THE MULTIPLE INDICATOR CLUSTER SURVEYS (MICS) 1995–2015

20 YEARS

Monitoring the Situation of Children and Women for 20 Years

MICS

unicef

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ACKNOWLEDGEMENTS

CONTENTS

LIST OF ABBREVIATIONS

ARI	acute respiratory infection
BBS	Bangladesh Bureau of Statistics
CDD	control of diarrhoeal disease
CEE/CIS	Central and Eastern Europe and the Commonwealth of Independent States
CSPro	Census and Survey Processing System
DHS	Demographic and Health Surveys
DPT	diphtheria, pertussis and tetanus
EAP	East Asia and the Pacific
EPI	Expanded Programme on Immunization
ESA	Eastern and Southern Africa
IMPS	Integrated Microcomputer Processing System
ISRT	Institute for Statistical Research and Training, Dhaka University, Bangladesh
ISSA	Integrated System for Survey Analysis
LAC	Latin America and the Caribbean
MDG	Millennium Development Goal
MENA	Middle East and North Africa
MICS	Multiple Indicator Cluster Surveys
ORT	oral rehydration therapy
SA	South Asia
SDGs	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
TB	tuberculosis
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WCA	West and Central Africa
WFFC	World Fit for Children
WHO	World Health Organization
WSC	World Summit for Children

FOREWORD

We live in exceptional times, in a world that has seen unprecedented improvements in the lives of children and women. Today, it is commonplace to find news stories and headlines detailing the number of children's lives saved by vaccinations or how many women receive the special care they need during childbirth. We now know more about people and how they live than at any other time in human history.

However, few take time to reflect on the vast developments that have catapulted us from an era of partial and outdated data to one with relevant and timely information for improving lives. Two decades ago, UNICEF embarked on the development of a household survey programme to improve the evidence base on children's and women's lives, to learn more about the myriad of issues that affect them and how interventions could be placed to improve their situation. This was the beginning of the Multiple Indicator Cluster Surveys (MICS) programme, one of the many elements that improved statistical capacity to generate critical information on the situation of children and women.

Over time, the programme has kept pace with the needs of countries and the international development community, improving, adapting and challenging the way we measure and think about issues. Having completed work on close to 300 surveys in more than 100 countries, we celebrate today 20 years of achievement, of providing new insights on the fulfilment of rights for children and women and improving statistical capacity in countries.

As the world ends the era of the Millennium Development Goals and enters the era of the Sustainable Development Goals, renewed thinking has called to harness the power of robust data systems such as MICS, other household surveys and censuses, as well as the power of 'big data'. Robust data from MICS and other sources will need to interface in the new development age to ensure that goals are met, and met with equity, a fundamental for our progress. The MICS programme has distinguished itself in the complex data ecosystem by providing reliable, timely data and, more so, for having innovated and moved with the changing times to improve our understanding of the world in which we live.

In this report, we take time to recount some of the achievements of MICS and the experiences of countries. As we move forward, we envision a world with more evidence on the living conditions of children, especially the most vulnerable, and using that evidence to fulfil their rights.

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EXECUTIVE SUMMARY

The narrative of the Multiple Indicator Cluster Surveys (MICS) is a unique one. The MICS programme is essentially an initiative pioneered by UNICEF field offices that was refined, developed and transformed from a methodology into a full-fledged survey programme, providing a range of technical assistance to ensure timely, high-quality data. Today, many countries and organizations recognize that data from MICS are key for understanding how children and women live and what can be done to improve their situations. The vast stores of data accumulated through MICS have transformed the surveys into one of the few and most comprehensive sources of information for examining global priorities relating to children and women.

While the global and country recognition for MICS is apparent, few are aware of the origins of the MICS programme. The need for improved monitoring of the situation of children and women became apparent in the early 1990s, when the data landscape was particularly bare. Few countries could adequately monitor whether the lives of children were improving, even based on a limited number of goals in the World Summit for Children. During this time, several UNICEF field offices in South Asia began to use novel survey approaches to examine this as well as provide monitoring data for district-level needs. Concurrently, countries looked towards UNICEF and other United Nations institutions for guidance on the World

Summit goals, widely considered at the time to be one of the key UNICEF priorities. Many of the surveys pioneered in South Asia would soon be recognized by UNICEF headquarters as important inputs towards developing a robust and flexible tool to quickly ascertain the well-being and health status of children. The combination of field experiences with vast technical expertise within UNICEF created standardized survey tools for measurement and launched a new UNICEF initiative, the MICS programme.

By numbers, the successes of MICS are evident. Since its launch in 1995, the MICS programme has been part of close to 300 surveys in more than 100 countries, providing invaluable data on the situation of children and women. MICS has kept pace with development objectives throughout the past two decades, increasing the number of indicators and topics in the surveys and providing an impressive proportion of data for key initiatives such as the Millennium Development Goals (MDGs), A Promise Renewed and the United Nations General Assembly Special Session on HIV/AIDS. In 2015, MICS data accounted for 20–40 per cent of data on a range of indicators for the MDG end-line assessment. This signals not only the centrality of MICS as a monitoring tool for creating a picture of the globe, but also its importance as an official, national source of data for countries to examine their own status.

While the central output of MICS is data, one of the programme's key concerns is improving statistical systems. Countries have developed new capacities, validated statistical systems and modernized their statistical thinking and skills through the MICS programme. Moreover, through regional capacity strengthening workshops – one of MICS' hallmarks – the programme has worked directly with statistical offices, ministries of health and other governmental entities to support questionnaire development, complex data processing and the elaboration of country reports on MICS data. The hands-on approach of MICS, coupled with innovative survey methods and questionnaire content, currently attracts low- to high-income countries.

As the world moves towards broader, more sustainable goals, the MICS programme is well positioned to support such initiatives. With a track record of producing timely, relevant data in a range of settings, MICS will seek to ensure together with partners that the needs of children and women are not left behind, but, rather, that they are at the forefront of the discussion.

Creation of the MICS programme

During the early part of the 1990s, a number of child-focused surveys were implemented in South Asia by UNICEF in collaboration with governments, local universities and others. The surveys were modest but invaluable as one of the few mechanisms to generate reliable statistics on the situation of children. These field initiatives would provide some of the inspiration for the creation of the MICS programme, which would reach more than half the globe throughout the next two decades. This chapter focuses on the circumstances and thinking that propelled this innovation into becoming a full-fledged survey programme.

AN INITIATIVE FROM THE FIELD: THE FIRST SURVEYS

The MICS programme has its roots in a number of different surveys, many in South Asia, most notably in India and Bangladesh. In the early part of the 1990s, limited data on the situation of children at the local and national levels were available for programmes to exploit for planning and policy purposes or for reporting on the World Summit for Children (WSC) indicators. These indicators focused on immunization, treatment for diarrhoea, breastfeeding, child nutrition, and access to water and sanitation, among other areas (*see Table 1.1*). The UNICEF India Country Office's need for monitoring the impact of the Child Survival and Safe Motherhood programme was one of the starting points for the implementation of a cluster-based survey. Although little formal documentation is currently available, several key aspects of the survey are known. The general approach was similar to the Expanded Programme on Immunization and Control of Diarrhoeal Disease (EPI-CDD) surveys, which were one of the leading World Health Organization (WHO) initiatives at the time. These surveys presented an opportunity to improve the understanding of the situation of children beyond immunization and diarrhoeal disease control. UNICEF India added several questions on vitamin A supplementation, acute respiratory infection (ARI) control and sanitation coverage to the existing EPI-CDD survey tools, and also increased the sample size and numbers of clusters to improve indicator estimates.

A similar approach was adopted in Bangladesh. In 1993, UNICEF Bangladesh, working with a national consultant from the Institute for Statistical Research and Training (ISRT) of Dhaka University, began work on a district-level survey using roughly the same design as in India. The survey's objective was to supply district-level data that supplemented the national-level data from the Bangladesh Bureau of Statistics (BBS) surveys.

The survey's content was slim and focused on a limited number of indicators. These indicators centred almost exclusively on child health but included additional items on education, thus covering the majority of the WSC indicators. The survey was national in coverage and provided data at the district level. The BBS reviewed the work of UNICEF Bangladesh and ISRT and agreed to take ownership of the project.

The initial piloting of the survey was done near Dhaka in the Narshingdi district and later implemented in all districts in Bangladesh, although three districts were still being surveyed when the 1993 report was published. As part of the survey, experts from the Evaluation Office at UNICEF headquarters visited Bangladesh and supported the concept. Meanwhile, additional technical support for the survey was provided by the United Nations Statistics Division, which played a key role in reviewing and supporting the sampling approach. After the completion of the survey, a report entitled 'Progotir Pathey: Progress towards the achievement of the Goals for the 1990s'[1] was published in 1994, along with additional data on the situation of children and women from various data sources, such as the census and other surveys.

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1 UNICEF Bangladesh and Bangladesh Bureau of Statistics, 'Progotir Pathey: Progress towards the achievement of the goals for the 1990s', UNICEF, Dhaka, Bangladesh, 1994.

Following this, similar surveys were implemented in Bangladesh on an annual basis until 2000, with the exception of one year due to heavy flooding. The surveys provided information on a limited number of key indicators related mainly to the situation of children, and reporting of survey reports was slim. These factors facilitated the rapid release of results for strategic data use.

ESTABLISHMENT OF THE MICS PROGRAMME: A CORPORATE COMMITMENT

In 1990, the world welcomed a new global agenda for children when nearly 160 heads of state and senior government officials committed to the WSC, thereby pledging to develop National Programmes of Action for Children and to monitor progress on each of the WSC goals and objectives for the year 2000. At the time, huge data gaps were apparent, with few countries having suitable data specific to the WSC goals. The WSC also developed a plan of action that requested the assistance of the United Nations statistical offices, specialized agencies, UNICEF and other United Nations organs to provide statistical tools to countries. The WSC, which was widely regarded as part of UNICEF's agenda, essentially created the institutional duty to pursue the development of data collection tools.

During the same period, timely, high-quality data were a scarce commodity in the field. Existing data on the WSC goals were either too old to be useful or simply did not exist, as demonstrated by a 1995 assessment of data for about 99 countries on the Mid-Decade Goals. Data from sub-Saharan Africa on safe drinking water were on average 4.7 years old, while data on primary school enrolment were nearly a decade old (*see Table 1.1*). Only 12 of the 99 countries had data on iodized salt consumption, while 4 had data on vitamin A supplementation. Some of the oldest data across regions were on stunting and underweight, which were almost 10 years old. Immunization data, however, were available and recent for many countries, in part due to the contribution of the EPI surveys.

In the mid-1990s, much of what we knew about children and women was dated

TABLE 1.1
AVERAGE AGE OF DATA ON MID-DECADE GOALS FOR DEVELOPING COUNTRIES*

GOAL	INDICATOR	AGE OF DATA IN YEARS (BY REGION)				
		Sub-Saharan Africa	South Asia	East Asia and Pacific	Middle East and North Africa	Latin America and the Caribbean
1	Immunization					
	—DPT	1.3	1.4	1.2	1	1.1
	—Measles	1.3	1.4	1.2	1	1.2
	—Polio	1.3	1.4	1.2	1	1.1
	Tetanus toxoid for pregnant women	2.8	1.6	3.9	3	13.6
	TB immunization	1.3	1.4	1.2	4.4	1.9
5	Children receiving adequate vitamin A[a]	Only 4 of 99 countries have data				
6	Iodized salt consumption[a]	Only 12 of 99 countries have data				
7	Use of ORT[b] (pre-1993 definition)	2.9	1.3	2.6	2.6	1.3
	Use of ORT[b]: increased fluids and continued feeding[a]	Only 13 of 99 countries have data				
11	Stunting	9.4	8.7	12.5	10.8	8.1
	Underweight	8.9	8.7	7.9	9.1	7.6
12	Children reaching grade 5	7	8.9	10.6	6.4	7.2
	Entering Grade 1 at recommended age	10.6	15.0	12.9	7.5	7.3
	Gross primary school enrolment	5.3	3.9	4.9	3.9	3.3
	Net primary enrolment ratio	8.7	11	8.5	6.1	4.6
13	Access to safe drinking water	4.7	2.9	4.3	4.7	3.2
	Access to sanitary excreta disposal	6.2	5.0	4.3	6.4	4.3

Note: Where no data are available for the period since 1975, the elapsed time for a country indicator is set at 20 years.

* United Nations Children's Fund, 'Monitoring Progress toward the Goals of the World Summit for Children: A practical handbook for Multiple-Indicator Surveys', UNICEF, New York, 1995.

[a] Only recently defined.
[b] Oral rehydration therapy.

Around 1990, few countries knew if undernutrition was rising or falling

Low- and middle-income countries with trend data around 1990

Low- and middle-income countries without trend data around 1990; all high-income countries in 1990

This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area has not yet been determined.

