of development partnerships and in advance of the Millennium Development Goals (MDGs) target date of 2015ⁱ. One key method to obtain such evidence is through comparable, cross-national household survey programs implemented to a high standard. However, such survey programs are extremely complex to organize and administer. Failure to properly manage and execute survey programs can result in data that is unreliable in various ways thereby representing a poor return on investment.

UNICEF plays an important role in data generation through its implementation of the Multiple Indicator Cluster Surveys (MICS), an international household survey program which answers part of that evidence need. UNICEF serves as the lead agency for reporting on six MDGs related to childrenⁱⁱ. Of the 48 indicators of progress toward the MDGs, the MICS provides data on twenty-three. UNICEF also helps to develop methodologies and indicators, maintain global databases, disseminate and publish relevant data. Together with a separate but related household survey program, the Demographic and Health Surveys (DHS), MICS is a fundamental source for assessing progress towards national and global development achievements and challenges.

With four rounds of implementation, the MICS surveys have supported countries to measure progress towards an internationally agreed goals including those related to the World Summit for Children (WSC), World Fit for Children (WFFC) Declaration and Plan of Action, the Millennium Development Goals, as well as other major international commitments, such as the goals of the United Nations General Assembly Special Session on HIV/AIDS and the Abuja targets for malaria. Over the last 17 years and four rounds, 240 MICS surveys have been conducted in more than 100 countries (Table 1).

Table 1: Summary of MICS rounds

Round	Dates	No. of countries/ surveys
1	Mid-1990s	60
2	Late 1990s-early 2000s	56/57
3	2005-2007	49/53
4	2009-2012	55/65
5	2013-2015	TBD

Owing to its importance and size, the MICS program is periodically evaluated with global evaluations following MICS1 and MICS3ⁱⁱⁱ. The round 3 evaluation (2008-09) identified important findings and contributed to adjustments^{iv}. Annex 1.1 summarizes the main recommendations from the MICS3 evaluation. By late 2012, Round 4 was nearly complete and Round 5 preparations underway for an early 2013 commencement. The imminent conclusion of the MDG period in 2015 makes MICS Round 5 an important source for estimating the success of the MDG efforts over the period 1990-2015. Accordingly, the timeline for Round 5 is largely driven by the need for MDG indicator data for key preparatory steps in advance of the UN Secretary General Final MDG Progress Report in September 2015.

ii. Evaluation Purpose, Objective and Scope

This evaluation seeks to provide UNICEF with an independent external view of its management and utilization of the MICS program. Particular emphases of the evaluation are the preparations for the fifth round of surveys and whether the critical governance strategies and technical elements are in place to ensure maximum quality, utilization, and sustainability over time.

This evaluation is timed to capitalize on the brief interim period between the completion of Round 4 and ramp-up of Round 5 activities. The underlying justification for the evaluation arises from the need to examine commitments made after the Round 3 evaluation to improve aspects of MICS as well as issues identified by the MICS leadership cadre arising from Round 4 surveys that may require adjustments to improve the quality in Round 5. In addition, the MICS program evolves and is shouldering increasing responsibilities. For example, the rounds are now closer together, which gives a shorter time to make adjustments than in the past. The evaluation has been strategically divided into two distinct clusters – one aimed at immediate needs related to Round 5 preparations and the second focused on whether MICS design, management and data utilization ensures maximum value from the considerable investments made.

The first component (Cluster 1) of this evaluation seeks to provide UNICEF with an independent external view on how far lessons drawn from the evaluation and experiences in Rounds 3 and 4 have been absorbed and acted upon, taking due account of global best practices for large scale household survey programs; and in this light assess how far the technical preparations for Round 5 are appropriate and sufficient. The specific issues of concern are the following:

- a) Thoroughness, quality, and scope of the implementation of the corporate response to the 2008-09 evaluation recommendations;
- b) Relevance and technical accuracy of the lessons learned by MICS management in Round 4.
- c) Suitability of preparations for Round 5 in terms of human resources, training and technical support in light of items a and b.
- d) Suitability of preparations for Round 5 in terms of data management (and more generally from any advances in Information and communications technologies) from the point of collection through final analysis, in light of items a, b, and c.

Based on the findings and recommendations from the 2008 MICS3 evaluation and interviews conducted during the inception phase of the current evaluation, four main themes have been identified and prioritized for examination. These themes include:

- a) Availability, allocation, function and effectiveness of human resources including technical support (i.e. UNICEF staff and consultants directly hired by UNICEF)
- b) Management and decision-making processes around MICS implementation at all levels (i.e. HQ/SMS/MICS, RO, CO) including planning, program improvement through lessons learned and oversight of arrangements with implementing agencies.

- c) Survey implementation including threats to data quality (i.e. adherence to protocols and standards) across all phases of survey operations (i.e. sampling issues; questionnaire development and modifications; data collection, entry, analysis; report writing)
- d) Quality of MICS4 data

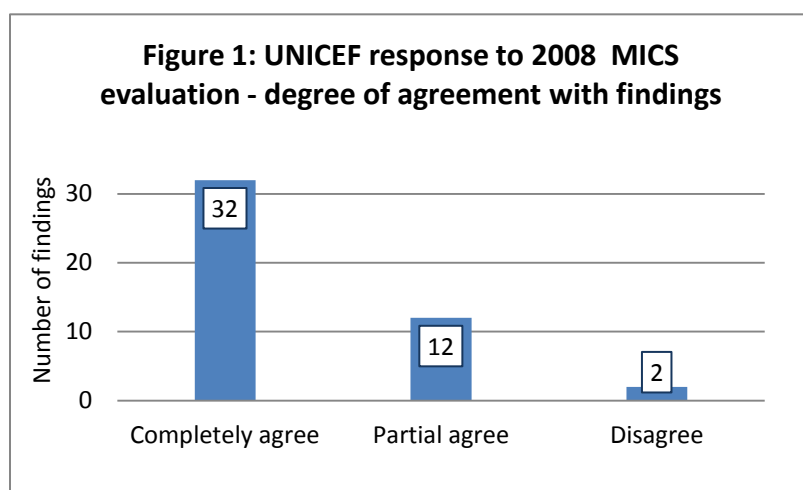
Cluster 2, the second component of the evaluation will assess whether the overall design and management of the MICS program and the utilization of MICS data is ensuring that UNICEF and other stakeholders are deriving maximum value from the investment. The second cluster will also examine preparation for the long term sustainable management of the MICS program. Cluster 2 will be undertaken after completion of Cluster 1 and therefore is not covered in this report. The Terms of Reference for this evaluation appear in Annex 1.2.

iii. Use of 2008 MICS evaluation

The utilization of the 2008 evaluation appears to have been *instrumental*, albeit limited. In evaluation parlance, instrumental utilization^v indicates that the evaluation was used by decision-makers to modify some aspect of the program that was evaluated. In considering the 2008 evaluation, the team would expand that definition to include the use of findings to substantiate changes that were planned or under consideration.

The findings of the 2008 evaluation were presented to UNICEF in a one-day workshop in November 2008. By this time, preparations for Round 4 were

already underway. While there was no formal written management response, the findings and recommendations appear to have permeated the program to some extent.



As a first step, the key findings were compiled and closely considered by the Evaluation Office and the Statistics and Monitoring Section where the HQ/SMS/MICS MICS team is located. That document^{vi} summarized evaluation findings, indicated UNICEF's degree of agreement with the finding (see Figure 1), identified the implications of the actions or changes that flow from the finding (i.e. actions already taken or planned by UNICEF MICS management team) and how transformational that change would be if implemented. These reactions and responses are incorporated in the relevant sections of the current report. Beyond this first step, the following responses and actions were identified:

- In December 2008, the 1st Global MICS Consultation was held which brought together Regional Coordinators and SMS/MICS staff. The findings of the 2008 evaluation were presented and discussed at length – although this session did not result in recorded action points.

- All MICS4 Design Workshops, initiated in July 2009, incorporated presentations of one to two hours on the 2008 evaluation in the agenda. These sessions, particularly the session on data quality findings, were highly appreciated by workshop participants as evidenced in workshop evaluation materials.
- The Terms of Reference for the regional household survey specialist (consultant) also cite key findings of the 2008 evaluation in providing the rationale for that position (see box text this page).
- In interviews, two Regional Coordinators cited the 2008 evaluation as quite useful – primary as an advocacy tool - providing evidence of problematic data, the need for greater alignment with global standards and the importance of COs engaging in quality assurance steps (e.g. submitting documents for review, participating in workshops). One Regional Coordinator felt that the 2008 evaluation could have been more useful with greater visibility and opined that it had been “buried” to some extent.

Use of MICS Evaluation 2007-08

Many lessons on improving the UNICEF technical support provided to government partners have been documented in the MICS3 Evaluation. The MICS3 evaluation demonstrated that when countries adhered to the MICS protocols and recommendations and made use of the tools provided, the survey process was very smooth. However, in many countries, the provision of survey tools alone was not sufficient without the additional support of personnel providing technical assistance.

Terms of Reference for MICS4 HH survey regional consultants

iv. Team members and management

The evaluation was conducted by two international consultants selected through competitive process by the UNICEF Evaluation Office. The Evaluation Specialist, who serves as team leader, is focal point for the cluster of activities around the design and management of MICS and of getting value from the MICS data (i.e. Cluster 2). She is also responsible for themes related to technical support and human resources and decision-making/governance, the on-line expert-practitioner panel and coordination of the team’s evaluation products. The second consultant, a Household Survey Specialist, serves as the focal point for data quality assessment, quality assurance mechanisms and technical design issues for Round 5. Both consultants are responsible for development of evaluation tools, conduct of interviews, document review, country visits and report writing.

The UNICEF Evaluation Office, in close coordination with the Statistics and Monitoring Section was responsible for the development of the Terms of Reference, recruitment and selection of the consultant team and communication within UNICEF on the evaluation. Throughout the evaluation, the UNICEF Evaluation Office provided guidance and facilitates the team’s work. The HQ/SMS/MICS Unit played a critical facilitating role by providing documents and contact information to the team. At an early stage, findings and recommendations were shared with UNICEF for vetting and feedback.

Section 2 Evaluation methodology

i. Design

The evaluation of Cluster 1 issues incorporated design elements of both formative and process evaluations. The evaluation design is formative in that it is coming at the end of Round 4 and in advance of Round 5 and is intended, in part, to encourage learning and adaptation for that upcoming exercise. Indeed, the main product of this segment is to generate findings and recommendations which can immediately guide the implementation of Round 5. To this end, the evaluation team had an opportunity to participate in a Global MICS Consultation (9-12 January 2013, Dakar) which brought together the Global MICS team to discuss and plan for the upcoming round of surveys. The evaluation team presented and discussed preliminary findings with the assembled group twice during the Consultation. Presentations were followed by question and answer sessions and open discussion. During subsequent sessions, preliminary findings were referenced and actively incorporated into the planning process. Based on these exchanges, additional materials were identified, select elements of the evaluation were refined and other areas (i.e. data quality assessment) expanded.

As a process evaluation, the exercise examined UNICEF internal structures, dynamics and practices notably changes or adaptations prompted by lessons learned in prior rounds or findings arising from the MICS3 evaluation. An evaluation matrix appears in Annex 2.1 which presents overarching questions, sub-questions, data collection methods, respondents/sources and data collection instruments. Several key terms used in the Terms of Reference were elaborated to help guide the development of evaluation tools (Annex 2.2).

ii. Methods

The evaluation drew on mixed methods, both qualitative and quantitative, to address the issues included in the evaluation framework. The methods are outlined below and include structured document review, interviews and group discussions with key stakeholders via both face-to-face and electronic communications, country visits, an on-line expert-practitioner panel and data quality assessment. To better inform the inception phase, the evaluation team attended a Planning, Monitoring and Evaluation workshop convened by the UNICEF Eastern and Southern Africa Regional Office for country offices in the region (12-16 November 2012, Nairobi) participating in select sessions and conducting interviews.

In the time available, the team was not able to examine MICS4 implementation in all countries. Questions to be examined pertain to distinct sets of countries including those that: a) participated in MICS4 (some of which will have also implemented MICS3); b) are planning for MICS5, particularly those which rely on MICS for MDG reporting; c) represent special circumstances for the MICS survey program (e.g. surveys labeled as “MICS” but conducted outside of the program’s purview, restricted data accessibility, non-compliance with agreed quality standards). This selective approach means that the evaluation cannot fully characterize MICS4 implementation in the widely varied regional and country contexts where UNICEF works.

a. Key informant interviews:

Key informant interviews were targeted to individuals who have direct involvement with the implementation of MICS4 at HQ/SMS/MICS, regional and country levels. That involvement included MICS management, coordination, survey design/planning, technical support, training, quality assurance, field operations, data handling and/or analysis and dissemination. Sixty-five individuals were interviewed using discussion guides tailored to respondent group. The numbers of respondents by type appear in the Table 2.1. Individuals interviewed appear in Annex 2.3.

A small number of countries were selected on a purposive basis for interviews. Countries were chosen based on regional distribution; levels of socio-economic development and MICS4 experience (degree of adherence to recommended practices)². Selection was finalized after consultation with Regional MICS Coordinators. From among those selected, a number were further identified for a visit by a member of the evaluation team. However, visiting the selected countries proved difficult due largely to the short timeframe for the evaluation coupled with end-of-year timing which had UNICEF offices largely occupied with reporting and planning. Several countries approached for their cooperation were unable to accommodate country visits during the time required. Other countries either declined interviews or were unable to carry through during the time available. The special circumstances countries were selected based on interviews with UNICEF headquarters and regional office staff.

Interviews were conducted with HQ/SMS/MICS during the inception phase followed with interviews with each of the Regional Coordinators. Regional-level interviews were also conducted with M&E Chiefs with two exceptions (i.e. EAPRO and ROSA). At country level, interviews were sought with the UNICEF CO MICS Focal Point, the UNICEF MICS Consultant and, as possible, with the implementing agencies. In several cases, other CO M&E staff was interviewed as well. In country visited, interviews were also carried out with the UNICEF Representative and Deputy Representative. Finally, the team sought interviews with consultants contracted by either the regional offices or HQ/SMS/MICS. Text boxes throughout the document present quotes from these interviews. These quotes are used selectively but are used only when an individual interviewee clearly articulated a point of view widely-held within a specific respondent category.

Table 2.1: Cluster 1: Respondents by category

UNICEF			Consultants (HQ/SMS/MICS, RO, CO)	Implementing agencies
HQ/SMS/ MICS	RO	CO		
5	13	26	10	11

Initially, interviews were conducted by both team members to ensure consistency in approach. Interviews were conducted with individuals and small groups. Team members utilized structured discussion guides tailored to respondent category for all interviews. Throughout this report, pertinent quotes from the interviews appear in boxed text. Interview guides appear in Annex 2.4.

² Countries/groups included Argentina, Jamaica, **Costa Rica**, Panama, Nepal, Mongolia, Pakistan, Lebanon (Palestinians), Occupied Palestinian Territories, Bosnia and Herzegovina, Moldova, **Madagascar**, Ghana, Kenya, Somalia, South Sudan, Uganda. Countries in bold were visited.

b. Document Review

The evaluation also relied on a structured review of documents found in Table 2.2. Many of the required documents were provided by the HQ/SMS/MICS, Regional and Country teams, consultant staff or downloaded from the MICS website (e.g. from the available survey reports). In countries visited by the consultant team, additional materials were provided by the Country Office and the implementing agency.

Table 2.2: Document review materials by cross-cutting theme

Quality assurance	Human resources and technical support	Decision-making and governance	Data Quality
• Country Survey Plans • MICS4 Manual • MICS4 workshop materials • HQ/SMS/MICS MICS tracking tools (e.g. Survey Profile Sheets) • Field check tables • Data on duration of interviews • Materials from modules development/validation	• ToRs for Reg. MICS Coordinators, • Generic ToRs for UNICEF MICS Consultants; regional sampling, HH survey and data processing consultants	• Template MOUs between CO and implementing agency • Materials from Global MICS Consultations • RO materials summarizing Round 4 experiences (WCARO and CEE/CIS)	• Data quality tables for all MICS4 surveys and MICS3 surveys in the same countries; • Data quality tables for a selected set of DHS surveys

c. Data quality assessment

Data quality was assessed by drawing on standard data quality tabulations from 47 MICS4 surveys from 40 countries. Of those countries, 22 conducted a MICS3 allowing assessment of change between rounds. In six countries, MICS4 and a standard DHS were conducted within a three year period thereby allowing further comparison. Countries included in this assessment appear in Annex 3D1. With few exceptions, data were extracted from survey materials either available on the www.childinfo.org or provided to the team by UNICEF. The DHS data used in the assessment was retrieved from the data quality tables or tabulated from the micro-data. The variables which were included for this assessment included:

- Completeness of reporting of birth date
- Age heaping and age transference for under-fives
- Age heaping and transference for women 15-49
- Completeness and heaping of anthropometric measures
- Observation in household of bednets and hand washing facilities

d. On-line expert-practitioner panel

An on-line expert-practitioner panel was convened to provide insight on a small set of issues which lack well-established standards (e.g. optimal length of interview). Twenty-six expert-practitioners were invited based on their expertise in household surveys in low and middle-income countries. Invitees had

to respond affirmatively in order to receive the link to the survey. Fifteen invitees took part, primarily from the field of demography, with an average of 29 years of experience in their profession. The survey was created and implemented through SurveyGizmo. Confidentiality of information was assured with only the two team members having access.

The expert-practitioner panel included 20 questions in total including background information on respondents. Participants were instructed that the questions were intended to be answerable based on their accumulated experience and knowledge (i.e. no additional review of material was expected). Topics covered in the expert-practitioner panel included: optimal duration of interviews, criteria for the inclusion additional questions/modules, opinions on varying levels of age transference (5:4 ratio), and experience with observational questions (i.e. bednets and hand washing facilities). In closing, the participants were asked their opinion on other areas for which existing standards for household surveys are either lacking or worthy of re-examination (e.g. an opinion offered was “standards for supervising field teams and re-interviewing”).

e. Identification of standards and benchmarks

In order to make judgments about the performance of the MICS survey program, the evaluation team sought to identify or otherwise create a set of standards or benchmarks for use in comparisons.

Several approaches were employed in order to make these comparisons including:

- *Existing standards and recommended practices* identified through literature searches for published standards, agencies with a norm-setting function (e.g. World Health Organization, UN Sub-Committee on Nutrition) as well as standards agreed to within inter-agency working groups (e.g. Roll Back Malaria Monitoring and Evaluation Reference Group).
- *MICS4 guidance materials* (i.e. MICS4 Manual and workshop materials) include a number of recommendations for survey implementation which, themselves, served as the basis for comparison.
- *Performance patterns and best achieved performance* for the relatively standard set of data quality variables are used across survey programs (i.e. DHS and MICS).
- *Expert-practitioner opinion* was sought (as described above) for a small number of variables of interest which did not have well-established standards to use as the basis of comparison.

The standards used throughout the evaluation are found in Annex 2.5.

iii. Limitations

The preparations for Round 5 are already in their initial stages. In the time available, the team was challenged to focus on a small number of variables for which it can create an evidence base of past performance and to gauge current preparatory efforts. The four cross-cutting themes were therefore chosen on the basis of the MICS3 evaluation and interviews conducted during the inception phase. Moreover, the preparation and launch of Round 5 was actively underway as this Report was being developed and reviewed. Certain of the recommendations may have already been considered and decisions made to address or not. It was not possible for the evaluation team to keep track of the many aspects of the MICS survey program while being readied for Round 5 launch.

In addition to the limited focus, the team selected only a few countries for visits. Several Country Offices declined the team's request for a visit due to end of year activities. Country visits were therefore quite limited with visits to only two countries (Madagascar and Costa Rica) for several days each. However, the team was able to capitalize on participation in both regional (ESARO PME Workshop, Nairobi) and global workshops (Global MICS Consultation, Dakar; and Sampling Experts Workshop, Dakar) to directly reach a wider range of interviewees. In addition, travel to one regional office (i.e. TACRO) allowed face to face interviews with Panama Country Office staff on their experience with their upcoming MICS survey.

An important variable, adherence to data quality processes during field implementation, is best examined by direct observation of field teams in their work. When this is not possible, a second method is to collect and review original survey records and materials to provide an objective assessment of actual, unobserved practice (e.g. the 2008 Evaluation relied on locally-recruited staff which sought and reviewed documents for these purposes). This method was possible to a limited extent only in those countries visited by the team.

Finally, the approach to data quality assessment was finalized after the January 2013 consultation meeting in Dakar, with inputs from the participants. While the original plan was to assess data quality in a small set of (12) MICS4 surveys, the decision made in Dakar, based on the concerns from the participants to the meeting, expanded the analyses to cover all MICS4 surveys with available data. As a result, the findings from the assessment were not investigated during the interviews with UNICEF CO and RO staff, or with the statistics offices, which took place between November and December 2012. This timing (interviews prior to data quality assessment) precluded any detailed investigation of the factors underlying the levels and trends in key data quality indicators.

Section 3 Findings

Section 3A: Technical support and Human resources

i. Findings/recommendations from 2008 evaluation

The prior evaluation found that the importance of technical assistance could not be overstated. Eighty-six percent of on-line survey respondents reported receiving assistance from various sources (e.g. regional office, HQ/SMS/MICS level, external consultants). A key finding of the prior evaluation was: *"The technical assistance received is rated very highly and, indeed, seems an essential element of the MICS operations. Steps should be taken to expand and formalize the provision of technical assistance."* The 2008 evaluation also identified a number of areas in which limited human resources served as an important impediment to the quality and timeliness of the MICS, including:

- Within country offices, the designated MICS Focal Points had little or no prior experience in household surveys³ and worked with no formal or informal description of that role.
- Regional office capacity, commitment, and engagement concerning MICS3 varied tremendously. Regionally based staff saw their roles vis-à-vis the MICS differently, ranging from those who viewed themselves simply as a liaison between countries and HQ/SMS/MICS to those who played a substantive technical role in survey operations. Three of seven ROs had a regional MICS coordinator to further facilitate and support activities.
- At the HQ/SMS/MICS level, the MICS3 was implemented with exceedingly slim staffing levels with three professional staff members (one assigned only 50 percent of time to MICS). The Evaluation team considered this staffing level to be far below the minimum required to coordinate and support a global household survey initiative such as the MICS.

The 2008 evaluation recommended that the regional level be strengthened for improved MICS implementation and suggested several options for doing so, including:

- Establishing an external international expert reference group to help establish standards for country-level implementers (i.e. adherence to international norms and standards) and to review and provide input into key elements of survey design and implementation.
- appoint an internal regional evidence-management staff with strong backgrounds in survey design and analysis, as well as in data capture and editing to catalyze decision making related to the MICS and prompt a range of data utilization efforts
- seek appropriately resourced and positioned regional institutions for the technical support function and manage them as contractual agreements in which the regional institution adheres to well-defined standards and recommended practice
- grant UNICEF HQ/SMS/MICS the authority to review and approve a small number of key decisions, either through HQ/SMS/MICS staff members themselves, designated consultants, or review panels.

At the time of the prior evaluation, new regional MICS coordinator posts were being recruited. The evaluation noted that these posts would need to attract experienced and well-qualified professionals and that they should have the authority and resources to bolster quality assurance practices. At the country level, substantial upgrading of the skill sets among M&E officers and others assigned responsibility for the MICS was recommended as well as to clearer definitions of accountability.

³ Based on the 2008 on-line survey, thirty-seven percent of UNICEF MICS Focal Points had no prior direct involvement with household surveys.

Now, after an interval of four years, the current evaluation seeks to examine questions including:

- *What steps has UNICEF taken to strengthen the regional level for improved MICS implementation? Have resources (human or financial) external to the organization been mobilized to strengthen the regional function? Have internal resources been expanded or strengthened for this purpose? Have other steps been taken to strengthen the regional level? If not, why not?*
- *Among those steps taken to strengthen the regional level, have they had the intended outcome? Is there evidence that MICS surveys have better adherence to international standards due to regional level efforts? What are the main challenges or barriers to effective regional level support to countries in MICS implementation?*
- *To what extent have UNICEF country-level staff been upgraded or otherwise strengthened to improve MICS implementation?*
- *What are lessons learned in regards to human resources including technical support and training? How effective has been the role of regional MICS coordinators? How much of their time has been spent on other assignments?*
- *What lessons pertain to the timing and placement of needed human resources? What lessons have emerged from how gaps identified and addressed? From how are needs for specialized technical support addressed?*
- *What are the processes put in place for the identification of lessons learned and reflection on their importance? Are these processes transparent and understood among key actors? To what extent is lessons learned under MICS4 are linked to a sound evidence base?*

The section below describes the changes to the technical support system of the MICS surveys. An underlying principle of this approach is a tiered system of support, reviews and feedback - at the first level between country and regional offices and then in subsequent step involving HQ/SMS/MICS as well. Consistent with this structure, the following section will begin by describing changes made at regional level, followed by country-level. Lessons learned are identified at the close of this section.

ii. Expanded human resources and technical support

(1) Regional MICS Coordinators:

A significant change is the new support structure put in place with the Regional MICS Coordinators. At the time of the previous evaluation, three regions had a coordinator in place while during Round 4, all seven regions had a MICS coordinator albeit with some turn-over and transitioning⁴. From the lens of a household survey program, these positions play a crucial role in coordinating MICS surveys throughout the region, facilitating the provision of technical assistance as well as providing support directly and ensuring that quality standards are applied in the MICS surveys. They serve as a linchpin between the

⁴ Two regions, ROSA and EAPRO shared a MICS Coordinator. Since January 2012, that Regional Coordinator serves only the ROSA office. At least two regions (i.e. TACRO and EASRO) had staff turn-over in the Regional Coordinator position.

MICS global functions located at UNICEF HQ/SMS/MICS and country-level implementation under the responsibility of the Country Office.

In interviews, the regional coordinators described their work as primarily coordinating the MICS in the region (between 75% and 100%) inclusive of planning and budgeting for the technical assistance needs of countries implementing the surveys⁵. Their other duties range from providing general support on M&E for the regional office (e.g. reviewing and providing feedback on reports and materials coming from country offices), involvement with other studies and research in the region, assisting other program sections with survey, supporting other monitoring initiatives in the region (e.g. TransMONEE), working to see that other national household surveys in the region include relevant child-related questions, as well as responsibility for DevInfo.

Both HQ/SMS/MICS and regional staff acknowledge that there is some tension in this arrangement. HQ/SMS/MICS staff would prefer to see the Coordinators' time devoted almost entirely to MICS-related tasks and perceive other responsibilities as distracting from their core purpose. While HQ/SMS/MICS and the Regional Coordinators work extremely closely and are in almost constant contact, there is no supervisory relationship between them. For the Regional Office, the Regional Coordinators are expected to be part of the regional team dynamic and an integrated part of the planning, monitoring and evaluation team.

Consistent with UNICEF's decentralized structure, a Regional Office determines the shape and structure of the Regional MICS Coordinators' positions. There is considerable variation across regions in key elements of the position descriptions for these posts including purpose, duties, the nature of decisions and recommendations made and relationships with HQ/SMS/MICS and country offices. These variables are summarized in Annex 3A.1 for four of the positions. Notable across these position descriptions is the widely varied placement of the MICS within the major duties and responsibilities, from a central role to minor reference. In addition, given the Team's perception of the Regional Coordinator as a linchpin in a global HH survey program, it is notable that the stated relationship between the Coordinator and HQ/SMS/MICS and the Coordinator and the CO is construed differently across regions. In some cases, there is no reference made the relationship to HQ/SMS/MICS or the country offices.

Nonetheless, Regional Coordinators often have close working relationships with the Country Office staff with frequent communication and visits. The working relationship is exemplified through a structured process of technical support and review which spans from the initial consideration of conducting the MICS to the Final Report and data archiving. A set of twenty-two steps has been outlined which depict the technical support and exchange between country offices, regional offices and the UNICEF MICS team at HQ/SMS (Annex 3A.2). Throughout the conduct of the survey, the Regional Office provides

⁵ One region, with predominantly middle-income countries, anticipates that the Regional Coordinator will devote 40% to 50% of time to the MICS and the remainder to strengthening national monitoring systems and seeing that MICS content is incorporated into other national household surveys.

guidance materials and mobilizes specialist consultants at approximately 10 key steps and CO to RO to HQ/SMS/MICS reviews of survey elements occur no fewer than eight times.

(2) Regional technical support:

In MICS4, steps were also taken to bridge the gap between the skill sets usually found among UNICEF CO staff members and the specialized skills needed to support national household surveys (i.e. sampling, survey implementation and data processing). UNICEF substantially expanded the pool of specialist consultants available to support MICS implementation so that country offices are able to receive needed technical assistance in a timely manner. These specialist consultant pools are “attached” either to HQ/SMS/MICS or a regional office and made available to countries as needed. The Regional Coordinators mobilize the technical support for individual countries as needed. These technical assistance costs are primarily covered by HQ/SMS/MICS and regional office funds although other cost-sharing arrangements were identified (e.g. HQ/SMS/MICS and country office split expenses for a sampling consultant to travel to Afghanistan).

To further facilitate this technical support at regional level, HQ/SMS/MICS has prepared and distributed generic Terms of Reference for three types of experts: sampling experts, household survey specialist and data processing experts. The main tasks and estimated number of days per country for these consultants appear in Annex 3A.3.

The steps used to create a roster of specialist consultants varied by region. Initially, HQ created and then supplemented a global roster through means of word of mouth among existing consultants, advertisements and announcements in journals and professional associations. The global roster was shared with each region and Regional Coordinators then canvassed sources in the region (e.g. universities, regional institutions, other UN agencies) for additional consultants. Regional Coordinators repeatedly described difficulties in identifying adequate numbers of consultants with the required technical skills and language capabilities. To some extent, gaps were filled by HQ/SMS/MICS-provided consultants (working both remotely and in-country), the sharing of consultants across regions (e.g. French-speaking consultants shared between MENA and WCARO) and by tapping well-performing national consultants in one country to provide assistance in another (e.g. EAPRO and CEE/CIS).

It appears that these efforts have resulted in a greater percentage of Country Offices availing themselves of expert consultant services. As seen in Figure 2⁶, countries carrying out a MICS4 are more likely to utilize the services of sampling and data processing consultants than the previous round. The

⁶ Data in Figure 2 are drawn from differing sources and should be used with caveats. Round 3 data are taken from an on-line survey conducted for the 2008 evaluation. The wide-ranging audience for that survey included UNICEF Country Representatives; MICS3 Focal Points; CO and RO M&E and communications officers; implementing agency staff; members of in-country steering committees; UN agencies; donor agencies; consultants; and participants in regional training workshops. In some cases, multiple individual responses were re-tabulated into a single value per country. Round 4 data are drawn from an internal management tool, the Survey Profile Sheet, maintained by the Regional Coordinators. Those figures were supplemented, where needed, with information from the Regional Coordinators.

area of household surveys/field work witnessed a much smaller increase. Regional Coordinators were less likely to mention difficulty in recruiting HH survey specialists implying that demand and not supply was a factor in the lower percent of those consultants use.

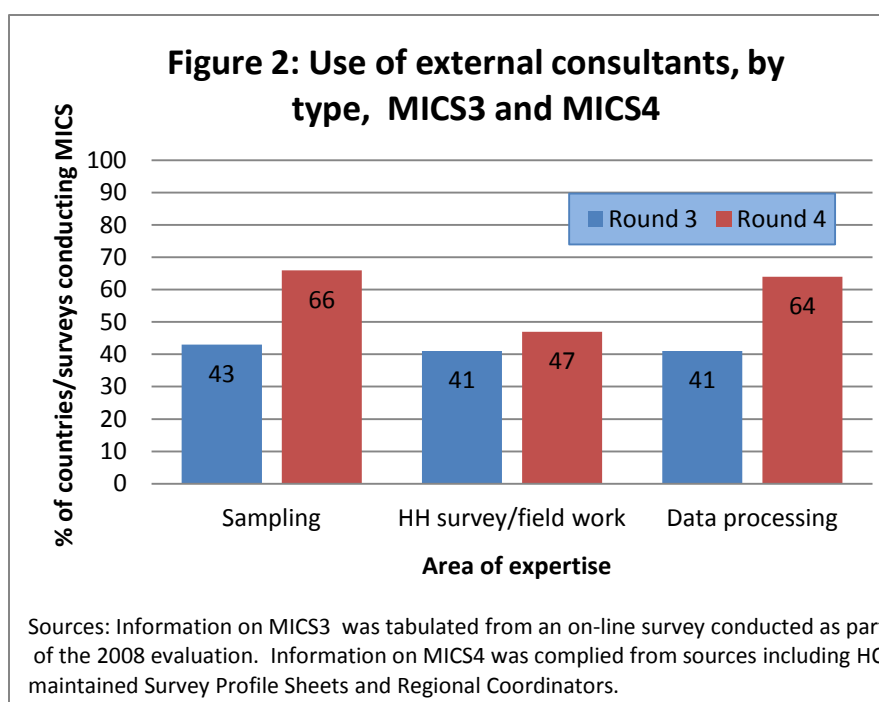
In interviews with UNICEF staff and others in 13 countries, this external technical support was typically rated as very timely and effective. Many of those interviewed cited the responsiveness and timely support provided through these consultancies. Hands-on support and knowledge sharing in the area of sampling was particularly

appreciated. In some cases, consultants are present during the training phase and the early stages of data collection and have been able to identify potential problems and recommend solutions.

Nonetheless, there were disappointments in the provision of technical support as well. These difficulties typically involved:

- turn-over with one consultant becoming unavailable and another picking up where his/her predecessor left off,
- consultants available for very short windows of time (although consultants reported that UNICEF requests came with insufficient lead time),
- the use of sequential consultants particularly when one consultant questioned the previous work and re-opened issues which the Country Office and implementing agencies considered to be final,
- hand-over of work from one consultant to another unduly complicated by the lack of documentation resulting in delays.

In one case, the technical support was perceived as more focused on detecting error and identifying differences from the standard rather than providing support in the country context. Poor communications between consultants and Country Offices resulted in situations where the CO couldn't provide adequate explanations to the implementing agencies (e.g. when dataset being checked at



HQ/SMS/MICS would be returned). In several cases, the Country Office felt that their credibility was at risk as a result⁷.

Despite largely positive experiences, MICS implementation appears to be impeded by limited supply and by the lack of availability of expert consultants. No fewer than four of the seven regions reported that the supply of regional consultants available to support specific aspects of the surveys (i.e. sampling, HH surveys, data processing) was insufficient to the need. Regional MICS Coordinators and others described exhaustive searches for appropriately-skilled consultants within their regions including professional networks, regional institutions with technical capacity, universities and research institutions. As underlying reasons, interviewees cited low technical capacity in the region and few experts with the requisite language skills. Lack of advance planning needed to secure the time of these high-demand consultants was also cited as a factor.

Across regions, several methods were employed to compensate for the shortage of skilled consultants in the areas of sampling, HH survey implementation and data processing. Some regions have relied on consultants from outside of the region, at added expense, to provide the technical support needed. HQ/SMS/MICS has played a very active role in identifying and sending consultants when the RO has been unable to identify a regional consultant. On several occasions, different modalities were found for specific circumstances. For example, data processing teams from Nigeria and Ghana travelled to HQ/SMS/MICS for the needed support. In Bosnia and Herzegovina, where three separate surveys were conducted and a large number of staff was unable to attend a global workshop on data processing, a regional consultant travelled there and conducted training/provided support in separate, tailored sessions.

UNICEF financial and recruitment systems have also hindered the consistent placement of needed technical resources and have placed heavy time demands on both HQ/SM/MICS and RO staff attempting to hire these consultants. Requirements for competitive recruitment and selection are difficult to fulfill when there are a very limited number of consultants who have the required skills, knowledge of international standards, availability and linguistic capabilities. Moreover, their services are sought by several organizations conducting large-scale household surveys (e.g. ICF/Macro for the DHS, the World Bank) which pay higher consultant rates than UNICEF. In addition, consultants' services may be needed at the beginning and again at the end of field work, therefore a few months apart, necessitating multiple contracts. These factors contribute to difficulties in getting the needed consultant at the right time to keep the survey on track. A quote that typifies this

UNICEF finance system hinders use of expert consultants

The team found that UNICEF administrative systems hindered the ability of RO and COs to use the newly-acquired expert consultants. As stated by one respondent,

"Having the need for a consultant and having funding for a consultant don't coincide."

-Regional MICS Coordinator

⁷ It may be noteworthy that these cases (3) came from a region where the Regional Coordinator post was unfilled for a period due to staff turn-over.

perspective appears in the boxed text above. Many regional office respondents spoke of the desire for a pool of consultants pre-certified by the HQ/SMS/MICS team and contracted on longer-term or “rolling” contracts. When technical support is needed, it should then be possible to “draw” from this pool of certified experts without going through a competitive process each time.

Respondents at HQ/SMS/MICS and in multiple regions described difficulties in contracting and retaining consultants due to financial restrictions (e.g. funding arrives late and must be expended before the end of the year, inability to contract consultants for needed duration). Funding with “expiry dates” has created myriad problems with the provision of technical support – sometimes even halting survey operations and forcing the UNICEF CO to seek “bridge funds” from other development partners in country.

During Round 4, one region developed institutional contracts for specific aspects of survey implementation (i.e. data processing support, PDA support). This experience was not fully satisfactory as available staff within the contracted organization were more limited than expected. In hindsight, the Regional Coordinator felt that working with individual consultants was a more manageable process. At least one regional office remains interested in utilizing existing institutional support in the belief that not all potential resources have been tapped.

(3) Country-level support:

An important finding of the 2008 evaluation was the limited capacity of the M&E officers within the country offices to effectively oversee the MICS3 survey processes. In response, the program has introduced more systematic use of national consultants, in some cases international consultants, to coordinate the implementation of the MICS surveys in individual countries. Termed UNICEF MICS Consultants, these individuals provide guidance and technical assistance and facilitate communication for both the country office as well as the implementing agency. Recruited for a period of 12 months or more, the UNICEF MICS Consultant advises the implementing agencies through all stages of the process (i.e. planning, questionnaire design, sampling, training, fieldwork, data processing, data analysis and dissemination) and seeks to ensure that MICS quality standards are used throughout. The national MICS consultants are experienced with conduct of household surveys within their country but do bring the specialist expertise of the consultant pools managed by the Regional office or HQ/SMS/MICS (as described in section 2 above).

In the evaluation team’s estimation 60% of the Round 4 surveys have been supported by an UNICEF MICS Consultant. The costs of these consultants are covered by the country office. HQ/SMS/MICS has prepared and distributed Terms of Reference to assist the COs in recruitment and hiring. The individuals sought should possess an advanced university degree in social sciences, demography, statistics, epidemiology or other relevant fields. More important, the UNICEF MICS Consultant should bring at least three to five years experience in the coordination and/or management of quantitative household surveys. These qualifications are particularly important as the 2008 evaluation found that 37% of country office MICS focal points (typically the M&E officer or social policy officer) had no prior experience with household surveys. The MICS4 evaluation was unable to systematically assess the

experience level and skills set of the CO M&E officers which would have provided an important point of comparison with the 2008 evaluation. More importantly, it is clear that addition of the national MICS consultant bridged the important human resource gaps found in the 2008 MICS3 evaluation.

Regional M&E chiefs as well as Regional MICS Coordinators spoke consistently of the importance and benefits of having the UNICEF MICS Consultants in place. From their perspective, these consultants provided a consistent and informed point of contact for their inquiries and issue resolution and reduced turn-around times. Illustrative quotes of these oft-cited opinions appear in the boxed text above. The presence of the UNICEF MICS Consultant is also seen as a key element of the quality assurance as they are on-the-ground observers of the survey process. Not surprisingly, respondents in the country offices also spoke highly of the role of the consultants. They were noted for “staying on top of everything”, their degree of involvement with quality assurance steps and intensive communication with the implementing agencies. Please see boxed text on this page for respondent quotes as examples.

Based on these experiences, several Regional Offices now encourage or even insist that Country Offices mobilize the needed resources and hire an UNICEF MICS Consultant. Based on interviews conducted, limited country office funds were most commonly cited as the barrier to hiring the UNICEF MICS Coordinator. Less frequently reported was difficulty in identifying qualified national consultants with requisite survey experience to serve as UNICEF MICS Coordinators.