Few options existed in the mid-1990s for countries to collect data on children in a systematic way. One of the larger household survey programmes, the Demographic and Health Surveys (DHS), was already implementing surveys in a number of countries. UNICEF approached the DHS to implement fast, relatively inexpensive surveys to focus on children and the WSC goals. However, the DHS implemented too few surveys in a year and therefore did not match UNICEF's needs. Other United Nations agencies, such as the World Bank, had a multitude of surveys in many countries, but these did not focus on the WSC goals. The World Health Organization (WHO) at the time had large surveys on CDD, although these lacked the number of WSC indicators. While several of the WSC indicators could be covered by administrative systems, such systems were deficient in the majority of countries, providing data only on unrepresentative subsets of children and doing so in an untimely manner.

The establishment of the MICS programme came as a combination of these needs; countries and field offices needed timely data to monitor outcome-level indicators in programming, while UNICEF as an institution was bound by a global WSC commitment to work with countries to generate data. With the inability of existing systems to deal effectively with the data needs and with previous experience with a number of child-focused surveys in several countries such as Bangladesh and India, UNICEF's MICS programme began to emerge.

UNICEF's Executive Director at the time, James P. Grant, officially launched the MICS programme in November 1994 through an executive directive entitled 'Multiple Indicator Cluster Surveys for the Mid-Decade Goals'. The directive aptly and succinctly describes the initiative:

> *"A collaborative effort involving many participants, both within and outside UNICEF, has now produced a standardized survey instrument for goal measurement. It is based on a modification of the EPI and CDD cluster survey approach that has been used so successfully all over the world. It uses a series of questionnaire modules designed to provide data for most of the primary indicators of mid-decade goals, as agreed to by both WHO and UNESCO, including those relating to vaccine coverage, vitamin A status, salt iodization, ORT use in diarrhoea, malnutrition, educational attainment, and the availability of water supply and sanitation facilities…It can be easily adapted to specific country situations; so that if, for example, very good and current data already exists for an indicator in a particular country, the relevant module can be dropped.*

> *The questionnaire modules can also be appended to other surveys. In addition to those designed specifically to measure goal indicators, several other modules are provided, to be included or not at the discretion of particular country offices and counterparts. The survey can be implemented at reasonable cost in a variety of country situations."*

At UNICEF, a number of organizational changes took place around the time of the directive to create the appropriate conditions for supporting countries for MICS implementation. At UNICEF headquarters, a team of experts was engaged to act as a technical resource. The team created the first MICS manual, entitled 'A Practical Handbook for Multiple-Indicator Surveys' and published in January 1995. The manual was designed for survey managers and implementing partners. It included a range of technical material focusing on the Mid-Decade Goals and how to conduct a MICS survey. Additional appendices also supported the implementation with instructions for interviewers, and information on anthropometric techniques and organization and administration of data processing. UNICEF supported countries in survey implementation through a series of regional MICS workshops, wherein UNICEF officers from the respective geographic region would attend the workshop with the implementing partners (such as the national statistics offices, ministries of health and other governmental ministries). At these workshops, the tools were presented and implementation plans were discussed. Such workshops are a hallmark of MICS and have continued to the present round of the programme.

The first survey of the MICS programme: China

UNICEF conducted the first global MICS workshop in Dhaka, Bangladesh (August 1994) to train UNICEF officers and national partners on MICS tools. Bangladesh, Nepal and other countries in South Asia were particularly early in implementation and even pre-dated the first workshop and the official programme launch.

Based on the launch date of MICS and the survey timelines, the first survey completed as part of the first round of the MICS programme was in China. In 1994, discussions among UNICEF staff and China's State Statistical Bureau took place regarding the assessment of major development goals. With the assistance and guidance of the UNICEF China Country Office, the State Statistical Bureau conducted the first-ever MICS during February 1995.

The China MICS survey used two-stage, systematic cluster sampling, targeting households in urban and rural areas of the entire country, and children age 0–14 years old. In all, 60,027 households in 30 provinces, municipalities and autonomous regions were covered. Some 2,000 households were selected in each province (except for the Tibet autonomous region and Sichuan province, where 1,000 and 3,000 were selected, respectively). Training of supervisors took 10 days, followed by 10 days of training of interviewers. The cost of the survey exceeded US$500,000, making it the most expensive survey of the first round. The average cost of a survey in MICS1 was approximately US$80,000, a rather modest investment at the time.[2]

The China MICS collected information on access to safe drinking water, access to sanitary latrine facilities, consumption of iodized salt, level of education among children 6–14 years old, consumption of vitamin A rich foods, immunizations and underweight among children 0–4 years old. The survey also included questions on the type of housing, building material and living space.

Both the national and provincial governments attached great importance to the results of the survey, and survey data were cited widely in monitoring reports at the national and provincial levels. Some provinces and municipalities publicized the results of the survey widely. They not only achieved good social feedback but also significantly promoted the work of child development in these regions. The MICS data were used in the 'Report on China's Child Development at the Mid-Decade of the 1990's', prepared by the Chinese National Working Committee for Children and Women. Following the 1995 MICS in China, five provinces carried out similar surveys in 1996, which, although not part of the Global MICS Programme, shared much of the MICS methodology.

2 United Nations Children's Fund, 'Evaluation of the UNICEF Multiple Indicator Cluster Surveys', UNICEF, New York, 1998.

CHAPTER 2

The evolution of the MICS programme

Throughout the past two decades, the MICS programme has come a long way to bring robust data on children and women to the forefront of the development agenda. Conceived initially as an idea in the field, the programme has helped transform the data landscape in countries by generating much-needed data for policy and programming, highlighting inequities and identifying the under-served. The sheer number of countries implementing surveys has in turn transformed MICS into an indispensable source of data for key global development initiatives such as the MDGs.

Producing robust data for an increasingly demanding world is no easy feat. However, the MICS programme has a firm commitment to ensuring that both methods and data from surveys meet or surpass internationally agreed-upon standards. To safeguard this commitment, the programme engages and relies heavily on sound scientific work to develop indicators and validate survey methodology, a defining feature of the programme that is often overlooked, despite its importance.

This chapter explores the changing role of MICS and the various elements of the programme during the past two decades, and provides information on the programme's current status.

A COMMITMENT TO MAJOR DEVELOPMENT GOALS

The development dialogue for children has changed considerably since the initiation of the MICS programme in 1995. In the 1990s, child survival and the basic health needs of children were paramount. Countries focused on reducing mortality and delivering life-saving vaccinations. Such issues would soon share the spotlight with developing a broader development agenda for children and women and improving the environment and circumstances in which they live. Monitoring progress has therefore implied that MICS, too, must be responsive to change, able to recognize the needs of the global community, work to refine these and reflect them with sound quantitative data.

MICS has always been an invaluable source of data on children. For the first two rounds of MICS (roughly, surveys around 1995 and 2000), the focus of the surveys was undoubtedly to provide data to monitor progress towards the goals of the WSC, which was one of the first global platforms specifically for children (*see Table 2.1*). The WSC goals were highly quantitative and focused on several sectors, such as child survival, development and protection, women's health and education, nutrition, child health, water and sanitation, basic education and children in difficult circumstances. The initial MICS surveys were essentially for monitoring the WSC goals, and were purposed as 'mid-decade' monitoring surveys in MICS1 or 'end-of-decade' monitoring in MICS2, which essentially reviewed progress over the 10-year period.

At the end of MICS2, UNICEF had, for the most part, reduced support for MICS, given that the WSC goals had expired. In 2002, however, the World Fit for Children (WFFC) Declaration and Plan of Action changed the monitoring environment and began to create greater momentum to continue the MICS programme. The Declaration specifically called upon UNICEF to continue monitoring in paragraph 61b, which stated:

> *"As the world's lead agency for children, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the present Declaration and Plan of Action."[3]*

By 2003, one year after the WFFC summit, UNICEF re-started plans to resume the MICS programme. Apart from the WFFC goals, a number of high-level, global commitments were also being established during the same period. Chief among these were the eight MDGs, of which the vast majority of household-based indicators would be covered by MICS in the forthcoming survey rounds. In addition, the United Nations General Assembly Special Session on HIV/AIDS and the African Summit on Malaria each had additional goals, targets and indicators, which were folded into the MICS survey tools. The third round of MICS reflected this growing appetite

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3 United Nations General Assembly, Resolution adopted by the General Assembly [on the report of the Ad Hoc Committee of the Whole (A/S-27/19/Rev.1 and Corr.1 and 2)] S-27/2, A world fit for children, United Nations, New York, 2002.

MICS has a long history of covering major development goals and key indicators to monitor country progress

ROUND	APPROXIMATE PERIOD OF SURVEY IMPLEMENTATION	MAJOR INITIATIVES
MICS1	1995–1999	World Summit for Children Goals: Mid-Decade Monitoring
MICS2	1999–2004	World Summit for Children Goals: End-Decade Monitoring
MICS3	2004–2009	World Fit For Children Goals Millennium Development Goals United Nations General Assembly Special Session (HIV) Abuja Targets (Malaria)
MICS4	2009–2012	Millennium Development Goals United Nations General Assembly Special Session (HIV) Abuja Targets (Malaria)
MICS5	2012–2015	Final assessment of the Millennium Development Goals A Promise Renewed (Maternal and Child Health) United Nations General Assembly Special Session (HIV) Abuja Targets (Malaria)

for data and was designed to capture a much broader range of topics relating to children and women.

From MICS4 to MICS5, apart from the major initiatives, additional monitoring frameworks such as the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation began to play an important role in informing MICS content. UNICEF, as well, began to further utilize MICS for its own strategic plans and programmes, which further increased the use of the data. The sustained focus on major development goals in MICS4 and MICS5 led to few modifications of the survey protocols. Such a strategic move ensured that technical materials for survey implementation were quickly available for countries in the run-up to the MDG

final assessment. This facilitated the rapid deployment of surveys and uninterrupted technical support from UNICEF. The surge in implementation resulted in MICS being a major data source for the MDG final assessment, contributing between 20 per cent and 40 per cent of the data for the MDG final assessment (*see Figure 2.1*).

Apart from the MDGs and other international goals, MICS is a leading source of data on a range of innovative topics that are particularly attractive and relevant to countries that have already reached the MDG targets or monitor them through other data sources. Topics such as child discipline, early childhood development and life satisfaction provide new information on additional dimensions of the well-

MICS provides a vital contribution to MDG monitoring

MICS CONTRIBUTION TO THE MDGS[*]

Indicator	MICS	DHS	Other
1.8 Prevalence of underweight children under-five years of age	26%	36%	38%
5.2 Proportion of births attended by skilled health personnel	24%	30%	46%
5.3 Contraceptive prevalence rate	22%	28%	50%
5.5 Antenatal care coverage (at least four visits)	36%	43%	21%
5.5 Antenatal care coverage (at least one visit)	29%	36%	35%
5.6 Unmet need for family planning	27%	44%	29%
6.2 Condom use at last high-risk sex	22%	58%	20%
6.3 Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS	39%	50%	11%
6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years	40%	51%	9%
6.7 Proportion of children under 5 sleeping under insecticide-treated mosquito nets	34%	47%	19%
6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs	33%	53%	14%

■ MICS   ■ DHS   ■ Other

Source: Global MDG databases from UNICEF and other United Nations partners.

* Indicators which use direct estimates from household surveys, as reported in the MDG 2015 databases. This analysis was completed in June 2015, and is based on the latest available estimate for each country. Data on literacy (Indicator 2.3) and adolescent birth rate (Indicator 5.4) were not yet available in the MDG 2015 database at the time the analysis was completed.

being of children and women. A full list of MICS5 indicators is shown in the Annexes. Countries routinely provide data to UNICEF on key indicators, which are then reviewed and collated into global databases. These databases are useful for monitoring levels and trends in indicators, as well as for the examination of the sources of data. Figures 2.2 and 2.3 show the major data sources and the contribution of each source of data for several key indicators. At present, MICS is the leading source of data on child protection and early childhood development and a key source of data on child health (*see Figures 2.2 and 2.3*).

MICS is a key data source for data on child protection and early childhood education

MICS is a major data source on child health and nutrition

FIGURE 2.2
GLOBAL SHARE OF DATA ON CHILD PROTECTION AND EARLY CHILDHOOD DEVELOPMENT INDICATORS, UNICEF GLOBAL DATABASES, 2015

FIGURE 2.3
GLOBAL SHARE OF DATA ON CHILD HEALTH AND ANTHROPOMETRY INDICATORS, UNICEF GLOBAL DATABASES, 2015

VIOLENT DISCIPLINE — 75%, 15%, 10% — N = 61 countries

CHILD MARRIAGE — 36%, 53%, 11% — N = 117 countries

DIARRHOEA TREATMENT WITH ORS — 37%, 57%, 6% — N = 120 countries

CARE-SEEKING FOR SYMPTOMS OF PNEUMONIA — 46%, 47%, 7% — N = 118 countries

EARLY CHILDHOOD EDUCATION — 81%, 13%, 6% — N = 75 countries

BIRTH REGISTRATION — 28%, 32%, 40% — N = 163 countries

EARLY INITIATION OF BREASTFEEDING — 36%, 45%, 19% — N = 124 countries

CHILD MALNUTRITION — 26%, 36%, 38% — N = 145 countries

Legend: ■ MICS   ■ DHS   ■ Other

Source (Figure 2.2): UNICEF global databases, 2015, based on MICS, DHS and other nationally representative sources. This analysis was completed in June 2015, and is based on the latest available estimate for each country.