Despite the overall positive experience, there were cases where hiring the UNICEF MICS Consultant did not work as intended. In few instances, the individuals recruited for these positions possessed good networking skills but lacked adequate household survey experience. There were also reports that the UNICEF MICS Consultant taking on tasks which are the responsibility of the implementing agency. This was seen as contrary to the principle of country ownership and more representative of a “DHS approach”.

In-country MICS Consultants fill an important human resource gap

Regional and country office respondents were nearly unanimous in recognizing the benefits of the in-country MICS Consultants. The quotes below illustrate these opinions:

“Having [the UNICEF MICS Consultant] was a huge help - it was a must; if we didn’t have such a competent person, I’m not sure how this process would have ended – the result would be questionable”

-Country Office M&E Officer/MICS Focal Point

“...MICS implementation in [countries with consultants] was better and smoother in terms of timing, follow-up MICS recommendations, data quality control and communication. “

-MICS4 and MICS5 in WCAR: Challenges, Bottlenecks and Propositions for implementation improvement.

iii. Technical review and quality assurance processes

The prior evaluation of the MICS3 identified significant gaps in types of skilled technical support being utilized at country level. This problem was compounded, in part, by the profile of UNICEF country M&E officers, many of whom had little or no experience with household surveys. The prior evaluation concluded that a higher level of skill must be available at the country level so that those making key

decisions on survey implementation have the background and experience necessary. Moreover, the expectations for technical review processes of country survey materials by the Regional Office and HQ/SMS/MICS were not included in the Manual or workshop materials. A number of corresponding recommendations targeted both the regional and country levels.

Beginning in Round 4, UNICEF developed and introduced a more structured approach to technical review and quality assurance processes. This approach brings together the expanded availability of specialist consultants with a more formalized process of technical review and quality assurance for specific materials at pre-defined points in the survey. As described above, the specialist consultants, managed by Regional Office and HQ/SMS/MICS, are available for country offices and implementing agencies throughout the survey process. Evidence suggests (Figure 2) that a greater percentage of country offices avail themselves of these resources compared to Round 3. Across countries, interviewees rated this external technical support as very timely and effective, with few exceptions.

Technical review and quality assurance steps were also outlined as part of the expanded technical support platform. This comprehensive set of steps demonstrates the points in the process when technical reviews take place, the material to be reviewed and the level at which the review takes place (e.g. Regional Office). These steps appear in Annex 3A.2 and demonstrate the intense degree of exchange across HQ/SMS/MICS, regional and country levels. The process was introduced to country offices and implementing agencies via a brief session (i.e. thirty minutes to 1 hour) at the six regional Design Workshops.

In Round 4, these newly-introduced technical review processes helped to formalize an important system of technical oversight and quality control. While interviewees in the country and regional offices recognized the value of the reviews, there were difficulties cited consistently about aspects of the review processes. Even interviewees who saw the review processes as essential to data quality noted the “heavy” nature of the process and length of time required for a response.

The leading issue identified was the length of time required for RO and/or HQ/SMS/MICS to review and feedback to the country office. Five of the twenty-two steps in the technical assistance framework have associated time standards (see Table 3A.1 and Annex 3A.2). However, it appears that these standards are most often not met and, perhaps, not even monitored. The evaluation team requested any type of systematically recorded turn-around times for the steps which appear in Table 3A.1 to compare with the time standards. It seems that this information is unavailable.

The time standards in the table below are feasible and could be met under certain conditions. Primarily, the reviewers would need to know in advance that materials were ready for review. This advance notice would allow them to either make time in their schedule or delegate the task to a pre-qualified, contracted external resource to do the review. However, in cases at reported from multiple levels (i.e. CO, RO, HQ), poor planning was cited as a factor with materials received for review with

unrealistically short turn-around times (e.g. a draft questionnaire received only a few days in advance of the country's steering committee meeting).

Table 3A.1: Existing time standards for technical review processes, MICS4

Step	Action	Time standard
Questionnaire design	1 st review of draft questionnaire by RO	Feedback provided to country within 1 week
	2 nd review of draft questionnaire by RO and HQ/SMS/MICS	Feedback within 1 week
Data processing programs	Data entry template in country and sent to RO/HQ/SMS/MICS for review	Feedback within 1 week
Data editing and cleaning	CsPro data files and SPSS datasets shared with RO for review. RO shares with HQ/SMS/MICS	1 st feedback provided to country after 10 days
Data analysis and tabulation	Tabulations shared with RO for comparative review. RO shares with HQ/SMS/MICS.	Feedback provided to country after 10 days
Printing	Print ready version sent to RO and HQ/SMS/MICS for final feedback	Feedback provided within 10 days.

Again, interviewees at CO were nearly uniform in appreciation for the support and capacity building received from the RO and HQ/SMS/MICS. However, the relatively small staff at HQ/SMS/MICS conducting reviews for 64 surveys, each with at least eight items for technical review, became a factor in the timeliness of the process. The review process is premised on tiered reviews in which the Regional MICS Coordinator plays a pivotal role. Ideally, the regional level would conduct several complete cycles of review with, comments back to CO and revisions followed by submission of a near final version to HQ/SMS/MICS requiring minimal modification. Overall, the process as played out in Round 4 was an improvement over previous rounds. However, materials still arrive at HQ/SMS/MICS with an inadequate degree of regional “filtering” and required far greater HQ/SMS/MICS input than originally envisioned. Several respondents mentioned the timeliness of feedback from HQ-level on data processing as an issue -- while acknowledging the efforts of the exceedingly small data processing staff at HQ/SMS/MICS. A compounding factor in these delays is the lack of skilled data processing support within the regions which results in an increased burden on the limited HQ/SMS/MICS data processing staff.

Gaps in communication and poor documentation also contributed to a rough start for the technical review/quality assurance framework in Round 4. Staff turn-over (e.g. the Regional Coordinator, CO M&E Officer) was particularly associated with gaps in communication which sometimes left the CO unable to adequately inform implementing agencies about the timing of next steps. In extreme cases, an individual survey could lag unduly due to turn-over at both the CO and RO office levels. In regards to the review processes, country staff requested clearer communication along the lines of “thank you for your questions / here is the timeframe in which we will respond “. Correspondingly, technical review

and quality assurance processes were hindered by limited documentation. Handovers involving both staff and consultants were reported to lack documentation of previously taken decisions that impeded progress in several surveys. When asked if the technical support and reviews added value, the head of one implementing agency responded *“only when accompanied by adequate documentation”*. Finally, HQ/SMS/MICS feedback to the Regional Coordinator may be provided by individual team members at different times and not in a single cohesive package.

Most country and regional-level staff interviewed felt that the roles and responsibilities of the CO, RO and HQ/SMS/MICS were clear. However, there was uncertainty around certain aspects of decision-making in regards to the technical assistance framework (e.g. country office respondent expressed uncertainty of the review processes –*“we just learned that there are two validation processes –RO and HQ”*). The language of the technical assistance framework also lacks specificity (e.g. *“RO discusses with HQ”*; *“RO shares with HQ”*). Many CO referred to *validation* or *getting a green light* from HQ/SMS/MICS as a component of the process but these terms do not appear in the guidance materials. HQ/SMS/MICS describes their role as one of review, feedback and comment. With the introduction of the regional consultants, there is some uncertainty around how much further review is required (e.g. the example given was with sampling experts –*“if one consultant signed off, we can’t have another consultant come into the process, notice something and then re-open the entire discussion”*).

The more formalized process of technical review and quality assurance represents an important step forward for the MICS surveys. However, the team found that (i) resources were strained to consistently implement these steps in a smooth and timely manner, (ii) better communications and more systematic documentation, and (iii) greater clarity is needed on the hierarchy of reviews.

iv. Preparation for Round 5

The evaluation also looked at the preparation in place for the upcoming round with specific attention to the plans to maximize the timely availability and support from the HQ/SMS/MICS and regional experts as well as the UNICEF MICS Coordinators in countries.

Given the emphasis that interviewees placed on the deficit of regional consultants in MICS4, this should emerge as a high priority for the coming round. Several regional coordinators will make further efforts to tap regionally-based consultants and are also looking to use well-performing country consultants for regional activities. Some Regional Coordinators pointed to the need for greater HQ/SMS/MICS involvement in mentoring and screening the regional consultants. One idea to expand the pool of regionally-based consultants is to take on-board mid-level professionals, with either no or limited MICS experience, and partner them with proven, senior-level specialists (e.g. sampling experts) as a means to both vet and standardize performance. This idea was raised in several interviews but does not appear to be a clearly defined work stream at either HQ/SMS/MICS or RO levels. Overall, continued reliance on the HQ/SMS/MICS roster and existing regional contacts form the basis for moving forward into Round 5.

In addition to increasing the number of qualified regional consultants, MICS program managers are now looking to increase the standardization of approaches across individual consultants. Beginning in early 2013, a series of expert consultations are underway aimed at harmonizing approaches. The first such consultation was held 14-18 January in Dakar, Senegal and attended by nine sampling experts. The sampling consultation provided an opportunity to present and discuss issues encountered in countries and solutions used to resolve. The overall objective was to identify harmonized approaches (e.g. tools, process, and deliverables) to carry forward in the upcoming round. Similar sessions for the household survey expert consultants will be appended to upcoming MICS Survey Design Workshops beginning in March 2013. Data processing experts will be convened after the completion of the MICS Survey Design Workshops (May 2013 and after).

At HQ/SMS/MICS, the team has been expanded with the addition of a P4 household survey expert who brings extensive experience with MICS management and oversight. Additional staff anticipated includes a new P4 post devoted to data quality as well as two new P2s, one a Junior Professional Officer supported through the German government. External funds from sources such as the Gates Foundation may also assist in seeing more adequate staffing levels are achieved.

The technical framework is current being revised based on Round 4 experiences. The framework will emphasize/reinforce several principles. Among these are:

- improved continuity of support with regional teams in place facilitated by the use of external funds (i.e. eliminating the “expiry date” problems)
- more willingness to push for timely completion of surveys - including a MOU clause indicating that UNICEF can take on flagging efforts and see them through to completion
- increased push-back about countries which don’t comply with principles such as data access and sharing.

Finally, two Regional Coordinators have prepared thoughtful, documents aimed at documenting experiences, reiterating best practices and recommending modifications for improved performance. These documents will help will guide and prioritize their efforts in Round 5. As emphasized in those documents and reiterated in multiple interviews, Regional Coordinators want to be more adamant about the hiring of UNICEF MICS Coordinators in countries conducting a Round 5 survey.

Section 3B: Decision making/governance

i. Findings/recommendations from 2008 evaluation

The 2008 evaluation found that UNICEF’s organizational structure through which the MICS is implemented is suboptimal for the achievement of its objective. The organizational structure and differentiated roles and responsibilities at the headquarters (HQ/SMS/MICS), regional, and country levels introduce the following barriers to performance:

- Authority for technical decisions and negotiation that resides with those least experienced and knowledgeable in household survey methodologies.
- Delays caused by staff turnover and review processes.
- Less-than-effective quality-assurance measures because the need for technical assistance may be overlooked locally, resulting in late-stage “rescue” operations.

The 2008 evaluation found that a higher skill level was needed within Country Offices in order to deliver on the commitment to quality (i.e. avoiding compromise on key aspects of design and implementation). However, the prior evaluation also concluded that the value of high-quality technical assistance would be diminished if qualified staff could not ensure that best practices are followed. While not advocating for a highly centralized model, the Team pointed to key junctures and decisions in which more guidance from UNICEF HQ/SMS/MICS was required.

Recommendations emerging from the previous evaluation included:

- UNICEF should further clarify accountabilities for staff members at all levels in regards to MICS and address the “mismatch” whereby survey expertise residing at HQ/SMS/MICS and, to a lesser extent, at regional levels, while the locus of technical decision making is at country level.
- Within the CO, accountability for leadership of the surveys and understanding strategic measurement choices—should rest with the Country Representative and with the senior country management team. Representatives and the senior members of country team should be evaluated on the quality and timeliness of their country’s MICS and how effectively the country team uses the results.
- UNICEF’s Executive Director and Regional Directors need to continue to challenge all Country Representatives to make evidence-based work—and especially the MICS—a centerpiece of their country programs. Special briefings, training, and team-building will be needed for this change to be put into practice. Additional materials and training are needed to increase the senior country management team’s understanding of the key features that ensure or threaten quality in MICS surveys.

The current evaluation sought to answer the following questions:

- *To what extent has UNICEF clarified accountabilities for staff in regards to MICS?*
- *To what extent has UNICEF rationalized the locus of decision-making about technical issues related to MICS surveys? To what extent has the “mismatch” been addressed?*
- *Does UNICEF HQ/SMS/MICS have any approval authority for key decisions in the MICS survey in order to assure credible data? If not, why not? If so, describe any available evidence on the outcomes of these changes.*

- *Do senior managers understand strategic measurement choices (e.g. how questionnaire length and duration of interview can affect data quality)? Are senior managers aware of the key elements that threat or ensure quality in MICS surveys? To what extent are senior managers aware of the findings of the 2008 evaluation in regards to data quality?*
- *To what extent have senior managers in the CO been held accountable for the quality and timeliness of MICS surveys?*
- *How can the CO best support the production of timely MICS survey reports?*
- *What lessons have been drawn pertaining to MICS survey program management and decision-making? Are experiences and lessons summarized and made available to relevant staff?*
- *What did the MOUs with governments and implementing partners cover in MICS4? What lessons have arisen regarding the nature of agreements between UNICEF and implementing agencies?*

ii. Accountabilities of UNICEF structures

The underlying decision-making hierarchies and accountabilities remain the same between Rounds 3 and 4. Recommendations arising from the prior evaluation (i.e. clarifying accountabilities and shifting the locus of technical decision-making) have not been addressed. These recommendations would have required a high-level corporate response as the recommendations dealt with structures and systems that are fundamental to UNICEF decentralized organizational structure.

Although the technical support envelope has clearly been expanded, communication channels and decision-making authorities remain unchanged. The Memorandum of Understanding between the UNICEF country office and the implementing agency in which the UNICEF Country Representative or appointed individual serves as the main channel of communication with the implementing agency. This means that communications from the Regional MICS Coordinator would be channeled through the designated CO staff to the UNICEF MICS consultant, and eventually, the implementing agent. This situation appears to vary by region and may depend on the nature of the relationships and style of communications between the RO and country offices.

The Regional Coordinators emphasized the importance of country office buy-in. According to several Regional Coordinators, where the country office accepts MICS guidelines and technical

Decision-making and MICS

Key decisions on survey implementation, including quality assurance steps remain with the Country Office and implementing agencies. This quote is representative of an oft-repeated experience.

“Some countries may come to RO for support, but if they don’t want to take it (our advice), they don’t have to”.

-Regional Coordinator

review/quality assurance processes, the entire survey can move relatively smoothly. However, most described instances in which country offices chose not to comply with the guidelines. As recounted, these circumstances were often related to non-adherence to the recommendations and quality assurance processes (e.g. deviations from the sampling procedures advised by expert consultants; short-

cuts in which interviewers do household listing, selection and then interviews; incorrect procedures for recording of reference dates). Regional Coordinators are aware that their advice to country offices is not always followed. An illustrative quote appears in an accompanying boxes text. However, there is no mechanism in place to know whether their advice was followed or not. Getting that feedback depends on the relationship with the individual CO M&E officer - some of whom will let the Regional Coordinator know whether the advice was followed or not while others don't provide feedback. In these situations, the Regional Coordinator may turn to the HQ/SMS/MICS team whose advice carries more weight.

Two important areas in which Country Offices press ahead against the concerns of Regional Coordinators are larger samples and the use of non-MICS questions and modules. Country offices, particularly in large countries, with country programs focused on sub-national units and with adequate budgetary resources, want to conduct surveys with larger sample sizes. The advice of regional coordinators to scale back these designs may go unheeded. The Regional Coordinator post level (P3) is presented as a dilemma in these situations as it is difficult for them to negotiate/discuss these issues with Country Representatives (i.e. D1 or D2). The second area deals with questionnaire design and CO desire to add questions which they believe address country needs. These additions are often untested and not part of the MICS standard materials. In some cases, the CO comes to realize the difficulty with these additions when they cannot tabulate the data. Regional Coordinators may try to assist but are limited in their resources/ability to support these additional tabulations and analyzes.

Regional Coordinators also seek support from the RO M&E chief in discussions with country offices. In some cases, an appeal is made to the Regional Director when country offices balk in following quality assurance guidelines. Examples were provided when the Regional Offices decided to back-out of surveys when it was clear that the quality standards were not agreed by the country partners. Some RO M&E chiefs say that, in hindsight, they would have been more insistent in discussions with countries and in at least case report being overruled by a Representative who felt strongly about proceeding with a survey.

One such case concerns the MICS survey conducted in the People's Democratic Republic of Korea. The UNICEF Representative advocated strongly for a MICS, despite the knowledge that a fundamental principle, data sharing and accessibility, would not be upheld. The standard Memorandum of Understanding signed by UNICEF and the implementing agencies stipulates that "*data generated from the MICS (including full datasets, tabulations and reports) will be shared and made available to both parties for use and dissemination to other users and researchers*". Unlike every other survey conducted in Round 4, the dataset for the People's Democratic Republic of Korea will not be made publically available⁸. The rationale for proceeding with the survey included the paucity of recent survey data, interest on the part of the national statistical agency, and the opportunity for UNICEF to interact constructively on data collect methods related to children's issues. In short, the MICS was seen as a means to open avenues even with the lack of data accessibility acknowledged.

⁸ It is worth noting that of many of the reported data quality variables for the DPK survey equal 100% -- indicating that the data has none of the normally observed patterns regarding completeness and other factors.

iii. Processes to communicate and share lessons in MICS4

Since the recruitment of the Regional Coordinators, new mechanisms were needed for sharing information and coordination. Since late 2008, a primary means of sharing lessons has been through global MICS consultations. To date, eight such consultations, with durations of 3-5 days, have been held with venue rotating by region. The consultations focus on both technical and coordination issues (e.g. regional updates, functioning of the technical support framework, detailed review of survey materials, allocation of “top-up” funds, status of workshops, work planning including assignment of tasks). Depending on the stage of MICS4 implementation, other topics have included:

- findings and recommendations of the 2008 MICS evaluation
- results of the MICS4 pilot study and resulting changes to the survey tools
- content of ToRs for UNICEF MICS Consultants, regional consultants, and MOUs with implementing agencies
- consultant roster
- development of new modules
- experiences with the use of PDAs

These consultations are a potentially effective means of sharing lessons learned, achieving a shared understanding of survey tools and processes, identifying key issues to be resolved and planning next steps. In these sessions, comments, ideas and opinions from the Regional Coordinators are actively sought even on the content of the agenda and how much time is required. However, decisions do not seem to be pinpointed to the level of specificity sought by some members. The major drawback identified was the very limited form of documentation emanating from these sessions. As stated by one participant and echoed by others interviewed: *“If you don’t go to the global consultations, you miss out, there are no meetings notes, minutes or reports – the GMC could be better documented and shared”*. Files made available to the evaluation team seem to confirm this opinion (e.g. no single GMC seemed to have a complete, consolidated report or set of meeting notes).

As noted previously, two Regional Coordinators have taken initiative to summarize and communicate lessons learned from Round 4 in preparation for the upcoming round (i.e. WCARO and CEE/CIS). Those two documents are aimed at differing audiences – one addressed to decision-makers at HQ/SMS/MICS⁹ and identifying key issues from MICS4 and providing recommendations on planning, funding and human resources needs and the other a set of “do’s and don’ts” aimed at MICS focal points in COs. In the latter case (i.e. the CEE/CIS document), the recommended “do’s and don’ts” are intended to keep CO informed of key issues from round to round (e.g. in the case of staff turn-over) and the content is being shared with several COs to test their understanding of the key messages.

Multiple CO respondents mentioned their need for information on the upcoming round (Round 5). There was a general expectation that HQ/SMS/MICS would circulate a format for a data gap assessment

⁹ The document was conveyed to the Associate Director, Division of Policy and Strategy from the Acting Regional Director, WCARO in June 2012.

to guide discussion of the RO/CO with countries on Round 5. Some respondents made requests of HQ/SMS/MICS and were waiting on that guidance. Other areas of uncertainty included details on the differing timelines of countries needing the MICS for MDG reporting versus those which have other data sources for that purpose and which new areas which might be covered in the coming round through new or expanded modules. This latter concern was expressed as: *“It is impossible for us to design and theoretically tested questions yet we cannot tell how much [of that work] is being done [at the global level], we need better communication on what [new questions/modules] will and will not be available”*.

iv. Agreements with implementing agencies

A primary means of communicating expectations between UNICEF and the implementing agencies comes in the form of the memorandum of understanding (MOU) inclusive of work plan, timeline and budget. Between rounds 3 and 4, the MOU was modified based on a recognized need to add specificity around data access. In its present form, the MOU template includes stipulations related to access to all survey documents and clean survey datasets and distribution of the data. However, many respondents felt that additional measures were needed to further mitigate risks.

Concern was expressed that countries fail to understand that doing a MICS entails acceptance of a well-defined package of technical assistance and quality assurance steps. This concern applied to both the UNICEF CO as well as implementing agencies. While the surveys are discussed in regional M&E meetings, it was felt that a greater understanding was needed among country office management as to the requirements. It was also noted by some that MICS is not discussed at regional management team meetings; others posited that the Executive Directive is not read by Representatives. These gaps can lead to inconsistent messaging regarding the technical assistance and quality assurance steps and put UNICEF at some reputational risk when surveys fall below accepted international standards.

When the MOU is not upheld, UNICEF will withdraw a country survey from the MICS program.

Uzbekistan stands as a case where data sharing has been a concern in past MICS. In Round 4, despite a carefully negotiated MOU and inclusion of additional guarantees, agreed-upon quality assurance steps were not fully applied and resulting data was compromised. Problems became apparent when the NSO balked at joint monitoring visits of the field work. UNICEF refused to financially support visits not jointly conducted and the NSO found other funds to cover the cost of these separate field monitoring visits. Despite an agreement that data would be shared throughout the process, the NSO only provided data to UNICEF after the database was finalized. Moreover, the NSO failed to share the data with the organization responsible for analysis and report writing (i.e. another government institution). UNICEF then chose to formally withdraw the Uzbekistan survey from the MICS program. Individuals interviewed suggested the need for a more clearly-defined decision-making process wherein UNICEF could withdraw if country commitment was lacking. Finally, some felt that although the global MOU template could be clearer, in the end, implementing agencies will behave in ways that could not be foreseen.

Implementing agencies may also be frustrated as their experience doing surveys with other organizations may not require the same degree of adherence to quality standards (e.g. training was one area where implementing agencies seek to cut back from recommended duration).

At least two lessons emerge from Round 4 in regards to agreements with implementing agencies. The first deals with the need to be more specific around minimum standards - with sharing of databases still a commonly cited issue (stated by one respondent as : *“More transparency with the signed agreement exactly what it means to share a database”*). Another issue potentially addressed via the MOU is the timeliness of final reports. The second lesson deals with needed transparency around decisions not to proceed with a MICS based on concerns of country commitment to either quality assurance steps or data accessibility. There seemed to be some variability between regional offices in their approach – with one RO citing several cases where they declined to proceed and another RO which clearly wishes that they were more firm during initial discussions with several countries.

v. Preparations for Round 5

Several of the items discussed above are embedded in UNICEF’s organizational structure and the respective roles found at HQ, regional and country level. As was found in the prior evaluation, these issues are beyond the ability of the HQ/SMS/MICS team or individual Regional Offices to address (e.g. decision-making around compliance with quality assurance steps, accountabilities for strategic measurement choices such as sample sizes beyond a manageable level). The team found no evidence that these issues are on the agenda of senior managers at either HQ or regional levels.

Several of the elements above are indeed amenable to the efforts of the global MICS team (HQ/SMS/MICS and Regional Coordinators) and were discussed in the Global MICS Consultation (January 2013). Noteworthy is the revision of the MOU between UNICEF and implementing agencies. That MOU is undergoing revision, will be circulated for review among the Regional Coordinators and finalized for use in Round 5. The team did not find plans in place for either (i) improved documentation of the Global MICS Consultations nor (ii) methods to better assess risk in situations where compliance with the data sharing clause is anticipated to be a problem. Regional Office M&E Chiefs were attuned to the demands of the coming round with priorities tailored to their regions. Based on Round 4 experience, several anticipate being more forceful in discussions with countries on their understanding of the MICS package including quality assurance and data sharing.

Section 3C: Quality Assurance and Timeliness

i. Findings/Recommendations from the 2008 Evaluation

The MICS program has designed a set of quality assurance procedures that the survey teams should systematically implement in order to prevent unacceptable practices, minimize errors in data collection, and achieve timely collection, analysis and publication of high-quality and reliable data. The 2008 evaluation documented the considerable progress that countries had made in terms of their capacity to design and implement household surveys. It found that UNICEF had put in place several mechanisms that clearly contributed to acceptance of proven practices and improved data quality. Among the mechanisms identified were the MICS Manuals, regional training workshops, and technical assistance.

However, the evaluation also noted several areas of concern:

1. On **sample size**, the pressure to produce results for many subdivisions (i.e., sub-regions) of the country for guiding program decisions led to very large sample sizes in some surveys, with possible negative effects on the quality of the data collected. UNICEF was thus encouraged to resist the pressure of expanding sample sizes to generate sub-national estimates.
2. **Data collection practices** were also found to often deviate from MICS3 guidelines. Recommended team composition for the field staff was followed in only half of the study countries. Data quality controls were reported to be followed in nearly all of the countries, but there was no written documentation for the assertion. In some cases, the large number of interviews per day per interviewer and the higher-than-recommended supervisor/editor-to-interviewer ratios made it doubtful that quality controls were followed. The evaluation found several common problems affecting data collection that could be remedied to improve data quality. These concerns include scheduling fieldwork during a difficult season, out-of-date or incomplete household listings, funding issues affecting staff quality and time for fieldwork, problems with measuring equipment, and lack of measuring equipment.
3. On the **content and length of questionnaires**, the 2008 evaluation recommended that priority should be assigned to measures that have demonstrated association or effects on long-term child health and well-being objectives, such as mortality reduction. For the interim period (2009 through 2015), those priority measures may be construed as MDG indicators and other internationally agreed-upon coverage measures. The Evaluation recommended that UNICEF should produce a shortened core questionnaire with clear decisions on the inclusion of full birth histories and with additional modules; and that funding should be limited to surveys that include interviews that are manageably short.
4. The 2008 evaluation reported that barriers to the utilization of MICS3 data included the **delays in releasing the final reports**, and recommended that UNICEF should set realistic expectations for the time required to conduct data processing, analyses, and report writing, and train UNICEF country and regional staff members and the implementing agency staff to identify early warning signs of difficulties in data processing and report writing, and to provide the means to remedy those difficulties.

Based on the findings and recommendations of the prior evaluation as well as information provided during the inception period, the current evaluation to answer the following:

- *What lessons have been learned in regards to implementation of the package of data quality assurance measures? How is evidence on the implementation of data quality assurance measures compiled and reviewed? Are lessons available on those measures which represent the greatest challenge to implementing agencies? Is there a common understanding on the data quality assurance measures that are most likely to be adapted or disregarded?*

- *What are the proper mechanisms to ensure that quality problems and mistakes are caught in real time and corrected? When quality assurance issues are identified and shared with implementers (e.g. by regional experts, RO staff, HQ staff), who is accountable for the resulting actions?*
- *To what extent has UNICEF taken steps to appropriately limit sample sizes to the stated purpose of the MICS survey in individual countries? What types of steps were taken? To what extent were these actions relevant? Were these actions successful?*
- *Has UNICEF at HQ and regional levels provided guidance and technical assistance to country offices and implementing agencies to appropriately limit sample sizes to suit the stated purpose of the survey?*
- *What should be the ideal length of time between the end of a survey and the finalization of data cleaning and analysis, publication of the report, and availability of datasets to the public? What are the plans for MICS5 and the resources needed to deliver high-quality data and report in a timely manner?*
- *To what extent has MICS HQ defined a process for inclusion of new indicators/modules? If so, what are the components of that new process? To what extent does that process result in technically sound decisions on questionnaire content?*

This section dwells on the following MICS4 issues: a) Implementation of quality assurance mechanisms; b) Sample sizes; c) Timeliness of final reports; and d) Processes informing the inclusion/revision of modules in the questionnaires. We draw mainly from the document review and the in-depth interviews with UNICEF staff from HQ, regional offices and country offices, with national and international consultants, and with implementing agencies (national statistics offices – NSOs). Where applicable, the findings are contrasted with the insights from the expert-practitioner panel.

ii. Quality Assurance Mechanisms

The MICS program has been, and continues to be acknowledged for the thoroughness of its quality assurance mechanisms for data collection and data processing, all aimed at minimizing non-sampling errors. These procedures, most of which were in place in round 3 include intense training, the number of interviewers and interviews per day, supervision and monitoring of field work, double data entry and easy-to-use data processing programs, among others. In this section we review the extent to which these procedures were adhered to during Round 4 of the MICS program, and how UNICEF benchmarks against global standards for data collection and processing.

a. Training

Collecting high-quality data will only be possible if all field staff are thoroughly trained and thus are familiar with the content of the questionnaire as well as fieldwork procedures. While the length of training depends on the content of the questionnaire, as well as the complexity of field procedures and the characteristics of the field staff, MICS recommends that training be carried out for at least two

weeks, preferably up to 3 weeks. UNICEF also recommends that fieldwork training be carried out in a central location, preferably with a group of 30-40 candidates in a class at one time. The MICS4 manual strongly recommends a centralised training where the fieldwork staff is trained in one single classroom, acknowledging that decentralized training (i.e. holding different trainings in different sites) typically proves difficult to standardize. For trainings involving larger number of field workers, the Manual suggests, in order to maximize standardization of instruction, to keep all participants together for lectures and then split them into smaller working groups.

The assessment of the degree of adherence to the standards above uses data from 27 MICS4 surveys that are covered by the country survey profiles¹⁰. The number of field workers trained, the type of training (centralized or decentralized) and the number of days of training are summarized in Table 3C.1. The number of days of training for the 24 surveys with available data was about two weeks, except in Serbia where it was seven days. The number of days of training ranged from 10 days in St Lucia, 11 days (in three surveys), 12 days (in nine surveys), 13 days (in two surveys), 14 days (in three surveys), and 15-21 (in the five remaining surveys). The 2008 evaluation noted that although the MICS4 Manual recommends two weeks of interview training and provides an illustrative agenda of items to be covered during the training, half of the countries evaluated conducted shorter training sessions. Overall thus, the almost universal adherence to the standards on training duration during MICS4 constitutes a great improvement from MICS3, and should be credited for the data quality improvements described in Section 3D.

Adherence to training improved

The evaluation team found almost universal adherence to the standards on training duration during MICS4, a great improvement from MICS3. Improved adherence to the standard should be credited, in part, for data quality improvements.

Out of the 26 surveys with data on the type of training, 15 (58%) were centralized and 11 (42% decentralized). The number of field workers (FWs) trained varied greatly, from less than 50 in four surveys (Bosnia and Herzegovina–Roma, St Lucia; Tunisia; Barbados) to more than 200 in four others (Serbia, Bhutan, Cuba and Nigeria). There are cases of centralized trainings involving a large number of FWs: Bhutan (240 FWs), Serbia (194), Somalia North East (137), Somalia North West (130) and Suriname (120). Overall, there have been a relatively high number of decentralized trainings in MICS4, driven largely by the surveys' sample sizes. The MICS4 Manual recommends that the same group of trainers conducts the sessions, to ensure a more standardized training. For lack of information, the extent to which this recommendation was followed was not assessed (not reported in the country survey profiles). Neither was it examined whether in instances of centralized trainings with large number of trainees, all participants were kept together for plenary lectures, and split into smaller working groups, as recommended by the Manual.

¹⁰Country Survey Profiles are monitoring tools designed by MICS HQ.

b. Supervision and monitoring of field work

According to the MICS Manuals, supervision and monitoring of data collection entails among others, observation of interviews aimed at evaluating and improving interviewer performance, and systematic spot checking. Each supervisor is bound to observe about 5-6 interviews per week, and to spot check about 5% of households (i.e. about 5-6 per week), covering all teams and with focus on household composition as it relates to the eligibility for women, men and under-five interviews. Until round 3, the survey tools related to data quality were mainly the Data Quality Tables (DQTs). Because they ought to be produced at the time of final report, the DQTs were of limited interest for data quality monitoring and improvement during field work. One of the novelties of MICS4 has been the design and introduction of Field Check Tables (FCTs) aimed at quantitatively identifying errors during data collection and improving data quality. The implementation of this quality control mechanism is possible when data entry starts early after the beginning of field work.

Observation of interviews and spot checks

The interviews with NSO and UNICEF CO staff and consultants in a handful of target countries (Ghana, Madagascar, oPt and Lebanon) did not show any conclusive evidence that the observations of interviews and spot checks were implemented during MICS4 data collection. This sentiment was echoed by a MICS Focal Point interviewed, who reported that the supervisors' reports (where one could see the data on spot checks and observations) were with the NSO and were not accessible by UNICEF. The national and international consultants interviewed in another country were also doubtful of the implementation of these quality control procedures as shown by this response: *"We really do not fully know how NSO performed quality controls in the field. Quality controls were not fully implemented because NSO said they do not have enough funds"*. Indeed, during one of our two country visits, NSO staff was not able to share any supervisory documents reporting the spot checks and observations of interviews.

The MICS3 evaluation reported that "although all survey coordinators and supervisors interviewed said they regularly revisited households, no country had written documentation to support that this quality control occurred". Our finding therefore suggests that in most of the countries covered by the interviews, no major steps have been taken in MICS4 to ensure compliance with, or documentation of interview observations and spot checks during data collection.

Field Check Tables

In its Round 4, the MICS program introduced a set of Field Check Tables (FCTs) designed for use during data collection to identify departures from expected patterns, and to check internal consistency and completeness. These tables, similar in content to the data quality tables which are annexed to the final report, are produced per team and ideally, shortly after the start of field work. The utility of the field checks tables is highly dependent on data entry of completed questionnaires simultaneously with survey fieldwork and effective feedback loop from the primary data entry location to the field supervisor. This quality assurance mechanism, though not new in its content, was widely acknowledged as innovative to the household survey industry, seeing as a powerful tool for field supervisors to identify systematic errors made by individual interview teams and therefore allow for correction while the team is still in

the field. Several NSO staff reported that they will adopt the principle in other surveys they conduct. Indeed, in a few countries like Bosnia and Herzegovina, the FCTs were reported to have had an impact, making it easier to monitor in the central offices, and allowing the provision of feedback much quicker to the field supervisors. In another setting, the survey was aborted due to poor quality emanating from the FCTs.

Field Check Tables likely underutilized

The team found that the evidence of field check table implementation and use to improve the quality of data was missing in many countries.

As acknowledged by one interviewee, *“Field check tables were not optimally used. In future, there is need to reinforce the implementation of this quality control mechanism”*.

These two examples notwithstanding, the evidence that the procedure was implemented and used to improve the quality of data was missing in a many other countries. The field check tables, newly-introduced in Round 4, received little attention in the MICS Manual and workshops. As acknowledged by an interviewee, *“Field check tables were not optimally used. In future, there is need to reinforce the implementation of this quality control mechanism”*. An international consultant also reported not being aware of the use of FCTs during the MICS4 she supervised. One UNICEF MICS consultant in another country insisted that there were no provisions for FCTs in the original plan, and that they were only introduced after data collection had started.

In some cases, the FCT were partially implemented. In Ghana for example, data entry started about two weeks after the start of field work, and the first batch of FCTs was produced and shared with staff at NSO regional offices, UNICEF CO and HQ/RO. However, there was no follow up and despite insistence by the MICS Consultant; the second batch was not produced. In Madagascar, the first batch of Field Check Tables was reviewed during a meeting, but the extent to which the comments fed back to the field was less clear. Because of budget constraints, the program for the subsequent field visits was not respected, and FCT were not reviewed. In the oPT survey, the system was only adopted the system in the final stages of field work.

Sub-optimal use of field check tables also stemmed from the impression among NSOs that their use is optional. Implementing agencies considered them as redundant with existing quality control mechanisms (e.g. close monitoring and supervision in the field). As suggested by one interviewee, *“this control mechanism should be introduced in a manner that makes it clear to partners its value and the improvements to be made by their usage”*. In Uzbekistan, it was reportedly difficult to convince the implementing agency to use the FCTs. The first batch was produced about two weeks after data entry started, but the NSO staff saw it as extra work - It was however used in one region to realize that the lower response rates recorded were as a result of the teams not re-visiting households. The extra work for, or opportunity cost from the implementation of the FCTs, were also alluded to during one of the countries visited by the evaluation team. The NSO staff interviewed indicated that the budget for data collection was not congruent with the scope of work, and referred to the cost implications of managing the FCTs.

Another reason for the non-optimal use of FCTs, as emerging from the interviews, relates to delays in getting feedback and comments on the FCTs from HQ or the regional offices. This would appear to be

point of some miscommunication as HQ staff clearly downplays their role in reviewing the FCTs. However, many UNICEF CO and NSO staff interviewed conveyed their frustrations for not getting timely feedback from HQ or the ROs. The core message – that field check tables have their greatest utility when reviewed and acted upon in a short time span – has not been conveyed adequately nor supported by guidelines and tools. This finding was shared with the MICS Management team during the Dakar meeting in January, with the recommendation that HQ provide further clarification on the use of the FCT throughout the guidelines and materials being prepared for Round 5.

Double data entry

In almost all countries interviewed, the double data entry was implemented. In Madagascar for example, there was 100% double data entry, with a blind process of assignment of questionnaires to data entry clerks. The evaluation did not record any major concern regarding data entry, and concluded that the MICS program is doing well in this area.

iii. Sample Sizes

The implications of large sample sizes have been amply stressed in the MICS4 Manuals and workshop presentations. The larger the sample size, the larger the number of interviewers and consequently, the more likely the training will be decentralized and/or include multiple training sessions with little practice, with consequences including the inevitable risk to lose the standardization and consistency of the message delivered. The more critical implication of large sample size, and its resulting large number of field work teams, is the heightened difficulty to monitor data quality in real time, given the typically small number of supervisors at NSO HQ. In some countries (e.g. Kenya, Uganda, Ghana, Malawi), the NSOs are usually overwhelmed with demand for surveys, and would be inclined to shorten the duration of field work as much as possible in order to meet the competing requests for data collection.

As reported in the 2008 evaluation and confirmed during the interviews, the sample size increase is primarily driven by the need from within UNICEF or among national partners, to produce indicators and estimate program effects at lower sub-national levels (e.g. district). While the MICS HQ Team does not have any firm recommendations regarding sample sizes, the number of sampling domains, or the number of teams, there seemed to be an agreement during the interviews, that having 10-15 teams, and duration of field work of 3-4 months is the maximum size compatible with maintaining consistent good practice standards. Based on the recommended team composition and the number of interviews per day, this practice would result into a sample size ranging between about 9,000 and 18,000.

Large, and increasing, sample sizes remain a challenge in MICS4

The team found that large sample sizes and the resulting large number of teams and interviewers have persisted in a number of MICS4 surveys. Among the 14 countries that implemented both MICS3 and MICS4, the average sample size was 18,122 in MICS4, compared to 14,041 in MICS3.

Table 3C.2 lists 21 high sample size MICS4 surveys, the criteria being the number of households higher than 13,000 or comprised between 10,000 and 13,000 with an increase of more than 40% between MICS3 and MICS4. An unprecedented survey sample size was used in Pakistan-Punjab (102,545), and sizes above the 18,000 threshold in seven other countries including Iraq (36,000+), Nigeria (29,000+),

Thailand (27,000+), and Pakistan-Sindh (26,000+). Among the 14 countries from the list that had implemented both MICS3 and MICS4, the average sample size for was 18,122 in MICS4, compared to 14,041 in MICS3, hence an increase of nearly 30%, despite marked reductions in Thailand (from 40,000 in MICS3) and Algeria (from 29,000+ in MICS3). The MICS staff at HQ noted during the interviews that DHS sample sizes are also generally on the rise.

In the Table 3C.3 below, we analyze the survey plans of a subset of 10 MICS4 surveys from the list, with emphasis on the number of sampling strata, and the number of teams and field workers used. The selection was guided by the availability of MICS4 preliminary/final reports or survey plans, and the need to maintain a certain level of regional balance, with the inclusion of one or two country(ies) from each region (ESARO did not have any high sample size MICS4 surveys). Covering all regions was deemed desirable as the topic investigated is linked to regional support on sampling matters.