Violent discipline Percentage of children 2–14 years old who experienced any violent discipline (psychological aggression and/or physical punishment) in the last month.

Child marriage Percentage of women 20–24 years old who were first married or in union before they were 18 years old.

Early childhood education Percentage of children 36–59 months old who are attending an early childhood education programme.

Birth registration Percentage of children under age 5 who were registered at the moment of the survey. The numerator of this indicator includes children who have a birth certificate or whose mother or caretaker says the birth has been registered.

Source (Figure 2.3): UNICEF global databases, 2015, based on MICS, DHS and other nationally representative sources. This analysis was completed in June 2015, and is based on the latest available estimate for each country.

Diarrhoea treatment with oral rehydration salts (ORS) Percentage of children under age 5 who had diarrhoea in the two weeks preceding the survey and who received oral rehydration salts (ORS packets or pre-packaged ORS fluids).
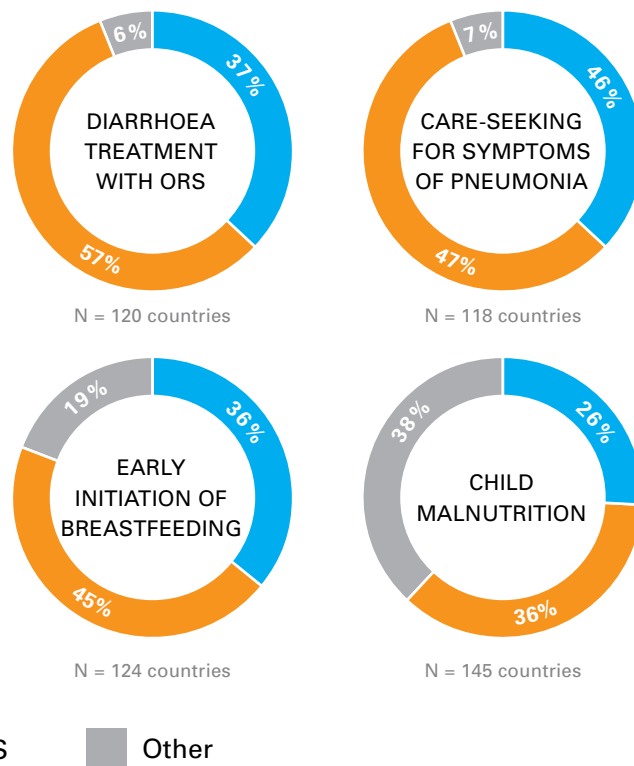
Care-seeking for children with symptoms of pneumonia Percentage of children under age 5 with symptoms of pneumonia (cough and fast or difficult breathing due to a problem in the chest) in the two weeks preceding the survey for whom advice or treatment was sought from a health facility or provider.

Early initiation of breastfeeding Percentage of infants who are put to the breast within one hour of birth.

Child malnutrition Children under age 5 who are underweight, stunted or wasted according to the WHO Child Growth Standards.

» **Underweight** Moderate and severe: Percentage of children under age 5 who are below minus two standard deviations from median weight-for-age of the WHO Child Growth Standards.

» **Stunting** Moderate and severe: Percentage of children under age 5 who are below minus two standard deviations from median height-for-age of the WHO Child Growth Standards.

» **Wasting** Moderate and severe: Percentage of children aged 0–59 months old who are below minus two standard deviations from median weight-for-height of the WHO Child Growth Standards.

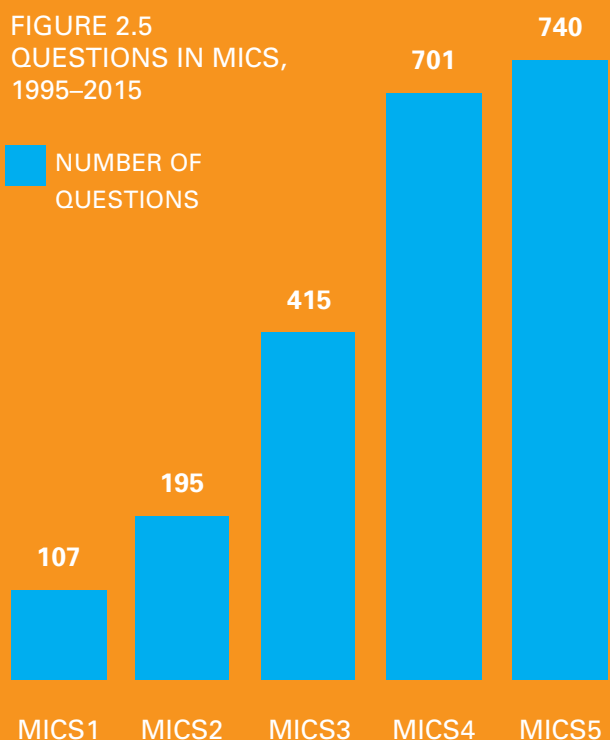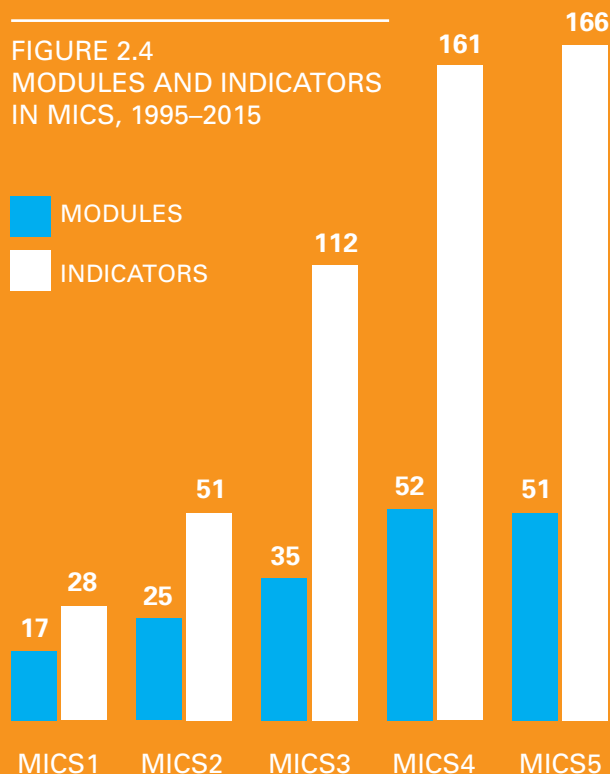# The exceptional growth of MICS questionnaire tools

An evolving set of global commitments for MICS has produced profound effects on the size of survey tools, dramatically increasing the number of indicators and questionnaire modules. Over 20 years, the number of indicators in MICS increased more than sixfold. In MICS1, a mere 28 indicators were targeted in the survey programme, a number that nearly doubled by MICS2 (*see Figure 2.4*). The development of MICS3 saw the largest proportional increase in the number of key indicators, with 112 indicators measured in that round. This massive increase was due to the inclusion of MDG indicators as well as WFFC indicators, and the desire to continue covering WSC indicators to understand trends. MICS4 and 5, due to heightened demand for data from countries and the global community, continued to expand on the number of indicators to 161 and 166 indicators, respectively.

This immense growth in indicators is paralleled by the more than tripling of the number of questionnaire modules in each survey round. MICS modules are self-contained sets of questions that are used to measure indicators on a particular topic. MICS1 had only 17 modules, a number which increased steadily over time to more than 50 modules in MICS4 and MICS5. A simple analysis shows that the number of questions per indicator went from 3.8 to 4.5; the number of questions per module grew from 6.3 to 14.5, and the number of indicators per module increased from 1.6 to 3.3. These findings imply that MICS questionnaires have become more detailed, asking more questions per indicator, spending more time to construct the numerators and denominators of the indicators, and including more elaborate questioning with longer modules.

With such increase in the number of modules and indicators, the number of questions in the standard MICS5 questionnaires increased to about seven times from what they were in MICS1.

FIGURE 2.4
MODULES AND INDICATORS
IN MICS, 1995–2015

MODULES
INDICATORS

MICS1 | MICS2 | MICS3 | MICS4 | MICS5
17 / 28 | 25 / 51 | 35 / 112 | 52 / 161 | 51 / 166

FIGURE 2.5
QUESTIONS IN MICS,
1995–2015

NUMBER OF QUESTIONS

MICS1: 107 | MICS2: 195 | MICS3: 415 | MICS4: 701 | MICS5: 740

DELIVERING SOUND DATA FOR ALL RIGHTS HOLDERS

Delivering sound statistics means working with diverse groups of individuals, organizations and countries to ensure that the MICS tools fit their purposes while still retaining cross-national comparability. Country officials such as national statistical offices, ministries of health and non-governmental organizations have a profound effect on shaping the content of MICS questionnaires, on how technical assistance is provided and on the kinds of quality assurance mechanisms that are delivered by the MICS programme. As of mid-2015, the programme has worked with more than 100 countries on close to 300 surveys, including ongoing surveys. (*See Map 2.1 and List of MICS Surveys in the Annexes.*)

The demand for MICS surveys has changed dramatically from a largely low-income country demand to demand from a spread of low-, middle- and high-income countries. In MICS1, close to 70 per cent of countries that joined the MICS programme were low-income. In MICS2, this percentage fell to 60 per cent and by MICS3, about half of the countries were low-income. This decline continued into MICS4 and MICS5. Meanwhile, the share of lower-middle, upper-middle and even high-income countries rose. Lower-middle and upper-middle countries accounted for only 31 per cent of the surveys in the first round; by MICS5, more than 70 per cent of the surveys were from these settings (*see Figure 2.6*). It should be noted that globally, the distribution of countries by income status throughout the past 20 years has changed as more countries become middle- and high-income.

Since 1995, MICS has worked with 108 countries on 296 surveys

MAP 2.1
MICS IMPLEMENTATION FROM 1995–2015
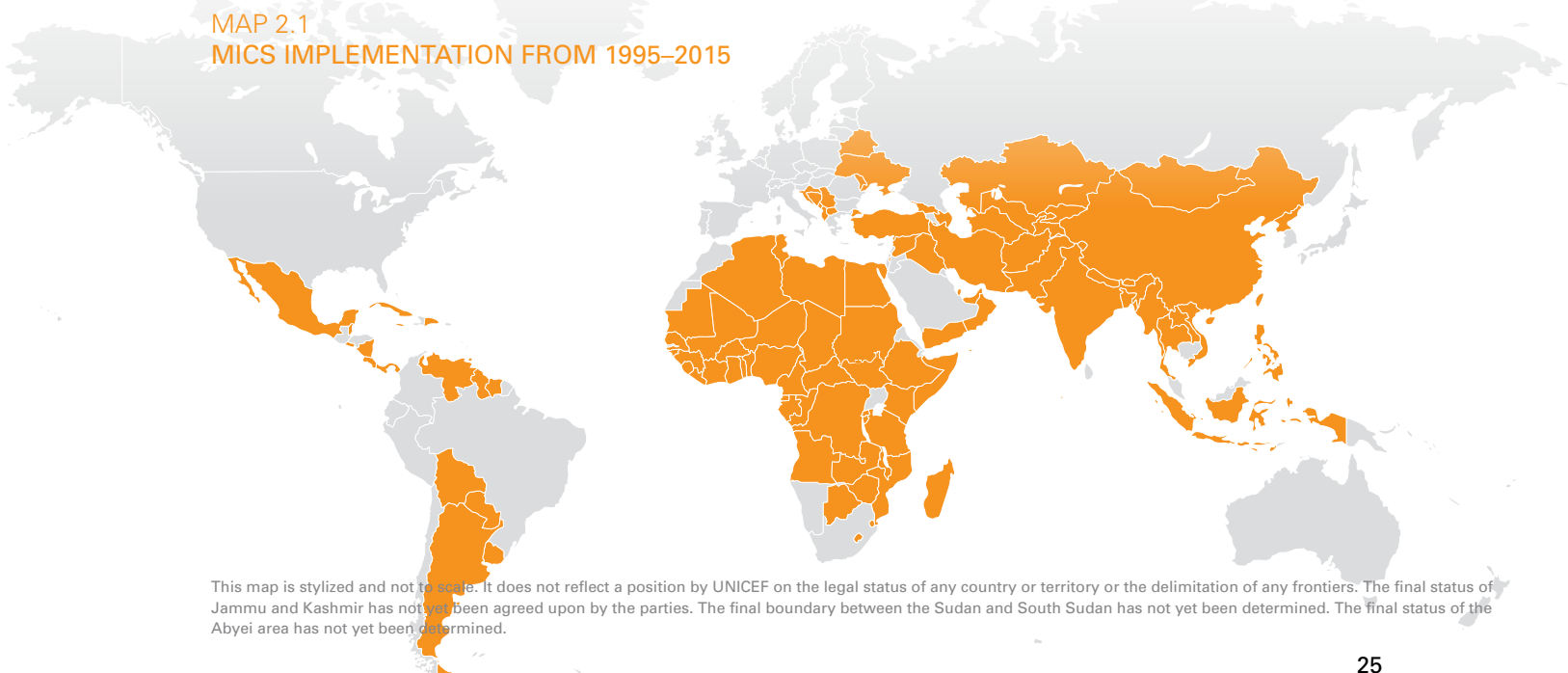
This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area has not yet been determined.

The MICS programme works with an ever-increasingly diverse set of countries

	MICS1	MICS2	MICS3	MICS4	MICS5
HIGH			1	4	2
UPPER-MIDDLE	3	6	5	18	16
LOWER-MIDDLE	17	20	20	21	23
LOW	44	39	27	17	13

LOW   LOWER-MIDDLE   UPPER-MIDDLE   HIGH
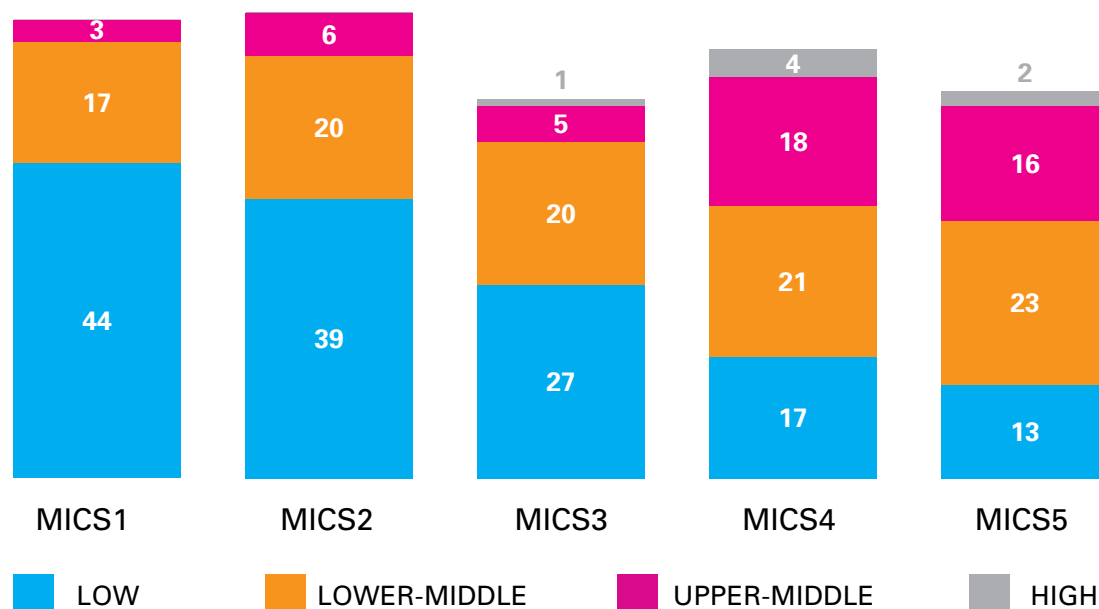
* Refers to the income level of the country at the time of the survey.

Apart from the numbers of countries, the MICS programme is well represented across the globe, with a diverse set of countries joining the programme in each round. Countries in Western and Central Africa (WCA) have traditionally been highly represented in the MICS programme, and continue to be a major focus for the programme. Across the five rounds of MICS, there are considerable numbers of surveys in East Asia and the Pacific (EAP), the Middle East and North Africa (MENA), and South Asia (SA) (*see Figure 2.7*). At the start of the MICS programme, there were relatively few MICS surveys in Latin America and the Caribbean (LAC) and Central and Eastern Europe and the Commonwealth of

Independent States (CEE/CIS). However, over time, the share of surveys in both regions grew as more middle-income countries sought to gain experience with a global survey programme as well as new insights into the latest thinking on survey methodology. Today, the share of these two regions is comparable with that of WCA, which, however, consistently has remained the largest.

Country demand for surveys has undeniably transformed MICS into an ongoing survey programme. Initially, MICS were timed in part by the global need for data, and were conducted when UNICEF provided tools and technical assistance to countries. The first two

rounds of MICS were specifically designed to monitor the Mid-Decade and End-Decade WSC Goals and, as such, were implemented around 1995 and 2000. MICS3 followed this pattern of implementation with the majority of surveys in 2006, mainly due to the need to monitor the WFFC goals. Technical assistance was also provided before and during this time, essentially creating discrete 'rounds' of surveys. However, as statistical planning mechanisms in countries increased ownership and responsibility of the fuller scope of data generated and the demand for more frequent monitoring of key indicators grew, the timing of the surveys became largely driven by national priorities (*see Figure 2.8*).

All regions participate in MICS, with recent growth in Latin America and the Caribbean as well as Central and Eastern Europe and the Commonwealth of Independent States
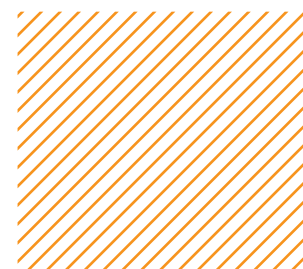
| | MICS1 | | MICS2 | | MICS3 | | MICS4 | | MICS5 |
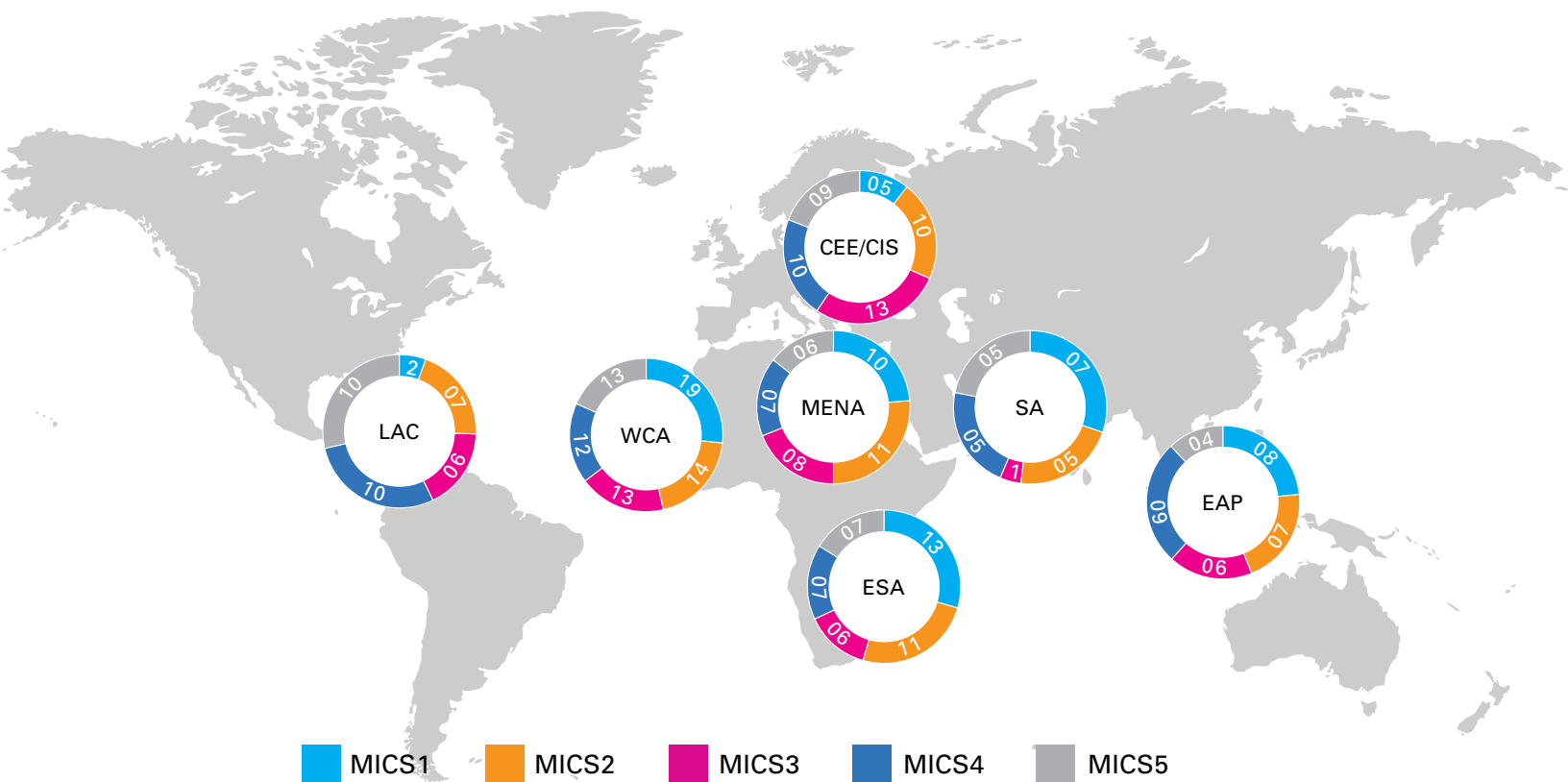
CEE/CIS	Central and Eastern Europe and the Commonwealth of Independent States
EAP	East Asia and the Pacific
ESA	Eastern and Southern Africa
LAC	Latin America and the Caribbean
MENA	Middle East and North Africa
WCA	West and Central Africa
SA	South Asia

UNICEF now supports surveys on an ongoing basis. This is reflected in Figure 2.8, which shows that peaks in survey implementation around 1995, 2000 and 2005 were replaced by a fair number of surveys every year thereafter. However, smaller spikes in implementation expectedly still correspond to when a new round is initiated. Each round is marked by innovations such as new indicators and protocols. However, the notion of a 'round' is now deemphasized given that MICS provides continuous support to countries. Throughout the past 20 years, MICS worked to implement surveys with about 14 countries per year. In MICS5, the rate of survey implementation increased to approximately 18 surveys per year.

MICS is also recognized as a flexible tool for monitoring, where questionnaires and survey designs can be adapted to reflect the needs of the country. Some details of two surveys, in Cuba 2010–2011 and Sierra Leone 2010, are shown in Table 2.2 below. The MICS in

MICS is now an ongoing survey programme, with surveys implemented every year

FIGURE 2.8
FIELDWORK YEAR FOR SURVEYS, 1995–2015

NUMBER OF MICS SURVEYS
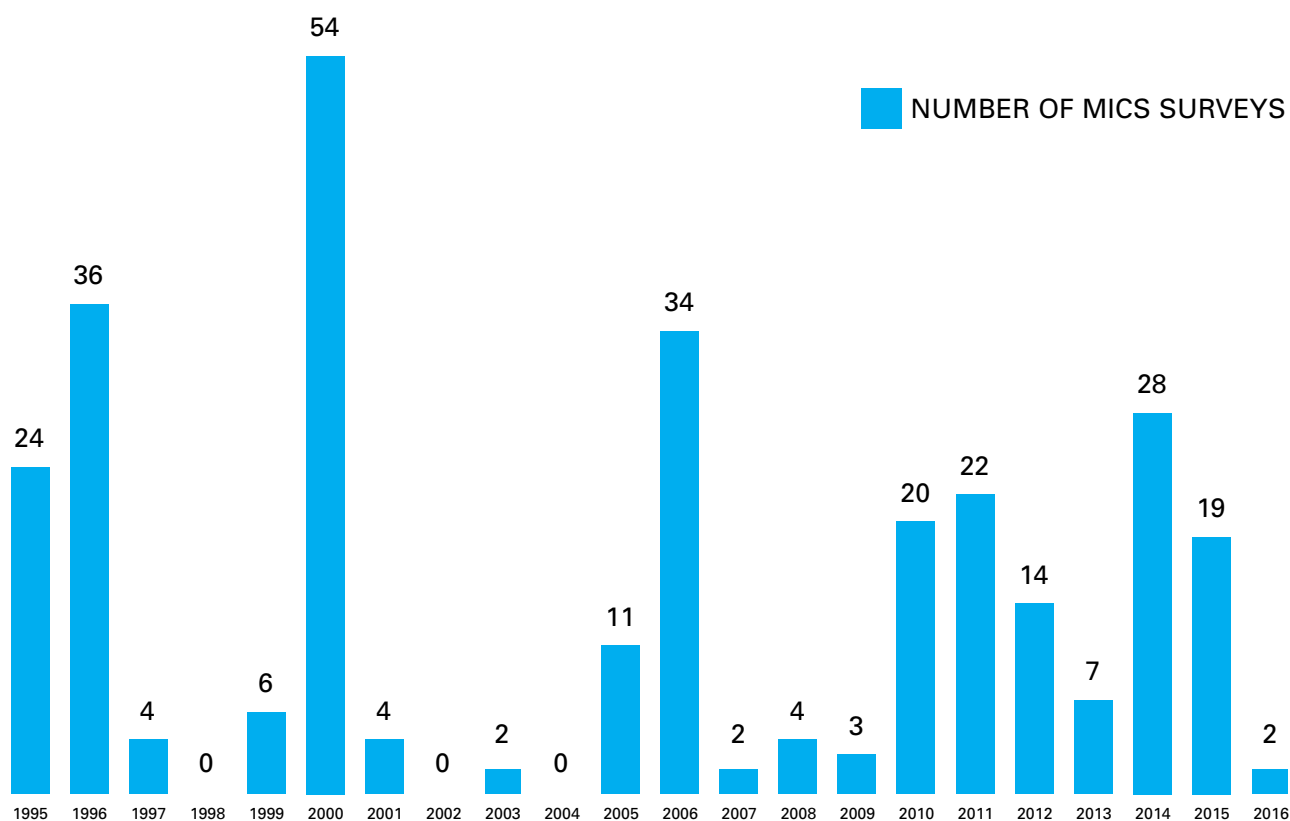
* Each year indicates the calendar year of when fieldwork for the survey ended. For surveys in 2015 or 2016, the year indicates completed fieldwork or surveys projected for fieldwork in that year.