Table 3C.3: Survey plan for selected high sample size MICS4 surveys

Survey	Sample size (<i>selected or actual</i>)	# Sampling domains (or strata)	# Teams and field workers (FWs)
1. Pakistan-Punjab (2011)	102,545 households	287 strata in 150 tehsils (from 9 divisions and 36 districts), by place of residence	75 teams for a total of about 525 FWs
2. Iraq (2011)	36,592 households	236 strata (118 districts by urban and rural)	118 teams for a total of 708 FWs
3. Nigeria (2011)	29,151 households (+ 10% from MICS3)	74 domains (37 states by urban and rural)	Not available in the preliminary report
4. Pakistan-Sindh (2011/12)	26,648 households	63 domains (22 districts by urban and rural; 20 urban centers/towns)	20 teams for a total of 120 FWs
5. Argentina (2011)	21,200 households	26 strata (23 of the 24 provinces; and Buenos Aires split into 3)	82 teams for a total of 556 FWs
6. Laos PDR (2011/12)	19,960 households (+239% from MICS3)	17 provinces by urban and rural	20 teams for a total of 140 FWs
7. Chad (2010)	17,668 households	59 domains (24 regions and few districts by urban and rural)	20 teams for a total of 120 FWs
8. Kazakhstan (2010/11)	16,380 households	30 strata (14 regions by urban /rural, and 2 urban regions)	16 teams for a total of 144 FWs
9. Palestine (2010)	15,345 households (+32% from MICS3)	16 Governorates, by urban, rural, and refugee camps	25 team for a total of 206 FWs
10. Mongolia (2010)	10,500 households (+69% from MICS3)	Five regions by urban and rural	10 teams for a total of 70 FWs

Overall, the recommendations from the prior evaluation about the disaggregation of data at district levels, or from the MICS Manuals about manageable number of teams and field workers, appear not to have been followed in a number of countries, as evident in Table 3C.3. Large sample sizes and the resulting large number of teams and interviewers have persisted in a number of MICS4 surveys. The main reason underlying this lack of progress is invariably, UNICEF's principle by which: (i) a MICS survey is to be led and owned first and foremost by the country, (ii) within UNICEF, key technical decisions remain with the UNICEF country office, with the RO and HQ/SMS/MICS providing only advice and recommendations. UNICEF HQ interviewees emphasized that the sample sizes reported in this analysis were not desirable but beyond providing guidelines and recommendations, UNICEF had influence little over decisions taken within the country. As one UNICEF/SMS/MICS member said: *"We say don't do it, in workshops, in e-mails and through other means. However, in the end, it's their survey"*.

iv. Timeliness

The evaluation sought to analyze the duration of the key stages of a typical MICS survey, from the first workshop to data collection and release of final reports. The main aim was to draw the implications for Round 5 and the MDG reporting. The duration of the following steps was assessed: a) First workshop to review of questionnaires; b) Questionnaire review to start of field work; c) Start to end of field work; d) End of field work to first data tables for review; e) First to final data tables; and f) Final data table to

Timeliness of MICS4 reports

The team found that the time lapse between end of field work and release of final reports had declined with average duration estimated at 21 and 14 months in MICS3 and MICS4 respectively.

While the decline is commendable, the length of time remains unacceptably long for many MICS4 surveys. Reports were still unavailable for six surveys after 15-19 months, for six others after 22-28 months, and for another 5 surveys after 30-33 months.

draft report for review. Country-level estimates and summaries statistics (minimum, median and maximum durations) were produced and presented at the consultation meeting in Dakar (on January 9-12, 2013). Comparing the findings with those from the previous evaluation suggested that timelines did not improve between MICS3 and MICS4. While this result may sound disappointing, the substantial increase in sample size between round 3 and Round 4 suggests that the MICS implementation may be efficient (i.e. as timelines did not correspondingly increase). The discussions that ensued recommended that the evaluation should work on the period from the end of field work to the release of final reports only, as the durations of the other steps are influenced by many factors beyond the control of the MICS

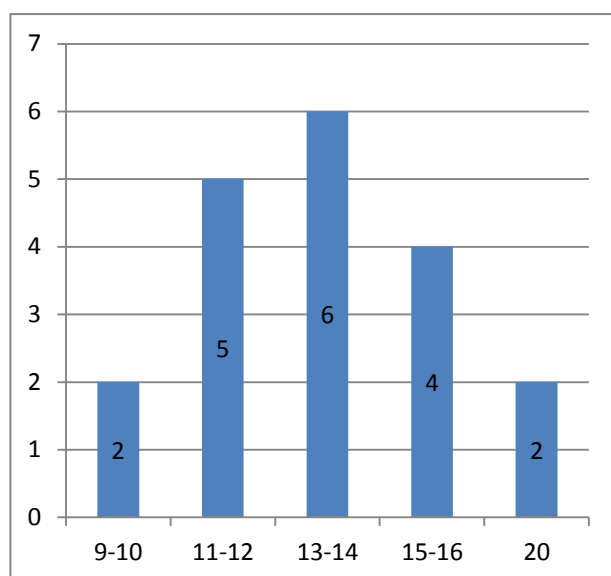
team. This section thus focuses on that stage. As mentioned above, the 2008 Evaluation recommended that UNICEF should set realistic expectations for the time required to conduct data processing, analyses, and report writing. This recommendation was followed, with a recommendation for MICS4, of a 12-month period from the end of field work to the production of final reports.

Annexes 3C.1a and 3C.1b describe the actual length of time (in months) from end of field work to the release of final reports for MICS4 surveys whose reports have been published (Annex 3C.1a), and the length of time from end of field work to February 1, 2013 for the MICS4 surveys whose reports are not yet available (Annex 3C.1a). Summaries of both tables are seen in Figure 3C.1. For the 19 MICS4 surveys

that had published their final reports, the median duration was 13 months (average of 14 months). Indeed about a third of these surveys (six) completed their final reports within 13 to 14 months after end of data collection. From the 2008 Evaluation, the median duration from completion of field work to the release of final reports stood at around 16.5 months, hence an improvement of 3.5 months or 21%. The MICS3 and MICS4 comparison should be regarded with caution since the MICS 4 surveys included in the analysis represent the best performing (i.e. in terms of report completion), while the MICS 3 comparator data may have included a more diverse set. Despite this improvement from MICS3 to MICS4, only seven MICS4 surveys (or 37%) produced their report within the recommended time frame of 12 months.

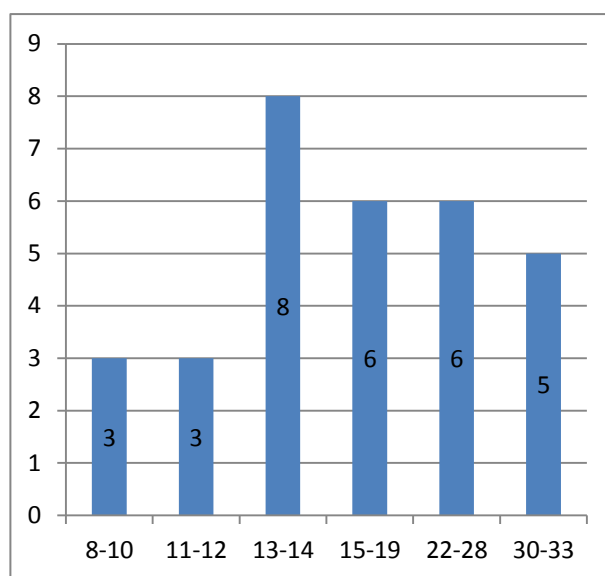
Figure 3C.1: Length of time from completion of field work to release of final reports (for countries with available final reports), or to February 1, 2013 (for countries where final reports were not yet available)

Time lapse (in months) from completion of field work to release of final reports (**19 MICS4 surveys with available final reports**)



Median duration: 13 months
Average duration: 14 months

Time lapse (in months) since completion of field work to Feb 1, 2013 (**31 MICS4 surveys with final reports not yet released**)



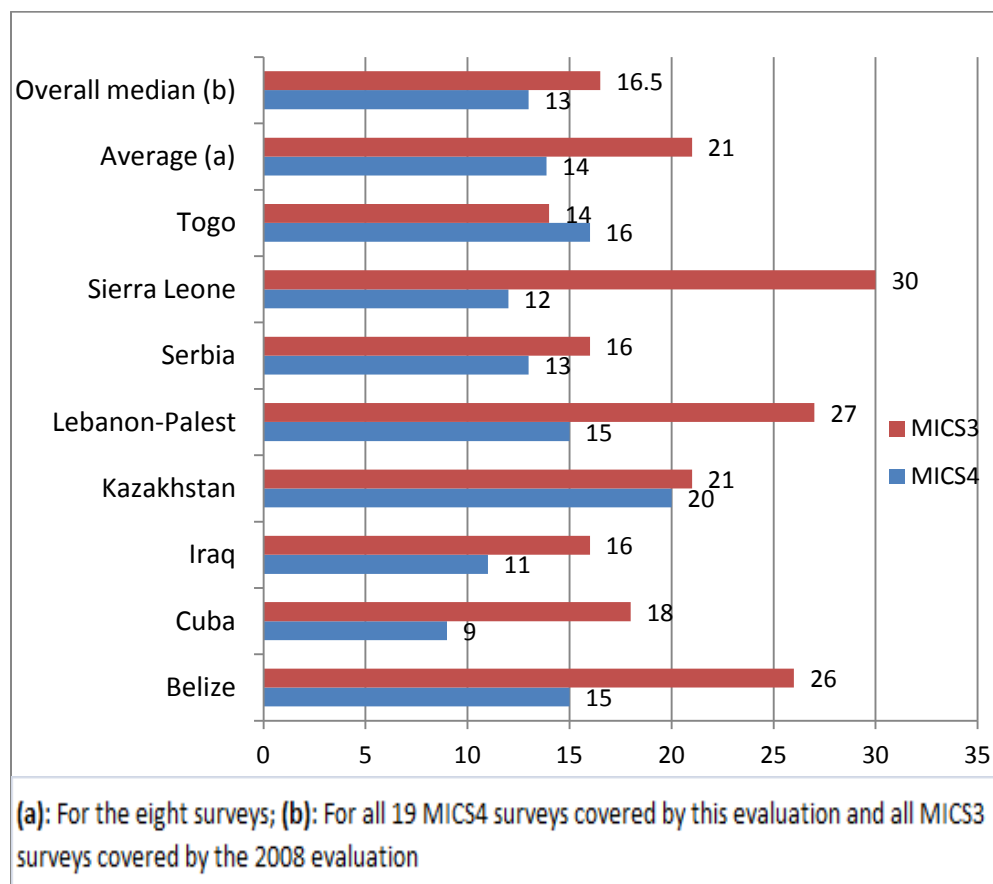
Median duration: 15 months
Average duration: 19 months

For the 31 MICS4 surveys with a report not yet finalized, it had passed a median duration of 15 months (average of 19 months) since the end of field work. In particular, the 12-month period had already passed for 25 (or 81%) of them. Noticeably, the reports were still not available for six surveys after 15-19 months, for six others after 22-28 months, and for 5 other surveys after 30-33 months.

Figure 3C.2 further depicts the change in the duration from end of field work to release of final reports, for a set of eight countries with MICS3 and MICS4 data (Belize, Cuba, Iraq, Kazakhstan, Lebanon-Palestinians, Serbia, Sierra Leone and Togo). It clearly shows that the time lapse had declined over time

in all countries, with the exception of Togo where it went up by two months. The average duration is estimated at 21 months in MICS3 and at 14 months in MICS4, for a decrease of 33% (or seven months).

Figure 3C.2. Length of time (in months) from completion of field work to release of final reports (for countries with available final reports): MICS3 and MICS4



While the decline in the length of time used to release final reports is commendable, the period remains unacceptably long in a large number of surveys. One of the reasons for long delays elicited during the interviews was the lack of incentives for NSO staff to work on the data analysis and report writing. Based on interviews in multiple countries, this lack of commitment may be come about because NSO staff are not paid any allowances during these phases unlike during the field work or because NSO staff quickly becoming engaged in other activities. Other commonly cited reasons relate to delays in getting feedback from HQ, as illustrated by these statements from interviewees in multiple countries covered by the interviews: *"Tables were sent to HQ for validation about one month ago and we still have not heard from them ... Since we could not wait longer, we went ahead and drafted the report without validated tables"*. Similar frustrations were also voiced by NSO interviewees in several countries. It was however difficult to establish if overall, the delays were mainly recorded at the national level or at the UNICEF/global level, the experiences varying from one country to another.

These delays, when extreme, cause frustrations among key players. As a stakeholder interviewed put it, *“MICS 4 data which was collected in 2010, hasn’t been released up until now, putting UNICEF and NSO in a tough situation and under huge pressures from various stakeholders who now view the data as outdated and useless. Additionally, UNICEF and partners were not able to use the data for planning purposes or as baselines for our 2011-2013 cycle indicators”*. In other cases, where reports have been delayed for long periods, the survey data was circulated and used within the country in the absence of a publication. While this coping strategy may contribute to data use within UNICEF CO and key national partners, the delays in the release of final reports clearly limit the implementation of the MICS dissemination plan, which, according to the MICS4 Manuals, includes creating awareness about MICS and interest in MICS data prior to data release, organizing a national seminar coupled with the official release of the final data, engaging the media and journalists, and making MICS data widely available at the national, regional and international levels.

v. New Questions & Modules

The 2008 evaluation noted that some questions/modules included in the MICS3 did not appear valid for cross-country comparisons but rather required considerable country-specific adaptation. The previous evaluation urged UNICEF to resist the pressure to expand the MICS questionnaire and recommended that new content should be determined through a transparent process that applies clearly defined criteria (e.g. endorsed by an inter-agency working group).

From the interviews with the MICS team at HQ, it appears that the inclusion of new modules and questions has followed a process of thorough review and validation, or exchanges with the DHS program, as shown in Annex 3C.2. The validation took different forms depending on the content of the module, and included qualitative, quantitative, clinical or observational methods, or a combination of the above as in the case of the Module on Early Childhood Development (ECD). The processes leading to the inclusion or updating of the Hand Washing, Unmet Need, and Post-Natal Health Checks Modules deserve further recognition not only for the validation studies that informed the changes, but also because the request for adaption emanated from a major partner (UNFPA for the case of the Unmet Need Module), or the changes adopted by MICS were later adopted by, and adapted in the DHS survey. The revised and expanded newborn care section was developed through an evidence-review carried out by an inter-agency working group inclusive of UNICEF, the World Health Organization, USAID, DHS, and Save the Children among others. The need to include/revise the Modules on Access to Mass Media and Technologies, and on Tobacco and Alcohol Use arose from the UNICEF team working on the adolescents; questions therein were mostly retrieved from the questionnaires by the UN agency responsible for ICT, or from the DHS. Though the inclusion or revision of the Modules on ECD and Children Left Behind, did not involve the collaboration with major international partner, validation studies were commissioned by UNICEF and tested in Philippines and Jordan (ECD Module), or in Albania and Costa Rica (Children Left Behind)^{vii}.

Section 3D: Data Quality Assessment

This section uses data from MICS4, MICS3 and DHS to describe the quality of MICS4 data, assess the change from MICS3 to MICS4, and compare MICS4 and DHS. The variables of interest are the missingness of date of birth, digit preference in age reporting and age displacement, incompleteness and inconsistencies of anthropometric measures, and observation of bednets and hand washing places.

Due to time constraint, the evaluation did not seek to interview DHS staff to gain insights into the divergences that may arise from the MICS-DHS comparative analyses. It is worth mentioning that the data quality assessment was finalized after the January 2013 consultation meeting in Dakar, with inputs from the participants. For example, the data quality assessment was originally designed by the Evaluation team to cover only a small set of (12) MICS4 surveys. A major decision was made in Dakar, based on the concerns from the participants to the meeting, to cover all MICS4 surveys with available data. As a result, the findings from the assessment were not investigated during the interviews with UNICEF CO and RO staff, or with the statistics offices, which took place between November and December 2012. This timing (interviews prior to data quality assessment) precluded any detailed investigation of the reasons explaining the dominant findings from the MICS data on the levels of, and trends in key data quality indicators.

The section begins with a summary of the key findings from the previous evaluation.

i. Findings from the 2008 Evaluation

In the previous evaluation, the quality of the MICS3 data was assessed in detail in nine countries. The MICS3 data was deemed of good quality overall. In several instances, however, data quality was poor. Compared to other global-level survey programs, the MICS showed a greater variability in data quality on a country-by-country basis. For example, Kazakhstan, Thailand, and Guyana appeared to have good data quality, whereas Bangladesh and Djibouti exhibited worrisome data quality findings. The Evaluation team concluded that this variability was linked to the decentralized organization of the MICS and to corresponding difficulties in ensuring adherence to fixed standards. Notable weaknesses—indicative of weak field supervision and editing, as well as respondent difficulty with the questions—included: the number of missing ages (month and calendar year for women respondents in Djibouti and Bangladesh); digit preference in age reporting (Djibouti and Bangladesh); low age-accuracy ratios (for children in Djibouti and adults females in Malawi); and lower than desired overall response rates (Bangladesh). In the limited comparisons made with data collected by the DHS, the response rates, the numbers of children ever born and surviving, and the estimates for a selected subset of the MDG indicators were very similar. Confidence intervals (CIs) and design effects (DEFFs) associated with key variables were also very similar in the two sets of surveys.

ii. Data Source

The data analyzed are drawn from Data Quality (DQ) Tables of all surveys conducted under MICS4 which had completed data analysis by December 2012 - a total of 47 MICS4 surveys from 40 countries. Out of these 40 countries, 22 had conducted a MICS3. These 22 surveys were included in the analysis to assess

the improvement between MICS3 and MICS4. Of interest is also the comparison between MICS4 and the standard DHS in countries where both surveys were conducted within a period not exceeding three years. Six DHS datasets were included in the analysis for this purpose. The Indonesia, Kenya, Madagascar, Nepal and Pakistan DHS were not considered because the corresponding MICS4 surveys were conducted at sub-national level. While all MICS data were retrieved from DQ Tables, some of the DHS data were from DQ Tables and others tabulated from the datasets. The list of all qualifying MICS4, MICS3 and DHS surveys is presented in Annex 3D.1 and the number of surveys summarized in Figure 3D.1 across the seven regions: Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS); East Asia and the Pacific (EAPRO); Eastern and Southern Africa (ESARO); Latin America and the Caribbean (TACRO); Middle East and North Africa (MENA); South Asia (ROSA); and West and Central Africa (WCARO).

This data quality assessment focuses on the following types of errors:

1. Incompleteness of date of birth for women 15-49 and children under-five¹¹;
2. Age heaping and out-transference (transfers across eligible and non-eligible groups of women and children);
3. Missingness and inconsistencies of, and digit preference in, anthropometric measurements;
4. Observations of bednets and hand washing places.

iii. Incompleteness of Date of Birth

In MICS and DHS surveys each woman is asked to provide her age in completed years, the year of birth, and a month of birth. However, some women do not provide all three items, and even if all information is provided, there may be inconsistencies. In these instances, MICS (like DHS and other surveys) uses complex statistical models to impute the missing values. The information about the birth date of children also faces the same problems. Conscious of the implications of large missing values (even if they are imputed) on the eligibility for women or under-five interviews for example, MICS recommends that the percentage of incompleteness should not exceed 5%, or 10% in the worse cases. This report analyzes the percentage of women 15-49 and children under-five with imputation on “month only” or on “month & year”. For children, we also add the imputation for “month”. The complete tabular data appear in Annex 3D.2.

a. Date of birth for Women 15-49

Incompleteness of month of birth is clearly less critical for adults. The focus of this section is consequently on incompleteness of both month and year of birth for women 15-49¹². Out of the 47 MICS4 surveys covered by this assessment, five (Madagascar-South, South Sudan, Iraq, Tunisia and Afghanistan) did not report the completeness of age of birth for women 15-49 in the corresponding

¹¹There was also interest on the age of household members, but the variable was not included in MICS3 DQ Tables.

¹²We may be missing the cases where the year of birth was imputed, but the month of birth was known. The number of such cases is typically negligible.

DQT. In 16 others, there was no imputation on “month & year”, while in eight others the percentage of imputation on “month & year” was around 0.1%. Figure 3D.2 shows the incompleteness of women’s month and year of birth for the remaining 18 MICS4 surveys (with percentage of imputation equal or higher to 0.2%). The Pakistan-Balochistan MICS4 recorded the highest level of incompleteness, with imputation of over 46% of women’s month and year of birth. Five other countries (Chad, Sierra Leone, Mali, Indonesia-Papua and Nepal-West) had a level of incompleteness between 12% and 25%, and three others (Guinea Bissau, Ghana-Accra, and Pakistan-Sindh) had values around 5-6%. The remaining eight countries shown in the Figure had a percentage of imputed values between 0.2% and 1.5%. Overall, out of the 42 MICS4 surveys with available information, nine (or 21%) had missingness above the 5% threshold recommended by MICS. Some degree of incomplete date of birth reporting is to be expected in household surveys. However, the fact that certain of the MICS4 countries had extremely high values of missing data (i.e. Pakistan-Balochistan, Chad and Sierra Leone) further suggests that quality assurance mechanisms (e.g. field check tables) are poorly utilized. Moreover, it is of concern that five MICS4 surveys did not include the standard data quality tables on missing data for women’s month and year of birth.

The corresponding variable in the MICS3 Data Quality Tables was either missing (Lao DPR, Belize, Cuba, and Nigeria – DQ Tables were not available for Tunisia and CAR) or with value of 0.0% (in the 16 other countries), precluding any comparison between MICS3 and MICS4. Among the six countries eligible for MICS4 and DHS comparison, the magnitude of incompleteness was similar for both surveys in Swaziland and Congo DR (around 0.1%); MICS4’s values were lower in Ghana (0.1% compared to 1.2%) and Nigeria (0.4% versus 4.1%), and higher in Mali (16.1% versus 5.9%) and Sierra Leone (17.4% compared to 7.6%). As mentioned above, the time constraint prevented any further investigation of these MICS-DHS differences.

b. Date of birth for Under-5s

For under-five children, the report uses the incompleteness of month of birth. Two countries (Iraq and Afghanistan) did not report on the incompleteness of children’s date of birth. Eighteen countries had values comprised between 0.0% and 0.1%. Figure 3D.3 depicts the incompleteness for the 27 remaining countries. As can be seen, the extent of incompleteness ranges from 0.2% to around 1% in 16 countries; it varies between about 1.5% and 3% in five others; and stands at around 4.5% in Mauritania and Sudan. Only three MICS4 surveys (or 7%) had values above the 5% recommendation. Worthy of further investigations are the cases of Chad and Pakistan-Sindh with values of 18.7% and 9.5%, respectively, and Pakistan-Balochistan with a level of incompleteness of over 37%.

Figure 3D.4 shows the change from MICS3 to MICS4 in the ten countries with missingness of 0.5% or higher in at least one of the two surveys. There have been marked improvements over time in all countries, except in Lao PDR (increase from 0.5% to 1.5%) and Mauritania (upward move from 2.1% to 4.5%). Finally, the MICS4-DHS comparison, as presented in Figure 3D.5, shows that both surveys have similar levels of missing cases in four of the six countries (Swaziland, Congo DR, Mali and Nigeria). In Ghana and Sierra Leone, DHS had substantially lower levels of missing values.

iv. Age Heaping and Age Displacement

Quality household survey data depends heavily on accurate identification of eligible respondents among women of reproductive age and children less than five years of age. Two quality problems associated with age reporting are covered in this section: age heaping or digit preference with interest to ages ending with 0 or 5; and age displacement or transfers outside the range of eligibility for women age 15-49 and children under five. Both of these issues in age reporting can introduce bias in the calculation of key demographic variables (e.g. fertility and under-five mortality) as well other key indicators. Misreporting of ages often takes the form of a preference for numbers ending with the digits 0 or 5. This pattern of skewed age reporting occurs when respondents don't know their age or that of other household members, or when ages are intentionally misreported. Out-transference of a household member age from one category to another is more commonly associated with interviewer attempt to reduce work load or to speed the pace of the interview. Out-transference occurs when interviewers misstate ages, causing for example a woman who is aged 15-19 to be reported as 10-14, a woman who is aged 45-49 to be reported as 50-54, or a child aged 4 to be reported as aged 5.

a. Age Heaping among female household respondents

We assess this possible bias using the Whipple's index on the sample of women aged 13-62, by calculating the ratio of reported ages ending in 0 or 5 to one-fifth of the total sample (multiplied by 100). In this original version, the Whipple's index (noted W_t) measures preferences for ages ending in either 0 or 5 without distinction. As these effects may offset each other, we also calculate two variants of the Whipple's index, the first (noted W_0) to detect heaping at ages ending 0, and the other (noted W_5) to detect preferences for ages ending 5. W_t is the arithmetic average of W_0 and W_5 by construction^{viii,ix}. The results of W_t , W_0 and W_5 are presented in Annex 3D.3.

Figure 3D.6 shows the general Whipple Index (W_t) among women age 13-62 for heaping at 0 or 5 in the 47 MICS4 surveys. As widely accepted, the assessment of data quality based on this index is as follows: <105 = highly accurate; $105-109.9$ = fairly accurate; $110-124.9$ = approximate; $125-174.9$ = rough; ≥ 175 = very rough^x. In Indonesia-Papua there was a tendency of under-reporting ages ending with 0 or 5 (W_t of about 93). Out of the 47 surveys, 27 (or 57%) have either highly accurate age reporting (18 countries) or fairly age reporting (9 countries). Bhutan and Ghana-Accra are deemed to have approximate data quality. The quality of age reporting in the remaining 17 countries (or 36%) is clearly rough (in 12 countries) and even very rough in five countries including Pakistan-Balochistan, Sudan, Chad, Afghanistan and Sierra Leone.

Figure 3D.7 shows the change from MICS3 to MICS4 among the 20 qualifying surveys. Six countries (Macedonia, Nigeria, Lebanon-Palestinians, Ghana, Gambia and Lao PDR) registered a dramatic improvement in age reporting; six other countries (Guinea-Bissau, Sierra Leone, Iraq, Togo, Suriname and Kazakhstan) recorded a modest improvement; and in six others (Belize, Bosnia & Herzegovina, Jamaica, Cuba, Mongolia and Serbia) the quality of age reporting remained almost unchanged – these countries already had good quality in MICS3. Only in Vietnam and Mauritania was there a deterioration of the quality of age reporting. Finally, Figure 3D.8 –which compares MICS4 and DHS - shows that the

quality of age reporting of MICS4 is comparable to that of DHS in Swaziland and Congo DR; it is better than that of DHS in Ghana, Mali and Nigeria. DHS displays higher quality only in Sierra Leone.

b. Out-Transference for women 15-49 and Under-five Children

The assessment of the extent of out-transference uses age ratios, defined as the ratio of the reported number of cases in an age bracket divided by the reported number of cases in the preceding or succeeding age interval, multiplied by 100^{xi}. We also use calculations based on individual age values. The detailed results of age ratios for women and children are in Annex 3D.3.

Women

Figure 3D.9 summarizes the age ratios 14 to 15 and 50 to 49. It shows an evidence of transfer from age 15 to 14 in 16 surveys (34% of the surveys), with age ratio of 125 or higher. In particular the ratio exceeds 175 in Sudan, Bhutan and Sierra Leone¹³. Thirteen other surveys had an age ratio between 110 and 125, suggesting possible displacement from age 15 to age 14. In four surveys, the age ratio stands below 90, indicating a possible transfer from age 14 to age 15. The remaining 14 surveys (30%) have age ratio (from 90 to 110) which suggests the absence of out-transference. More apparent is the displacement from age 49 to age 50. As the corresponding Figure shows, the 50 to 49 age ratio is 175 or higher in 27 surveys (57%), including values of 200 or higher in 19 of these surveys. In five other surveys the ratio varies from 125 and 175, while in eight others it stands between 110 and 125. Only in four surveys (Bosnia & Herzegovina, Macedonia, Macedonia-Roma, Jamaica and Korea PDR) does the age ratio suggest an absence of out-transference. As the MICS Team clearly puts it, the out-transference around age 49 is of less concern, not only because the population in those age groups (e.g. 45-59) is proportionately smaller, but more importantly because older women have significantly lower contribution to the events of interest (e.g. fertility and mortality).

Standards on out-transference in children's reported ages

Expert-practitioner panelists were asked to provide an opinion on the issue of out-transference. There was close correspondence in their responses. Moreover, their responses were well aligned with the experiences and judgments of the HQ/SMS/MICS team. For the MICS team, values below 1.05 were deemed to be good while values above 1.10 were worthy of a closer look.

When tabulating MICS4 data against these standards, the team was struck by the number of countries which fall significantly below the normative score. These countries/ populations, including Serbia (.67), Jamaica (.81), as well as Roma populations in both Serbia (.75) and Macedonia (.82), represent special challenges for the MICS. These patterns may be related to oversampling of households with children under age five in low fertility settings. Further exchange with the expert-practitioner panel may help to better calibrate standards for out-transference in these groups.

¹³ Surveys with high levels of age displacement typically make note of such. In an example from Sierra Leone, discussion of the population pyramid generated from MICS4 data, noted that: "Examination of this figure reveals that females aged 40-49 are underrepresented or "missing" while there is a large bulge of women aged 50-54. Children aged 5-9 of both genders appear to be overrepresented. This suggests that enumerators may have introduced data quality errors by overstating the age of children aged under five years and women aged 40-49, possibly in order to minimize the number of interviews that they had to conduct".

Clearly, the improvements in human resources and quality assurance between MICS3 and MICS4 resulted in improvements in the displacement from age 15 to 14, as seen in Figure 3D.10. Increase of age displacement was recorded in only seven countries (Iraq, Lebanon-Palestinians, Sierra Leone, Ghana, Kazakhstan, Vietnam and Mongolia). The same pattern of improvement can be noticed on the age ratio 50 to 49, with only five exceptions (Vietnam, Mongolia, Mauritania, Ghana and Cuba). The comparison between MICS4 and DHS, as described in Figure 3D.11, shows that for displacement from 15 to 14, MICS4 performed better in four of the six countries (Swaziland, Congo DR, Sierra Leone and Mali). Regarding age displacement around age of 49, both surveys had ratio of 220 or higher in three countries (Sierra Leone, Nigeria and Mali). MICS4 had better outcome in Ghana, while the reverse was observed in Swaziland and Congo DR.

Children

The magnitude of age displacement from age 4 to age 5 is summarized in Figure 3D.12. Out-transference is evident in 22 countries (47%) displaying an age ratio between 110 and 145, including seven with values standing between 125 and 145. There are 20 countries with age ratio between 90 and 110 and indicating an absence of age displacement around 4 years of age. In five countries (Serbia, Serbia-Roma, Jamaica, Pakistan-Sindh and Madagascar-South), the distribution of age suggest an over-representation of age 4, compared to age 5 between 20% (100/82) and 50% (100/67). Table 3D.1 classifies the MICS4 surveys as very good, good, acceptable, poor or very poor based on the standards from the experts-panel survey. As for out-transference among women, there has been tremendous improvement over time in age displacements among children under-five. Out of the 20 countries represented in Figure 3D.13, only two (Ghana and Bosnia & Herzegovina) registered and increase in age displacement between MICS3 and MICS4. Finally, Figure 3D.14 indicates that DHS has substantially lower magnitude of out-transference among under-fives, compared to MICS4.

Table 3D.1: Out-transference of children: Classification of MICS4 surveys data quality based on upper and lower interval limits drawn from expert-practitioner survey

Data quality category	Lower limit	Upper limit	Countries
Very good	.97	1.03	Afghanistan, Belize ,Suriname, Chad, Cuba
Good	.95	1.15	Bosnia and Herzegovina (Roma), Costa Rica, Iraq, Lebanon/Palestinians, Moldova, Korea DPK, Mongolia, Vietnam, Kenya-Nyanza, St. Lucia, Pakistan-Punjab, Pakistan-Balochistan, Mauritania, Nigeria, Kazakhstan, Ghana
Acceptable	.90	1.23	Indonesia-Papua, Madagascar-South, OPT, DRC, Bhutan, Macedonia ,Lao PDR, Sudan, Tunisia, CAR, Ghana-Accra, Sierra Leone,
Poor	.85	1.47	Bosnia and Herzegovina, Indonesia-Papua Barat, South Sudan, Nepal-Far West, Gambia, Togo, Swaziland,
Very poor	.80	1.63	Macedonia (Roma), Jamaica, Pakistan-Sindh
	<.80	1.63<	Serbia, Serbia (Roma), Mali

v. Incompleteness of, and Heaping in Anthropometric Measurements

Incompleteness of anthropometric indicators arises from two types of errors: Missingness of weight and height measurements, and inconsistencies of the associated indicators (height-for-age, weight-for-age and weight-for-height) leading to exclusion from analysis. Missing values arises from mothers' refusal to have to weigh or measure their child for reasons including health status of the child. Inconsistency occurs when the value of an indicator falls outside the expected range of values, due to irrational weight or height data as a result of poor measurement board or inaccurate reading by the measurer, or due to irrational age data. The extent of digit preference in weight and height measurements is also a key quality issue. To assess the preference for digits 0 or 5, we use the excess ratio, defined as the percentage of measurements ending with 0 or 5 divided by 20. The results on missingness, inconsistencies and heaping are presented in Annex 3D.4. The Data Quality Tables did not cover the anthropometric in MICS3. As a consequence, this section does not include trends assessments.

a. Incompleteness

The results for the 39 MICS4 qualified for the analyses are presented in Figure 3D.15. As indicated above, the recommended threshold is 5%. As can be seen, 23 surveys (or 59%) have missingness of height measurement below 5%. At the other end of the scale, the percentage of missing height measurement reached 24% in South Sudan and 30% in Pakistan-Balochistan, and stands at around 16%-18% in four other MICS4 surveys (Serbia, Serbia-Roma, Suriname and Palestine). On the other hand, the percentage of children excluded from height-for-age analysis is below 5% in 19 surveys, reaches 10% or higher in 12 surveys, and ranges between 5% and 10% in eight surveys. Figure 3D.16 provides a comparison between MICS4 and DHS. It clearly shows that the MICS program performed better in all six countries included in the analysis. If the missingness occurs to a large extent at random, the implications on the estimates of the anthropometric indicators may be negligible. It has been shown that missing or inaccurate data are more like to occur among the poor or the less educated mothers and households, and thus could impact on the estimates generated from the survey.

b. Digit preference in weight and height measurements

Figure 3D.17 shows the excess ratio of height and weight measurements ending with 0 or 5. For weight measurement, there is clear evidence of weight heaping at 0 or 5 in the 15 surveys (39%) with excess ratio of 1.2 or higher, while on the contrary, 22 other surveys have excess ratios between 0.9 and 1.1, suggesting an absence of heaping at 0 or 5. Not surprisingly, heaping for height measurement is more pronounced than that for weight measurement as weight is measured with a digital scale while height is measured and recorded by survey personnel thereby introducing the likelihood of rounding. In 18 of the 38 MICS surveys (47%), the excess ratio for height is greater or equal to 2.0, including values of 3.0 or higher in Tunisia, Afghanistan, Pakistan-Balochistan and Iraq. Only four surveys (Togo, Mali, Swaziland, Macedonia-Roma and Lebanon-Palestinians) do not display any apparent heaping of height measurements at 0 or 5. On the heaping of weight measurement, MICS4 and DHS have comparable outcomes in Ghana and Swaziland; MICS4 records better outcomes (lower excess ratio) in Mali and Nigeria; and DHS register a lower heaping at 0 or 5 in Sierra Leone, as depicted in Figure 3D.18. The

comparison regarding heaping of height measurement is similar to that of weight measurement, except that DHS has a better outcome in Ghana.

Weight and height heaping is a proxy of the measurers' ability to accurately capture or read the anthropometric measures. It has implications on the percentage of children excluded from analysis which in turn, may impact on the estimates, as alluded to above.

vi. Observation of Bednets and Hand Washing Places

As stressed in the MICS Manuals, hand washing with water and soap is the most cost effective health intervention to reduce both the incidence of diarrhea and pneumonia in children. Acknowledging the difficulty to measure hand washing behaviors with household surveys, the MICS approach has been to observe the hand washing places, as a proxy of the extent to which hand washing with water and soap took place. This approach was informed by research showing that having soap and water at a specific places designated for hand washing is associated with reduced risk of diarrheal diseases. In MICS4, the interviewer was asked to observe the presence of water at the specific place for hand washing, to verify (by checking the tap/pump, or basin, bucket, water container or similar objects) the presence of water, and to record if washing agent was present at the specific place for hand washing. Likewise, the interviewer was instructed to ask the respondent to show the bednets reported as present in the household. The observation of hand washing places was tested and validated as part of the validation of the corresponding module, while the observation of bednet was borrowed from DHS and is the same as used in the Malaria Indicator Surveys. The MICS standard on the observations of bednets and hand washing places is similar to that on missingness (5% or 10% at most). The expert-practitioner panel on the other hand, suggested that approximately 16% of bednets unobserved was an acceptable level of non-observation when assessing characteristics of the nets in use in a given population.

The results of our assessment of the completeness of the observation of bednets and hand washing places are in Annex 3D.5. Figure 3D.19 shows the percentage of bednets observed by the interviewers in the 14 African MICS4 where such observations were included in the survey. Only one country (Swaziland) had a percentage of observed nets of 90% or higher. Efforts of data collectors to observe bednets were also visible in Sierra Leone (89%) and Madagascar-South (88%) with level of non-observation within the range proposed by the expert-practitioner panel. A majority of countries had values of non-observation comprised between 50% and 80%. The case of Kenya-Nyanza (3%) needs further investigation. In the five countries with corresponding DHS data, MICS4 clearly shows deliberate efforts to observe the bednets, compared to DHS. The MICS advantage is particularly strong in Sierra Leone (89% vs. 12%) and in Swaziland (94% vs. 22%), and to a lesser degree, in Ghana (63% vs. 36%).

The percentage of hand washing places observed is shown in Figure 3D.20, for all 30 MICS4 surveys where such observations were included in the survey. Ten surveys (or a third) recorded a percentage of observed hand washing places of nearly 90% or higher, while ten others had values ranging from 60% to 85%. There were outstanding low observations in Kenya-Nyanza and Guinea-Bissau, with less than 5% of hand washing places observed.

Section 4 Conclusions

The Multiple Indicator Cluster Surveys program has undergone significant changes between 2008 and 2012, a period corresponding to Round 3 completion and implementation of Round 4. Using the main recommendations of the 2008 MICS3 evaluation as a guide, this evaluation focused on a limited number of issues which deemed most significant to the performance and quality of the MICS. This section provides the team's conclusions regarding these four issue areas.

i. Technical support and human resources

Since 2008 UNICEF has expanded the envelope of technical support resources available to support MICS implementation. This has been accomplished through the placement of Regional MICS Coordinators in the Regional Offices, UNICEF MICS consultants in country offices as well as increased availability and use of HQ/SMS/MICS- and regionally-based consultants in specific aspects of survey design and implementation. Taken together, these steps can be considered as directly addressing many of the issues identified in the 2008 evaluation albeit through means other than those recommended in the previous evaluation.

The team concludes that Regional Coordinators have played a role in improved adherence to recommended quality assurance standards in comparison to Round 3. While the Regional Coordinators have responsibilities other than MICS, the balance of work currently seems to be largely in favor of MICS. Some of their additional responsibilities (e.g. supporting other surveys undertaken by UNICEF, encouraging the inclusion of child-relevant content into non-UNICEF surveys) are better aligned with the specialized skill set than others (e.g. reviewing country annual reports, managing DevInfo). With few exceptions, Regional Coordinators did not report significant conflict with their other responsibilities. However, the degree of variability in the position descriptions across regions combined with the and broad range of added tasks are a concern for a global household survey program. These factors suggest that the focus of the Regional Coordinators could be diverted thereby jeopardizing the important quality assurance function that they perform. In sum, the placement of the Regional Coordinators is fully responsive to lessons learned from prior rounds. However, their role and responsibilities have been interpreted differently on a region-by-region basis.