28

Cuba 2010–2011 (as well as the previous MICS in 2006) recognized that due to the low levels of fertility in the population, the usual two-stage sampling methods recommended in MICS would yield low sample sizes for this population. In collaboration with the MICS programme, the design for Cuba oversampled households with children under the age of 5, thereby boosting the sample of the population. The Sierra Leone 2010 MICS, due to higher levels of fertility, did not have this issue and used the standard sample design. In terms of questionnaire content, Cuba focused on a limited number of modules for children and women, while the questionnaires for Sierra Leone collected a wider panorama of data.

The MICS programme adapts well to the country situation through innovative sampling and questionnaire approaches

TABLE 2.2
COMPARISON OF COUNTRY ADAPTATIONS OF MICS

SURVEY	CUBA 2010–2011 MICS	SIERRA LEONE 2010 MICS
Sample design	Oversampling of households with children under the age of 5 (due to low fertility)	Typical two-stage sample design
Questionnaire content		
Household Questionnaire	Household listing Education Water and sanitation	Household listing Education Water and sanitation Household characteristics Insecticide-treated nets Child discipline Handwashing
Individual Woman's Questionnaire	Woman's background Child mortality Desire for last birth Newborn health (omission of maternal health indicators) Illness symptoms Contraception Unmet need Marriage/union Sexual behaviour HIV and AIDS	Woman's background Child mortality Desire for last birth Maternal and newborn health Illness symptoms Contraception Unmet need Female genital mutilation/cutting Attitudes towards domestic violence Marriage/union Sexual behaviour HIV and AIDS
Children under 5	Age Breastfeeding Care of illness Immunization	Age Birth registration Child development Breastfeeding Care of illness Malaria Immunization Anthropometry

FROM IDEAS TO QUALITY MEASUREMENTS: METHODOLOGICAL WORK AND INNOVATIONS

As the monitoring needs of countries and the global community have changed in fundamental ways throughout the past two decades, the MICS programme has progressively reflected these varying needs by working with countries and other partners to identify suitable indicators, develop new questionnaires and protocols and test these under rigorous field conditions.

Indicator selection and module development: From desk reviews to field testing and pilots

New indicators are added to MICS based on several criteria. Indicators must be clearly defined, and should be relevant and useful for global application. Indicators should also reflect population needs that can be actionable at the policy level. Country-level and global advocacy play an important part in creating the demand for new indicators in MICS. Regional and country-level advocacy for the inclusion of indicators into the standard MICS tools ensures that MICS reflect the current realities and priorities of countries. Such efforts have resulted in the development and addition of modules related to adolescents, including early childhood development,

life satisfaction, tobacco and alcohol use and the use of mass media.

The MICS programme is also proactive in reviewing global measurement needs and maintains close contact with a number of specialized inter-agency and technical working groups on various thematic areas. For work in emerging areas, MICS and other UNICEF staff are able to convene such groups to develop new areas of work that can satisfy global and country needs. In general, these groups advise on the specific areas of measurement, while the MICS programme provides the technical expertise for developing the tools and standards to meet these needs.

Before an indicator can be included in the standard tools of the Global MICS Programme, a number of steps are usually followed to ensure that the resulting instrument is able to meet scientific rigour. First, indicators are defined on the area of work, often to suite specific targets, goals, areas of concern and policy. Following this, the existing tools and approaches previously used to measure these indicators are reviewed to examine if these are complementary to existing MICS tools. Draft tools are then defined based on these and tested in the field. At times, several field tests are needed to examine how the tools perform, both from a methodological point of view as well as from a statistical point of view. Finally, when the tools are close to finalization, they are piloted within a MICS context with the aim of understanding how they perform in such a context and how they blend with the existing structure.

As the start of each round of MICS provides the opportunity to revisit the existing tools, the MICS programme typically has a global pilot survey

and then launches the indicators and questionnaires for the round. Historically, these pilots have yielded invaluable experiences and changes. Few data exist on the pilots for the earliest rounds of MICS, but there are extensive reports and media footage for the past two to three rounds. The MICS4 pilot in Mombasa, Kenya, for example, resulted in key recommendations for the MICS programme, including the inclusion of a dedicated measurer for anthropometry. Systematic observations and analysis of data also showed that the entire household questionnaire should be administered to only one respondent, rather than selecting different respondents for various modules. In addition, the MICS5 pilot in Bogra, Bangladesh, tested a new protocol for testing water for *E. coli* and produced consistent observations that the proposed questionnaire for men would function well within MICS. The pilot also verified that the selection of a single child for the new Child Labour module would perform well in the field as well as in analysis. Field observations also supported the exclusion of a short module on consumption which performed well technically but was difficult to adopt in practice.

Innovations, equity and MICS

In today's data-driven world, the MICS programme is more than a monitoring tool. Instead, the surveys are a fundamental instrument to identify key characteristics of children and women who are most vulnerable and in need of programmatic intervention. In the recent past, UNICEF began to refocus programming to ensure that the most disadvantaged are reached by interventions. Countries responded

strongly in favour of this strategic move and of quality data with an 'equity lens', changes which remain in high demand.

The MICS programme supports the equity agenda in a number of ways. The first is through the analysis of data. The earliest surveys, for example, provided national and sub-national estimates of key indicators. In MICS2, analysis of data in country reports expanded the range of background variables that could be used for equity analysis. These included the disaggregation of data by geographic region, urban/rural residence, age and mother's educational level. In subsequent rounds of MICS, the number of background variables for equity analysis expanded further. Data from some MICS2 included the ownership of household assets and goods that could be used to create a rudimentary household wealth index. In MICS3, MICS4 and MICS5, however, an increasing list of assets was included to improve the ability of surveys to discriminate varying levels of household wealth, which is now fundamental to monitoring the equity agenda. Additionally, household wealth status can be combined with other characteristics in the MICS datasets to allow for even greater understanding of coverage gaps in countries and how these are improving. For example, analysts can create population subgroups such as urban-poor and compare these with urban-rich or rural-poor, relating the categories to indicators on child health (*see Figure 2.9*). Further, MICS data are one of the largest sources of data for in-depth global and country equity analysis, such as the Multidimensional Poverty Index (produced by Oxford Poverty and the Human Development Initiative), the UNICEF Multiple Overlapping Deprivation Analysis and the Bristol

method of poverty measurement. Such analysis of MICS data further our understanding of the situation of children and women, in particular, in understanding inequities and identifying the most vulnerable.

Ensuring that the most vulnerable are represented in data is a statistical challenge. Typical sampling strategies do a good job of representing major population groups. However, special populations that are usually small in number are usually under-represented in sample surveys, limiting the amount of analysis that can be done. Recognizing the need to have data on special populations, the MICS programme introduced oversampling of these populations in a number of countries. In the majority of the CEE/CIS surveys, oversampling of households with children under 5 is routinely undertaken to ensure larger numbers of observations on this critical population group, which would otherwise yield insufficient numbers of observations with given sample sizes due to low fertility rates. In Latin America, oversampling indigenous and afro-descendant populations were introduced in MICS4 and MICS5 to ensure that sufficient samples were available for the analysis of disparities facing these populations. While this

MICS data are paramount for finding pockets of inequalities within countries

FIGURE 2.9
ANTENATAL CARE COVERAGE IN NIGERIA, MICS 2011

FOUR OR MORE ANTENATAL CARE VISITS

© UNICEF/NYHQ2006-0027/Bannon
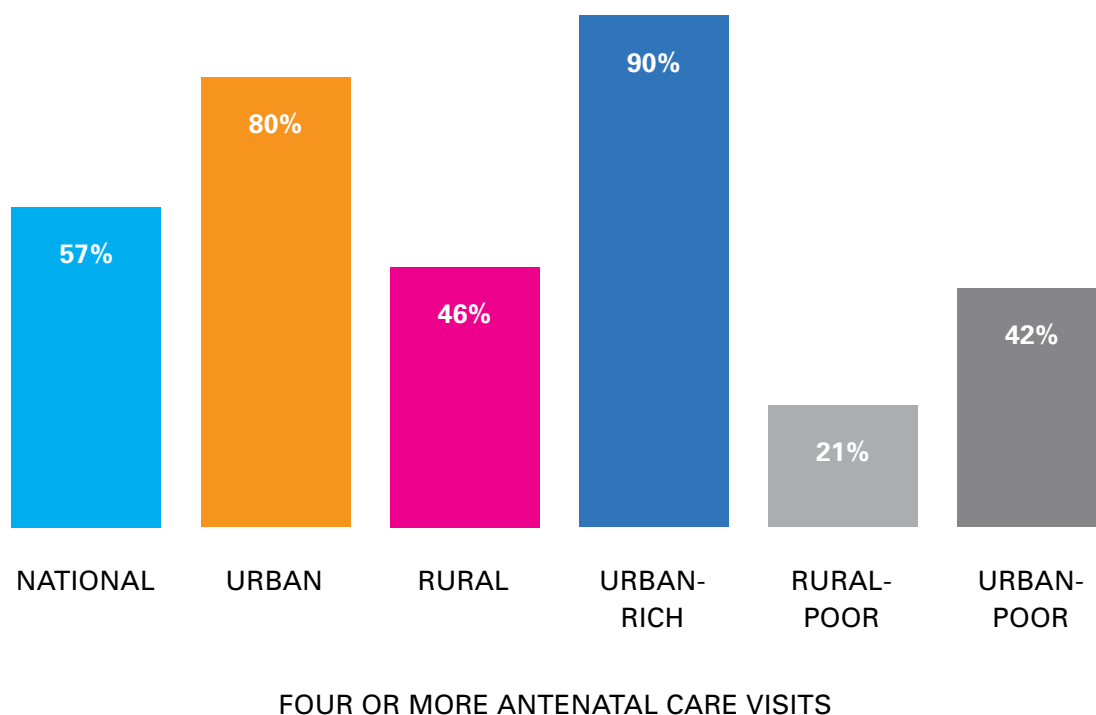
sampling approach is not new, the novelty to the MICS programme expands on the usefulness of MICS as a monitoring tool and moves MICS a step closer to gathering data on all.

At times, oversampling of populations is neither sufficient nor advisable due to various considerations. In these cases, the MICS programme has worked closely with countries to develop special stand-alone surveys on populations of interest. In MICS1, there were three such surveys: a MICS survey that covered 20 districts in Kenya, and two separate surveys in Somalia – one for the North West Zone and one for the North East Zone. In MICS2, there were two surveys on Palestinians in Lebanon and the Syrian Arab Republic, along with sub-national surveys in Sudan (North) and Afghanistan (East, and another for eight provinces). By MICS4, there were 13 surveys for sub-national areas of countries, 4 of which were for special populations. In particular, MICS surveys on the Roma population ensured that this highly ignored population group gained visibility data-wise and had a

voice in the statistical world. In MICS5, sub-national surveys on vulnerable/ special populations account for close to 25 per cent of all surveys in the round (*see Figure 2.10*).

New technologies are providing extraordinary opportunities for data collection. Recent years have witnessed an unprecedented demand for using mobile devices for data entry. Seizing this challenge, the MICS programme experimented with mobile data collection in a number of countries throughout MICS4. The Costa Rica MICS 2011 was the first MICS to fully use this mode of data collection. Currently, the MICS programme provides guidance on the specifications for mobile devices, produces and shares standard Census and Survey Processing System (CSPro) programmes for data entry in mobile devices, and has guidelines for customization of this software and on how to implement such data collection in the field. By the end of MICS5, about one third of surveys will have used tablets and other mobile devices for data collection.
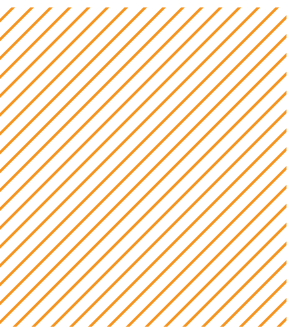
With the heightened demand for data to identify the poorest and most deprived, a growing proportion of MICS surveys are implemented at the sub-national levels or exclusively for vulnerable populations

	MICS1	MICS2	MICS3	MICS4	MICS5
SUB-NATIONAL/SPECIAL POPULATION	3	5	4	17	12
NATIONAL	61	60	49	43	42

NATIONAL   SUB-NATIONAL/SPECIAL POPULATION

© UNICEF Barbados/2012/Nartea
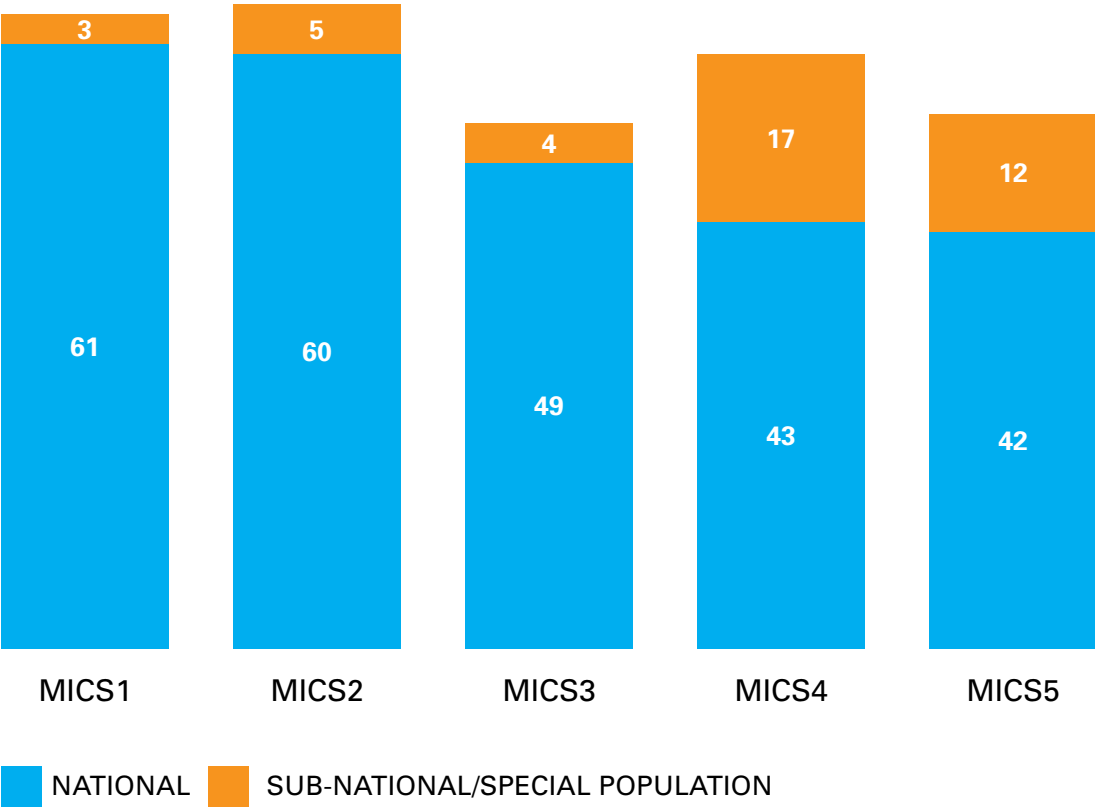
WORKING WITH COUNTRIES FOR SURVEY IMPLE-MENTATION

While MICS has a clear normative role in monitoring at the global level, the core work of the programme is to support countries in producing sound data on the situation of their children and women. MICS provides a series of tools for countries to use as part of a technical assistance system. These tools are subject to high levels of scientific scrutiny and rigorous testing in an effort to ensure that quality measurements are made. An elaborate technical assistance framework incorporates hands-on attention to all steps of the survey from experts at the country, regional and global levels. The MICS tools are standard in nature and require countries to customize them to fit the needs of their situation while still ensuring comparability with other countries. To coordinate this delicate balance of interests, the MICS programme has always provided technical assistance and tools to countries.

Regional workshops are one of the hallmarks of the MICS programme. These workshops are hands-on and product-oriented, and are used to strengthen capacity and work directly with a select group of country staff on survey implementation, data processing and reporting. The workshops cover all stages of survey implementation and are focused on creating country-specific adaptations of standard MICS tools to be used in the participating countries. In recent years, regional workshops are not always possible, because surveys are implemented on an ongoing basis

and, at any given time, too few countries within a region may need technical assistance. For this reason, additional global workshops where countries from different regions attend are also organized when necessary.

Certainly, the MICS programme has ramped up the level and kinds of technical assistance to countries over the past five rounds. This scale-up results from the conclusions of evaluations of the MICS programme at the end of each round and takes into consideration the numerous demands of an ever-changing base of countries that join the programme and need varied and specialized support. The evaluations point out that countries organize better surveys, generate better data and use the data from MICS when UNICEF is more involved in the survey process.

In the earliest rounds of surveys, limited technical assistance was provided to countries through UNICEF field offices and UNICEF headquarters. While MICS1 was a success in pioneering the collection of data on a large scale, issues such as inadequate sampling and lack of planning for fieldwork resulted in recommendations to improve the MICS Manual, especially with regard to sampling, provision of technical training and assistance for data processing and extension of training for field workers. Further evaluations of MICS emphasized the need to provide direct assistance to countries.

During MICS3, regional MICS coordinator posts were created in some UNICEF regional offices and were tasked with providing technical assistance and quality assurance to countries implementing the surveys in the region. Today, all seven UNICEF regions have a regional MICS coordinator who manages the provision

of technical assistance to countries and the implementation of surveys.

Further, the independent evaluation of MICS4 showed that the MICS focal points in UNICEF country offices were usually unable to provide dedicated follow-up on a day-to-day basis and thus recommended appointing UNICEF MICS consultants at the country level who could work directly with the implementing agencies/governments and bridge communication with the MICS coordinators in the regional offices. Finally, regional MICS coordinators employ a team of three types of expert consultants for i) household surveys, ii) sampling and iii) data processing, who work with the countries by reviewing documents and procedures and examining if countries meet guidelines, both on- and off-site. In a few regional offices, the regional MICS coordinators are supported by an additional UNICEF staff member. The team at the regional office and the country office focal points are supported by a team at UNICEF headquarters that is tasked with developing standards and guidelines, as well as with the overall functioning of the MICS programme.

The fifth round of MICS provides all of the above elements. At the country level, UNICEF recommends the use of a full-time MICS consultant to work directly with the implementing partners. Work done at the country level is reviewed by the regional MICS coordinator and the regional team of experts in sampling, survey and data processing specialists. Ultimately, these documents are also reviewed by UNICEF headquarters, which has specialized skills in all areas of survey work. The constant and reciprocal reviews of documentation from the surveys are used as mechanisms to ensure the highest standards of quality in all aspects of MICS.

MICS tools in focus

The MICS programme develops and supplies a comprehensive set of tools to countries to support survey implementation. These tools are intended to guide countries throughout all stages of survey implementation. An important characteristic of these tools is that they are developed at the global level but need to be customized to fit the situation of countries without compromising the comparability of data from one country to another. The tools are related to survey design, data collection and processing, analysis, report writing and dissemination (*see <mics.unicef.org>*). Throughout the past two decades, the scope, quality and availability of tools have seen substantial growth and improvements.

The growth of the suite of MICS tools

MICS shares a number of tools to facilitate the survey process. These tools include indicator lists, sampling guidelines, reporting templates, manuals and data processing programmes. What has been clear over the past 20 years of the MICS programme is the tremendous growth and the continuous process of improvement in the availability of tools to countries.

The first MICS manual, 'Monitoring Progress Toward the Goals of the World Summit for Children: A practical handbook for Multiple-Indicator Surveys', was published in January 1995 and designed for survey managers and survey implementing partners. The manual was soon expanded in MICS2 to include additional chapters for such topics as instructions for supervisors, tabulation guidelines, and indicators

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for global reporting. MICS3 continued the process of expansion and included a new set of instructions for editors. While MICS4 produced a manual, no print version was produced – instead, due to the increased access to and use of the internet, an electronic manual was provided online. This facilitated rapid revision, updating and inclusion of new topics. MICS5 continues to rely primarily on the dissemination of MICS tools through the internet under <mics.unicef.org>, as opposed to the single-volume manual approach. Today, tools and templates for sampling, reporting, hiring of consultants, budgets, supplies procurement, survey planning templates and more are available. The vast majority of tools are available in Arabic, English, French, Russian and Spanish from <mics.unicef.org>. A summary of the current tools is presented in the Annexes (*see List of MICS5 tools*).

Questionnaires have also experienced a progression from fairly modest structures to more complex formats. These changes have been essential to increase the number of indicators and refine the measurements of other indicators in the MICS tools. In MICS1, data were collected essentially through a list of 17 questionnaire modules. This changed in MICS2 to become separate questionnaires for the household, women and children under 5. MICS3 followed this pattern and also included a number of optional modules. The optional modules were separate topical modules that countries could select for use, and included topics such as maternal mortality, child discipline, attitudes towards domestic violence, and child development. MICS4, due to increased demand for data on men, added a separate individual men's questionnaire. One additional questionnaire form for vaccinations at health facilities was also made available. This form is used in countries where the vaccination cards of significant numbers of children are kept at health facilities. Survey teams are expected to visit health facilities and complete the form. A second form on child disability, which was an optional module in the MICS3 household questionnaire, was made available but only to be used where medical assessment would occur following the survey. The MICS4 module on child disability was later removed, as few countries pursued recommendations to follow up survey work with medical assessment of the children. MICS5 also uses four questionnaires, as seen in Figure 2.11.

MICS uses four main questionnaires

```
              ┌──────────────────────────┐
              │  HOUSEHOLD               │
              │  QUESTIONNAIRE:          │
              │                          │
              │  ANY ADULT MEMBER        │
              │  AGE 15 OR OLDER         │
              └──────────────────────────┘
```

QUESTIONNAIRE FOR INDIVIDUAL WOMEN: ALL WOMEN AGE 15–49	QUESTIONNAIRE FOR CHILDREN UNDER 5 (MOTHERS; CAREGIVERS IF MOTHER IS DECEASED OR LIVES ELSEWHERE): FOR ALL CHILDREN AGE 0–4	QUESTIONNAIRE FOR INDIVIDUAL MEN: ALL MEN AGE 15–49 IN ALL OR A SUB-SAMPLE OF HOUSEHOLDS
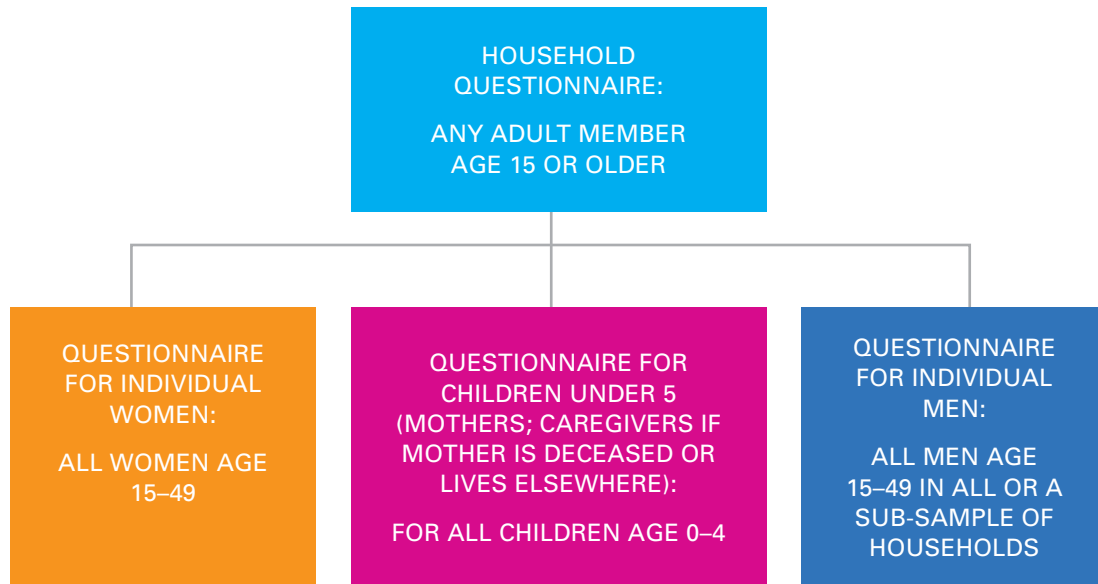
The additional 'Vaccination Records at Health Facility' form is available for certain countries and is essentially the same as MICS4's 'Vaccinations at Health Facility' form. A summary of the progression of questionnaires and modules used in MICS is presented in the Annexes (*see Questionnaires by MICS round*).

From MICS2 to the present, questionnaires from MICS have been shared and jointly reviewed with the DHS programme. This kind of collaboration has improved the consistency across the two programmes and has fostered greater harmonization on questionnaire design approaches. Hence, for a country that implements a MICS followed by a DHS, or vice versa, the majority of indicators from both programmes are comparable and trend data can be generated with little, if any, concern for comparability.

Increasing standardization and comparability

While the size and sheer number of survey tools have grown since 1995, the tools themselves have promoted the collection of the same indicators in the same way, a process which ensures that data from one context to another are comparable. This process of standardization, which began in the earliest phases of MICS and continues to the present phase, impacts all stages of survey work.