Likewise, the creation of the in-country UNICEF MICS Consultant has filled an important gap in the coordination and oversight demands of the surveys. With those resources in place, the frequent communications between the Regional Offices and countries are seen as quicker and more consistent. The role played by the UNICEF MICS Coordinator seems to overcome two difficulties identified in the prior evaluation - the limited survey experience of CO M&E officers and the amount of time required to adequately monitor survey progress. Most Regional Coordinators would prefer to require country offices hire this consultant but ultimately, this is the decision of the CO and not the RO. The current evaluation was not able to ascertain if the skill set of CO M&E Officers had been updated, another recommendation of the previous evaluation. Based on interviews conducted, it is not apparent that any significant individual skill strengthening was carried out. However, CO officers are now clearly enveloped by additional technical resources to bridge that gap. The team concludes that the placement

of the UNICEF MICS Consultant is an important addition and fully responsive to the documented lessons learned of previous rounds. However, the corporate response and on-going implementation is interpreted and applied differently across settings as only approximately 60% of surveys benefitted from the presence of the UNICEF MICS consultants.

Another element of expanded human resources and technical support was the pool of HQ- and regionally-recruited consultants working in specialized area of survey design and implementation (i.e. sampling, HH survey implementation and data processing). Based on information from the 2008 evaluation compared to current estimates, Country Offices are more likely to make use of services of sampling and data processing experts. The team was not able to independently assess the quality of the work of the consultants. Again, the team concludes that this expanded pool of technical support was firmly aligned with lessons from prior experiences including the 2008 evaluation. However, HQ/SMS/MICS and most Regional Coordinators reported that supply of qualified candidates was insufficient – particularly in the area of data processing. Several Regional Coordinators felt that they exhausted the channels available to them to identify and recruit consultants. This creates a particular problem for the functionality of the technical support framework as the regional level plays a pivotal “filtering” function. Without that support in place, HQ/SMS/MICS is drawn into more detailed and comprehensive review of materials thereby adding more time to the overall process.

In order to utilize the new technical resources, a technical support framework was developed and incorporated into MICS4. This framework parallels the major steps of the MICS survey process through technical review processes that link country offices with the Regional Coordinators, and in turn, the HQ/SMS/MICS team. With the added human resources, the technical framework provides the model for execution of the quality assurance processes. The majority of respondents were appreciative of the large-scale change in quality assurance processes. However, developing a common understanding of the new framework took time as well as developing the consultant pool to help implement it.

The team concludes that technical review and quality assurance processes provides an appropriate albeit ambitious structure for quality assurance. Not surprisingly, there were “growing pains” associated with its implementation in Round 4. There was clearly a limited understanding/underestimation of the time required for technical review processes. Timeliness standards were conceptualized but appear to be unused. Moreover, the technical support framework appears to have outstripped the human resources needed for its operation particularly at regional level. Difficulties also arose from gaps in communication and insufficient documentation.

ii. Decision-making/governance

Much of the decision-making dynamic that was found in the 2008 evaluation remains in place. This is not surprising since the prior recommendations suggested modifications to UNICEF decentralized organizational structures. Little has been done to clarify accountabilities for staff in regards to MICS although other changes have ameliorated the situation found in 2008. The Country Offices have far better technical support for their central decision-making role. The technical support offsets, but does not fully resolve, the “mismatch” between the locus of decision-making and technical knowledge found

in the 2008 evaluation. The Regional Offices now play a far more important role through the placement of the Regional Coordinators as well as the regional consultants.

The effectiveness of these additional technical resources may be compromised by several factors. Country Offices have the ability to “take or leave” the advice of the Regional Coordinators. Regional Coordinators may not even be informed of the CO’s decision on their feedback. CO senior managers have strongly advocated/insisted that countries join the global MICS program despite RO and HQ/SMS/MICS concern about their willingness to comply with quality assurance steps and principles of data access.

HQ/SMS/MICS does not have approval authority for key decisions as was recommended in the 2008 recommendation. As part of the technical support framework, HQ/SMS/MICS provides feedback and comments which may be construed as a “green light” meaning that the review has happened and the survey can proceed to the next stage.

Based on several cases in Round 4, the team concludes that most senior managers have limited understanding of strategic measurement choices and how they can impact on quality in MICS surveys (e.g. how sample size choices and questionnaire length can affect data quality). Moreover, CO senior managers do not appear to be held accountable for the quality and timeliness of MICS surveys. This appears to be case even when sizable investments are at stake. The team concludes that MICS, as tool for addressing data gaps, does not permeate onto the agenda of senior managers in a sufficient manner. It was noted by some that MICS is not discussed at regional management team meetings; others posited that the Executive Directive is not read by Representatives. These gaps put UNICEF at some reputational risk when surveys fall below accepted international standards.

Global MICS consultations are the modality for sharing lessons and experiences among the global MICS team (i.e. HQ/SMS/MICS and Regional Coordinators). The GMC are suitable for sharing updates, reviewing materials, identifying lessons learned, and work planning. Unfortunately, these consultations are not well documented and may have little impact for persons and offices that did not attend, or that did attend and need to be refreshed on key decisions.

iii. Quality assurance mechanisms

Our assessment of the degree of adherence to the MICS program’s quality control procedures during Round 4 shows that the number of days of training was about two weeks, ranging from 10-11 days to 15-21 days. MICS recommends that training be carried out for at least two weeks (preferably up to 3 weeks), depending on the content of the questionnaire. Likewise, most MICS4 surveys adhered to the MICS proposed rules on double data entry. By contrast, the interviews and document reviews did not show consistent evidence that the observations of interviews and spot checks were implemented during MICS4 data collection. A number of UNICEF CO staff and consultants acknowledged they did not know if and how the NSOs implemented the spot checks and interview observations. Further, there was no written documentation from the NSOs, about such supervisory practices. Regarding the field check tables (FCTs) – a quality assurance procedure widely acknowledged as innovative - the evidence that the

procedure was optimally implemented and used to improve the quality of data was not consistent either. Reasons cited for the sub-optimal use of field check tables included the impression from NSOs that their use was optional when other quality control mechanisms were in place at the NSO, and the delays in getting feedback and comments on the FCTs from HQ or the regional offices.

As stressed by the MICS Manuals, extremely large sample sizes have detrimental consequences on data quality. Our review identified 21 MICS4 surveys with sample sizes (number of households) of 13,000 or higher, or comprised between 10,000 and 13,000 with an increase of more than 40% between MICS3 and MICS4. The sample size reached about 102,000 in Pakistan- Punjab, 36,000 in Iraq and 25,000-30,000 in Nigeria, Thailand and Pakistan-Sindh. Among the 14 countries from the list which had implemented both MICS3 and MICS4, the average sample size was 18,122 in MICS4, compared to 14,041 in MICS3, hence an increase of nearly 30%. To implement these large samples, surveys employ a number of teams and field workers far greater than recommended, manageable levels and compromising quality assurance efforts. At the base of this issue is the demand by UNICEF countries offices and countries to have survey estimates at lower levels (e.g. districts) for the purposes of planning and programming. However, as also concluded in the MICS 3 evaluation, in many settings, data demands are incongruent with the ability of the tool (national-level, cross sectional household surveys) and its supporting structures to produce data of acceptable quality and timeliness.

Our assessment also had a focus on the timeliness of release of final reports. Here the findings are two-fold. First, there has been a notable reduction of the time that passes from the end of field work to the release of final reports. The median duration for MICS4 is 13 months, against a 16.5-month estimate from the 2008 Evaluation. Based on a set of eight countries with MICS3 and MICS4 final reports available, our analysis clearly shows that the time lapse had declined over time in almost all countries. The average duration is estimated at 21 months in MICS3 and 14 months in MICS4, for a decrease of about seven months. While doing MICS for a second time may be a key factor underlying the improvement, the expanded human resources and technical support (Regional MICS Coordinators, streamlined availability of data processing consultants) recorded in MICS4 as described in Section 3A, is the major determinant. Our second major finding is that despite these improvements, the interval between the end of field work and the release of final reports remains long, beyond the 12-month recommendation. A review of the MICS website showed that for nine MICS4 surveys whose field work ended in 2010, a period of 25 months or longer had elapsed since the end of field work, while of the 22 surveys whose data collection phase ended in 2011, the final reports were not available for 15 of them.

Finally, this study reveals that unlike in MICS3 the inclusion or revision of new modules and questions has been preceded by more systematic efforts of validation and testing, usually in collaboration with other international key players. This is another area of clear improvement from MICS3.

Looking forward, the evaluation also examined the preparations for Round 5. Plans are in place to address the timeliness of Final Reports by revising the Memorandum of Understanding between UNICEF and implementing agencies to include a stipulation on timeliness. Newly-introduced tools such as the field check tables will be more thoroughly incorporated into MICS workshops and guidelines. Other

quality assurance methods will reinforced through the continued work of the household survey expert consultants and UNICEF MICS consultants. It noted that the more systematic process observed in MICS4, to include new modules or revising the existing ones is also being followed during the preparation of Round 5. For the revision of the Child Labor Module, a series of high-level meetings were held with International Labor Organization (ILO) and several reports produced^{xii,xiii}. A well-documented testing was also done regarding the Water Testing Module^{xiv}.

iv. Data quality assessment

Three clear findings emerge from the data quality assessment conducted by the team. First, there has been a dramatic improvement between MICS3 and MICS4 (seen in Table 3D.2), across all quality indicators covered in the analysis. Second, the comparison between MICS4 and DHS reveals that both programs have comparable data quality in many indicators. A visible MICS4 advantage is noted in a few indicators, notably the incompleteness of weight and height measurements, while DHS had substantially lower displacement from age 4 to age 5. Third and finally, the improvements from MICS3 to MICS4 notwithstanding, the quality of some of the MICS data still need a great deal of improvement. For example the analysis shows an evidence of transfer from age 15 to 14 in 16 surveys (34%) with age ratio of 125 or higher, with values exceeding 175 in three countries (Sudan, Bhutan and Sierra Leone). Also, as shown above, out-transference is evident in the 22 MICS surveys (or 47%) showing displacement from age 4 to age 5 captured by age ratios between 110 and 145, including seven with values standing between 125 and 145. The transfer from age 40 to 50 was also prevalent, but it is likely to only have little impact on the indicators, as mentioned above.

Improved data quality

The team concludes that there has been a dramatic improvement between MICS3 and MICS4, across all quality indicators covered in the analysis. Comparisons between MICS4 and DHS reveal that data is of similar quality in many indicators. The improvements from MICS3 to MICS4 notwithstanding, the quality of some MICS data still need a great deal of improvement.

These marked improvements in data quality between MICS3 and MICS4 have various sources, chief of which are the improvements in human resources and technical support as described in Sections 3A, and as a result, a more systematic adherence to the standards on training of field workers as shown in Section 3C, which are all key ingredients for data quality. A major limitation of the assessment, as indicated above, is the impossibility to further investigate these improvements, owing to the fact that the interviews preceded the data quality assessment. Insights into the findings on the MICS-DHS comparisons were also not sought, because of time constraints. There was an attempt to carry out correlation analysis between specific quality assurance mechanisms and specific data quality outcomes, but the evaluation recognized that the association between quality control and data quality may not be accurately captured based on individual factors.

Table 3D.2: Summary of the data quality assessment

Data Quality Indicator	MICS4 & MICS3 Comparison	MICS4 & DHS Comparison
1.a. Incompleteness of date (year) of birth of women 15-49	Data for MICS3 either not available or equal to 0.0%	• Comparable: 2 countries (Swaziland & Congo DR) • MICS4 better: 2 countries (Ghana & Nigeria) • DHS better: 2 countries (Mali & Sierra Leone)
1.b. Incompleteness of date (month) of birth of children under five	• Marked improvements in all countries, except in 2 (Laos & Mauritania)	• DHS better: 2 countries (Ghana & Sierra Leone) • Comparable: 4 other countries
2.a. Age heaping among female household respondents	• Dramatic improvement: 6 countries • Modest improvement: 6 countries • Deterioration: 2 countries (Mauritania & Vietnam)	• Comparable: 2 countries (Swaziland & Congo DR) • MICS4 better: 3 countries (Ghana, Mali & Nigeria) • DHS better: 1 country (Sierra Leone)
2.b. Out-transference for women around age 15	• Deterioration: 7 countries • Improvement: 15 others	• MICS4 better: 4 countries (Congo DR, Swaziland, Mali & Sierra Leone) • DHS better: 2 countries (Ghana & Nigeria)
2.c. Out-transference for women around age 49	• Deterioration: 5 countries • Improvement: 17 others	• Comparable : 3 countries (Nigeria, Mali & Sierra Leone) • MICS4 better: 1 country (Ghana) • DHS better: 2 countries (Swaziland & Congo DR)
2.d. Out-transference for children around age 5	• Deterioration: 2 countries (Ghana and Bosnia & H) • Improvement: 18 others	• DHS better: all 6 countries
3.a. Incompleteness of height measurement	Not applicable – MICS3 Data Quality Tables did not cover anthropometric measurements	• MICS4 clearly performed better in all 6 countries
3.b. Inconsistency of height-for-age		• MICS4 clearly performed better in all 6 countries
3.c. Excess ratio of (0, 5) in weight measurement		• Comparable : 2 countries (Ghana & Swaziland) • MICS4 better: 2 countries (Mali & Nigeria) • DHS better: 1 country (Sierra Leone) – Congo DR has missing data
3.d. Excess ratio of (0, 5) in height measurement		• Similar to that of weight measurement, except that DHS has a better outcome in Ghana
4.a. Observation of bednets	Not applicable	• MICS4 clearly performed better in all countries
4.b. Observation of hand washing places	Not applicable (analyses were only conducted for MICS4)	

The evaluation concludes that to further improve the quality of its data, the MICS program should endeavor in Round 5 to strengthen the adherence to the quality assurance mechanisms (especially the optimal use of field check tables and the implementation of spot checks and observations of interview), and dissuade countries from large sample sizes and large teams and interviewers.

Section 5 Recommendations

The evaluation team has framed a set of recommendations based on the findings and conclusions above. For maximum utility, the recommendations are grouped according to their anticipated impact on survey operations, quality and timeliness as well as pacing. The categories below are based on two categories of impact and two categories of timing:

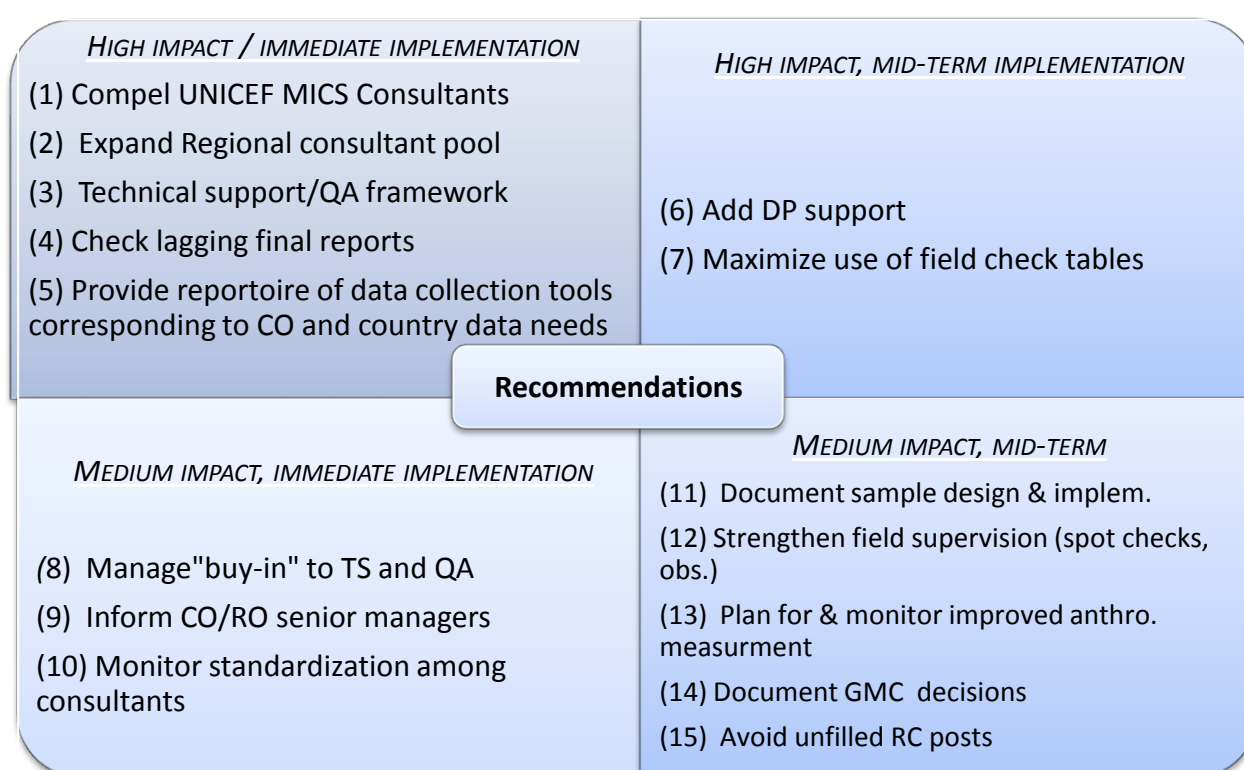


Figure 5.1 Recommendations categorized

- *high impact* indicating that some element of MICS implementation, quality or timeliness would be substantially improved or made more consistent and standard across settings.
- *medium impact* indicating that some element of MICS implementation, quality or timeliness would likely be improved or marginally improved.
- *immediate* (i.e. to be addressed in advance of Design Workshops, development of Country Survey Plans and negotiations of MOUs)
- *mid-term* (i.e. to be addressed in advance of Data Processing Workshops)

The evaluation's fifteen recommendations are categorized in Figure 5.1 and further described below. It should be noted that the launch of Round 5 was actively underway as this Report was being reviewed. Certain of these recommendations may have already been considered and decisions made to address or not. It was not possible for the evaluation team to keep track of the many aspects of the MICS survey program while being readied for Round 5 launch.

i. High-impact, immediate

(1) Country offices should be compelled to hire a UNICEF MICS Consultant for the conduct of the MICS. Even in COs with technically strong M&E Officers, the time required for survey oversight and coordination necessitates additional support. The strong evidence from Round 4 should be used in these discussions and integrated into Round 5 materials as appropriate. Where UNICEF HQ provides "top up" monies to a Country Office, the Country Office should be expected to acquire the services of the MICS consultant. Regional Directors and PME Chiefs should be informed and prepared to play a role in convincing COs of the importance of the UNICEF MICS Consultants. As these steps have implications for CO planning and budgeting, they should be undertaken immediately.

(2) Highest priority should be placed on increasing the regional consultant pool. This should be accomplished through a combination of efforts outlined below.

- HQ/SMS/MICS should develop a plan for partnering new, mid-level consultants with proven senior consultants. This plan would incorporate capacity-development elements to guide that effort as well as timelines and means of monitoring the quality of products. While developed immediately, this plan would be implemented throughout the course of Round 5.
- HQ/SMS/MICS should carefully weigh the pros and cons of creating a screened and pre-cleared pool of consultants available to provide consistent support for RO and COs without additional competitive processes. If determined to be a worthwhile investment, then HQ/SMS (and Contracts Office?) should facilitate this contractual mechanisms and initiate immediately.
- Examine more closely the possibility of contracting with institutions at regional level. Where appropriate, Regional Offices should consider performance-based contracting as a means to improve timely delivery of quality products
- Continue on-going searches for individual consultants with an emphasis on grooming UNICEF MICS consultants and specialist consultants with proven country-level experience for regional use.

(3) Far greater effort is needed to fully integrate the technical support framework into key guidance materials including the Design Workshop and Manual. The global MICS team should revise the technical framework to incorporate more realistic time standards and develop a means for tracking turn-around times for reviews. Aspects of the technical review should be clarified in regards to the sequencing/hierarchy of multiple reviewers particularly when consultants are included in the process. A standard communications package should be created to provide regular feedback to ROs and COs on the

status of the review process (e.g. “thank you for your questions / here is the timeframe in which we will respond”).

(4) A recommendation of the prior evaluation - that UNICEF should strengthen the ability of CO and RO staff members to identify early signs of difficulties in report writing and to provide the means to remedy those difficulties, remains valid. Where MICS final reports are lagging, the UNICEF CO, with support of the Regional Coordinator, should bring on an additional implementing agency (e.g. for analysis and report-writing) or consultant to prepare the report. Country Offices should either: a) have a contingency budget in this event or b) develop a separate agreement in advance for analysis and report-writing phase. Agencies supported for the analysis and report-writing may also be well-positioned to identify issues for further analysis as part of their work (e.g. as was done with the Centro Centroamericano de Población for the Costa Rica MICS). The MOU template should be modified to reflect this priority (e.g. in those cases when a draft report is not well-advanced six months after the completion of field work, UNICEF reserves the right to x, and z...”). This recommendation is for immediate action as the MOU template is undergoing revisions. In addition, Country Offices should plan for budget the added support, as appropriate.

(5) UNICEF should address the fundamental mismatch between country-level demand for lower-level survey estimates (e.g. at district and sub-district) and the ability of existing survey tools (e.g. MICS) to provide that data in a high-quality and timely manner. The result for the MICS survey program is **use of large, and increasing, sample sizes**, which are chiefly driven by the pressure to produce indicators for a large number of lower level administrative units. Within the current arrangements, the MICS survey program has gone about as far as is possible to contain unmanageably large samples. The negative effects on data quality, of large sample sizes and large number of teams and field workers are emphasized and illustrated in MICS Manuals, during the design workshops and reinforced during reviews of the Country Survey Plans and by sampling consultants.

It may be possible to further tweak existing guidance materials on the implications of large sample sizes, or the good/best practices with regard to the number of sampling domains, number of teams and duration of field work. Guidance materials (i.e. Manual, workshop presentations) could, perhaps, more clearly define parameters for manageable field work conditions (e.g. number of teams). Moreover, UNICEF Regional and HQ senior management should be prepared to chip in to get buy-in from COs on use of internationally-recognized standards and best practices including sample size implications. However, demand for surveys with large sample sizes will not go away. Therefore, UNICEF should develop protocols to mitigate risk to quality data (e.g. two rather than one national consultant).

These modifications will not substantially alter the drivers of demand for large sample sizes. UNICEF is moving purposively in the direction of programming to eliminate bottlenecks and reduce disparities. The types of data required are more highly disaggregated than a national household survey can typically provide. However, without an adequate repertoire of data collection tools, Country Offices turn to those available (i.e. MICS) to meet their needs. The team strongly recommends that UNICEF, at a global level, support country offices and their partners by investing in the development and testing of

alternative data collection tools and support. The efforts should be positioned as complementary to the MICS and other large-scale household survey programs.

ii. High impact, mid-term

(6) Based on our findings, it appears that additional data processing staff is needed. If qualified regional consultants or institutions cannot be identified (i.e. as part of recommendation #2 above), then a global level contract should be awarded to make DP experts available as needed.

(7) Implementing agencies should be encouraged to make the best possible use of the **field check tables**. Overall, the emphasis on these efforts should be to strengthen the on-going completion and use of the field check tables by the implementing agencies. The UNICEF CO and RO review should be secondary and more appropriately focused on the follow-up and corrective actions taken by the implementing agency and not on actually identifying field work issues from afar. HQ/SMS/MICS and Regional Coordinators can support implementing agencies by ensuring that: a) the tool is duly covered during the design workshops, in MICS Manuals and on-line resources and in discussions with NSOs prior to the start of data collection; b) data entry program and logistics are finalized in time to allow the start of data entry a few days after the beginning of field work; and c) CO and RO staff members have tools and capacity to do a summary quality check of the problems identified by the implementing agencies through the field check tables, follow-up actions that were taken and any unresolved problems in survey field work that require CO/RO attention.

iii. Medium impact, immediate

(8) Regional offices take varied approaches to dealing with countries which are reluctant to “buy-in” to the MICS package of technical support and quality assurance. Increased guidance and support is needed for Regional Coordinators and their supervisors to gauge risk *in advance of the MOU* in countries where compliance issues are a concern and to negotiate with CO senior managers on those concerns. In addition, guidance should be provided which outlines the potential for either course-corrections or withdraw from the global MICS program when warranted. These guidance materials might take the form of a decision-tree that could guide Regional Offices in their discussions with Country Offices and implementing agencies. Tools of this type could also lay out alternatives for a CO where compliance with standards is not agreed (e.g. undertake/support a HH survey which is not a MICS). Moreover, HQ and RO senior levels should be prepared to play a role in communications with COs that want to proceed in ill-advised situations. These materials are needed in advance of Round 5 MOU negotiations.

(9) CO and RO senior managers should be provided with a brief high-level “Do’s and don’ts”. A session on the role of UNICEF and MICS in MDG reporting should be prepared for the regional management team meetings to reinforce the key messages of the Executive Directive.

(10) As a follow-up to global expert consultations (i.e. sampling and data processing), tools should be developed for on-going monitoring of their work to assure standardization of approaches. Moreover, a set of standardized documentation protocols for consultants should be developed, consistently used and an electronic file created.

iv. Medium impact, mid-term

(11) A protocol for documentation of sample design and implementation in the field should be developed and included in Country Survey Plans and ToRs for sampling experts. This type of documentation was lacking in several cases and resulted in long delays as the information was slowly pieced together.

(12) UNICEF should ensure that **spot checks and observations of interviews** during field work are implemented according to the Manuals and guidelines, and are properly documented (e.g. number, outcomes and decisions made) by supervisors in the field. These documented reports should be made available to UNICEF at periodic intervals, for use by UNICEF MICS Consultants to monitor the performance of supervisors, which would entail review, comments and feedback to NSO, and assessment during Consultants' supervisory visits in the field.

(13) While the implementation of the recommendations above on sample size and number of teams, spot checks and observations of interviews, and field check tables will go a long way in improving the quality of data, in particular the extent of **out-transference from age 15 to 14 and from age 4 to age 5, as well as the heaping of, and missingness in anthropometric measurements**, UNICEF should consider revisiting the training and the supervision of the measurers in order to further improve the quality of anthropometric data.

(14) Global MICS Consultations, particularly decision points, should be carefully documented -- even if it means hiring a rapporteur for that purpose.

(15) Experience shows that Regional Coordinator turn-over (and post left vacate in the interim) can have detrimental effects on multiple surveys within the region. Regional Offices should see that these intervals are avoided in the future and, ideally, that there is overlap between in-coming and out-going Coordinators. Again, Regional Directors and PME Chiefs should be well-informed of the importance of continuity in this role for the purpose of relatively short-term, time-intensive survey operations. This recommendation is more anticipatory as opposed to needed immediate action.

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http://www.aideffectiveness.org/busanhl4/images/stories/BB_Results_and_Accountability_25_November.pdf
- ⁱⁱ http://www.unicef.org/mdg/index_unicefsrole.htm
- ⁱⁱⁱ Ahmed S, Ali D, Bisharat L, Hill A, LaFond A, Morris L, Plowman B, and K Richter. Evaluation of UNICEF Multiple Indicator Cluster Surveys Round 3 (MICS3). Final Report. 2009.
www.unicef.org/evaldatabase/index_52700.html.
- ^{iv} Ibid.
- ^v Dreolin N. Fleischer and Christina A. Christie, Evaluation Use, Results from a Survey of American Evaluation Association Members, American Journal of Evaluation 30:2, June 2009, pp. 158-75.
- ^{vi} Template for Converting MICS Evaluation Findings into Discussion Points for Management Response Meetings. MICS Evaluation technical Team. 10 November 2008.
- ^{vii} UNICEF 2008. Pilot Research on International Migration and Those Left-Behind in Ecuador and Albania: A Methodological Evaluation. Working Paper, Division of Policy & Planning.
- ^{viii} Spoorenberg T. 2007. Quality of age reporting: Extension and application of the modified Whipple's index. *Population* (English Edition) 62(4): 729-741.
- ^{ix} Noubissi A. 1992. L'Indice de Whipple modifié : Une application aux données du Cameroun, de la Suède et de la Belgique. *Population* 47 (4) : 1038-1041.
- ^x Pardeshi G.S. 2010. Age heaping and accuracy of age data collected during a community survey in the Yavatmal District, Maharashtra. *Indian J Community Med.* 35(3): 391–395.
- ^{xi} Pullum T.W. 2006. An Assessment of Age and Date Reporting in the DHS Surveys, 1985-2003. Methodological Reports No. 5. Calverton, Maryland: Macro International Inc.
- ^{xii} S. Lyon and F. C. Rosati. 2010. Child labour: A review based on data from the UNICEF Multiple Indicator Cluster Survey programme. Working Paper.
- ^{xiii} UNICEF. 2010. ILO-UNICEF Technical Consultation on the Measurement of Child Labour
- ^{xiv} Rick Johnston. 2012. Water Quality Testing Module Test Report; Bogra, Bangladesh.

Annex 3C.1a: Time lapse from completion of field work to release of final reports (MICS4 surveys with available final reports)

No	Survey (year)	Time lapse (in months)
1	Cuba (2010/11)	9
2	Bhutan (2010)	10
3	Vietnam (2010/11)	11
4	Iraq (2011)	11
5	Congo, Democratic Republic (2010)	11
6	Chad (2010)	12
7	Sierra Leone (2010)	12
8	Serbia (2010)	13
9	Serbia - Roma Settlements (2010)	13
10	Swaziland (2010)	13
11	Korea, Democratic People's Rep. (2009)	14
12	Kenya -Mombasa Inf Settlements (2009)	14
13	Pakistan - Balochistan (2010)	14
14	Lebanon - Palestinians (2011)	15
15	Belize (2011)	15
16	Ghana - Urban Accra (2010/11)	16
17	Togo (2010)	16
18	Kazakhstan (2010/11)	20
19	Nepal - Mid/Far Western Regions (2010)	20
	Median	13
	Average	14

Source: Monitoring Document from MICS HQ, Final reports and MICS website

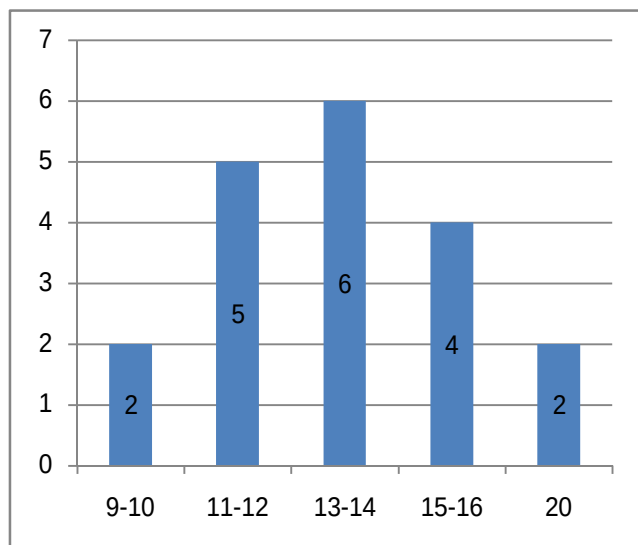
Annex 3C.1b: Time lapse since completion of field work (MICS4 surveys where final reports are not yet available)

No	Survey (year)	Time lapse to Feb 1, 2013 (in months)
1	Belarus (2012)	8
2	St Lucia (2012)	9
3	Tunisia (2011)	10
4	Bosnia and Herzegovina (2011/12)	11
5	Bosnia and Herzegovina - Roma (2011/12)	11
6	Lao People's Democratic Rep. (2011/12)	11
7	Argentina (2011)	13
8	Indonesia - Papua (2011)	14
9	Indonesia - Papua Barat (2011)	14
10	Kenya - Nyanza (2011)	14
11	Somali - North East Zone (2011)	14
12	Costa Rica (2011)	14
13	Trinidad & Tobago (2011)	14
14	Ghana (2011)	14
15	Pakistan - Punjab (2011)	15
16	Mauritania (2011)	15
17	Macedonia (2011)	19
18	Macedonia - Roma (2011)	19
19	Somali - North West Zone (2011)	19
20	Afghanistan (2010/11)	19
21	Nigeria (2011)	22
22	Jamaica (2011)	23
23	Mongolia (2010)	26
24	Central African Rep (2010)	26
25	Palestine (2010)	28
26	Suriname (2010)	28
27	Gambia (2010)	30
28	Mali (2009/10)	30
29	Guinea Bissau (2010)	31
30	South Sudan HHS (2010)	33
31	Sudan HHS (2010)	33
Median		15
Average		19

Source: Monitoring Document from MICS HQ, Final reports and MICS website

Figure 3C.1: Length of time from completion of field work to release of final reports (for countries with available final reports), or to February 1, 2013 (for countries where final reports are not yet available)

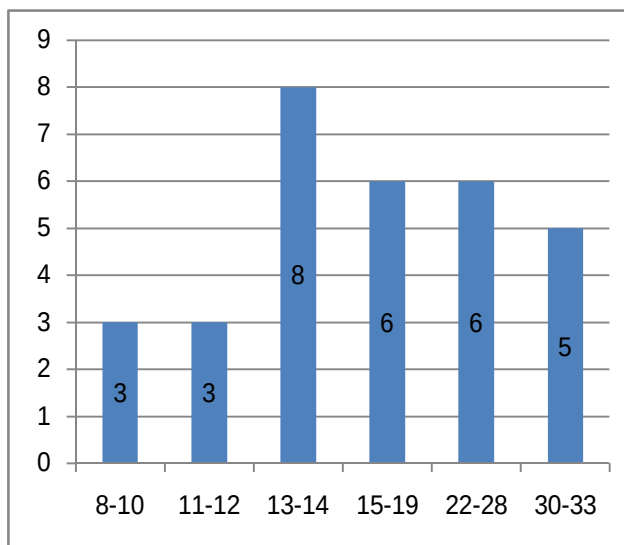
Time lapse (in months) from completion of field work to release of final reports (**19 MICS4 surveys with available final reports**)



Median duration: 13 months

Average duration: 14 months

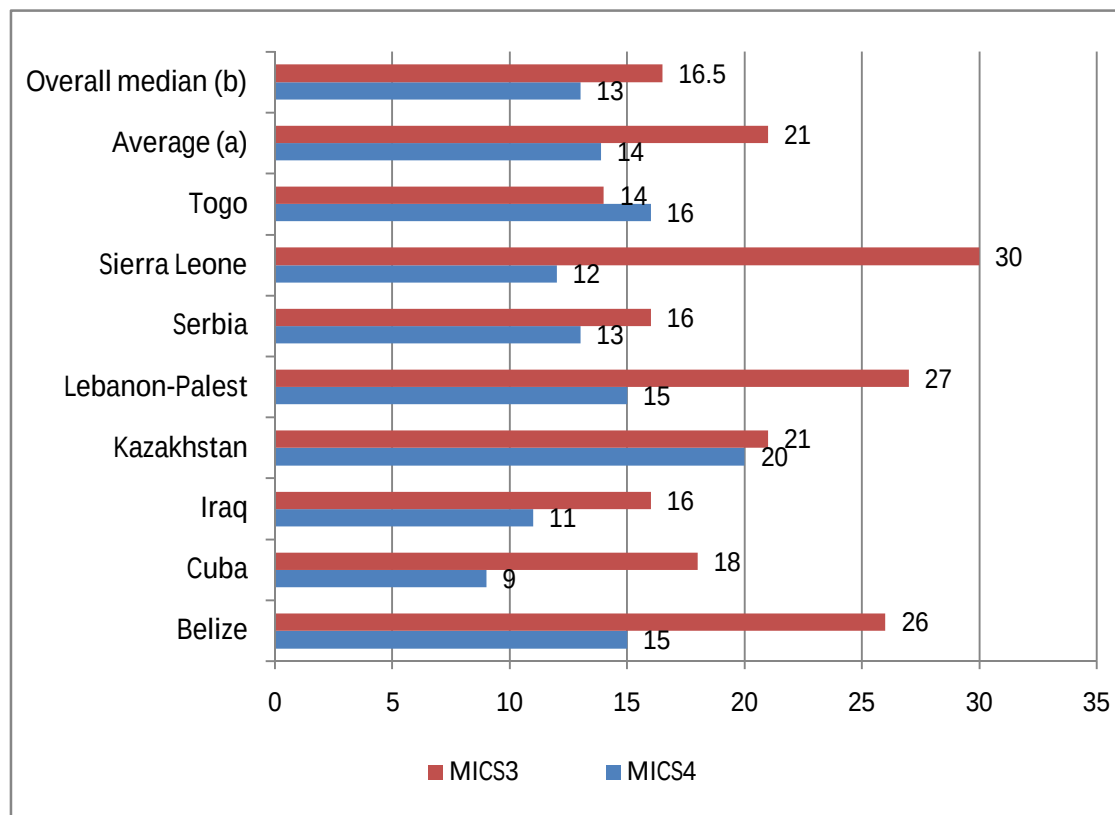
Time lapse (in months) since completion of field work to Feb 1, 2013 (**31 MICS4 surveys with final reports not yet released**)



Median duration: 15 months

Average duration: 19 months

Figure 3C.2: Length of time (in months) from completion of field work to release of final reports (for countries with available final reports): MICS3 and MICS4



(a): For the eight surveys; **(b):** For all 19 MICS4 surveys covered by this evaluation and all MICS3 surveys covered by the 2008 evaluation

Table 3C.1: List of MICS4 Surveys from the Survey Profiles

Region	No	MICS4 (Year)	Training of Field Workers		
			# FWs ¹	Type ²	# Days ³
Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS)	1	Belarus (2012)	194	C	7
	2	Bosnia and Herzegovina (2011/12)	128	D	11
	3	Bosnia and Herzegovina - Roma (2011/12)	30	D	12
	4	Kazakhstan (2010/11)	52	D	12
	5	Serbia (2010)	55	C	12
	6	Uzbekistan	NR ⁴	C	12
East Asia and the Pacific (EAP)	7	Indonesia - Papua (2011)	NR	C	12
	8	Indonesia - Papua Barat (2011)	144	D	13
	9	Korea, Democratic People's Rep. (2009)	144	D	13
	10	Lao People's Democratic Rep. (2011/12)	NR	D	14
	11	Mongolia (2010)	NR	C	15
	12	Vietnam (2010/11)	143	C	18
Eastern and Southern Africa (ESA)	13	Kenya - Nyanza (2011)	130	C	14
	14	Somalia - North East (2011)	137	C	16
	15	Somalia - North West (2011)	82	C	21
Latin America and the Caribbean (LAC)	16	Barbados (2012)	30	C	10
	17	Cuba (2010/11)	120	C	11
	18	Jamaica (2011)	49	C	12
	19	St Lucia (2012)	55	D	12
	20	Suriname (2010)	320	D	NR
	21	Trinidad & Tobago (2011)	NR	NR	NR
Middle East and North Africa (MENA)	22	Tunisia (2011)	45	D	12
South Asia (SA)	23	Afghanistan (2010/11)	60	C	11
	24	Bhutan (2010)	240	C	12
	25	Nepal - Mid/Far Western Regions (2010)	NR	D	14
West and Central Africa (WCA)	26	Mauritania (2011)	90	C	20
	27	Nigeria (2011)	610	D	NR

Source: MICS4 Survey Profiles¹Number of fieldworkers; ²Type of training: C - centralized or D - decentralized; ³Number of days of training⁴Not reported in the documents source

Table 3C.2: High Sample Size^a MICS4 Surveys

No	Survey	MICS4	MICS3	Change (%)
1	Pakistan - Punjab (1)	102,545		NA ^b
2	Iraq (1)	36,580	17,873	104.7
3	Nigeria (1)	29,600	26,735	10.7
4	Thailand	27,000	40,511	-33.4
5	Pakistan - Sindh (1)	26,648		NA
6	Algeria	22,500	29,476	-23.7
7	Argentina (1)	21,200		NA
8	Laos PDR (1)	19,960	5,894	238.6
9	Chad (1)	17,668		NA
10	Ghana	17,000	5,939	186.2
11	Kazakhstan (1)	16,380	14,564	12.5
12	Bhutan	15,400		NA
13	Palestine (1)	15,345	11,661	31.6
14	Mali	13,980		NA
15	Afghanistan	13,468		NA
16	Central African Rep	13,328	11,723	13.7
17	Ukraine	12,480	5,243	138.0
18	Vietnam	12,000	8,355	43.6
19	Sierra Leone	11,923	7,078	68.5
20	Mongolia (1)	10,500	6,220	68.8
21	Guinea-Bissau	10,374	5,305	95.6
Average^c		18,212	14,041	29.7

Source: Monitoring Document from MICS HQ

^aNumber of households higher than 13,000, or comprised between 10,000 and 13,000 with an increase of more than 40% between MICS3 and MICS4

^bNot Applicable

^cBased on the 14 surveys present in MICS4 and MICS3

(1): Selected for a quick review of the survey plans. The selection was guided by the availability of reports or survey plans, and the need to maintain a certain level of regional balance

Table 3C.3: Survey plan for selected high sample size MICS4 surveys

Survey	Sample size (<i>selected or actual</i>)	# Sampling domains (or strata)	# Teams and field workers (FWs)
1. Pakistan-Punjab (2011)	102,545 households	287 strata in 150 tehsils (from 9 divisions and 36 districts), by place of residence	75 teams for a total of about 525 FWs
2. Iraq (2011)	36,592 households	236 strata (118 districts by urban and rural)	118 teams for a total of 708 FWs
3. Nigeria (2011)	29,151 households (+ 10% from MICS3)	74 domains (37 states by urban and rural)	Not available in the preliminary report
4. Pakistan-Sindh (2011/12)	26,648 households	63 domains (22 districts by urban and rural; 20 urban centers/towns)	20 teams for a total of 120 FWs
5. Argentina (2011)	21,200 households	26 strata (23 of the 24 provinces; and Buenos Aires split into 3)	82 teams for a total of 556 FWs
6. Laos PDR (2011/12)	19,960 households (+239% from MICS3)	17 provinces by urban and rural	20 teams for a total of 140 FWs
7. Chad (2010)	17,668 households	59 domains (24 regions and few districts by urban and rural)	20 teams for a total of 120 FWs
8. Kazakhstan (2010/11)	16,380 households	30 strata (14 regions by urban /rural, and 2 urban regions)	16 teams for a total of 144 FWs
9. Palestine (2010)	15,345 households (+32% from MICS3)	16 Governorates, by urban, rural, and refugee camps	25 team for a total of 206 FWs
10. Mongolia (2010)	10,500 households (+69% from MICS3)	Five regions by urban and rural	10 teams for a total of 70 FWs

Annex 3D.1: List of MICS4, MICS3 and DHS Surveys Used in the Data Quality Assessment

Region	No	MICS4 (Year) ^a	MICS 3	DHS
Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS)	1	Bosnia and Herzegovina (2011/12)	MICS 2006	
	2	Bosnia and Herzegovina - Roma (2011/12)		
	3	Kazakhstan (2010/11)	MICS 2006	
	4	Macedonia (2011)	MICS 2005	
	5	Macedonia - Roma (2011)		
	6	Moldova (2012)		
	7	Serbia (2010)	MICS 2005/06	
	8	Serbia - Roma Settlements (2010)		
East Asia and the Pacific (EAPRO)	9	Indonesia - Papua (2011)		(1)
	10	Indonesia - Papua Barat (2011)		
	11	Korea, Democratic People's Rep. (2009)		
	12	Laos People's Democratic Rep. (2011/12)	MICS 2006	
	13	Mongolia (2010)	MICS 2005	
	14	Vietnam (2010/11)	MICS 2006	
Eastern and Southern Africa (ESARO)	15	Kenya - Nyanza (2011)		(1)
	16	Madagascar - South (2012)		(1)
	17	South Sudan (2010)		
	18	Swaziland (2010)		DHS 2006/07
Latin America and the Caribbean (TACRO)	19	Belize (2011)	MICS 2006	
	20	Costa Rica (2011)		
	21	Cuba (2010/11)	MICS 2006	
	22	Jamaica (2011)	MICS 2005	
	23	St Lucia (2012)		
	24	Suriname (2010)	MICS 2006	
Middle East and North Africa (MENA)	25	Iraq (2011)	MICS 2006	
	26	Lebanon - Palestinians (2011)	MICS 2006	
	27	Palestine (2010)		
	28	Sudan (2010)		
	29	Tunisia (2011)	MICS 2006 (3)	
South Asia (ROSA)	30	Afghanistan (2010/11)		(2)
	31	Bhutan (2010)		
	32	Nepal - Mid/Far Western Regions (2010)		(1)
	33	Pakistan - Balochistan (2010)		(1)
	34	Pakistan - Punjab (2011)		
	35	Pakistan - Sindh (2011/12)		
West and Central Africa (WCARO)	36	Central African Rep (2010)	MICS 2006 (3)	
	37	Chad (2010)		
	38	Congo, Democratic Republic (2010)		DHS 2007
	39	Gambia (2010)	MICS 2005/06	
	40	Ghana (2011)	MICS 2006	DHS 2008
	41	Ghana - Urban Accra (2010/11)		
	42	Guinea Bissau (2010)	MICS 2006	
	43	Mali (2009/10)		DHS 2006 (2)
	44	Mauritania (2011)	MICS 2007	
	45	Nigeria (2011)	MICS 2007	DHS 2008
	46	Sierra Leone (2010)	MICS 2005	DHS 2008
	47	Togo (2010)	MICS 2006	

^aSurveys with Data Quality Tables available. (1): The country conducted a DHS in the recent past, but the corresponding MICS4 are at sub-national level. (2): There was a 2010 Special DHS (not Standard DHS). (3): Data Quality Tables not available

Annex 3D.2: Completeness of reporting of date of birth - Percent with missing or incomplete information

Country	Survey	Date of birth - Women age 15-49		Date of birth - Under-5 children		
		Month only	Month & year	Month only	Month & year	Month ¹
Bosnia & Herzegovina	MICS3	0.2	0.0	0.2	0.0	0.2
	MICS4	0.1	0.1	0.1	0.0	0.1
Bosnia & Herz., Roma	MICS4	0.6	0.3	0.4	0.0	0.4
Kazakhstan	MICS3	0.0	0.0	0.0	0.0	0.0
	MICS4	0.0	0.0	0.0	0.0	0.0
Macedonia	MICS3	1.5	0.0	0.4	0.0	0.4
	MICS4	0.1	0.0	0.0	0.0	0.0
Macedonia, Roma	MICS4	0.1	0.1	0.0	0.0	0.0
Moldova	MICS4	0.0	0.0	0.0	0.0	0.0
Serbia	MICS3	0.2	0.0	0.1	0.0	0.1
	MICS4	0.0	0.0	0.0	0.0	0.0
Serbia, Roma	MICS4	1.8	0.0	0.4	0.0	0.4
Indonesia - Papu	MICS4	3.1	13.0	0.6	0.0	0.6
Indonesia-Papua Barat	MICS4	3.8	1.3	1.0	0.0	1.0
Korea, DPR	MICS4	0.0	0.0	0.0	0.0	0.0
Lao PDR	MICS3	NR ²	NR	0.5	0.0	0.5
	MICS4	2.2	0.0	1.5	0.0	1.5
Mongolia	MICS3	0.1	0.0	0.0	0.0	0.0
	MICS4	0.0	0.0	0.0	0.0	0.0
Vietnam	MICS3	12.9	0.0	0.0	0.0	0.0
	MICS4	4.0	0.0	0.1	0.0	0.1
Kenya - Nyanza	MICS4	23.7	0.4	0.6	0.0	0.6
Madagascar - South	MICS4	NR	NR	0.2	0.0	0.2
South Sudan	MICS4	NR	NR	4.3	0.1	4.4
Swaziland	MICS4	0.4	0.0	0.1	0.0	0.1
	DHS	1.8	0.0	0.0	0.0	0.0
Belize	MICS3	NR	NR	0.6	0.1	0.7
	MICS4	0.0	0.1	0.0	0.0	0.0
Costa Rica	MICS4	0.1	0.2	0.0	0.0	0.0
Cuba	MICS3	NR	NR	NR	NR	NR
	MICS4	0.0	0.0	0.0	0.0	0.0
Jamaica	MICS3	0.5	0.0	0.1	0.0	0.1
	MICS4	0.3	0.1	0.0	0.0	0.0
St Lucia	MICS4	0.2	0.5	0.0	0.0	0.0
Suriname	MICS3	0.2	0.0	0.3	0.4	0.7
	MICS4	0.1	0.0	0.3	0.0	0.3
Iraq	MICS3	3.8	0.0	0.3	0.0	0.3
	MICS4	NR	NR	NR	NR	NR

Country	Survey	Date of birth - Women age 15-49		Date of birth - Under-5 children		
		Month only	Month & year	Month only	Month & year	Month ¹
Lebanon, Palest	MICS3	0.4	0.0	1.1	0.4	1.5
	MICS4	2.0	0.1	0.1	0.0	0.1
Palestine	MICS4	1.3	0.0	0.0	0.0	0.0
Sudan	MICS4	0.0	0.0	0.7	0.0	0.7
Tunisia	MICS3	Data Quality Not available				0.0
	MICS4	NR	NR	0.1	0.0	0.1
Afghanistan	MICS4	NR	NR	NR	NR	NR
Bhutan	MICS4	38.4	0.9	1.1	0.0	1.1
Nepal - Mid/Far West	MICS4	4.7	11.8	0.1	0.1	0.2
Pakistan - Balochistan	MICS4	25.6	46.3	21.8	15.3	37.1
Pakistan - Punjab	MICS4	21.4	3.6	1.8	0.4	2.2
Pakistan - Sindh	MICS4	19.2	4.9	8.4	1.1	9.5
Central African Rep.	MICS3	Data Quality Not available				0.0
	MICS4	20.3	0.5	0.4	0.0	0.4
Chad	MICS4	43.6	23.8	16.3	2.4	18.7
Congo DR	MICS4	10.6	0.0	1.1	0.0	1.1
	DHS	11.6	0.1	0.8	0.1	0.8
Gambia	MICS3	26.6	0.0	0.1	0.0	0.1
	MICS4	23.0	0.0	0.2	0.0	0.2
Ghana	MICS3	41.1	0.0	4.4	0.2	4.6
	MICS4	13.8	0.1	0.6	0.0	0.6
	DHS	19.0	1.2	0.0	0.0	0.0
Ghana - Accra	MICS4	6.1	5.6	1.1	0.5	1.6
Guinea Bissau	MICS3	27.6	0.0	3.6	0.6	4.2
	MICS4	10.5	6.2	1.9	0.0	1.9
Mali	MICS4	58.1	16.1	0.3	0.0	0.3
	DHS	62.8	5.9	0.0	0.0	0.0
Mauritania	MICS3	72.1	0.0	2.0	0.1	2.1
	MICS4	37.5	0.1	4.5	0.0	4.5
Nigeria	MICS3	NR	NR	15.2	1.9	17.1
	MICS4	19.4	0.4	1.0	0.0	1.0
	DHS	20.1	4.1	0.9	0.0	0.9
Sierra Leone	MICS3	32.9	0.0	10.3	2.7	13.0
	MICS4	28.4	17.4	2.5	0.2	2.7
	DHS	17.8	7.6	0.1	0.0	0.1
Togo	MICS3	17.6	0.0	4.7	5.1	9.8
	MICS4	17.2	0.1	1.3	0.0	1.3

Source of Data: MICS Data Quality (DQ) Table 6; DHS DQ Table C1 and tabulation of corresponding variables in DHS datasets

¹Obtained by adding "Month only" and "Month & year"; ²NR: Not reported

Annex 3D.3: Age heaping at (0,5) and age displacement for women 15-49 and under-five children

Country	Survey	Whipple's index, Women 13-62			Age Ratios, Women 13-16		Age Ratios, Women 48-51		Age ratios children 3-6	
		Heaping at (0, 5)	Heaping at 0	Heaping at 5	14 to 15	(13-14) to (15-16)	50 to 49	(50-51) to (48-49)	5 to 4	(5-6) to (3-4)
Bosnia & Herzegovina	MICS3	104.6	107.8	101.5	163.3	124.5	226.6	191.2	112.9	110.9
	MICS4	103.8	102.2	105.5	102.1	90.1	108.2	107.3	139.3	133.2
Bosnia & Herz., Roma	MICS4	101.6	98.6	104.5	165.1	127.8	181.0	137.5	114.6	98.1
Kazakhstan	MICS3	106.6	100.9	112.4	102.9	98.4	148.6	111.4	94.1	89.2
	MICS4	101.4	103.8	99.1	118.9	106.8	141.4	121.8	95.1	92.6
Macedonia	MICS3	122.2	127.0	117.4	178.3	130.9	178.6	113.9	140.4	113.3
	MICS4	97.3	97.0	97.7	91.8	85.4	110.9	100.9	116.3	106.9
Macedonia, Roma	MICS4	99.4	99.7	99.0	97.6	94.3	104.5	115.5	82.0	83.7
Moldova	MICS4	101.5	107.7	95.2	101.6	91.4	144.4	130.6	103.7	94.6
Serbia	MICS3	100.0	98.0	102.0	97.3	94.0	143.8	127.8	118.6	117.7
	MICS4	106.0	100.6	111.4	68.1	80.8	81.1	80.5	67.1	77.8
Serbia, Roma	MICS4	106.7	96.6	116.8	71.3	78.6	61.6	113.1	75.1	84.5
Indonesia - Papu	MICS4	92.6	80.3	104.9	125.5	112.0	120.8	112.5	94.4	99.7
Indonesia-Papua Barat	MICS4	100.9	92.2	109.5	159.3	131.3	150.7	120.1	123.9	112.8
Korea, DPR	MICS4	101.1	103.3	98.9	119.1	106.8	98.6	112.7	109.3	101.7
Lao PDR	MICS3	122.1	125.2	118.9	161.2	139.0	753.8	284.5	149.6	127.9
	MICS4	105.6	98.6	112.5	127.6	127.2	182.6	154.4	118.0	109.8
Mongolia	MICS3	102.2	86.1	118.2	106.7	97.1	120.2	89.9	110.9	96.0
	MICS4	104.0	99.7	108.2	116.3	117.7	151.1	116.0	112.8	98.4
Vietnam	MICS3	96.5	90.3	102.8	101.7	97.7	92.6	86.8	121.8	109.4
	MICS4	107.3	107.1	107.4	113.1	103.7	193.0	148.8	111.2	105.0
Kenya - Nyanza	MICS4	102.2	85.2	119.1	146.6	136.8	119.7	111.1	105.8	98.8
Madagascar - South	MICS4	133.8	140.8	126.7	96.0	98.7	121.2	96.4	92.4	101.0
South Sudan	MICS4	172.7	202.4	142.9	172.8	163.9	896.6	396.2	125.5	129.1
Swaziland	MICS4	102.3	95.1	109.5	118.0	105.8	208.7	137.0	102.4	105.7
	DHS	97.5	98.6	96.4	153.6	127.3	156.6	108.1	87.7	93.7

Country	Survey	Whipple's index, Women 13-62			Age Ratios, Women 13-16		Age Ratios, Women 48-51		Age ratios children 3-6	
		Heaping at (0, 5)	Heaping at 0	Heaping at 5	14 to 15	(13-14) to (15-16)	50 to 49	(50-51) to (48-49)	5 to 4	(5-6) to (3-4)
Belize	MICS3	106.8	107.2	106.4	139.7	132.4	189.7	162.3	132.5	142.0
	MICS4	103.2	100.4	106.0	113.1	103.5	144.2	125.2	100.3	101.8
Costa Rica	MICS4	96.0	101.7	90.3	91.4	94.4	124.6	116.8	107.5	98.2
Cuba	MICS3	106.0	110.4	101.7	107.7	99.2	155.7	137.6	96.6	97.0
	MICS4	105.3	102.3	108.4	93.9	87.6	175.7	128.0	102.5	115.3
Jamaica	MICS3	106.4	107.8	105.0	113.6	116.0	148.0	111.7	113.4	107.2
	MICS4	105.6	97.8	113.4	98.1	99.9	106.5	108.0	80.7	103.6
St Lucia	MICS4	102.3	102.9	101.6	81.3	85.5	112.5	93.1	106.5	90.6
Suriname	MICS3	106.2	101.4	110.9	89.3	89.6	108.5	90.5	97.9	97.9
	MICS4	101.0	91.3	110.6	103.9	109.6	81.6	91.3	97.7	89.1
Iraq	MICS3	109.8	104.9	114.7	94.7	99.3	364.7	238.1	120.2	110.6
	MICS4	102.7	97.1	108.2	115.6	109.0	178.1	127.8	107.1	103.3
Lebanon - Palestinians	MICS3	123.1	122.7	123.5	89.5	94.3	260.9	148.2	156.8	135.5
	MICS4	103.7	103.4	103.9	111.5	108.5	178.5	131.0	110.3	119.3
Palestine	MICS4	103.1	97.3	108.8	113.4	103.1	114.4	97.0	94.6	92.7
Sudan	MICS4	191.7	208.0	175.3	182.9	157.0	1254.6	555.2	118.8	105.7
Tunisia	MICS3									
	MICS4	108.5	103.9	113.1	130.6	112.9	179.8	139.2	116.7	105.5
Afghanistan	MICS4	203.6	219.4	187.9	147.7	117.7	867.8	330.4	101.0	104.2
Bhutan	MICS4	112.3	116.7	107.9	185.4	150.2	294.9	219.7	122.8	121.5
Nepal - Mid/Far West	MICS4	133.5	132.3	134.8	162.1	154.5	240.2	200.6	132.0	124.4
Pakistan - Balochistan	MICS4	185.9	202.9	169.0	135.8	115.2	475.5	222.3	104.0	109.7
Pakistan - Punjab	MICS4	139.9	134.6	145.2	101.9	99.5	238.1	176.8	103.3	101.3
Pakistan - Sindh	MICS4	164.4	178.3	150.6	108.6	99.9	580.3	326.5	80.7	96.0

Country	Survey	Whipple's index, Women 13-62			Age Ratios, Women 13-16		Age Ratios, Women 48-51		Age ratios children 3-6	
		Heaping at (0, 5)	Heaping at 0	Heaping at 5	14 to 15	(13-14) to (15-16)	50 to 49	(50-51) to (48-49)	5 to 4	(5-6) to (3-4)
Central African Rep.	MICS3									
	MICS4	134.2	144.0	124.5	125.4	121.0	301.2	159.2	117.0	100.7
Chad	MICS4	195.7	212.9	178.6	109.7	122.0	496.3	264.4	97.7	95.0
Congo DR	MICS4	105.6	100.1	111.1	121.0	137.4	203.9	168.1	131.3	110.2
	DHS	107.1	110.6	103.5	174.2	140.1	112.9	101.5	91.2	94.4
Gambia	MICS3	160.4	183.7	137.2	186.1	165.4	757.8	435.9	191.7	148.5
	MICS4	136.9	146.5	127.3	123.6	124.1	487.6	280.0	144.3	115.6
Ghana	MICS3	124.5	113.6	135.5	118.0	115.0	105.3	104.9	106.2	112.2
	MICS4	106.2	98.4	113.9	163.6	152.6	121.3	136.8	113.9	109.3
	DHS	130.7	123.0	138.4	111.0	127.5	225.7	133.2	85.9	98.9
Ghana - Accra	MICS4	120.1	118.7	121.4	127.1	133.7	188.2	122.2	117.0	116.9
Guinea Bissau	MICS3	148.6	158.5	138.7	112.8	123.5	390.6	207.1	114.5	108.0
	MICS4	137.7	142.6	132.7	96.0	98.8	363.0	199.9	113.0	105.5
Mali	MICS4	145.9	154.2	137.6	103.8	113.8	386.8	228.3	141.8	117.7
	DHS	161.0	164.7	157.4	114.5	127.0	219.5	150.5	79.5	98.2
Mauritania	MICS3	123.7	136.5	110.9	128.1	130.5	410.1	218.7	139.1	129.2
	MICS4	138.0	145.0	131.0	88.0	107.4	482.8	251.2	105.3	108.0
Nigeria	MICS3	205.4	239.0	171.8	217.8	194.6	1518.0	548.7	173.8	142.8
	MICS4	170.5	182.3	158.8	116.4	122.2	361.6	195.2	105.6	99.5
	DHS	177.6	181.8	173.4	98.3	112.4	224.6	124.9	87.4	92.8
Sierra Leone	MICS3	219.5	220.1	219.0	152.8	163.9	1760.0	736.3	155.9	132.5
	MICS4	204.1	223.9	184.2	203.8	190.4	1286.1	640.9	120.6	121.0
	DHS	179.2	186.2	172.3	403.3	318.2	1491.4	490.7	80.5	103.4
Togo	MICS3	151.6	148.2	155.0	191.0	182.3	428.3	297.8	195.9	158.6
	MICS4	142.2	140.8	143.6	114.8	135.6	247.2	156.6	135.6	119.5

Source of Data: MICS Data Quality (DQ) Tables 1 &3; and DHS DQ Table C1

Annex 3D.4: Incompleteness of, and Heaping in Anthropometric Measurements

Country	Survey	Missing anthropometric measurements			Percent of children excluded from analysis			Excess ratio ¹ of (0,5) in anthropometric measurements	
		Weight only	Height only	Weight & height	Weight-for-age	Height-for-age	Weight-for-height	Weight	Height
Bosnia & Herzegovina	MICS4	4.0	6.1	4.0	4.2	6.4	9.0	1.2	1.5
Bosnia & Herz., Roma	MICS4	3.4	5.9	3.4	3.9	7.5	8.8	0.8	0.7
Kazakhstan	MICS4	3.2	3.3	3.2	3.6	4.1	4.7	1.3	2.6
Macedonia	MICS4	2.9	3.6	2.8	3.2	4.3	5.7	1.2	1.7
Macedonia	MICS4	1.1	1.9	1.0	1.5	4.0	4.2	0.9	1.1
Moldova	MICS4	7.5	8.3	7.3	9.6	10.6	11.0	1.3	2.5
Serbia	MICS4	10.7	18.0	10.6	11.4	19.3	20.8	1.0	0.8
Serbia, Roma	MICS4	11.7	18.1	11.6	10.5	18.5	20.8	0.9	0.7
Korea, DPR	MICS4	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.4
Lao PDR	MICS4	2.0	2.6	2.0	2.3	4.1	3.5	1.1	2.0
Mongolia	MICS4	6.0	6.1	5.9	6.1	6.7	7.1	1.3	1.6
Vietnam	MICS4	1.9	2.5	1.8	2.1	3.1	3.3	1.2	1.7
Kenya - Nyanza	MICS4	2.1	2.3	2.0	2.5	3.0	2.8	1.1	1.9
South Sudan	MICS4	19.3	24.3	18.3	5.1	11.8	13.2	1.5	2.4
Swaziland	MICS4	2.6	2.6	2.5	2.9	3.3	3.5	1.0	1.1
	DHS	6.2	6.2	6.2	8.5	8.5	8.5	1.0	1.2
Belize	MICS4	7.0	7.5	6.7	6.4	7.6	8.5	1.0	2.2
St Lucia	MICS4	2.5	3.0	2.5	3.8	4.1	5.8	1.1	2.1
Suriname	MICS4	12.8	16.3	12.6	15.0	18.5	19.3	1.1	1.9
Iraq	MICS4				1.8	2.3	2.7	1.6	3.4
Lebanon, Palest	MICS4	1.0	1.5	1.0	1.1	1.9	2.4	1.1	1.1
Palestine	MICS4	17.3	18.3	16.4	16.8	18.5	19.6	1.3	2.8
Sudan	MICS4	7.0	8.4	7.0	1.3	3.7	4.0	1.1	2.2
Tunisia	MICS4	7.5	8.5	7.1	5.7	8.9	11.3	1.9	3.0
Afghanistan	MICS4				13.9	16.6	18.2	1.8	3.0
Bhutan	MICS4	2.2	3.0	2.0	4.1	8.4	8.4	1.7	2.6
Pakistan - Balochistan	MICS4	27.1	29.9	26.6	28.0	35.2	39.1	4.7	3.1
Pakistan - Punjab	MICS4	3.5	3.9	3.5	5.4	6.4	6.5	1.0	1.4
Pakistan - Sindh	MICS4	7.4	7.6	7.4	17.4	23.7	13.3	1.3	2.3
Central African Rep.	MICS4	1.7	1.8	1.7	2.5	2.9	2.7	1.0	1.2
Chad	MICS4	7.9	8.8	7.8	24.9	26.2	26.5	1.1	2.0
Congo DR	MICS4	0.0	0.6	2.3					
	DHS	6.6	7.5	7.6	18.4	18.4	18.2	1.1	2.5

Country	Survey	Missing anthropometric measurements			Percent of children excluded from analysis			Excess ratio ¹ of (0,5) in anthropometric measurements	
		Weight only	Height only	Weight & height	Weight-for-age	Height-for-age	Weight-for-height	Weight	Height
Gambia	MICS4	1.0	1.1	1.0	1.1	1.6	1.7		
Ghana	MICS4	1.6	1.6	1.4	2.1	2.8	2.9	1.0	1.9
	DHS	4.9	5.8	5.8	11.1	11.1	11.1	1.0	1.6
Ghana - Accra	MICS4	3.3	3.7	3.1	5.3	6.2	6.6	1.0	1.4
Guinea Bissau	MICS4	2.0	2.0	1.9	4.3	4.9	4.9	1.0	2.0
Mali	MICS4	2.0	2.1	2	2.5	2.6	2.7	1.1	1.1
	DHS	3.7	3.8	4.0	9.3	9.3	8.6	1.1	2.2
Mauritania	MICS4	3.4	4.8	3.2	8.3	10.8	10.8	1.0	2.0
Nigeria	MICS4	3.2	3.4	4.1	4.0	4.8	4.0	1.1	1.5
	DHS	4.7	5.3	5.5	20.9	20.9	20.9	1.2	2.2
Sierra Leone	MICS4	1.9	1.1	1.4	5.7	10.0	10.0	1.2	2.2
	DHS	5.1	5.0	5.2	14.6	14.6	14.6	0.9	1.6
Togo	MICS4	1.4	1.3	1.3	2.2	2.4	2.4	1.0	1.0

Source of Data: MICS Data Quality (DQ) Tables 7 & 8; tabulation of corresponding variables in DHS datasets

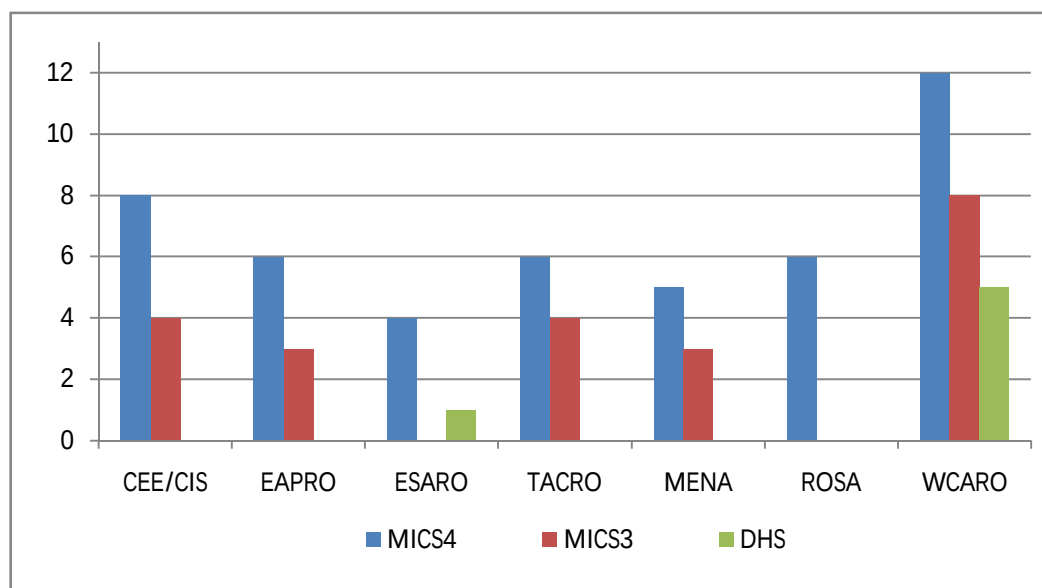
¹Percent reported with 0 or 5 divided by 20

Annex 3D.5: Observations for bednets and hand washing places - Percent seen by the interviewer

Country	Survey	Bednets	Handwashing places
Bosnia & Herzegovina	MICS4		97.4
Bosnia & Herz., Roma	MICS4		94.7
Moldova	MICS4		89.4
Serbia	MICS4		97.3
Serbia, Roma	MICS4		93.9
Indonesia - Papu	MICS4	52.8	
Indonesia-Papua Barat	MICS4	48.9	
Korea, DPR	MICS4		100.0
Lao PDR	MICS4	89.5	
Mongolia	MICS4		61.2
Vietnam	MICS4	89.5	97.8
Kenya - Nyanza	MICS4	2.8	3.8
Madagascar - South	MICS4	88.3	79.0
South Sudan	MICS4		
Swaziland	MICS4	94.4	74.3
	DHS	21.5	
Costa Rica	MICS4		83.5
Cuba	MICS4		
Jamaica	MICS4		64.2
St Lucia	MICS4		
Suriname	MICS4	32.9	70.6
Iraq	MICS4		
Lebanon, Palest	MICS4		98.5
Bhutan	MICS4		96.3
Nepal - Mid/Far West	MICS4		92.5
Pakistan - Balochistan	MICS4	56.6	66.4
Pakistan - Punjab	MICS4		96.7
Pakistan - Sindh	MICS4	72.6	72.9
Central African Rep.	MICS4	33.0	16.9
Chad	MICS4	50.0	51.3
Gambia	MICS4	78.9	33.2
Ghana	MICS4	62.9	21.8
	DHS	35.9	
Ghana - Accra	MICS4	55.0	57.6
Guinea Bissau	MICS4	76.9	3.3
Mali	MICS4	69.1	25.9
	DHS	57.6	
Mauritania	MICS4	43.0	51.3
Nigeria	MICS4	57.5	25.8
	DHS	45.1	
Sierra Leone	MICS4	88.6	66.6
	DHS	12.1	
Togo	MICS4	69.1	28.7

Source of Data: MICS Data Quality (DQ) Tables 9 & 12; Tabulation of the DHS variable on bednets

Figure 3D.1: Distribution of the 47 MICS4, 22 MICS3 and 6 DHS surveys used in the data quality assessment, by region



CEE/CIS: Central and Eastern Europe & the Commonwealth of Independent States

EAPRO: East Asia and the Pacific

ESARO: Eastern and Southern Africa

TACRO: Latin America and the Caribbean

MENA: Middle East and North Africa

ROSA: South Asia

WCARO: West and Central Africa

Figure 3D.2: Missing date of birth of women 15-49 - Month & Year: MICS4 (0.2%+)

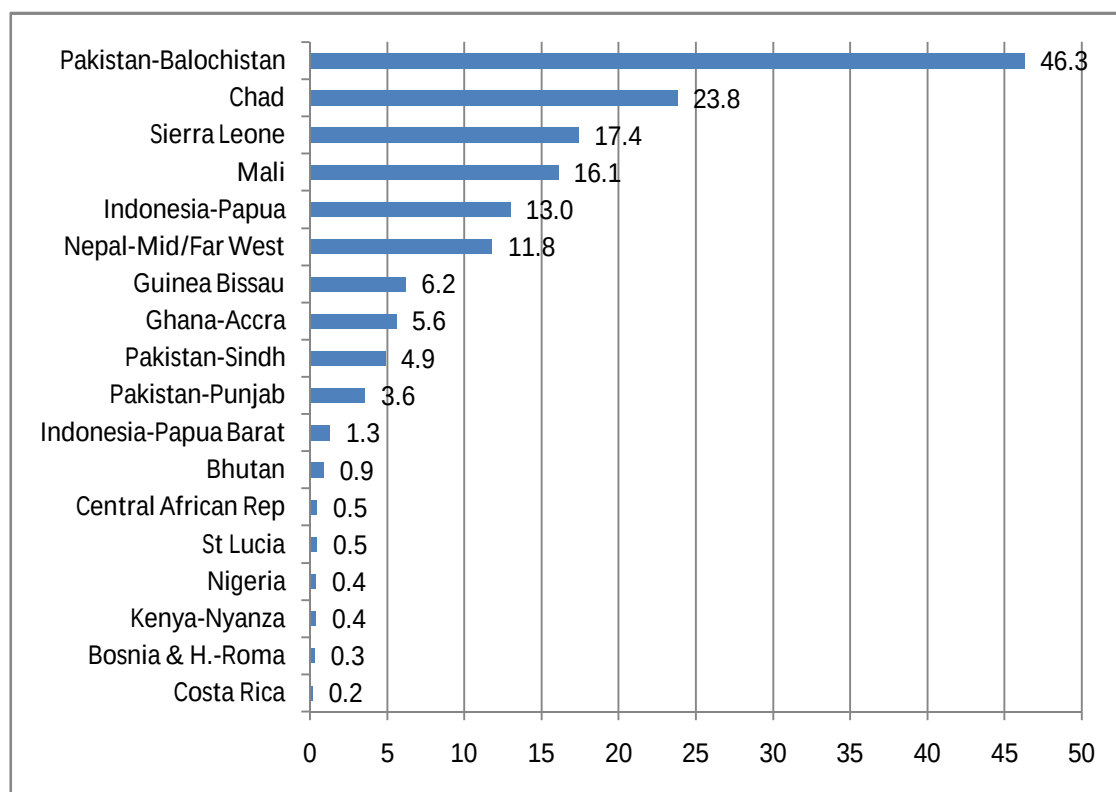


Figure 3D.3: Missing date of birth of under-5 - (month only + month & year): MICS4

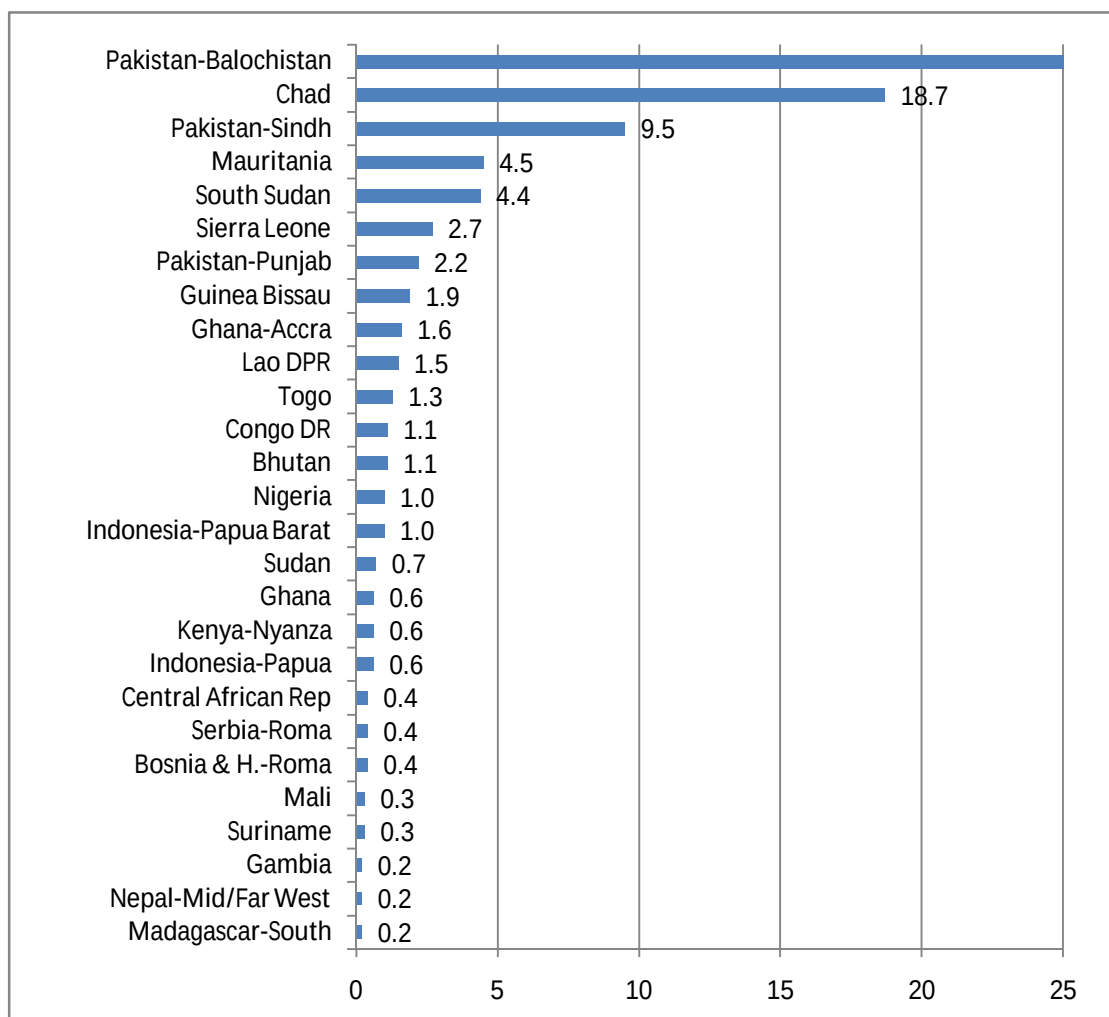


Figure 3D.4: Missing date of birth of under-5 - (Month): MICS4 & MICS3 (0.2%+)

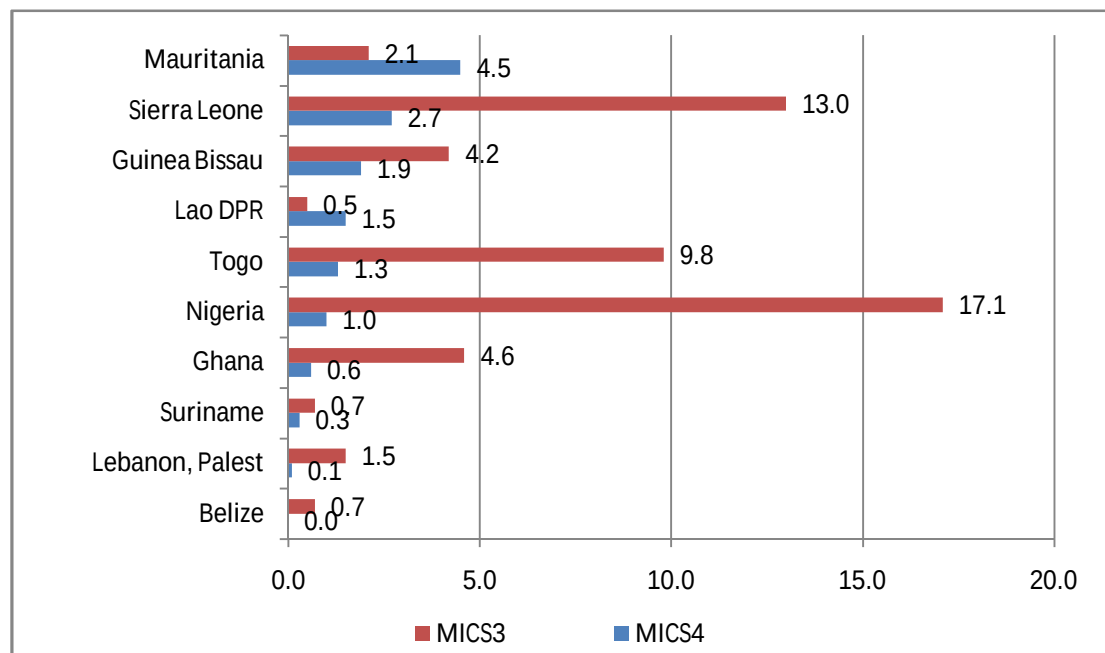


Figure 3D.5: Missing date of birth of under-5 - (month only + month & year): MICS4 & DHS