Statistical sampling in MICS lacked comparability in the first round of surveys but is now standard across countries. In MICS1, countries were given the option to use a 'random walk' method to select households during the second stage of sampling. This method might have involved interviewer judgement about a direction to follow

and might not have been completely random in nature. Hence, the design would not produce a probability sample. This implied that estimates were not comparable across countries in terms of sample design. Therefore, from MICS2 onward, this and other non-probabilistic methods were not recommended to ensure that estimates were indeed representative of the country and to foster cross-country comparability. Currently, MICS uses a two-stage design, first selecting Census Enumeration Areas and then households. These are usually not self-weighting samples; sample weights must be designed and used to produce indicator estimates. To promote the standardized approach, tools to calculate sample sizes, determine the number and size of clusters, map and list households, select households in the sample, and, later, generate the sample weights are available for countries to use. (*See List of MICS5 tools in the Annexes.*)

With a plethora of indicators in a survey, the way results are presented can vary widely across countries. The MICS programme provides reporting templates to facilitate the efficient production of documentation on the results of surveys as well as the comparison of data across different surveys over time. As the templates are standardized, results from one survey can be compared with those of another. MICS1 did not provide an explicit reporting template, although it gave guidelines for producing a 'Preliminary Report', as well as a 'Full Survey Report' with examples of graphs, tables, descriptions of the components of reports, and guidelines on how to report the indicator estimates. From that time to the present, reporting templates have become standard and from one round to another, newer reporting guidelines have built upon previous versions, fostering the ability of readers to compare data across reports and over time. Reports themselves grew tremendously, from a mere 42 tables in MICS2 to 184 in MICS5. Details are shown in the Annexes (*see Reporting templates in MICS*).

Data processing has been an area where standardization of approaches has allowed UNICEF to provide uniformly high levels of support to countries. In MICS1, EpiInfo and the Statistical Package for the Social Sciences (SPSS) were used for data entry and data analysis, respectively. In MICS2, the Integrated System for Survey Analysis (ISSA, then used in DHS surveys) was also provided as an option to countries in addition to EpiInfo and SPSS, although countries were more familiar with the Integrated Microcomputer Processing System (IMPS), a survey and census data processing programme. By MICS3, CSPro was produced through a collaborative effort of IMPS and ISSA. The MICS programme decided to provide standard applications in CSPro henceforth, a decision that has allowed UNICEF, in essence, to 'speak' the same programming language as the countries. The DHS also uses CSPro, which promotes the exchange of technical materials across the two survey programmes and further harmonization of approaches and calculations.

Ethics in MICS: The human responsibility

As one of the globe's largest sources of data on children and women, the MICS programme has a tremendous responsibility to ensure the recognition, protection and respect for the rights of children and women, who are the emphasis of the surveys. The programme endeavours to ensure that the survey process minimizes risks to participants and that any risk – perceived or real – is outweighed by the potential benefits of the data collection exercise. In recognition of these issues, over the past 20 years, the MICS programme has strived to ensure the ethical collection of data from respondents. The right to privacy, the need for informed consent and responsibilities that arise when potential health problems are uncovered are several of the key issues that were identified in MICS1 and that, to this day, are implemented in the surveys. Surveys should meet country-level ethical review and approval as directed by laws in the country. Information provided during interviews is confidential; records are securely stored and data files do not include names of participants nor the locations of where participants live. Confidentiality is particularly important during fieldwork; interviewers are advised not to discuss interview results with others, and editors who have access to all questionnaires should review these in private.

Participants in surveys must be made aware of the content of the survey to which they are asked to provide informed consent, which may in some cases be written. Before starting the survey, coordinators should plan the type of feedback that will be given to communities. Overall, the number of interviews per community is too small for statistical validity, although even some general feedback is often appreciated by local authorities (for example, that 30 of the 40 children in the village had not been vaccinated). If possible, this type of feedback should be given before the interview team departs for a new community.

In 2015, UNICEF established ethical standards for research, evaluation and data collection and analysis, thereby creating minimal and binding standards for the conduct of ethical research. An initial review of these documents shows that the MICS already meets many of these guidelines, although further strengthening of the guidelines into the usual MICS implementation process will be done. These changes will improve informed consent procedures for survey respondents – especially for those regarded as minors by each country – and place additional emphasis on ethical interviewing during fieldwork training.

Data, monitoring and the policy environment

No discussion on data can be complete without examining if the data are used and are useful to inform positive change for children and women. Globally, MICS data have gone from being used as tools to inform global initiatives to being used for wider purposes, with greater country ownership and analysis. MICS data are particularly persuasive and powerful when used in countries, by countries. Map 2.2 and the interviews with national counterparts and UNICEF country offices detail some of the ways in which the surveys have affected countries.

From these sources, several general patterns emerge. MICS are often used to generate official statistics. This is exemplified by Zimbabwe, where MICS data served as the main data source for reporting on the MDGs. For several of the countries listed in Map 2.2, MICS is the major source of data on children and women. This is particularly true in Barbados and St. Lucia, where data on children and women were scarce prior to MICS and where few international household survey programmes were present. Apart from generating official statistics, MICS has been consolidated into the national and sub-national plans of countries. One such example is Mongolia, where MICS receive funding from the national Government on a planned basis. Further, in Punjab, Pakistan, MICS is used to report on outcomes at the sub-national level and funding for programming is linked to MICS results.

Countries have also used MICS in novel ways. As cities grew in sub-Saharan Africa, Ghana and Senegal used MICS as a means to examine child and women's issues in their capitals.

MICS data have also been used to validate other official sources of data. In Costa Rica, immunization rates from MICS were compared with national administrative sources. The results revealed an expected under-estimation of the administrative sources, and helped to quantify the differences. In Nepal, the 2014 MICS was used as an important pre-earthquake baseline on how children and women lived in the country. MICS data are also key to identifying vulnerable populations. In Bosnia and Herzegovina, Serbia and the former Yugoslav Republic of Macedonia, data from MICS are paramount for creating a reliable viewpoint of the Roma populations, which show large vulnerabilities in key outcomes related to the well-being of children and women.

Further, many of these important results have been widely disseminated at the international, national and sub-national levels. In Costa Rica, a national analysis forum set the scene for revealing findings of the MICS, while in Punjab, Pakistan, sub-national workshops were held to inform officials of the results of MICS and how to further use the results. In Zimbabwe, a special 'child-friendly' report on MICS findings was generated and used to ensure that the rights holders – children – were informed on how well their country performed on key topics.

MAP 2.2
USING MICS ACROSS THE GLOBE

Barbados and St. Lucia: Small Island Developing States adopt MICS.

Côte d'Ivoire, Mali and Nigeria: In recent years, MICS and DHS have alternated, resulting in impressive time trends and a wider panorama on the situation of children and women.

Tunisia: Using MICS data to identify vulnerable children with multiple and overlapping deprivations (Multiple Overlapping Deprivation Analysis).

Nepal: Following the devastating 2015 earthquake, the Nepal 2014 MICS served as a key pre-emergency baseline for recovery efforts.

Costa Rica: Using MICS to validate coverage of administrative systems on immunization.

Accra, Ghana, and Dakar, Senegal: With increasing urbanization in sub-Saharan Africa, Ghana and Senegal have used MICS as a means to monitor urban trends in their capital cities.

State of Palestine: MICS, operating in a country in conflict, uncovered striking coverage gaps in access to drinking water in the Gaza Strip.

Bosnia and Herzegovina, Serbia and the former Yugoslav Republic of Macedonia: MICS is the main tool to develop a robust profile on the Roma population, a vulnerable and under-served population.

This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area has not yet been determined.

ZIMBABWE: ADOPTING MICS TO FILL NATIONAL DATA GAPS

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INTERVIEW DATES

▶ 18 June 2015, 25 June 2015

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The 2014 MICS is the second MICS in Zimbabwe. Tell us about the decision to do a second MICS.

ZIMSTAT: A few years prior to 2009, the country was facing economic challenges that also affected the provision of statistics. In other words, there was a serious gap of data for evidence-based programming, monitoring and evaluation. MICS 2009, the first MICS we implemented, was a welcomed development for most stakeholders in the social sectors, as it was intended to fill these data gaps.

By 2014, stakeholders were already aware of the benefits of MICS and did not need any convincing, but, rather, were ready to contribute to the needs of the country. We needed a tool to measure national progress on the MDGs. This needed to happen in 2014 for us to finalize our country report on MDG progress in 2015. MICS was our strategy for this. Since it is comparable with the previous MICS and other surveys, it was invaluable to provide the panorama on the situation of children and women in Zimbabwe. In fact, MICS is the source document on end-line progress towards the MDGs.

UNICEF Zimbabwe: Data are key for the Government of Zimbabwe (GoZ), so much so that the GoZ included data collection through the MICS as part of their cooperation with the UN in the Zimbabwe United Nations Development

Action Framework (ZUNDAF). This second MICS was planned as a way to inform the GoZ and UNICEF on what progress and pitfalls the country had made since the 2009 MICS. Since the crisis in Zimbabwe, donors provided a great deal of transition funding, especially in health, education and child protection issues. One of the main necessities of the GoZ is to provide evidence of progress and link this to funding. We found that MICS was a timely and important means to gauge the progress on these areas.

From the side of UNICEF, we were ending the country programme and, accordingly, we needed to find precise baseline data for the next programme cycle. The DHS does operate in Zimbabwe, but is not planned until 2016. This would mean that the GoZ and UNICEF would not have timely data for planning purposes and, even so, the DHS does not cover certain issues, such as child protection issues, which the MICS covers.

So, MICS was used as a mechanism for collecting data for a diverse set of needs, including the MDGs. Has MICS delivered on these issues?

ZIMSTAT: Most certainly. MICS results are critical for showing areas that need work, building the case for further social investments and sustaining past gains. MICS has also identified areas of the unfinished agenda that currently need additional attention.

As a national tool, MICS is the reference document for MDG monitoring and is invaluable for this purpose. MICS has even been quoted at highest levels in the land, especially on child issues. Without MICS, Zimbabwe would simply not have updated data for tracking progress.

UNICEF Zimbabwe: We are currently using MICS data to do more than tracking indicators. The data are being analysed with an equity lens to identify who are the most vulnerable in the country and what the situation of these children and women are. We are also looking at the role of religion on child and women outcomes, which we can use to design and inform programming and tailor messages for policy advocacy. Of course, it also goes without saying that MICS data are the cornerstone of the new CPD, which is a document that the GoZ and UNICEF share ownership over.

Now that the final report has been launched, what are some of the benefits and lessons learned from the MICS experience?

ZIMSTAT: The benefits are huge. The Survey Management Team is more or less the same as that of 2009, hence, experience is now there. The base for local consultants for writing MICS reports is growing, since the one who wrote the 2014 report is different from the 2009. As a Government, we benefited from UNICEF staff and consultants visiting and validating our work and knowing that we can discuss with them technical issues. We sent teams to different regional MICS workshops, where the teams were able to fully learn the system and strengthen certain skills in survey methodology. Finally, based on MICS recommendations, we included committees to oversee the process. Apart from subject matter ministries such as Health, we even included the media as a member. Due to this, we are able to keep everyone actively involved in the process and when the results came out, the media who accompanied the process was instrumental in sharing findings even at the regional level.

UNICEF Zimbabwe: National ownership is key to make the MICS happen and to ensure that the key players in the Government and users of the data are always engaged in the process. ZIMSTAT really took ownership over MICS and invested in the process by appointing a number of staff to work on MICS. UNICEF played more of a facilitating role, though the technical work from MICS was key to making this a success. The UNICEF MICS teams from headquarters and the regional office were key to providing technical support at every critical stage to weed out challenges and ensuring quality. The teams also played a role inspiring ZIMSTAT staff, to complement the work at the country level and provide validation to the survey. ZIMSTAT is proud of its data and defend the data even when controversial.

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STRONG GOVERNMENT COMMITMENT TO SITUATION AND SOCIAL SECTOR MONITORING IN PUNJAB, PAKISTAN

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Punjab, Pakistan, is the most populous province in Pakistan and has done two MICS surveys covering the province in 2011 and 2014. What is the thinking around doing province-level surveys rather than national-level surveys?

BoS: Well, there were two MICS surveys prior to 2011 (2003/04 and 2007/08) in Punjab province that were not part of the MICS survey programme, but these used MICS protocols and tools. These initial surveys exposed us to the MICS global methodologies and its key functions. In the two subsequent surveys, we joined the MICS programme to benefit from all of the technical experience with the global MICS team, as well as the opportunity to get the international recognition for the work we do.

The first Punjab MICS surveys were unique in that they provided data on the MDG indicators at a lower administrative level that were not coming from other sources. Apart from the MICS, the largest surveys in Pakistan are the Pakistan Social and Living Standards Measurement Survey (PSLM), which collects data on provincial as well as the district level, and the Pakistan Demographic and Health Survey (PDHS). The former provides a lot of updated socio-economic data, while the latter gives similar data to the MICS, but does so at the national level, and does not reach the sub-national levels we are interested in.