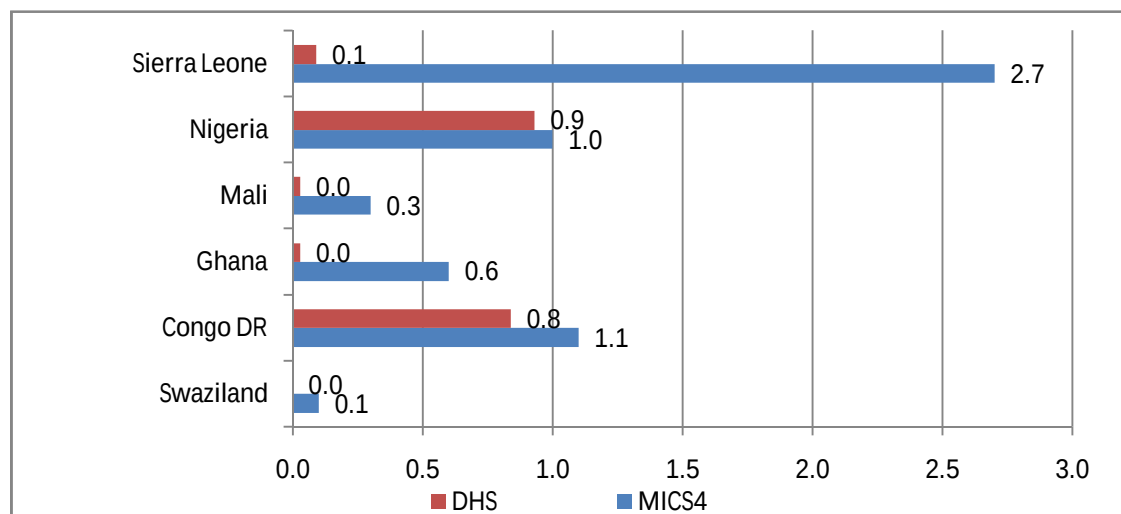


Figure 3D.6: Whipple Index for women 13-62: Heaping at 0,5 - MICS4

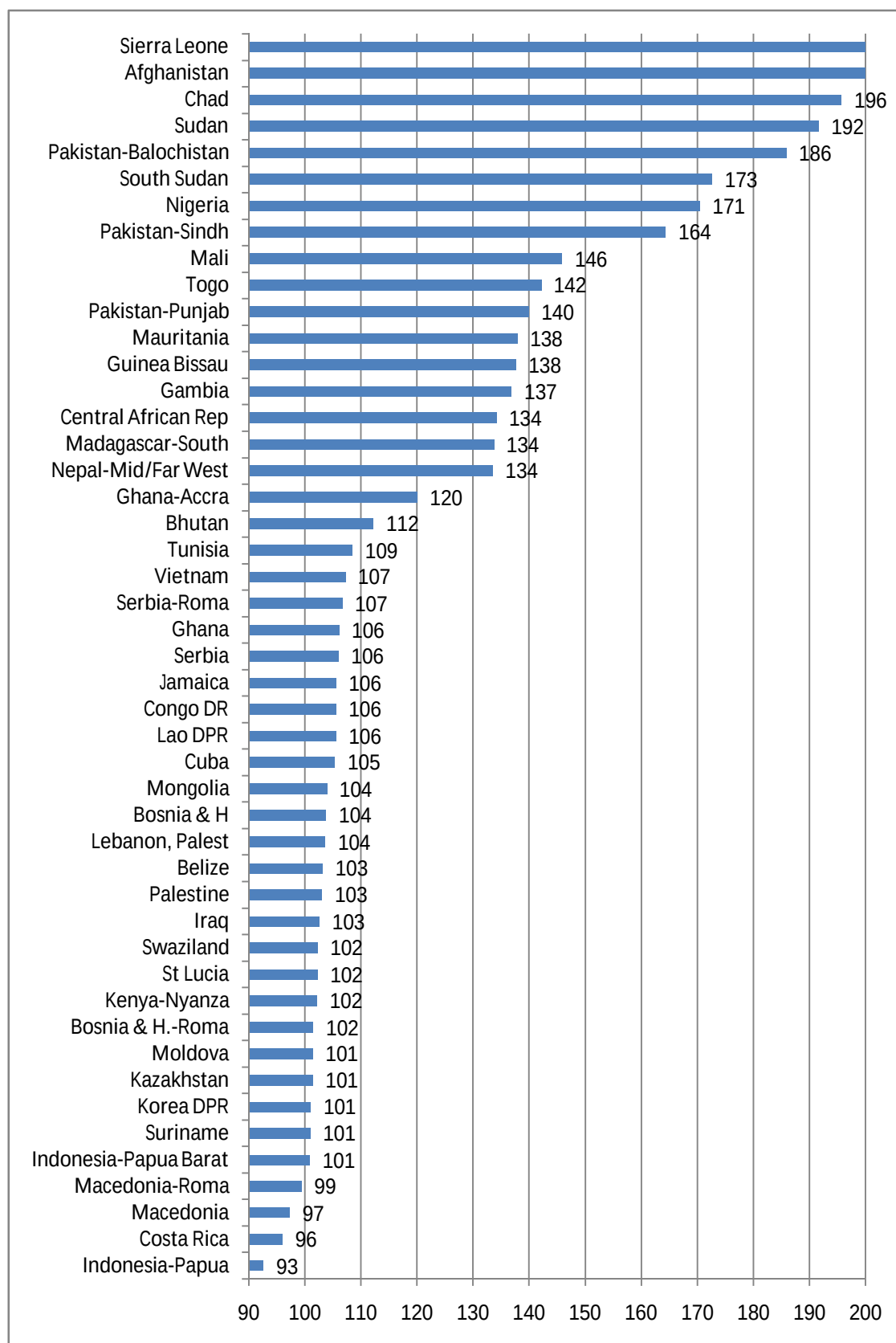


Figure 3D.7: Whipple Index for women 13-62: Heaping at 0,5 - MICS4 & MICS3

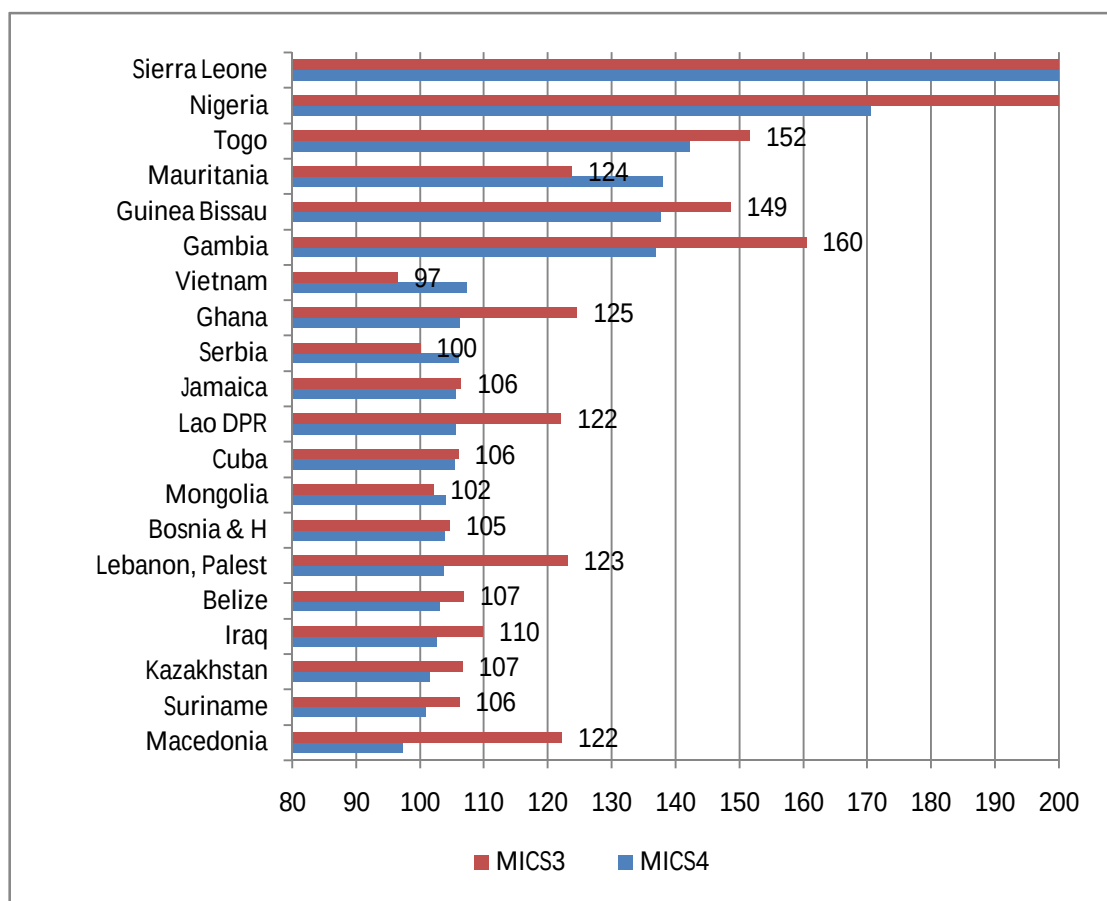


Figure 3D.8: Whipple Index for women 13-62: Heaping at 0,5 - MICS4 & DHS

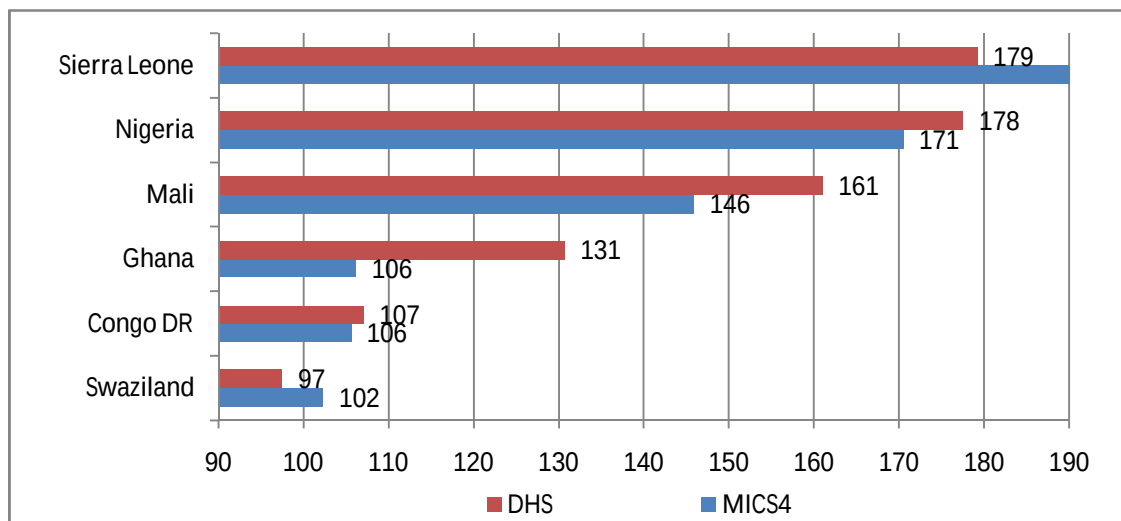
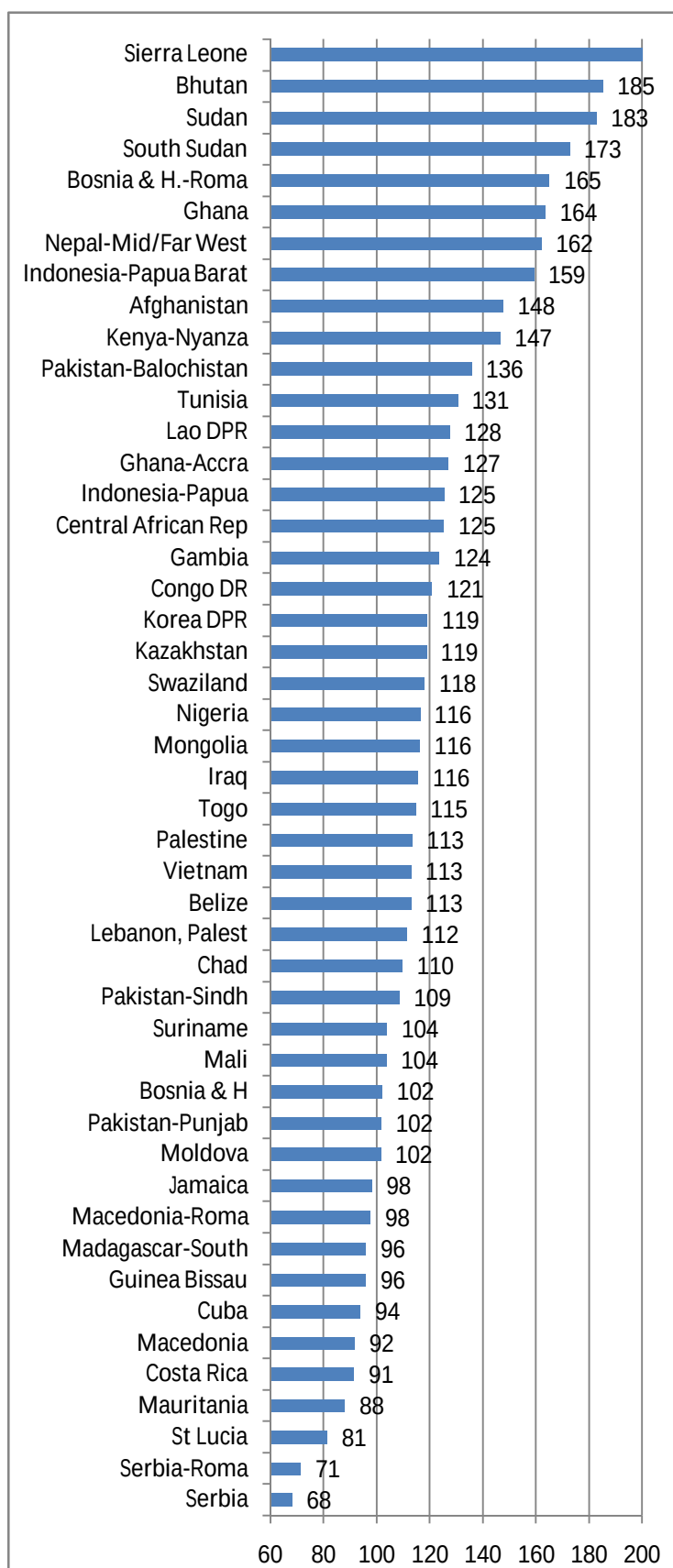


Figure 3D.9: Age Ratios for women: MICS4

Ratio 14 to 15



Ratio 50 to 49

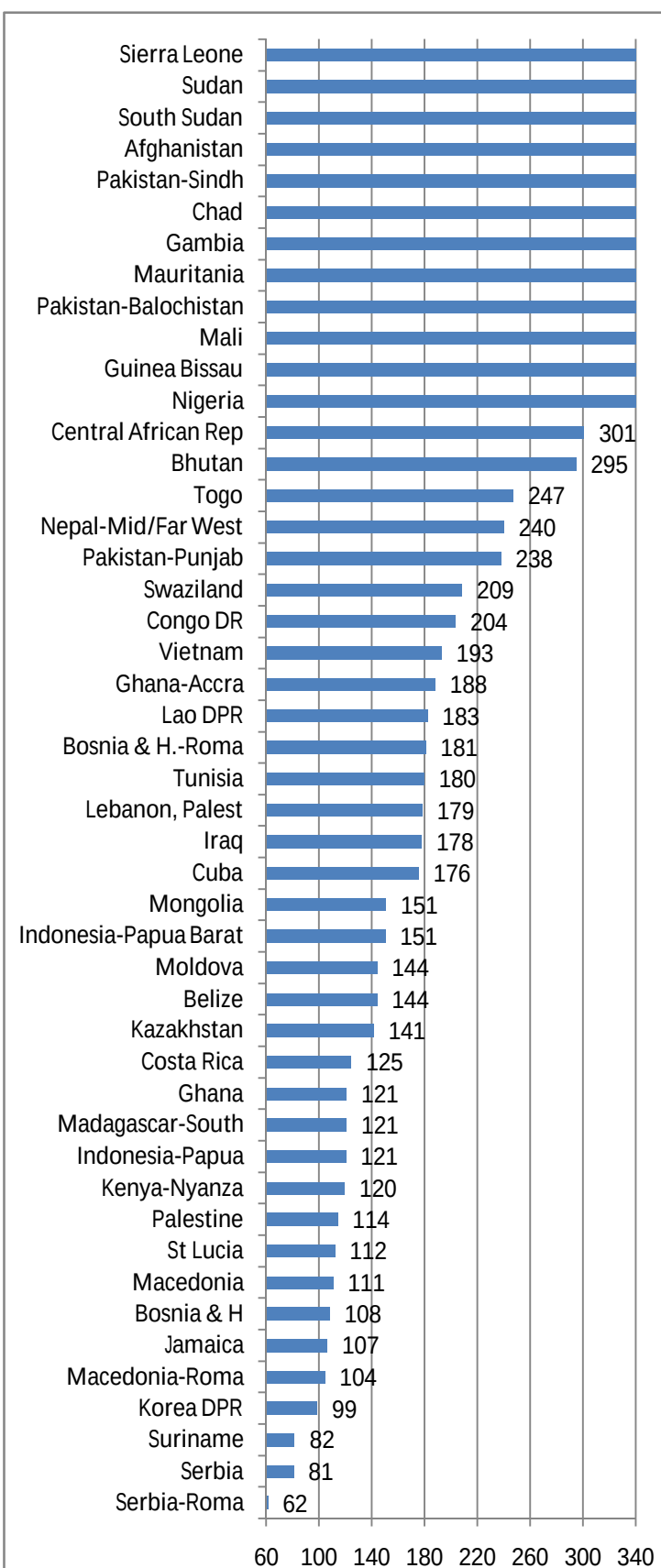
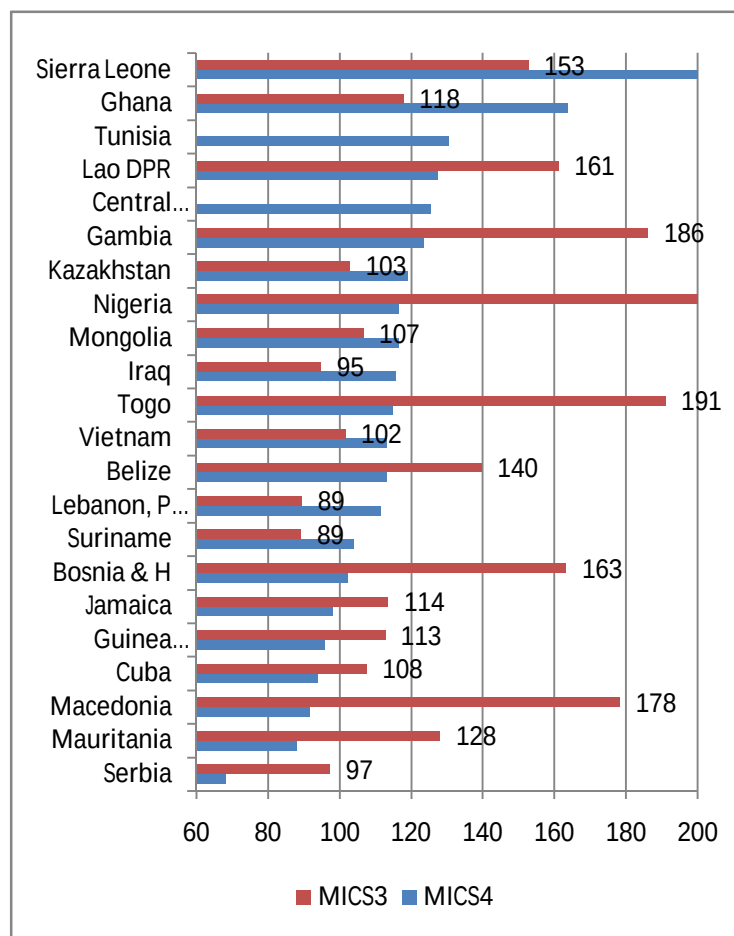


Figure 3D.10: Age Ratios for women: MICS4 & MICS3

Ratio 14 to 15



Ratio 50 to 49

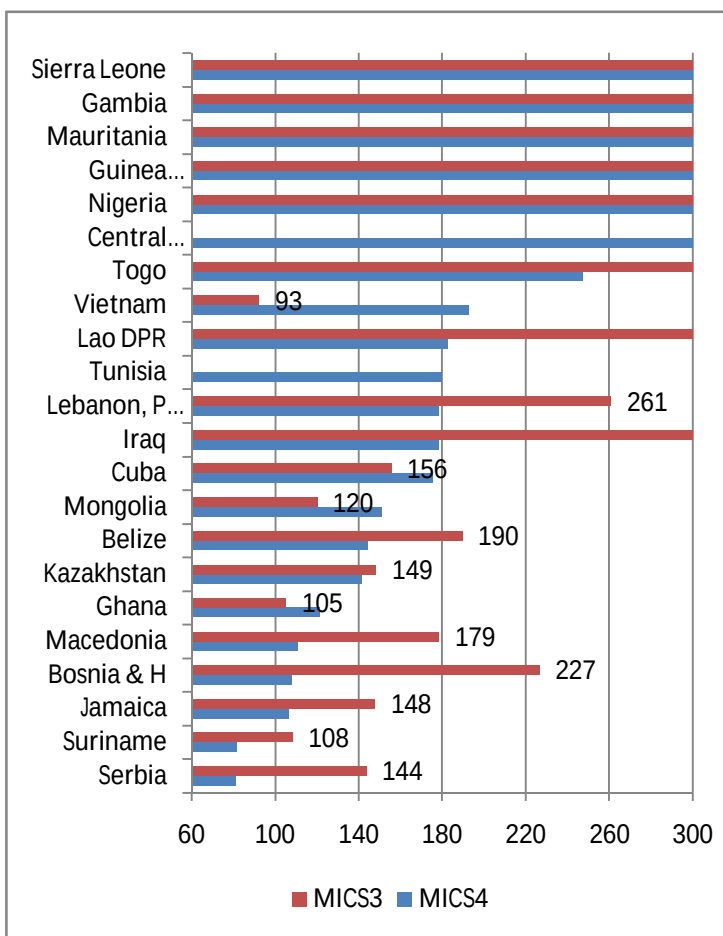
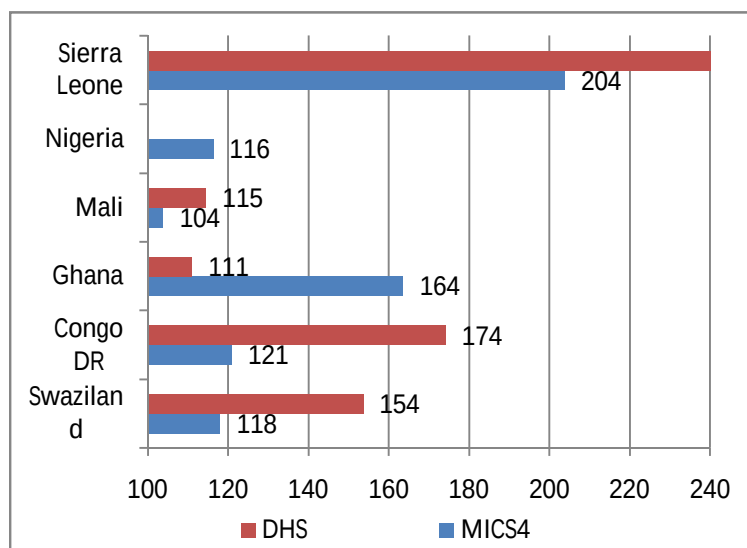


Figure 3D.11: Age Ratios for women: MICS4 & MICS3

Ratio 14 to 15



Ratio 50 to 49

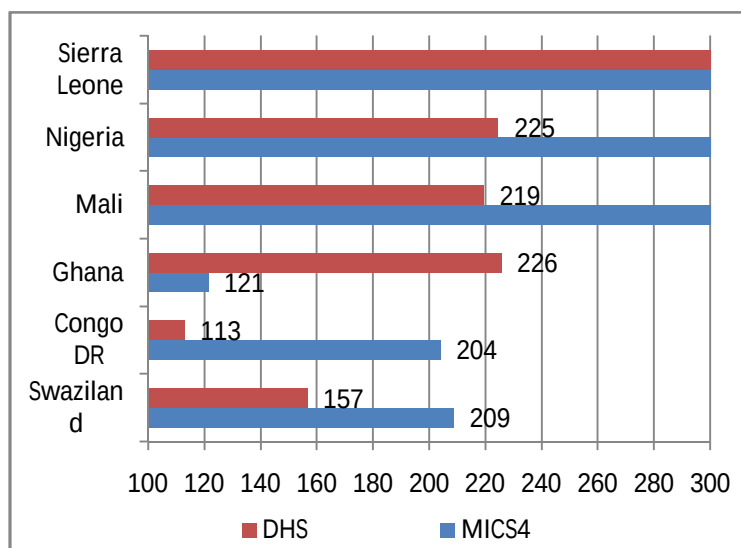


Figure 3D.12: Age Ratios of children - 5 to 4: MICS4

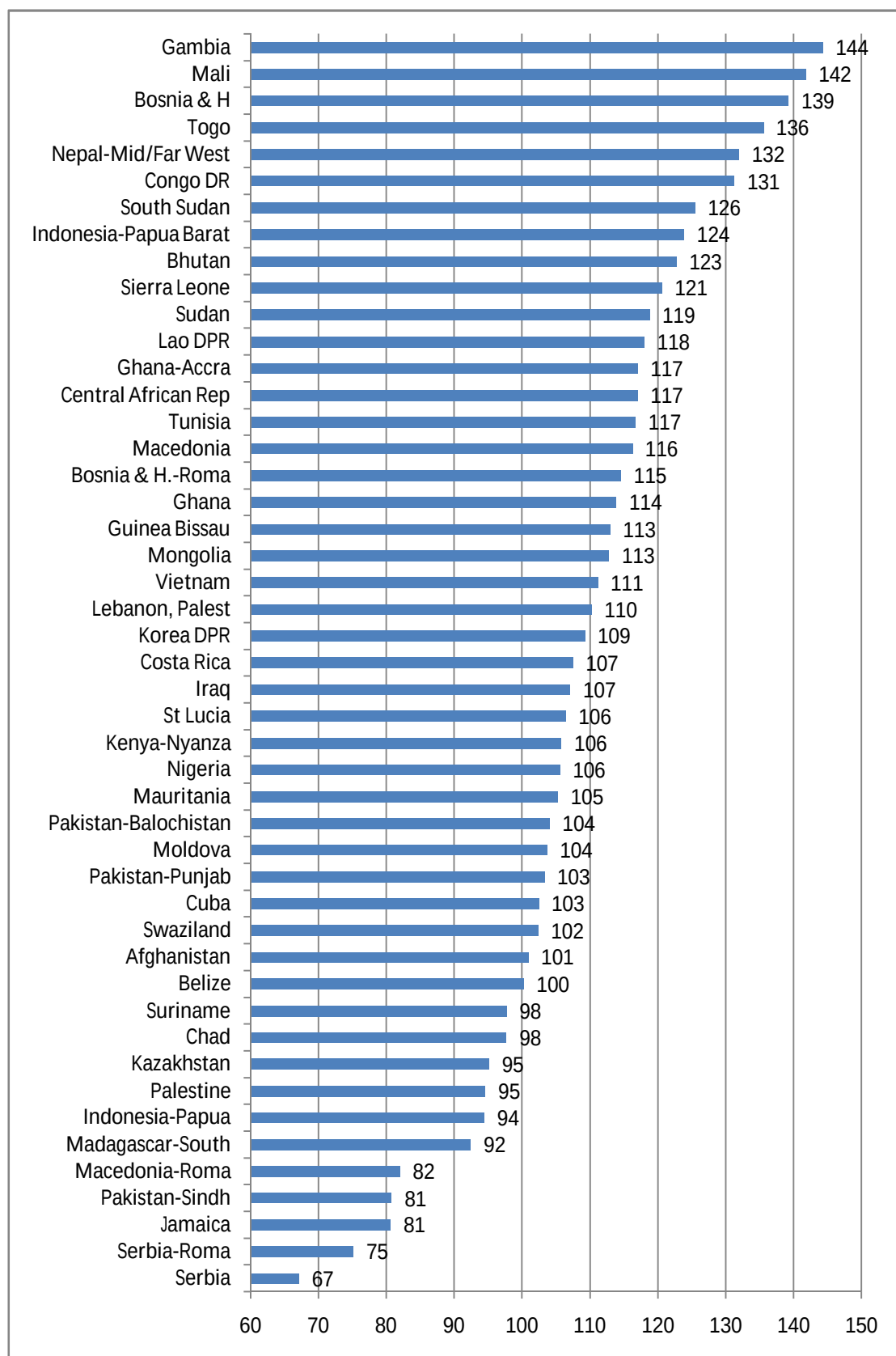


Figure 3D.13: Age Ratios of children - 5 to 4: MICS4 & MICS3

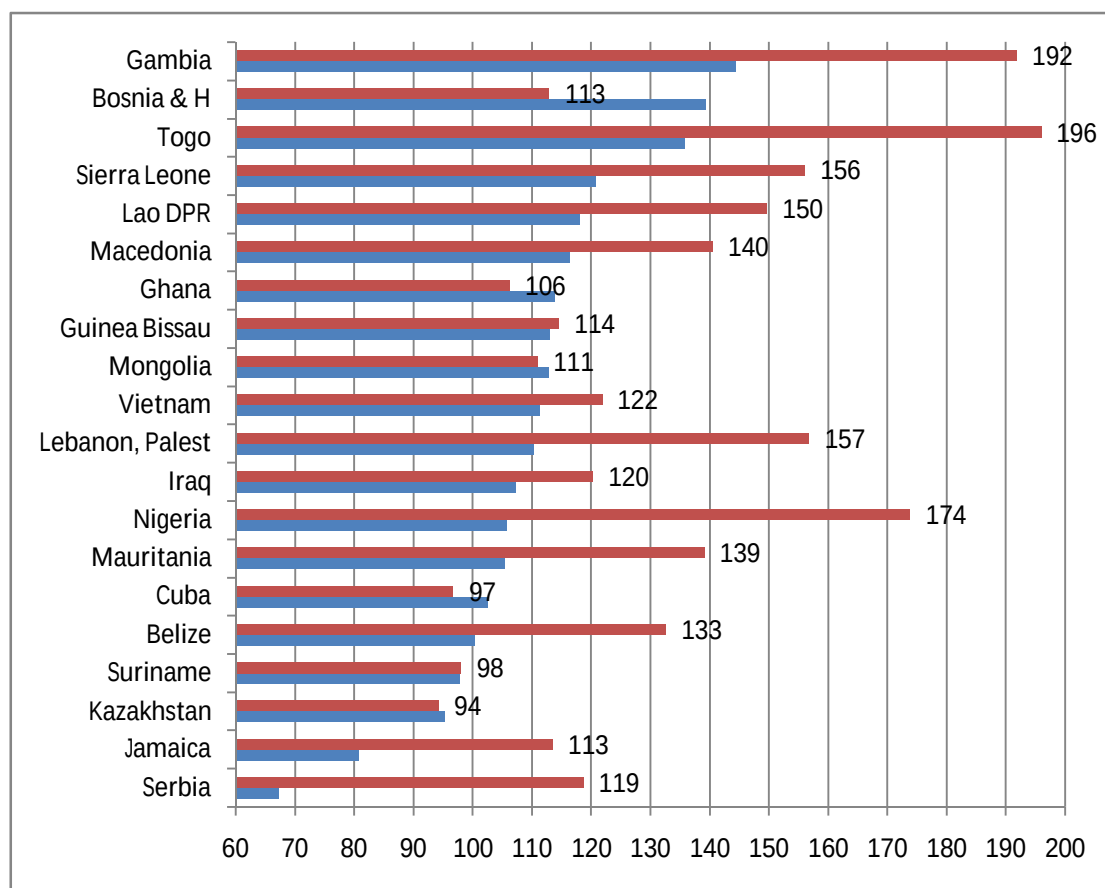


Figure 3D.14: Age Ratios of children - 5 to 4: MICS4 & DHS

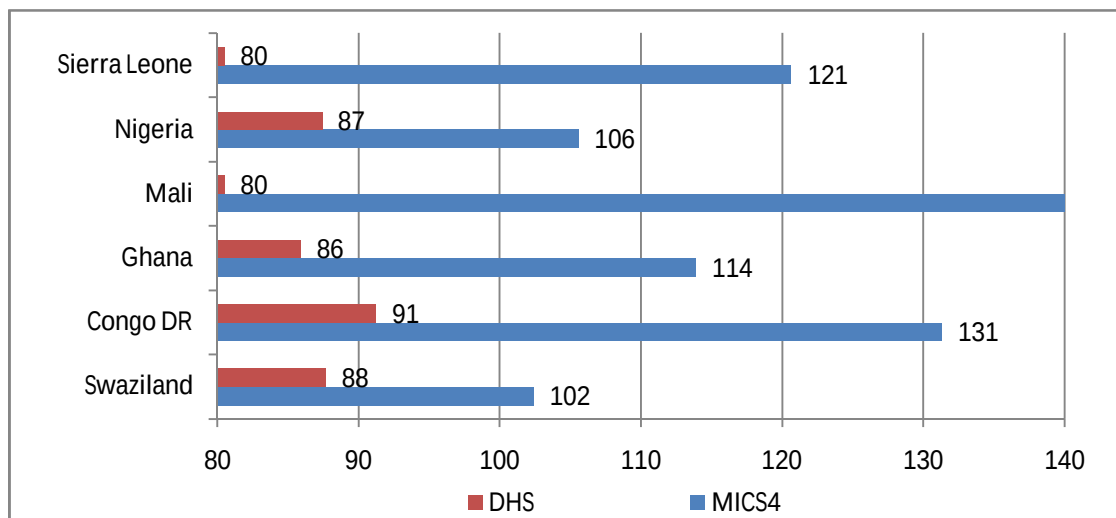
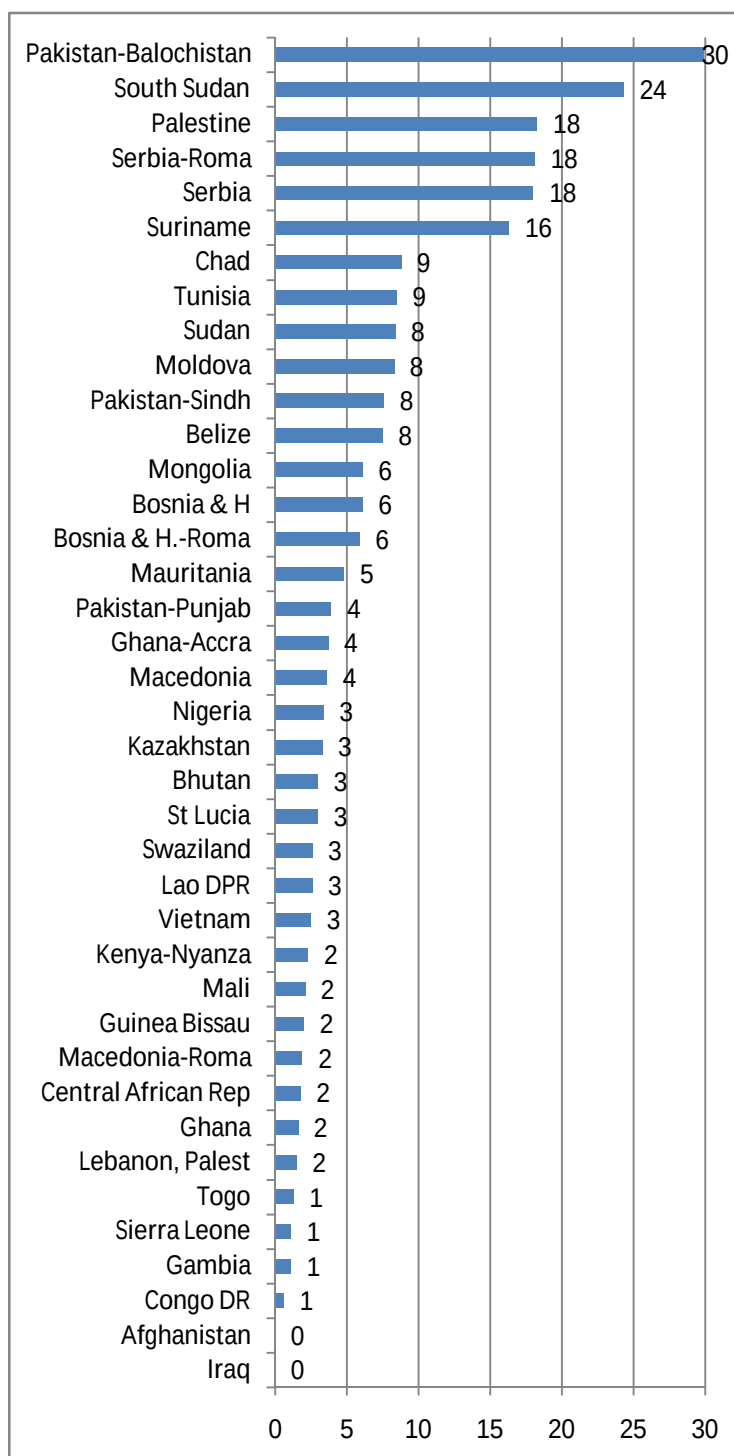


Figure 3D.15: Incompleteness of height measurement and inconsistency of height-for-age indicator: MICS4

Incompleteness of height measurement



Inconsistency of height-for-age indicator

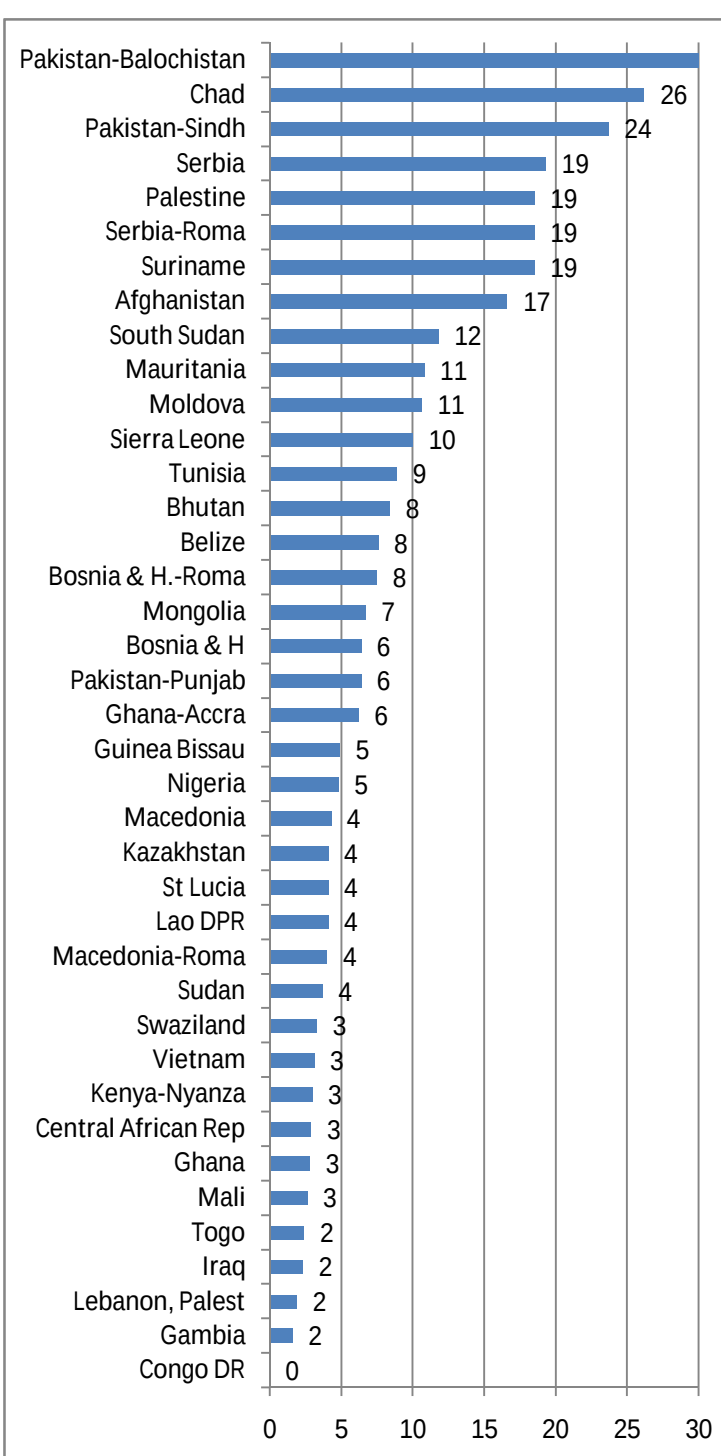
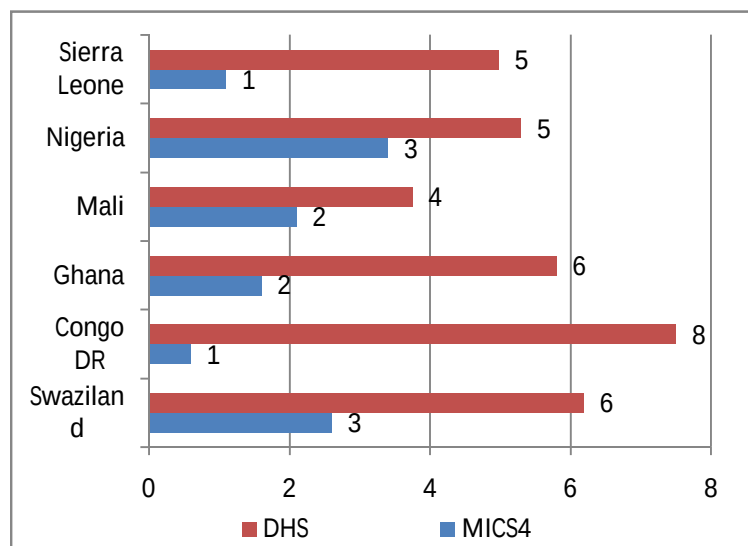


Figure 3D.16: Incompleteness of height measurement and inconsistency of height-for-age indicator: MICS4 & DHS

Incompleteness of height measurement



Inconsistency of height-for-age indicator

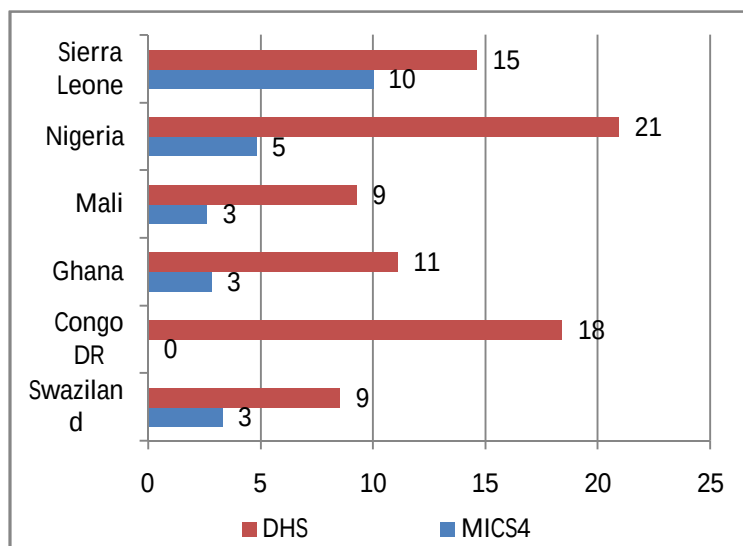
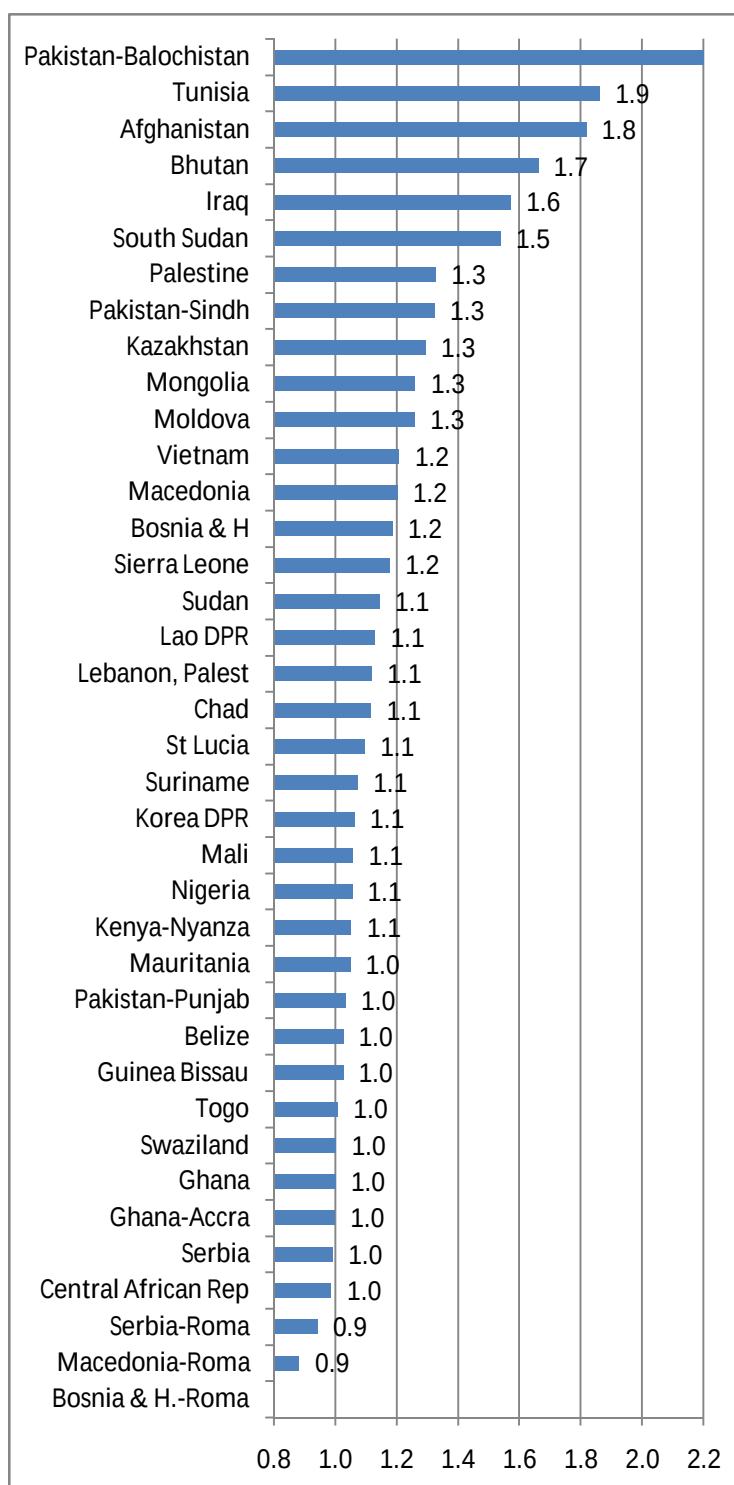


Figure 3D.17: Heaping of weight and height measurements at (0,5): MICS4

Excess ratio of (0, 5) in weight measurement



Excess ratio of (0, 5) in height measurement

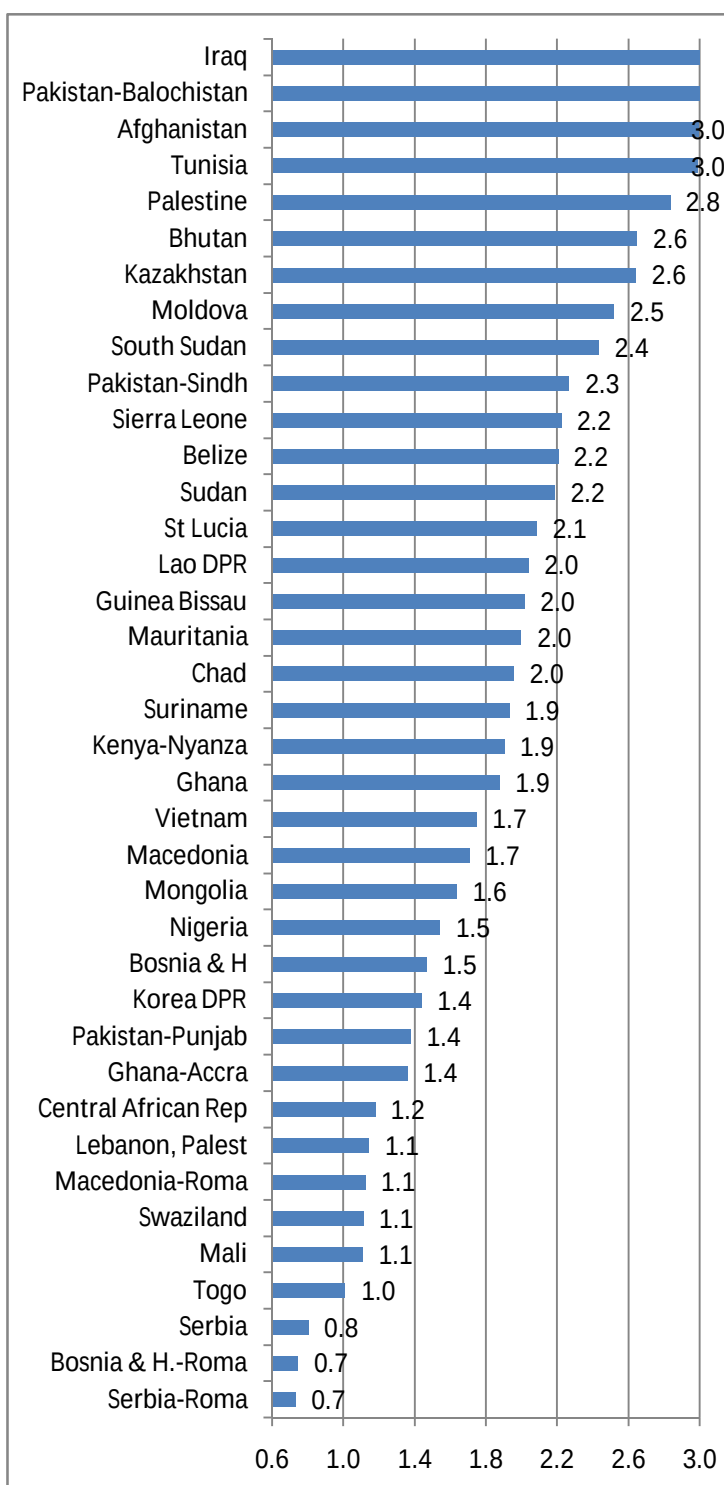


Figure 3D.18: Heaping of weight and height measurements at (0,5): MICS4 & DHS

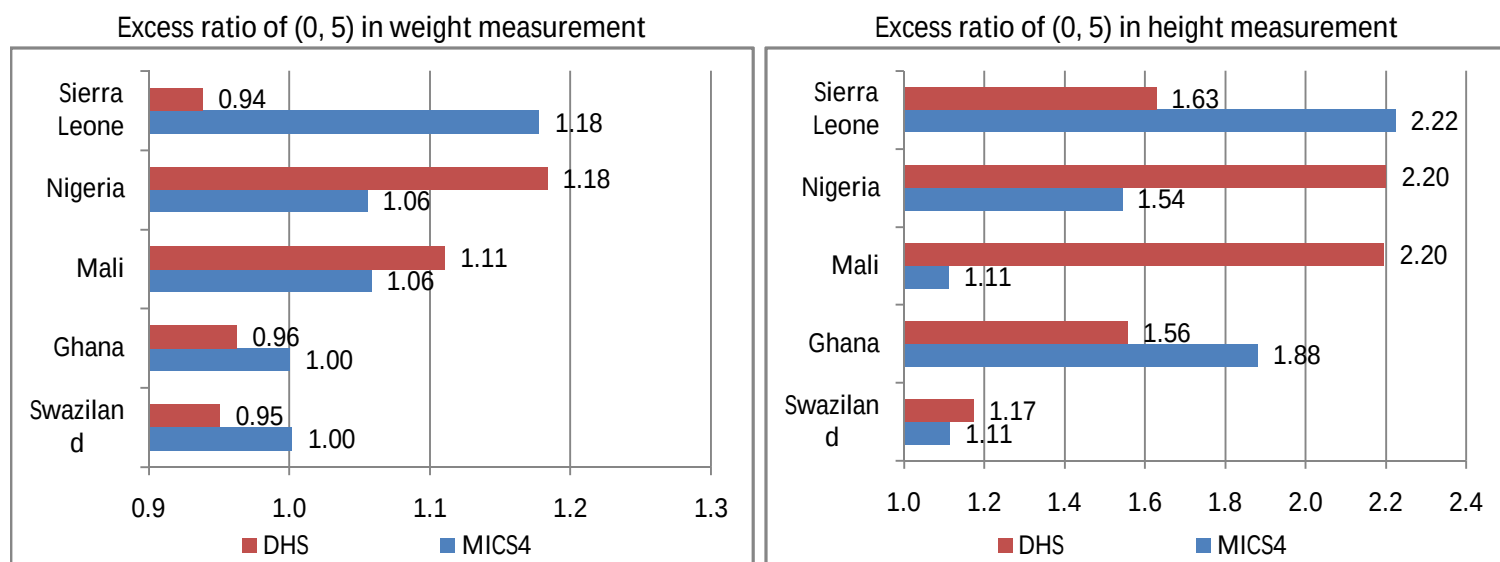


Figure 3D.19: Observation of bednets: MICS4 & DHS, Africa

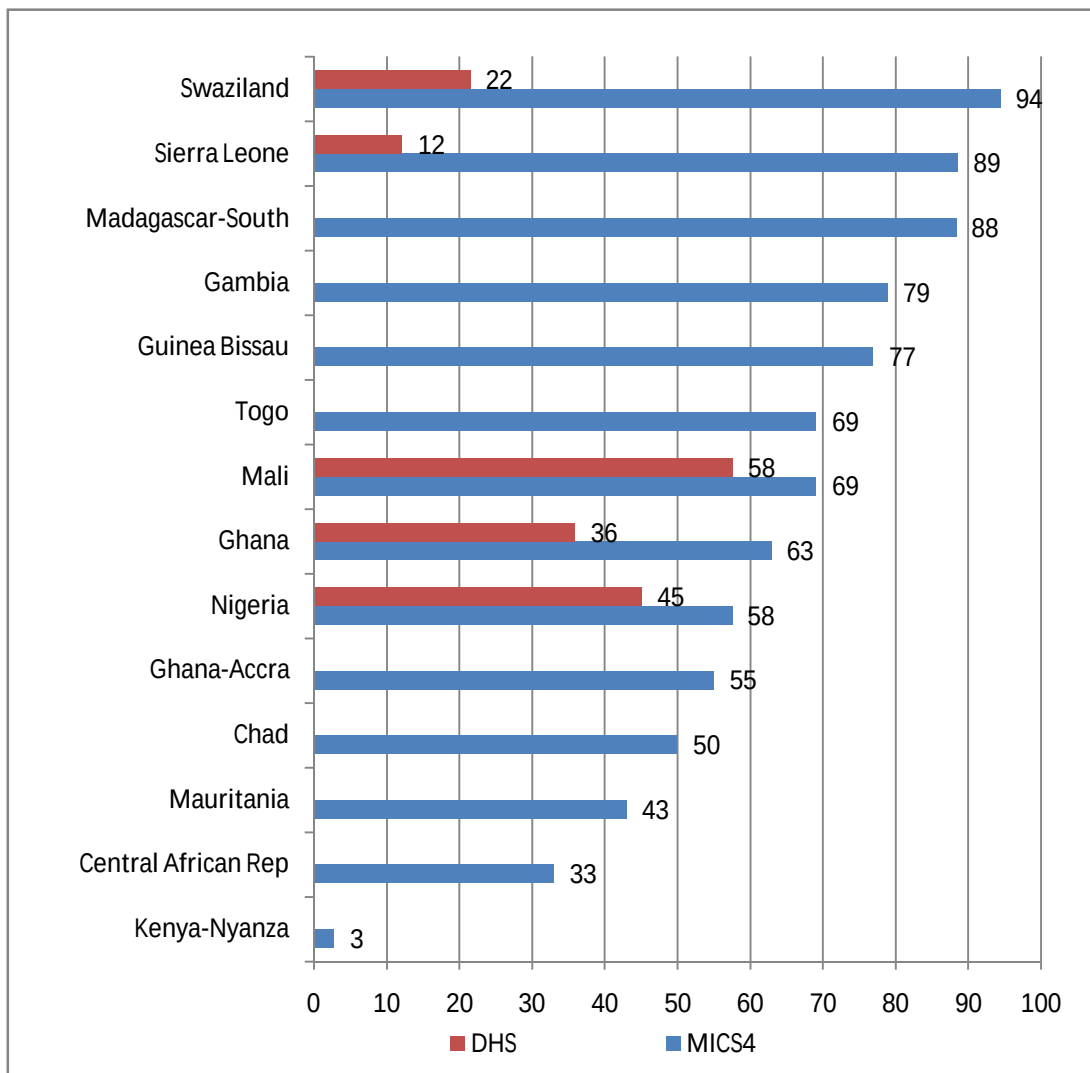


Figure 3D.20: Observation of hand washing places: MICS4

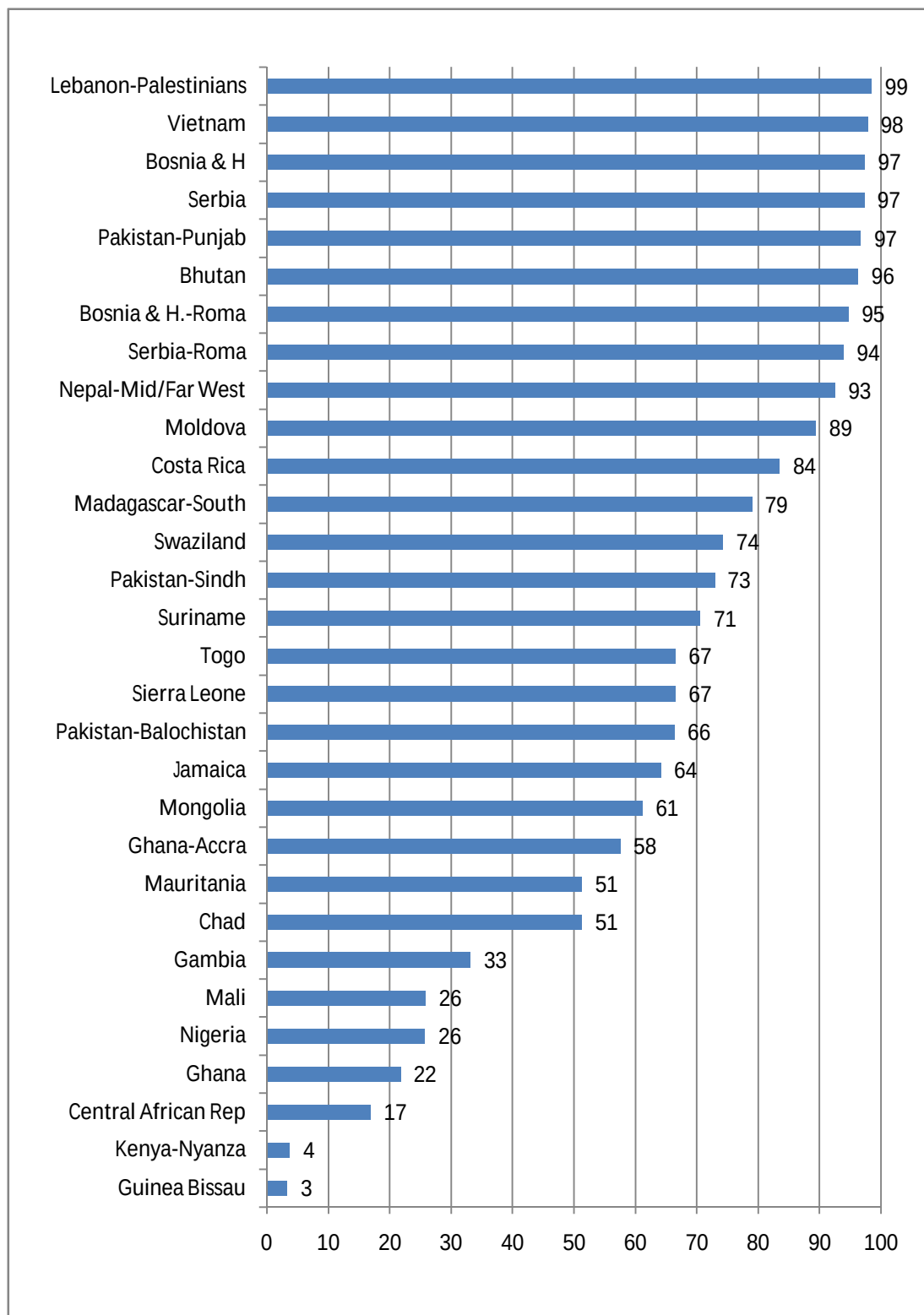


Table 3D.1: Out-transference of children: Classification of MICS4 surveys data quality based on upper and lower interval limits drawn from expert-practitioner survey

Data quality category	Lower interval		Upper interval	
	Value	Countries	Value	Countries
Very good	.97		1.03	Afghanistan, Belize
Good	.98	Suriname, Chad	1.15	Bosnia and Herzegovina (Roma), Costa Rica, Cuba, Iraq, Lebanon/Palestinians, Moldova, Korea DPK, Mongolia, Vietnam, Kenya-Nyanza, St. Lucia, Pakistan-Punjab, Pakistan-Balochistan, Mauritania, Nigeria,
Acceptable	.90	Kazakhstan, Indonesia-Papua, Madagascar-South, OPT, DRC, Ghana	1.15	
Poor	.85	Macedonia (Roma), Swaziland, Jamaica, Pakistan-Sindh	1.47	Bhutan, Bosnia and Herzegovina, Macedonia, Indonesia-Papua Barat, Laos, South Sudan, Sudan, Tunisia, Nepal-Far West, CAR, Gambia, Ghana-Accra, Sierra Leone, Togo
Very poor	<.80	Serbia, Serbia (Roma), Mali	1.63	

Table 3D.2: Summary of the data quality assessment

Data Quality Indicator	MICS4 & MICS3 Comparison	MICS4 & DHS Comparison
1.a. Incompleteness of date (year) of birth of women 15-49	Data for MICS3 either not available or equal to 0.0%	• Comparable: 2 countries (Swaziland & Congo DR) • MICS4 better: 2 countries (Ghana & Nigeria) • DHS better: 2 countries (Mali & Sierra Leone)
1.b. Incompleteness of date (month) of birth of children under five	• Marked improvements in all countries, except in 2 (Laos & Mauritania)	• DHS better: 2 countries (Ghana & Sierra Leone) • Comparable: 4 other countries
2.a. Age heaping among female household respondents	• Dramatic improvement: 6 countries • Modest improvement: 6 countries • Deterioration: 2 countries (Mauritania & Vietnam)	• Comparable: 2 countries (Swaziland & Congo DR) • MICS4 better: 3 countries (Ghana, Mali & Nigeria) • DHS better: 1 country (Sierra Leone)
2.b. Out-transference for women around age 15	• Deterioration: 7 countries • Improvement: 15 others	• MICS4 better: 4 countries (Congo DR, Swaziland, Mali & Sierra Leone) • DHS better: 2 countries (Ghana & Nigeria)
2.c. Out-transference for women around age 49	• Deterioration: 5 countries • Improvement: 17 others	• Comparable : 3 countries (Nigeria, Mali & Sierra Leone) • MICS4 better: 1 country (Ghana) • DHS better: 2 countries (Swaziland & Congo DR)
2.d. Out-transference for children around age 5	• Deterioration: 2 countries (Ghana and Bosnia & H) • Improvement: 18 others	• DHS better: all 6 countries
3.a. Incompleteness of height measurement	Not applicable – MICS3 Data Quality Tables did not cover anthropometric measurements	• MICS4 clearly performed better in all 6 countries
3.b. Inconsistency of height-for-age		• MICS4 clearly performed better in all 6 countries
3.c. Excess ratio of (0, 5) in weight measurement		• Comparable : 2 countries (Ghana & Swaziland) • MICS4 better: 2 countries (Mali & Nigeria) • DHS better: 1 country (Sierra Leone) – Congo DR has missing data
3.d. Excess ratio of (0, 5) in height measurement		• Similar to that of weight measurement, except that DHS has a better outcome in Ghana
4.a. Observation of bednets	Not applicable	• MICS4 clearly performed better in all countries
4.b. Observation of hand washing places	Not applicable (analyses were only conducted for MICS4)	

List of Annexes Sections 1 through 3A.

Annex 1.1	Main recommendations from the 2008 MICS3 evaluation
Annex 1.2	Terms of Reference for 2012-13 MICS evaluation
Annex 2.1	Evaluation matrix
Annex 2.2	Definition of key terms
Annex 2.3	Individuals interviewed
Annex 2.4	Interview guides
Annex 2.5	Standards and benchmarks
Annex 3A.1	Regional Coordinator position descriptions
Annex 3A.2	Steps in the technical support and quality assurance process
Annex 3A.3	Main tasks for regional consultants

ANNEX 1.1: MICS3 evaluation (2009): Summary recommendations

Data quality:

- UNICEF is strongly encouraged to resist the dual pressures of expanding sample sizes to generate sub-national estimates and content—particularly where indicators are not yet fully validated—by establishing parameters to better guide and support those decisions.
- Future rounds should determine indicators for inclusion through a transparent process that applies clearly defined criteria (e.g., new measures should have the endorsement of a recognized interagency technical group and should have field tests and reviews in 5–8 different country situations).
- Where under-five mortality rates are to be estimated, use of birth histories in order to increase the number of events for analysis.
- Improvements in age reporting should be a priority in future rounds to ensure MICS credibility and enhance its utility.
- The MICS survey program should produce a more formal advisory in regards to the timeliness of the sampling frame. Specifically, where an existing reputable sample frame not more than 2 years old, then new households could be drawn from already completed listings. However, if the sample frame is older or if there are suspicions about bias in the original frame, then there should be full relisting in the chosen clusters.
- UNICEF should track and maintain documentation on the types of sampling strategies used and should review and assess their success in application. Documentation of the different ways that countries chose to update the sampling frame and to manage the costly and time-consuming listing process could provide useful lessons for others

Human resources:

- The regional level should be strengthened for improved MICS implementation. Among recommendations were:
 - establish an external international expert reference group (e.g., the Child Health Epidemiology Reference Group) to help guide and establish standards for country-level implementers (i.e. adherence to international norms and standards)
 - appoint an internal regional evidence-management staff with strong backgrounds in survey design and analysis, as well as in data capture and editing to catalyze decision making related to the MICS and prompt a range of data utilization efforts
 - seek appropriately resourced and positioned regional institutions for the technical support function and manage them as contractual agreements in which the regional institution adheres to well-defined standards and recommended practice
 - ROs take a more significant role in disseminating MICS data (CEE/CIS may serve as model).
- CO's M&E officer post should be upgraded or a new post created to foster and to develop a professional track for CO staff who deal with information management, data analysis, and

interpretation related to child well-being. (e.g. RO MICS coordinators at the L-5 level to negotiate surveys and to collaborate with regional institutions that can undertake the review of results).

Decision-making roles/accountabilities:

- UNICEF should further clarify accountabilities for staff members at all levels in regards to MICS and address the “mismatch” whereby survey expertise residing at HQ and, to a lesser extent, at regional levels, while the locus of technical decision making is at country level.
- The role of *UNICEF HQ* should include approval authority - limited to a small number of key decisions and performed by HQ staff members, designated consultants, or review panels.
- Within the CO, accountability for leadership of the surveys and understanding strategic measurement choices—should rest with the Country Representative and with the senior country management team (e.g., the Deputy Representative and the M&E officer). Representatives and the senior members of their country team, including the Deputy Representatives, monitoring and evaluation offices, and communication officers, should be evaluated on the quality and timeliness of their country’s MICS and how effectively the country team uses the results.
- UNICEF’s Executive Director and Regional Directors need to continue to challenge all Country Representatives to make evidence-based work—and especially the MICS—a centerpiece of their country programs. Special briefings, training, and teambuilding will be needed for this change to be put into practice. Additional materials/training are needed to increase the senior country management team’s understanding of the key features that ensure or threaten quality in MICS surveys.
- COs should be encouraged to follow the existing guidelines to track the expenditure more closely. Additionally, guidelines might be revised so that in-kind and other costs incurred by partners can be tracked. As the Evaluation Team found, the contributions are quite substantial, yet there is no clear or standard documentation to quantify or describe the contributions.
- As a step toward improved MICS management, UNICEF HQ should actively track the expense of the MICS.
- According to reported expenditures and shortfalls, a clear need emerges for further budgeting guidelines regarding the data dissemination and use phase.

**Terms of Reference for the Evaluation of the Multiple
Indicator Cluster Survey, Round 4
Evaluation Office**

Consultancy: Technical Specialist, Evaluation Consultant

Consultancy: Technical Specialist, Household Survey Consultant

Terms of Reference: Evaluation of the Multiple Indicator Cluster Survey, Round 4

Position Title: Technical Specialist, Evaluation, Consultant [1 position]

Technical Specialist, Household Surveys, Consultant [1 position]

Location: Reporting to UNICEF NY Evaluation Office

Duration: a) 5 months Technical Specialist, Evaluation

b) 4 months Technical specialist, Household Surveys

Start date: Approximately 15 September 2012

Reporting to: Senior Advisor, Evaluation and Research, UNICEF NY Evaluation Office

Purpose:

To provide to UNICEF an independent external view of its management and utilization of the Multiple Indicator Cluster Survey [MICS] program. In particular, to focus on the pending implementation of MICS round 5 (MICS rounds having begun in the mid-1990s and recurring every 4 years since) and to evaluate whether the critical governance strategies and technical elements are in place to ensure maximum quality, utilization, and sustainability over time.

Background:

Development partners require high quality evidence of program results, especially at the systems and behavioral outcomes level and at the population impact level. Within this broad goal is a specific desire to measure the impact of national developmental processes on social equity. One key method to obtain such evidence is through household survey programs implemented to a high standard. However, such survey programs are extremely complex to organize and administer. Failure to properly manage them can provide data that is outdated and unreliable in various ways.

UNICEF is a global leader in data generation through its implementation of MICS, which answer part of that evidence need. Together with a separate but related household survey program [the Demographic and Health Surveys], MICS is a fundamental source for calculating national and global development achievements and challenges.

There is detailed information on the MICS program in the link given at the end of this section, but the essential program elements are the following:

- MICS was implemented in 55 countries in round 4 yielding 65 MICS reports (some countries do multiple efforts for regions or sub-populations), and is expected to be implemented in at least 45 countries in round 5.

- MICS and DHS together aim to cover as many countries as possible that desire assistance in obtaining high quality household data. In pragmatic terms, most developing countries implement one or the other but not both.
- MICS aims for a very high level of technical competence. Informally, this can be stated as meeting 'gold standard' quality norms. MICS managers and DHS managers confer with each other and external experts to improve and where possible to standardize definitions and technical approaches.
- MICS is administered as a part of the program of cooperation between UNICEF and a host nation. Consequently there is shared governance, which may involve other partners as well at the national level. At a global level, MICS is managed from the UNICEF Headquarters level Statistics and Monitoring Section.
- MICS reports and data, once released, are global public goods. They are made available free of charge. The actual utilization of the results is then assumed by a multiplicity of stakeholders and is not centralized.

The size and importance of MICS means it should be periodically evaluated. Global evaluations have followed MICS round 1 (late 1990s) and MICS round 3 (2007-08). The round 3 evaluation led to important findings and adjustments. Since then, Round 4 of MICS has been nearly completed at mid-2012, and round 5 preparations are underway for a late 2012 commencement.

MICS is not a static program. It evolves and in fact is shouldering increasing responsibilities. For example, the rounds are now closer together, which gives a shorter time to make adjustments to issues than in the past. The imminent conclusion of the MDG period in 2015 will make MICS round 5 a primary source for estimating the success of the MDG efforts over the period 1990-2015.

Links to reference materials that can help illuminate some of the issues discussed throughout this TOR are given on the final page.

Justification:

The end of MICS round 4 in 2012 and the many questions about adapting MICS for upcoming data needs justify an evaluation. Not only were commitments made after round 3 to improve certain aspects of MICS, but the MICS leadership cadre has identified issues arising in the round 4 iteration that also require adjustments to improve the quality in round 5.

Scope of Work:

The evaluation will focus on two related clusters of objectives:

Cluster 1: To assess how far lessons drawn from evaluation and experiences in rounds 3 and 4 have been absorbed and acted upon, taking due account of global best practices for large scale household survey programs; and in this light assess how far the technical preparations for round 5 are appropriate and sufficient. The particular issues of concern are the following:

a) Thoroughness, quality, and scope of the implementation of the corporate response to the 2008 evaluation recommendations;

- b) The relevance and technical accuracy of the lessons learned by MICS management in round 4.
- c) The suitability of preparations for round 5 in terms of human resources, training and technical support in light of items a and b.
- d) The suitability of preparations for round 5 in terms of data management (and more generally from any advances in Information and communications technologies) from the point of collection through final analysis, in light of items a, b, and c.

Cluster 2: To assess if the overall design and management of the MICS program and the utilization of MICS data is ensuring that UNICEF and other stakeholders are deriving maximum value from the considerable investments made, and are preparing for a long term sustainable management of the MICS program.

The particular issues of concern are the following:

- e) Whether UNICEF and partners are able to assure adequate funding in terms of quality, timeliness, and stability, for round 5 and, if possible, later rounds.
- f) How far MICS is coherently and efficiently designed to meet stakeholders' diverse needs and demands, taking note of requirements and expectations for statistical and analytical capacity development. Evidence of actual design choices from round 4 and proposed for round 5 will be particularly persuasive.
- g) How far consumers of the data at various levels (governmental, UNICEF, others) have been fully exploiting the potentials of the rounds 3 and 4 MICS data across diverse purposes (e.g. research, policy advocacy, decision taking about going to scale etc), and adjustments made to improve utilization in round 5.
- h) Whether the data archiving and other supportive analytic and knowledge management arrangements are in place to efficiently and effectively help the end users noted in item g.
- i) Whether the roles envisioned for MICS in the equity agenda the UNICEF supports and other strategies that depend on accurate results measurement are properly designed with respect to MICS strengths and weaknesses. This point is particularly designed to assess MICS' role in the broad substantive and policy contexts where equity is important as much the reliance on MICS for certain types of evidence gathering. NB that Information on the equity agenda is available through the link to more detailed reference material.

Methodological and Timing Considerations:

Since the Round 5 design is already underway, Cluster 1 will be the immediate priority at the start of the consultancy. Only when cluster 1 is at the completion phase should cluster 2 works be undertaken.

This assignment is based on the premise that the existing documentation already collected and the knowledge of the MICS management team will reduce the need for a lot of original data collection, especially for cluster 1. Put another way, cluster 1 is primarily an exercise in quality assurance, to understand if the round 5 preparations are correct in light of what is known. However, there is the opportunity to undertake limited new data collection through key informant interviews and small scale staff surveys, and also by testing the data management protocols and processes.

Cluster 2 activities do not have as consolidated or internally integrated a base of data as does cluster 1. There will need to be a range of key informant interviews inside and outside of UNICEF. Further, the analytic standards for issues of utilization and sustainability are more open to interpretation than the norms for sampling, data management etc in cluster 1. Therefore, there will be greater independence and creativity required in locating or setting the norms.

The consultants will work from their home base. However, up to 3 missions to UNICEF NY are envisioned, at the start and end of the work and at 1 point in-between. It is also likely that from 2-4 country visits and 1-2 regional office visits will be authorized to allow confirmation of field preparations and field experiences. These visits need not be taken by the consultants in tandem, as they can travel independently depending on the greater focus of the visit.

Deliverables:

Final products

1. 2 separate final reports, 1 each for cluster 1 and cluster 2. Reports should be concise but there is no formal page limit. Note that the reports may be augmented with technical annexes that consist of data files etc; not everything must be written.

The report for cluster 1 must be delivered within 2 months of the start of the contract. The report for cluster 2 will be delivered at the end of the contract.

2. Stand-alone executive summaries [that may form part of the final reports] of maximum 3 pages designed for senior managers—i.e. in as accessible language as possible.

3. 1 PowerPoint presentation for each cluster of maximum 20 slides with stand-alone notes—i.e. that can be delivered by persons other than the consultants.

Interim Products

4. One inception report for each cluster outlining the overall design to be employed and the methodologies to be used. For cluster 1 in particular this can be a light exercise given the time pressures.

5. Adequate notes and files such that the justification and calculations behind the findings can be repeated and demonstrated if queried.

6. Monthly progress reports delivered via conference calls.

Desired background and Experience:

The consultants are expected to work as a team, although they will have separate contracts. The Evaluation Specialist will be the team leader. This reflects the need to execute this work to a level of rigor and independence required of global evaluations, and that the broader issues found particularly in cluster 2 require a range of methods extending beyond the scope of the survey expertise. Having said that, the two are expected to work together very closely.

The following qualifications are sought from applicants to both positions unless otherwise specified:

Required:

- At least 10 years' experience at a senior level in their professional field [senior equates with levels 4 or 5 in the UN job classification scheme]
- For the evaluation specialist, at least 1 in-depth work assignment related to a global household survey program [e.g. MICS, DHS, Living Standards]

- For the evaluation specialist, experience with at least 3 instances of global or organization-wide evaluations in the field of international development, including being the team leader of at least 1 effort.
- For the household surveys specialist, experience with at least 2 instances of implementing or reviewing detailed quality assurance efforts in large scale survey programs, preferably MICS, DHS or related programs.
- For the household surveys specialist, advanced knowledge of the SPSS software
- Minimum Masters Level terminal degree in a related discipline, followed by appropriate professional development activities.
- At least 2 instances of having undertaken multi-week or longer field missions to development programs in program countries. Instances related to evaluations and/or household survey programs strongly preferred.
- Mastery of English
- Clear writing and presentational skills
- Ability to work in a multi-cultural environment.

Advantages, but not required:

- Fluency in French
- For the household surveys specialist, working knowledge of the CS Pro software.
- Strength in the areas of the other position [e.g. if the evaluation specialist is strong in data management, he/she will have a significant advantage].

Conditions:

These contracts will be administered as Special Service Agreements according to UN rules. Applicants will be expected to observe UN rules with respect to ethical practices, non-use of child labor etc. Likewise, normal UN rules related to medical clearance and security training will be enforced. These aspects form part of the administrative arrangements made at the time of contracting.

Applicants are expected to be available between 70-100% of each of the months of the contract.

Any arrangements that the applicant might make to sub-contract elements of the work must be identified in the cover letter. Sub-contracting may be allowed provided it meets quality and timeliness standards.

UNICEF may choose to form a reference group of internal and external experts. This group will be designed to help ensure corporate buy-in, maintain good communications with external stakeholders, and offer technical guidance in the conduct of the evaluation. The evaluators may interact with the reference group under the guidance of the reporting officer.

Submission Information:

Contact point for sending applications: evalofficeapplications@unicef.org

Submission deadline: 10 September 2012

Required information: a) Letter of application identifying which position is being applied for and explaining one's suitability for that post; and b) a UN Personal History Form, which is available through this link: <http://www.unicef.org/about/employ/files/P11.doc>

Applicants may at their discretion also include a cv/resume in the format of their choice, but it cannot replace the UN Personal History Form.

Notification: Applicants advancing to the interview stage will be notified by 13 September.

Regrets messages to applicants not advancing will be sent on 14 September.

Links to Reference Materials:

a. General information about MICS/MICS reports/MICS methodology: www.childinfo.org

b. Evaluation of MICS Round 3:

<http://intranet.unicef.org/epp/repsubportal.nsf/d328afedd0300bc68525700400707ed3/345aef47cf37ab918525790400646984?OpenDocument&Highlight=0,mics>

c. Equity case studies: <http://www.unicef.org/equity/index.html>

ANNEX 2.1 UNICEF MICS 4 Cluster 1 Evaluation matrix

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
A) What is the thoroughness, quality, and scope of the implementation of the corporate response to the 2008 evaluation recommendations?			
<i>Theme: Survey implementation including threats to data quality (i.e. adherence to protocols and standards) across all phases of survey operations</i>			
To what extent has UNICEF taken steps to appropriately limit sample sizes to the stated purpose of the MICS survey in individual countries? What types of steps were taken? To what extent were these actions relevant? Were these actions successful? Has UNICEF at HQ and regional levels provided guidance and technical assistance to country offices and implementing agencies to appropriately limit sample sizes to suit the stated purpose of the survey? To what extent has the MICS survey program addressed the length of the questionnaire? Has the program produced a shortened core questionnaire with clear decisions on the inclusion of full birth histories and with additional modules? To what extent does the MICS4 program guide and advise Country Offices and implementing agencies to conduct full birth histories? If so, were associated guidance materials and technical assistance adequate and relevant? To what extent did the program produce	Survey/sampling plans provide justification of the sampling size (stated purpose of the survey justifies sample size). For a limited number of variables, comparisons will be made on the basis of: (1) MICS3 to MICS 4 manuals, workshops materials, other guidance (indicative of eval. findings/lessons learned being acted upon between rounds) (2) MICS4 actual implementation to MICS4 recommended practice as found in manuals, workshop materials, other guidance (indicative of Improved compliance and, possibly, greater influence of regional and HQ expertise) (3) MICS4 implementation to international norms and standards (indicative of Improved compliance and, possibly, greater influence of regional	Structured document review Key informant and stakeholder interview guides tailored to audience and purpose On-line surveys, as needed to expand respond pool.	Documentation from a selected set of countries participating in MICS4 (e.g. MICS survey reports, survey plans, sampling plans, data quality tables, training materials, guidelines and selected communications from MICS HQ to regions and countries) At HQ, interviews with MICS team, other members of SMS, Evaluation Office and Programme Division as appropriate. At regional level, interviews with all RO MICS Coordinator, all RO M&E Officers, and in some cases, head of the PME section. At country level, interviews with purposive sample of M&E Officers and Deputy

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
guidance on the timeliness of the sampling frame? If produced, what were the stipulations included in that guidance? Has any improvement been seen in the sampling practices? Was any form of systematic documentation maintained on the sampling strategies used? To what extent has MICS HQ defined a process for inclusion of new indicators/modules? If so, what are the components of that new process? To what extent does that process result in technically sound decisions on questionnaire content? To what extent are the questions and modules utilized by the MICS4 are consistent with international best practice?	and HQ expertise) Timeliness of MICS survey reports (as per MICS3 eval.)		Representatives, others as appropriate. On-line survey respondents TBD
<i>Theme: Availability, allocation, function and effectiveness of human resources including technical support</i>			
What steps has UNICEF taken to strengthen the regional level for improved MICS implementation? Have resources (human or financial) external to the organization been mobilized to strengthen the regional function? Have internal resources been expanded or strengthened for this purpose? Have other steps been taken to strengthen the regional level? If not, why not? Among those steps taken to strengthen the regional level, have they had the intended outcome? Is there evidence that MICS surveys	Availability of dedicated of human resources at regional level for MICS oversight and implementation support. Evidence of other mechanisms at regional level to support, advice MICS implementation.	Same as above	Same as above

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
have better adherence to international standards due to regional level efforts? What are the main challenges or barriers to effective regional level support to countries in MICS implementation? To what extent have UNICEF country-level staff been upgraded or otherwise strengthened to improve MICS implementation?			
<i>Theme: Management and decision-making processes around MICS implementation at all levels including planning, programme improvement through lessons learned and oversight of arrangements with implementing agencies.</i>			
To what extent has UNICEF clarified accountabilities for staff in regards to MICS? To what extent has UNICEF rationalized the locus of decision-making about technical issues related to MICS surveys? To what extent has the “mismatch” been addressed? Does UNICEF HQ have any approval authority for key decisions in the MICS survey in order to assure credible data? If not, why not? If so, describe any available evidence on the outcomes of these changes. Do senior managers understand strategic measurement choices (e.g. how questionnaire length and duration of interview can affect data quality)? How can the CO best support the production of timely MICS survey reports?	Evidence of clarified accountabilities in regards to MICS quality and timeliness. Evidence of negotiations around external contributions and associated expectations. References found in internal documents on HQ role in key decisions-making for individual MICS surveys. Recommended improvements traceable from HQ/RO back to field level implementation	Same as above	Same as above

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
Are senior managers aware of the key elements that threat or ensure quality in MICS surveys? To what extent are senior managers aware of the findings of the 2008 evaluation in regards to data quality? To what extent have senior managers in the CO been held accountable for the quality and timeliness of MICS surveys?			
<i>Theme: Data quality</i>			
Based on findings in the 2008-09 evaluation, to what extent has UNICEF taken action to ensure that quality standards in age-reporting are utilized? Has the corporate response had a likely impact on data quality?	For a sub-set of countries, comparison of quality of age-reporting between: •MICS3 and MICS4 •MICS4 and comparable surveys •MICS4 and intl. standards	Data quality assessment based on extraction and analyses of key variables included in existing data quality tables.	Tier 1 and Tier 2 countries
B) What is the relevance and technical accuracy of the lessons learned by MICS management in round 4?			
What are the specific lessons learned by MICS management in round 4? To what extent are these issues the same as or different from lessons learned in round 3? What are the processes put in place for the identification of lessons learned and reflection on their importance? Are these processes transparent and understood among key actors? To what extent is lessons learned under MICS4 are linked to a sound evidence base? What are lessons learned in regards to human	Tabulation of lessons learned, by theme, with rank ordering based on a) frequency with which the issue is identified, b) association of HH survey performance (e.g. quality and timelines) and c) the strength of the evidence base.	Structured document review Review of training materials, guidelines and selected communications from MICS HQ to regions and countries. Key informant and stakeholder interviews On-line surveys, as needed to expand respond pool.	Selected documentation from selected countries participating in MICS4 At UNICEF HQ, interviews with MICS team, other members of SMS, Evaluation Office and Programme Division as appropriate. At regional level, interviews with all RO MICS Coordinator, all RO M&E

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
resources including technical support and training? How effective has been the role of regional MICS coordinators? How much of their time has been spent on other assignments? What lessons pertain to the timing and placement of needed human resources? What lessons have emerged from how gaps identified and addressed? From how are needs for specialized technical support addressed? Based on the lessons from MICS4 and previous experience, what are the major gaps/bottlenecks that would need to be filled and what are the plans to do so? What lessons have been learned in regards to implementation of the package of data quality assurance measures? How is evidence on the implementation of data quality assurance measures compiled and reviewed? Are lessons available on those measures which represent the greatest challenge to implementing agencies? Is there a common understanding on the data quality assurance measures that are most likely to be adapted or disregarded? Given the increased number of sub-national and target group surveys (e.g. Roma), what were the major problems encountered (e.g. sampling, quality control across different nations) and how were they dealt with? What lessons were learned from Round 4 in regards to sampling procedures, particularly			Officers and the head of the planning section. At country level, interviews with purposive sample of M&E Officers and Deputy Representatives, others (i.e. implementing agencies) as appropriate.

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
adherence to recommended practices in household listing? Cluster substitution? Cluster segmentation? What lessons have been drawn pertaining to MICS survey programme management and decision-making? Are experiences and lessons summarized and made available to relevant staff? What did the MOUs with governments and implementing partners cover in MICS4? What lessons have arisen regarding the nature of agreements between UNICEF and implementing agencies? To what extent do the lessons learned under MICS4 represent significant drivers of household survey programmes? To issues of data quality? timeliness? If resolved, would quality and timeliness of data be influenced? How?			
C) What is the suitability of preparations for round 5 in terms of human resources, training and technical support in light of items A and B?¹			
What plans are in place to maximize the timely availability of regional experts (i.e. sampling, survey implementation, data processing)? What are the plans to maximize support from the HQ and regional experts? from the country MICS consultants? Other external support?	Prioritize and diagram identified needs and articulated intended solutions for each theme. Create a scale depicting relative “distance” between need and intended solution and then map plan/preparation	Same as those described above.	Same as those described above.

¹These questions will need to be framed based on the findings to the questions in a) and b) above. The methods to be used will include culmination of the data collection described above with further, targeted interviews/data

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
Are modifications in the MoUs between UNICEF and implementing agencies envisioned for MICS5? What areas are to be addressed, if any, through new or reinforced provisions? ² What plans are in place to ensure rapid responses to delays which may impede MDG reporting? How well have the MICS4 experiences been assessed to see what mistakes arose and when? And how well has awareness of problems and solutions been transferred to the regions and countries?⁷ What are the risks of not having a period of reflection ('digestion') period between MICS4 and MICS5? Are there plans to minimize those risks? What should be ideal length of time and major activities between rounds?⁷	to the gap (spider diagram?)		
D) What is the suitability of preparations for round 5 in terms of data management (and more generally from any advances in Information and communications technologies) from the point of collection through final analysis, in light of items a, b, and c³.			
What are the proper mechanisms to ensure that quality problems and mistakes are caught in real time and corrected? When quality assurance issues are identified and shared with implementers (e.g. by regional experts, RO staff,	Same as that described for question c above.	Same as those described above.	Same as those described above.

² Overlap with question d

³ These questions will further framed based on the findings to the questions in a), b) and c) above. The methods to be used will include culmination of data collection described above with further, targeted interviews/data

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
HQ staff), who is accountable for the resulting actions? Are any plans/preparations in place for the increasing trend to conduct sub-national surveys? What plans are in place to strengthen adherence to recommended sampling procedures? Are these plans aimed at areas of well-evidenced weakness? What are the major lessons learned from the PDA pilots and what are plans for MICS5? Are current plans adequately timed and resourced in anticipation of increased country interest and demand? Based on previous rounds, what lessons and further guidance have been generated regarding questionnaire length and duration of interviews? What have been the challenges and benefits of any expanded use of tests, measurements or observations? How well piloted will be the proposed new ones? What should be the ideal length of time between the end of a survey and the finalization of data cleaning and analysis, publication of the report, and availability of datasets to the public? What are the plans for MICS5 and the resources needed to deliver high-quality data and report in a timely manner?			

Evaluation Questions	Performance Indicators	Data Collection Techniques & Instruments	Data source / Respondents/ Sampling Plan
What should be the role of HQ regarding the content and module mix of MICS5 questionnaires (e.g. validation of sample design and new modules and questions, use of birth histories), and data analysis and report writing? What are the strategies to support and integrate methods and modules in instances of piggy backing (others on MICS or MICS on others)?			

Annex 2.2 Key terms, definitions and means of measurement

Term and definition	Means of measurement
<i>Thoroughness</i> - The extent to which the corporate response and on-going implementation: (i) considered and (ii) addressed through verifiable actions documented lessons learned including findings and recommendations of the MICS3 evaluation	Consideration given to recommendations and lessons learned is evidenced/ documented and corresponding actions scaled in terms in terms of implementation
<i>Quality</i> - The extent to which the corporate response and on-going implementation aligns with accepted international standards and practices	Tabulation of responses juxtaposed against accepted standard/practice
<i>Scope</i> - The extent to which the corporate response and on-going implementation interpreted and applied documented lessons learned including MICS3 evaluation findings and recommendations across settings and context	Element of the response (for select recommendations) is evidenced across units, programmes, or organizational levels (e.g. new technical support mechanisms implemented consistently across regions, assessment of modules conducted uniformly)
<i>Relevance</i> - The extent to which the lessons learned represent significant drivers of household survey programs, and if resolved would influence quality and timeliness of data.	Tabulation of all lessons learned based on interviews and prioritization based on potential effect in quality and timeliness and the proposed resolutions for MICS5
<i>Technical accuracy</i> - The extent to which lessons learned are linked to a sound evidence base	Tabulation of lessons learned with corresponding documented, evidence base
<i>Suitability</i> - The extent to which plans/preparations for future rounds bridge the gap between identified needs and the articulated, intended solutions	Prioritize and diagram identified needs and articulated intended solutions. Create a scale depicting distance between need and intended solution and then map plan/preparation to the gap (spider diagram?)

Annex 2.3 Individuals interviewed

UNICEF Headquarters, Statistics and Monitoring Section

Attila Hancioglu	HQ MICS Global Coordinator
Turgay Unalan	Statistics Specialist/HH Survey Specialist
Ivana Bjelic	MICS Data Collection Expert
Yadigar Coskun	Statistics and Monitoring Specialist
Bo Pedersen	HH Survey Specialist

UNICEF Regional Offices

Eddie Addai	Regional M&E Officer/ESARO
Mamadou Thiam	Regional MICS Coordinator/ESARO
Anne-Claire Luzot	Regional Chief of M&E/CEE/CIS
Siraj Mahmudlu	Regional MICS Coordinators
Pierre Ngom	Regional Chief of M&E/MENA
Sarah Ahmad	Regional MICS Coordinators
Inoussa Kabore	Regional Chief of M&E/WCARO
Michele (Mishka) Seroussi	Regional MICS Coordinators
Deborah Comini	UNICEF TACRO, Deputy Director
Bastiaan Van't Hoff	UNICEF TACRO, M&E Chief
Vincente Teran	UNICEF TACRO M&E Specialist
Shane Khan	Former UNICEF TACRO M&E Specialist
Rhiannon James	Regional MICS Coordinators

UNICEF Country Offices

Sophie Busi	M&E Specialist	South Sudan Country Office
Sicily Matu	M&E Specialist	Somalia Country Office
Robert Ndugwa	Research and Evaluation Officer,	Kenya Country Office
Steven Lauwerier	UNICEF Representative	Madagascar Country Office
Sara Bordas Eddy	UNICEF Deputy Representative	Madagascar Country Office
Christine Weigand	Head, Social Policy & Evaluation,	Madagascar Country Office
Dina Husary	Monitoring and Evaluation Specialist, oPt	Madagascar Country Office
Naoko Hosaka	M&E Officer and Acting Head, Planning	Madagascar Country Office
May Anyabolu	Deputy Representative	Uganda Country Office
Paul Quarles Van Ufford	Chief Social Policy, Zambia Country Office	(discussed Viet Nam experience)
Selma Kazic	Social Policy Specialist	Bosnia and Herzegovina Country Office
Elena Laur	M&E Officer	Moldova Country Office
Silvia Mestroni	M&E Specialist	Uzbekistan Country Office
Ivan Rodriguez	UNICEF Assistant Programme Manager	Costa Rica Country Office
Rigoberto Astorga	UNICEF Programme Coordinator	Costa Rica Country Office
Tanya Chapuisat	UNICEF Representative	Costa Rica Country Office
Donneth Edmondson	M&E Specialist	Jamaica Country Office
Una McCauley	UNICEF Representative	Panama Country Office
Alma Jenking	UNICEF, PM&E Specialist	Panama Country Office
Hrayr Wanniss	M&E Officer	Lebanon Country Office
Ashok Vaidya	M&E Officer	Nepal Country Office
Misaki Akasaka Ueda	Chief, Planning and Evaluation	Nepal Country Office
Fawzia Hoodbhoy	Planning, Monitoring and Evaluation Officer	Pakistan Country Office
Carel De Rooy	Representative Libya Country Office	(former Representative Bangladesh)
Etienne Rusamira	Monitoring and Evaluation Specialist	Ghana Country Office

René Van Dongen	Deputy Representative	Ghana Country Office
Sarah Hague	Chief of Social Policy/ACMA,	Ghana Country Office

Implementing agencies

Rami El Dibs	Palestinian Bureau of Statistics	OPT
Philomena Nyarko	Ghana Statistical Service	Ghana
Cindy Valverde	Ministry of Health, Costa Rica	Costa Rica
Juan Carlos Zamora	Demographic Association of Costa Rica	Costa Rica
Carolina Santamaría	University of Costa Rica, (former MoH)	Costa Rica
Arodys Robles	Centro Centroamericano de Población	Costa Rica
Milena Castro	Centro Centroamericano de Población	Costa Rica
Ana Cecilia Morice	INCIENSA (fmr. Vice-Minister, MoH)	Costa Rica
Randretsa	Head, Demography and Social Statistics Division, INSTAT (Madagascar Bureau of Statistics)	Madagascar
Marius Randriamanambintsoa	MICS Project Coordinator, INSTAT (Madagascar Bureau of Statistics)	Madagascar
Nazmi Harb	Palestinian Bureau of Statistics	oPt (Lebanon-Palestinians MICS)
Ranto	MICS Data Processing Leader, INSTAT (Madagascar Bureau of Statistics)	Madagascar

MICS Consultants (HQ, regional and country)

Pierre Martel	Reg. Consultant, HH Survey Expert	Multiple countries
David Megill	Global MICS sampling expert	Multiple countries
Manar Abdel Rehman El Sheikh	Reg. Consultant, HH Survey Expert	Multiple countries
Ana Abdelbasit	UNICEF MICS Consultant	Bosnia and Herzegovina
Angela Vranceanu-Benes	UNICEF MICS Consultant	Moldova
Harry Hernandez	UNICEF DP consultant	Costa Rica
Manuela Thourte	UNICEF MICS Consultant	Argentina
Zokir Nazarov	UNICEF MICS Consultant	Uzbekistan
Raphael Ratovoarinony	UNICEF MICS Consultant	Madagascar
Yuki Takahashi	MICS International Consultant	Madagascar

Annex 2.4 Interview Guides

MICS4 Evaluation – Cluster 1 Interview with National Consultants

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with MICS4? What worked well? Where are improvements needed?
- Changes observed between MICS3 and MICS4? If so, please describe

3. Contractual Arrangements

- What was your understanding of your roles & responsibilities with regard to the survey? Those of the other players (e.g. NSO, Other Consultants, UNICEF staff)?
- What would you have liked to see included in or removed from your contract? In future what should the agreement look like?

4. Your Work and Working with NSO and UNICEF COs

- Do you think you have fulfilled (or are fulfilling) your commitments?
- What innovations did you bring? Did you face any challenges? Did problems of cluster substitution or segmentation, or related adjustments arise, and how were they dealt with?
- How would you rate the level, consistency and effectiveness of NSO's technical implementation of the strategies that were designed for sampling, field work, data entry, management and analysis, and report writing?
- Were the level and quality of the human resources (at NSO, at UNICEF, other Consultants) optimal given the roles and responsibilities and timelines? If No: Why?
- What quality control mechanisms were put in place to ensure high-quality data at all levels? Who was/were to review the quality control reports? How were comments, instructions and corrective measures to be fed-back to the field for implementation?
- What was your experience of the use of Field Check Tables (production, analysis and feed back to the field)?
- Based on the capacity of the NSO and the local realities, what should the compulsory control mechanisms include (for field supervisors, field editors and central supervisors, and during listing, field work and data entry)?

5. Looking Forward

- Overall what is your assessment of the MICS4 survey (at different phases)?
- In order to ensure high-quality survey (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1

Interview with Regional Consultants, Data Processing

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with MICS4? What worked well? Where are improvements needed?
- Changes observed between MICS3 and MICS4? If so, please describe

3. Contractual Arrangements

- What was your understanding of your roles & responsibilities with regard to data processing? Those of the other players (e.g. NSO, Other Consultants, UNICEF staff)?
- What would you have liked to see included in or removed from your contract? In future what should the agreement look like?

4. Your Work and Working with NSO and UNICEF COs

- Do you think you have fulfilled (or are fulfilling) your commitments?
- What innovations did you bring? Did you face any challenges?
- How would you rate the level, consistency and effectiveness of NSO's technical implementation of the strategy for data entry/management/analysis that was designed?
- Were the level and quality of the human resources (at NSO, at UNICEF, other Consultants) optimal given the roles and responsibilities and timelines?
- What quality control mechanisms were put in place to ensure high-quality data at entry and analysis? What percentage of double data entry was planned? How was the strategy implemented? Who was/were to review the quality control reports? How were comments, instructions and corrective measures to be fed-back to the data entry team?
- Any comments on the process of data management and data analysis?
- Based on the capacity of the NSO and the local realities, what should the compulsory control mechanisms at data entry include?

5. Looking Forward

- Overall what is your assessment of the MICS4 surveys in the countries you supported (with regard to data entry, data management and data analysis)?
- In order to ensure high-quality survey data (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1

Interview with Regional Consultants, Household Survey

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with MICS4? What worked well? Where are improvements needed?
- Changes observed between MICS3 and MICS4? If so, please describe

3. Contractual Arrangements

- What was your understanding of your roles & responsibilities with regard to the survey? Those of the other players (e.g. NSO, Other Consultants, UNICEF staff)?
- What would you have liked to see included in or removed from your contract? In future what should the agreement look like?

4. Your Work and Working with NSO and UNICEF COs

- Do you think you have fulfilled (or are fulfilling) your commitments?
- What innovations did you bring? Did you face any challenges? How were they dealt with?
- How would you rate the level, consistency and effectiveness of NSO's technical implementation of the data collection that was designed?
- Were the level and quality of the human resources (at NSO, at UNICEF, other Consultants) optimal given the roles and responsibilities and timelines? If No: Why?
- What quality control mechanisms were put in place to ensure high-quality data (from planning and training to field work)? Who was/were to review the quality control reports? How were comments, instructions and corrective measures to be fed-back to the field for implementation?
- What was your experience of the use of Field Check Tables (production, analysis and feed back to the field)?
- Based on the capacity of the NSO and the local realities, what should the compulsory control mechanisms include (for field supervisors, field editors and central supervisors)?

5. Looking Forward

- Overall what is your assessment of the MICS4 surveys in the countries you supported (from planning and training to field work)?
- In order to ensure high-quality survey (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1
Interview with Regional Consultants, Sampling

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with MICS4? What worked well? Where are improvements needed?
- Changes observed between MICS3 and MICS4? If so, please describe

3. Contractual Arrangements

- What was your understanding of your roles & responsibilities with regard to sampling issues? Those of the other players (e.g. NSO, Other Consultants, UNICEF staff)?
- What would you have liked to see included in or removed from your contract? In future what should the agreement look like?

4. Your Work and Working with NSO and UNICEF COs

- Do you think you have fulfilled your commitments?
- What innovations did you bring? Did you face any challenges? Did problems of cluster substitution or segmentation or related adjustments arise, and how were they dealt with?
- What is your view on the MICS4 sample sizes? Who should have the last say? Do you have a sense that steps have been taken to appropriately limit sample sizes to suit the stated purpose of the survey in individual countries?
- How would you rate the level, consistency and effectiveness of NSO's technical implementation of the sampling strategy that was designed?
- Were the level and quality of the human resources (at NSO, at UNICEF, other Consultants) optimal given the roles and responsibilities and timelines?
- What quality control mechanisms were put in place to ensure that the sampling strategy is implemented appropriately? Who was/were to review? How were the instructions and corrective measures fed-back to the field for implementation?
- Based on the capacity of the NSO and the local realities, what should the compulsory control mechanisms include (for field supervisors, field editors and central supervisors)?

5. Looking Forward

- Overall what is your assessment of MICS4 with regard to sampling (design, size, and implementation) in countries you supported?
- In order to ensure high-quality survey (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1

Interview with the Statistics Office (NSO)

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with the last MICS? What worked well? Where are improvements needed? Comparison with other similar surveys?

3. Contractual Arrangements

- What was your understanding of your roles & responsibilities with regard to the survey? Those of the other players (e.g. Consultants and UNICEF)?
- What would you have liked to see included in or removed from your contract? In future what should the agreement look like? Comparison with other similar surveys?

4. Your Work and Working with Consultants and UNICEF

- Do you think you have fulfilled (or are fulfilling) your commitments?
- What innovations did you bring? Did you face any challenges? Did problems of cluster substitution or segmentation, or related adjustments arise, and how were they dealt with?
- How would you rate the level, consistency and effectiveness of technical inputs from UNICEF and the Consultants in the implementation of the strategies that were designed for pre-field work, field work, data entry/management/analysis and report writing?
- Were the level and quality of the human resources you mobilized for the survey optimal given the roles and responsibilities and timelines? Comparison with other surveys?
- What quality control mechanisms were put in place to ensure high-quality data at all levels? Who was/were to review the quality control reports? How were comments, instructions and corrective measures to be fed-back to the field for implementation? Comparison with other surveys?
- What was your experience of the use of Field Check Tables (production, analysis and feed back to the field)?
- Based on your experience, what should the compulsory control mechanisms include (for field supervisors, field editors and central supervisors, and during listing, field work, and data entry/management/analysis)? Comparison with other surveys?

5. Looking Forward

- Overall what is your assessment of the MICS4 survey (at different phases)? How does this compare with other similar surveys implemented by your organization?
- In order to ensure high-quality survey (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1

Interview with UNICEF CO Senior Management

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with MICS4? What worked well? Where are improvements needed?
- Changes observed between MICS3 and MICS4? If so, please describe

3. HR & TS for MICS4 (MICS Focal Point, Consultants and the Statistical Office)

- What was your understanding of the roles & responsibilities of UNICEF, the Consultants and the Statistics Office?
- What would you have liked to see included in or removed from the contracts/MOUs? In future what should contract with the Statics Office look like? What should it cover?
- How would you rate the level, consistency and effectiveness of the TS received from UNICEF's national/international consultants? From the Regional Office? From HQ?
- What about the contributions of the MICS Focal Point and other CO staff? How does MICS fit in the work plan of the CO? What is its level of priority?
- Overall in terms of TS from UNICEF (HQ and Regional and Country levels) and Consultants, what worked well? What needs improvements in future?

4. Decision-Making between HQ, the Regional Office and the Country Office

- What was your understanding of the roles & responsibilities of HQ, the Regional Office and the Country Office?
- In your view which MICS-related decisions need to be made by HQ? Which ones by the Regional Office? Which ones by the Country Office?
- What was your experience with decision-making at these three levels during MICS4? Have there been any changes from MICS3? If yes, describe.

5. Looking Forward

- Overall what is your assessment of the MICS4 survey?
- Any plans to documents the lessons learned from MICS4 for use in sub-sequent surveys?
- In your view and based on the specificities on the country, should MICS be conducted at national level or regional level? And why?
- In order to ensure high-quality survey (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1
Interview with MICS Focal Point

1. Background

- Evaluation Objectives & Process & Confidentiality (by Interviewer)
- Brief description of professional background and length of time in position - Roles and responsibilities vis-à-vis the MICS

2. Overall Experience with MICS4

- What has been your overall experience with MICS4? What worked well? Where are improvements needed?
- Changes observed between MICS3 and MICS4? If so, please describe

3. Contractual Arrangements

- What was your understanding of your roles & responsibilities with regard to the survey? Those of the other players (e.g. NSO, Consultants, other UNICEF staff)?
- What would you have liked to see included in or removed from your roles & responsibilities on MICS? In future what should the contract with the Statics Office look like? What should it cover? How suitable were the contracts with the national and international consultants?

4. Your Work and Working with NSO and the Consultants

- Do you think you have fulfilled (or are fulfilling) your commitments?
- Did major problems arise in your work with the consultants, and how were they dealt with?
- How would you rate the level, consistency and effectiveness of NSO's technical implementation of the strategies that were designed for sampling, field work, data entry, management and analysis, and report writing?
- How would you rate the level, consistency and effectiveness of the TS received from UNICEF's national/international consultants? From the Regional Office? From HQ?
- Were the level and quality of the human resources (at NSO, at UNICEF, other Consultants) optimal given the roles and responsibilities and timelines? If No: Why?
- What quality control mechanisms were put in place to ensure high-quality data at all levels? Who was/were to review the quality control reports? How were comments, instructions and corrective measures to be fed-back to the field for implementation?
- What was your experience of the use of Field Check Tables (production, analysis and feed back to the field)?
- What should the compulsory control mechanisms include (for field supervisors, field editors and central supervisors, and during listing, field work and data entry)?

5. Looking Forward

- Overall what is your assessment of the MICS4 survey (at different phases)?
- In order to ensure high-quality survey (at all levels), what are the top three improvements that need to be made and why?
- Based on your experience, which areas of HR/TS need improvements in future and why?
- What other issues would you like the Evaluation team to be aware of?

MICS4 Evaluation – Cluster 1
Interview with Regional MICS Coordinator

1. Role and responsibilities

- Length of time in position.
- Overview of responsibilities (try to discern MICS and non-MICS). If non-MICS seems significant, ask for a rough percentage allocation across activities.

2. Overall experience with Round 4

- Lessons learned from R4: what worked well? where are improvements needed?
- Did he/she seek support from HQ at any point? What was that experience?
- Experience with the regional consultant pool? How was it created? Positive experiences / any drawbacks or problems?
- Challenges specific to the region? Nature of support/accommodation provided by HQ?

3. Looking forward

- Are there points which need to be addressed in R5? Across questions: probe on human resources, data management, data quality.
- How do countries make their decision whether to do it not? How does he/she support them in this decision?
- Once decision is taken, how does he/she support them in preparations?
- What does he/she see has greatest gap/need in good planning?
- What type of guidance has she received from HQ in preparing countries for R5?
- Across questions: probe on human resources, data management, data quality.

MICS4 Evaluation – Cluster 1
Interview with Regional M&E Chief / Officer

1. Role and responsibilities for individual and unit

- Brief description of professional background and length of time in position. Roles and responsibilities vis-à-vis the MICS.
- Brief description of M&E activities in the region (e.g. technical support to COs, regionally-relevant evaluations, review of CO programme plans and monitoring plans)? How many staff in the unit?
- How does the MICS fit into the unit's work? What role does the MICS Coordinator play (in addition to working on MICS)?

2. Changes observed between MICS3 and MICS4? If so, please describe.

3. Overall experience with Round 4

- In your opinion, what are the lessons learned from Round 4?
- What worked well? Where are improvements needed?
- Challenges specific to the region? Nature of support/accommodation provided by HQ?
- Experience with the regional consultant pool? How was it created? Positive experiences / any drawbacks or problems? Please provide examples, if applicable.

4. Decision-making

- In Round 4, did he/she communicate with RO Deputy Representative or Representative about MICS at any point? If so, please describe.
- Did he/she communicate with HQ about MICS at any point? What was that experience?
- Are responsibilities, lines of authority clear between levels (i.e. CO-RO-HQ)? Please provide an example: well-functioning decision-making and communication between levels (CO-RO-HQ) or, a situation where lessons should be drawn.

5. Looking ahead

- Are there points which need to be addressed in R5 (e.g. human resources, data management, decision-making, data quality)?
- How do countries make their decision whether to do Round 5 or not? Does he/she (RO) support them in this decision? How?
- Once decision is taken, does he/she support them in preparations? What are greatest gaps in good planning?
- What type of guidance has RO received from HQ in preparing countries for R5?

Annex 2.5 Standards and benchmarks used in the MICS4 Evaluation

Standard	Source
Time required for five key elements of the technical review processes.	Internal - Technical Assistance presentation from MICS4 Workshop 1 (Survey Design). <i>Note: Evaluation Team was unable to make comparison as no information was found on turn-around times.</i>
Standards for field work training / MICS recommends that field work training: (a) be carried out for at least two weeks, preferably up to 3 weeks, depending on questionnaire content. (b) be carried out in a central location. (3) is conducted with a relatively small group of interviewers (30-40 candidates in a class at one time).	Internal – MICS4 Manual – Preparing for Data Collection and Conducting Field work
Conduct of field work: 10-15 interview teams and field work duration of 3-4 months is considered the maximum size compatible with maintaining consistent good practice standards	Internal: General agreement during the interviews
Timeliness of Final Report: 12-month period from the end of field work to the production of final reports	Internal – MICS4 Manual Illustrative timeline for survey;
Data quality: Missingness of date of birth	External: Comparison with DHS surveys
Data quality: Digit preference in age reporting	External: Comparisons with international standard and with DHS surveys
Data quality: Age displacement	External: Comparisons with expert – practitioner opinion and with DHS surveys
Data quality: Incompleteness and inconsistencies of anthropometric measures	External: Comparison with DHS surveys Internal: MICS4 Data Quality Tabulation Plan
Data quality: Observation of bednets and hand washing places.	External: Comparisons with expert – practitioner opinion and with DHS surveys Internal: MICS4 Data Quality Tabulation Plan

Annex 3A.1: Comparison of positions descriptions for Regional MICS Coordinators

	MENA	CEE/CIS	EAPRO/ROSA (JT.)	ROSA
TITLE	Monitoring Specialist	Monitoring and Evaluation Specialist	Monitoring and Statistics (MICS) Specialist	Monitoring and Statistics (MICS) Specialist
PURPOSE	provide support for planning and implementation of the regional monitoring, research and evaluation plan, specifically to regional trend analysis, multiple-indicator cluster surveys, data base and monitoring systems	supports the RO in the preparation, implementation and evaluation of Multiple Indicator Cluster Surveys (MICS), TransMONEE database (TM) and DevInfo in the region	responsible for the provision and mobilization of technical assistance to COs and statistical bureaux for planning, monitoring, implementation and utilisation of MICS and other child relevant surveys and meta analysis of such surveys	responsible for the provision and mobilization of technical assistance to COs and gov't. counterparts for the planning, managing and implementation of MICS and other child relevant surveys and monitoring tools. Supports the dissemination and further analysis of MICS and other child-related data in the region to enhance evidence based programming and policy making
MAKES DECISIONS ON:	technical quality assurance and use of norms, standards, procedures related to M&E activities	interpretation/analysis of data gathered and on the information contained in the various reports being prepared, could influence policy/ programme direction taken by Supervisor, which in turn could impact on the Organization's work and image	which countries to prioritize for advocacy and technical support	which countries to prioritize for advocacy and technical support
MAKES RECOMMENDATIONS ON:	the information of monitoring and evaluation and research work.	the types of data collected and retained, and on the information contained in various reports prepared, which could impact on the decisions taken by the Supervisor	-to headquarters on allocation of financial support. -to country offices on consultant support	- to headquarters on allocation of financial support. - to country offices on consultant support
WORKING RELATIONS WITH	HQ: no reference	HQ: no reference	HQ: overall coordination and	HQ: overall coordination and

	MENA	CEE/CIS	EAPRO/ROSA (JT.)	ROSA
HQ, CO			information exchange	information exchange

Annex 3A.2: Technical Assistance processes ¹

Steps		Level of action		
		Country	Regional	HQ
1	Data Assessment	a. Discussion to determine if MICS is needed c. Decision made in-country. Draft MOU.	b. Discuss between CO, RO and HQ	
2	Survey Plan	a. Using templates, survey plan and MOU prepared by IA in consultation with CO d. Survey Plan finalized	b. Shared with RO for review	c. RO shares with HQ
3	Human Resources	b. ID and recruit survey personnel (i.e. survey coordinator and UNICEF MICS Consultant)	a. Standard ToRs and consultant roster shared	
4	Steering Committee	b. Committee(s) established	a. Standard ToRs for steering (and tech.) committees provided	
5	Questionnaire Design	a. Draft qnnaire produced c. 2 nd draft qnnaire e. Final qnnaire for pre-test	b. 1 st review, feedback provided w/in 1 week d. 2 nd review by RO and HQ / feedback provided w/in 1 week	
6	Translation	Qnnaire translated, back-translated and manuals translated		
7	Sampling	b. Design of sample e. Selection of sample	a. RO mobilizes consultant c. Sample design for review	d. RO discusses with HQ

¹  Materials shared
  Technical assistance provided
  Review/feedback provided

Steps		Level of action		
		Country	Regional	HQ
8	Supplies	a. Determine quantities required	b. Consult with RO on procurement	c. RO consults with HQ
9	Pre-test	b. Conducted after training	a. RO mobilizes HH survey consultant to assist	
10	Finalizing the questionnaire	a. Based on pre-test, qnnaire is finalized d. Final qnnaire produced/printed	b. Shared with RO for final consultation	c. RO shared with HQ
11	Data processing programmes	a. DP staff trained on customizing data entry template at workshop c. Data entry template completed e. Data entry template finalized	b. RO mobilizes DP consultant to assist d. Sent to RO and HQ for review (feedback w/in 1 week)	
12	Field staff training and pilot	b. 2-3 wks. training following pre-test	a. RO mobilizes HH survey consultant to support training	
13	Field work	b. Data collection	a. RO mobilizes HH survey consultant to support/ monitor field work in early stages	
14	Data entry	b. Simultaneous data entry conducted	a. RO mobilizes DP consultant to set-up data entry systems & support data entry in early stages	
15	Data editing and cleaning	b. Data editing and cleaning conducted e. Final SPSS data set produced ready for tabulation	a. RO mobilizes DP consultant to support as needed c. CsPro files and SPSS datasets shared with RO for review f. Shared with RO	d. RO shares with HQ. 1 st feedback within 10 days.

Steps		Level of action		
		Country	Regional	HQ
16	Data analysis and tabulation		a. RO mobilizes DP consultant to support as needed	
		b. Data analysis and complete set of tables produced	c. Tabulations shared with RO for comparative review	d. Tabulations shared with HQ
		e. Final tabulations produced ready for preliminary findings		
17	Preliminary findings	a. Preliminary findings produced by implementing agency with assistance of UNICEF and disseminated		b. Shared with RO and HQ
18	Report writing		a. RO mobilizes consultant to support	
		b. Draft of final report produced	c. Draft shared with RO/HQ	
		d. MICS Coordinator and UNICEF focal point have consultation to finalize report		
19	Printing	a. Print-ready version sent for final feedback		b. RO and HQ review and provide feedback within 10 days
		c. Report printed / copies sent to RO and HQ		
20	Archiving		a) RO and HQ coordinate with IHSN mobilize consultant to support, if needed	
		b) Archive completed, data anonymised and documented	c) Archives shared with HQ for review	
		d. Archive finalized		e. Archives shared with RO and HQ for public sharing
21	Dissemination	b. MICS dissemination activities with assistance from UNICEF communications		a) RO and HQ support
22	Further analysis	b) Further analysis planned		a) RO and HQ support as needed

Annex 3A.3 Main tasks related to Regional Office consultants, by type

Sampling consultant / estimated at 12 days per country

1. To technically review the sample design of each MICS country in *[Region]* ensuring that each design follows MICS guidelines;
2. To compile reports with technical comments and recommendations highlighting proposed changes, if any, to the sample designs. Comments will be shared by UNICEF with the implementing partner;
3. Facilitate a sampling session during the first MICS regional workshop (Survey Design) and discuss and advise countries attending the workshop on their sample design and approach;
4. Provide in-country support to selected countries to support designing and implementing the MICS sample and, if required, the household listing activity.

Household survey consultant / estimated at 30 days per country

1. Support the Regional MICS Coordinator in providing technical assistance and oversight for [selected MICS] surveys in the region;
2. Provide support to Regional MICS Workshops;
 - Survey Design Workshop: facilitate selected sessions and work bilaterally with different countries on questionnaires, survey plans and budgets;
 - Data Processing Workshop: work bilaterally with different countries on datasets, data quality, tabulation plans and final report contents.
 - Data Archiving and Dissemination Workshop: facilitate selected sessions and work with countries on putting the final touches to the final reports, dissemination plans and support countries on documenting the surveys (development of the archives)
3. From a distance and in coordination and collaboration with Regional MICS Coordinators, provide review and feedback to COs on the following documents, in order to ensure that they comply with MICS standards;
 - Survey plans (including budget and training plans)
 - Questionnaires and Manuals
 - Sample design (in collaboration with the Regional Sampling Consultant)
 - Data entry, editing and recoding programmes (in collaboration with the Regional Data Processing Consultant)
 - Review of tabulation plans
 - Review of datasets and tabulations (in collaboration with Regional Data Processing Consultant)
4. Carry out field visits, when necessary and when required, to MICS countries at the following stages of MICS implementation
 - Questionnaire design (approximately 5 days)
 - Fieldwork training and initiation of fieldwork (2-3 weeks)
 - Data analysis (approximately 3 days)
 - Report writing (approximately 5 days)

As needed, the Regional Household Survey Consultant will also take part in missions carried out by the Regional MICS Coordinator to support COs in negotiating, promoting and presenting MICS to governments and other partners.

5. Provide support to countries on report writing at workshops organized for this purpose at regional level and through assistance from afar
6. Review the preliminary and final reports produced by MICS countries
7. In collaboration with the MICS Regional Coordinator, provide regional status up-dates to RO and HQ.

Data Processing consultant / estimated at 20 days per country

1. To technically review the adapted data entry programs (CSPRO) of each MICS country in *[Region]* ensuring that data entry programs follows MICS guidelines and in agreement with the adapted questionnaires for the national survey;
2. To technically review the adapted data processing programs (SPSS) of each MICS country in *[Region]* ensuring that tabulation programs follows MICS guidelines and the output tables are in agreement with the adapted questionnaires for the national survey;
3. To compile reports with technical comments and recommendations highlighting proposed changes, if any, to the data entry and data analysis programs. Comments will be shared by UNICEF with the implementing partner;
4. Facilitate the data entry and analysis training sessions during the MICS regional workshop (Data Processing) and discuss and advise countries attending the workshop on their data entry and data analysis approach;
5. Provide in-country support to selected countries in order to assist the implementing partner in adapting the data entry and analysis programs (including providing technical support to data cleaning, recoding, analysis and tabulation of country-specific modules and/or questions).
6. Review the data processing related parts of the final report. Provide technical comments and recommendations highlighting proposed changes, if any to the relevant chapters. Comments will be shared by UNICEF with the implementing partner.
7. Support *[if the Data Processing Consultant knows IHSN Microdata Management Toolkit -] [and coordinate]* the data archiving and anonymisation of the MICS datasets in each country;
8. Respond to ad-hoc data processing queries from MICS4 countries by e-mail and through MICS4 Forum.