This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

UNICEF Punjab: Punjab, with the largest population share in the country, was lacking comprehensive data for planning and implementation of development and social change projects. The data generated by PSLM and PDHS were being generated and compiled to meet the reporting requirements at federal level. The sample sizes of the national-level surveys, however, were too small to be reliable and to make decisions at the provincial level. With the advent of MICS in the province, the provincial authorities immediately felt the usefulness of its data and added this activity in its regular Annual Development Programme (ADP). All the subsequent MICS surveys were, therefore, funded mainly from provincial budgets. In all the MICS surveys, the sample size at provincial level was much larger than the sample size allocated to the province in national-level surveys. As a result, the data generated were much more reliable and dependable at provincial level.

How have you balanced being in a global programme while still retaining the provincial-level appeal of MICS in Punjab?

BoS: Being in a global programme brings a lot of advantages. We are able to sharpen our skills in a number of areas through the regional and international MICS workshops, while also benefiting from the specialist MICS experts who visited Punjab over the past few years. In terms of retaining the character of a sub-national survey, we created a good institutional system where all of the indicators in MICS are being decided through an extensive consultation process in which all social-sector government departments take an active part and express their present and

future data needs for monitoring and assessments of their performance.

UNICEF Punjab: We feel that the Global MICS Programme provides a framework which is flexible enough to add to local needs. To keep the global touch intact, we keep the style and format of questions unchanged, follow all global protocols as indicated in the MICS Manual, get technical guidance from the experts provided by MICS, and seek concurrence of ROSA and the UNICEF headquarters team for activities. Moreover, to add local context within the global comparability framework, we adapt the global questionnaires and modules to local conditions, add indicators to meet local data needs, and get approval of major steps from the provincial authorities so that they are on board. For this purpose, a high-level Provincial Steering Committee (PSC) is formed at provincial level, which oversees and grants approval of MICS activities. Importantly, the PSC is chaired by the Chairman of the Planning and Development Board, Punjab, which is the highest-level government forum in the province.

With so much data being produced, what is being done with the data?

BoS: We do a great deal with the data within the Government. The data, because they have been in existence for some time, are expected from many sectors. MICS results are an integral part of the Government of Punjab (GOP) Growth and Development Strategy – Accelerating Economic Growth and Improving Social Outcomes (2012/18) and annual budgetary allocations at the province and district level. All social sector departments of the GOP use MICS results to prepare the new

Project Commencement Form (PC-I) (a form being used for new development projects/schemes) to get approval/funding from the provincial government. The Planning and Development Department routinely assesses these PC-Is to allocate funds in the light of MICS data/results on key indicators. The GOP regularly allocates 20 per cent of development funds to districts in its annual budget. The distribution of these funds among the districts is made using a yardstick based on MICS results.

UNICEF Pakistan: As the MICS in Punjab are sub-national in nature, the usual uses of MICS for reporting and national monitoring is not possible. However, we were clear from the outset that the Punjab results were for strengthening the advocacy for planning and using data for programming at the lower administrative (district) levels. We strengthened the MICS dissemination process at the province and sub-province level. This helps to disseminate the data, build awareness of the data at lower programme levels and also improve the interpretation of the data. The MICS also contributed to improving the culture of data sharing. As MICS data are available for free online, we have seen a number of researchers and students alike in Pakistan use these datasets for completing advanced graduate and post-graduate studies and generate numerous research papers.

Taking a step away from macro-level issues, how has the BoS benefited from the MICS?

BoS: MICS has developed the capacity of the Bureau of Statistics many fold. The international and national workshops in this regard arranged by the UNICEF office were excellent for enhancing the capacity of the BoS staff in survey design, data processing, effective dissemination and further analysis of MICS data. The BoS has accomplished the data processing of MICS 2014 in-house for the first time in its history only because of the encouragement, technical support and guidance of UNICEF ROSA and headquarters. And due to this, the BoS is now taking a step forward by doing the data processing of the other surveys in-house. Further, the BoS Punjab is now extending the capacity strengthening to other parts of the country. The impact of MICS methodology is also evident from the fact that at the provincial as well as the federal level, major surveys (for example, the child labour survey in the province) are being adapted to MICS methodology. MICS indicators and terminologies are commonplace in the talks of survey experts in the province as well as in the country.

UNDERSTANDING ADMINISTRATIVE DATA USING FURTHER ANALYSIS OF MICS IN COSTA RICA

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Costa Rica joined the MICS programme in 2011 and is planning to have a second MICS survey in 2016/17. What was the incentive to have a MICS survey?

MoH: We became aware of MICS through UNICEF. We reviewed the materials and the different documents on MICS and found it an interesting investment. Overall, Costa Rica produces a series of data from national registers which are of high quality. However, this was a chance to compare these systems with the MICS. Several topics were quite novel and interesting, such as child labour, HIV and unmet need, among others. Some of these were important for MDG measurement and prior to MICS, for other indicators, we could not provide an answer on what the state of those indicators were. So MICS was a way to really examine these.

Regarding a second survey, it seems important, as a follow-up to the first survey, to find out what are the population trends in Costa Rica. This new round of MICS shows the possibility of new modules that we think are important in providing more context and in-depth data on certain topics. For example, we are considering the inclusion of more information on nutrition and anthropometric measures, which hasn't been measured lately for young children, though we have done measurement for older children.

With the measurement of new topics, what kinds of outcomes came from the last survey?

MoH: MICS has been very valuable and we have taken into account the results. In the formulation of health policy, it was quite useful for us to use MICS as an input. From the MICS we learned that the general population of women had partial knowledge on HIV transmission, and the MICS showed many of the important gaps in what they knew. So we are reorienting our education programming based on the results.

For us, vaccine coverage is of high importance. With MICS, we wanted to use it as a means to get a different view of coverage rates. Costa Rica has the Caja Costarricense de Seguro Social, which provides vaccine services, but other private entities also provide vaccination. The Caja Costarricense de Seguro Social is known for complete recording and reporting of coverage, though reporting from other sources is less than 100 per cent. This means that the estimates from the routine system are probably under-estimates. As MICS is based on the entire population of children, we were able to compare the differences in coverage. It turns out that the coverage results from MICS are higher than data from the routine reporting system, which we expected. However, we can now quantify that difference. When we looked at how many children had "complete vaccination coverage" in MICS, we saw drops in coverage, which means that children were not completing the entire vaccination schedule. This was something we were not identifying in the routine reporting of vaccines and something that we can consider for action.

UNICEF Costa Rica: For the UNICEF office, MICS provided data on a lot of indicators – specifically, indicators on children – which supported many of the advocacy efforts that were part of the country programme. With physical punishment of children, for example, we had some data from previous sources, but the MICS data really opened the doors to new areas of work on the topic. First, the MICS data were used to reaffirm the findings of other studies and then helped to position the discourse on the topic. In fact, UNICEF developed a dissemination campaign on this topic, which transformed into more of a Communications for Development-type campaign to raise national awareness of the problem and change the perceptions and attitudes towards physical discipline.

MICS also provides an additional advantage in terms of analysis and reporting. While some data in the country are well known, disaggregations by specific groups are not readily available. MICS has the analytic advantage of being able to provide in-depth analysis and provide levels of information for different sub-groups such as wealth, information that we do not see from the administrative systems. The wealth disaggregations in MICS were quite important for characterizing the situation of the vulnerable in Costa Rica. Effectively, we can examine not only the national levels, but groups such as newborn children or sub-national estimates if we need to do so.

How did you discover these issues?

MoH: MICS creates a lot of data. One of the thoughts about MICS from the beginning was to do additional analysis of the data. We have a number of partners in the Government and with

the University of Costa Rica that can work on this with us. In 2014, we held a national symposium on analysis for MICS data on many topics, with very varied participation from different sectors. The objective of the symposium was to improve the dissemination and understanding of MICS data and use the data as inputs for high-level analysis of the data.

Over the three days, we did a lot of interesting work. We began with some presentation of the results and then moved into different topics. Some of the topics looked at included education in the context of social, ethnic and economic vulnerability, child well-being, detecting gaps in indicators by wealth and comparing vaccine coverage from various sources. We also included sessions on viewing child rights using the MICS, as well as different ways to examine inequalities and how to translate this kind of scientific knowledge into actionable results. We hope to ultimately publish the works of these analyses for public use.

As a first-time country to MICS, what are some of the lessons learned?

MoH: In MICS, we definitely have a lot of ownership; we put a lot of effort into the survey, getting the results and using them. MICS has the construct of being comparable to other countries, so this is one thing to keep in mind when you implement, so later on you can compare results. The resources from UNICEF in terms of technical support are important in the sampling, changes to the questionnaires, monitoring the fieldwork and elaborating the final reports and results. One of the key moments was the workshop in Barbados (on Data Interpretation, Further Analysis

and Dissemination), where we really understood the meaning of some of the indicators and why the levels were not what we expected. It was a good time to clarify and understand the data. With the regional consultants, it was quite good to have them support the process. They are open to the country context and adapting to it within the overall theme of comparing to other countries. Now that we have been through an entire survey, we are more certain of the process and how the various steps occur. This helps us in our planning for the next MICS survey.

UNICEF Costa Rica: The MICS process is an inclusive one, where we convened a lot of different partners from the different sectors in the Government. This created a lot of face-to-face interaction and a sense that reaching consensus on the major issues was necessary to move ahead with the process. This was particularly important with the indicators in MICS, where having so many partners ensured that each institution had to really think about the concepts they were proposing in the survey and reach consensus with each other. As a by-product, I believe that many of the partners are more child-sensitive in their approach to certain areas of work, having been involved in MICS. When the MICS results came out, each sector was responsible for reviewing the tables and comparing them with other data to check for correspondence of levels and to see if findings were logical. This kind of effort really helped in ensuring that the entire project encompassed different points of view.

MONGOLIA: LONG-TERM NATIONAL AND SUB-NATIONAL MONITORING USING THE MICS

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INTERVIEW DATE

▶ 2 July 2015

Russia

Mongolia

China

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Mongolia implemented its first MICS in 1995 during the early years of economic and social transition and sustained the implementation of the survey until today. The most recent MICS5, or the Social Indicator Sample Survey of Mongolia, was conducted in 2013–14, taking a holistic approach and covering a range of development areas integrating RHS (Reproductive Health Surveys) and DHS modules. Can you comment on the beginnings and ongoing engagement with MICS?

NSOM: MICS is fundamental to measuring indicators for children and women in Mongolia, to the point that MICS is an integral part of our national statistical system and is recognized as a formal survey tool in the National Law on Statistics. Over time, we have recognized how useful the instrument is for Mongolia and we recommend to implement MICS with good regularity, roughly every five years, in the country. As MICS is now part of the national statistical law, this means that we can plan for funding considerations for the survey. From a technical standpoint, this also helps us to reduce the duplication of indicators measured in other parts of the statistical system.

Thus far, we had five national surveys which we term the 'Social Indicator Sample Survey (SISS)'. The last of these released results in 2014 and formed the basis of our MDG assessment. From MICS1 to MICS5, we recognize that the

sample sizes have increased a great deal, which yields better estimates. The results of the national surveys, in conjunction with administrative sources, have been instruments in recognizing that further understanding of social indicators, such as child mortality, was needed in certain parts of the country. As such, we decided to implement provincial surveys in Khuvsgul Aimag and Nalaikh district (in 2012). We are planning to conduct more sub-national surveys, as we want to increase the data in sub-national areas and also increase the capacity of the local areas to conduct rigorous data collection. To add to this, these surveys are important from a health point of view since these areas have the highest rates of child mortality and sub-national surveys would provide data for in-depth study of these areas.

UNICEF Mongolia: From a somewhat different point of view, seeing MICS and the NSOM interact is an interesting story. The early 1990s saw major changes in Mongolia, where economic planning was to be de-centralized. The dominant type of survey was economic in nature and really did not address any social indicators. MICS came at an interesting crossroads to address the need for social indicators. The effort was initially led by UN agencies but later transferred to the Government and is now a part of the national system. The chair or vice chair of the NSOM leads the steering committee for MICS, which signifies the importance of the survey.

With so much experience with MICS, what is the continued attraction to the survey programme and the contribution to the statistical system?

NSOM: MICS is the only survey in the country that is part of a global survey

programme, which provides a great deal of recognition to the work we do. For us, MICS has a lot of benefits. We welcome MICS as an opportunity to train and update on survey methods. The regional MICS workshops are useful for the development of the programmes for the MICS but also for us to focus our skills. We also monitor fieldwork using a MICS recommendation, field-check tables, which are produced during fieldwork. This actually helps us to reduce field monitoring costs.

We also use the MICS recommendations in other surveys, especially the governance and management of the survey, where we use steering and technical committees. These are used in other surveys, as they allow us to take decisions in a participatory manner. The sampling methodology of MICS is quite useful for us to develop probabilistic samples. We use the same kind of logic to devise other sample surveys, such as a new gender survey and another on time use. One of the newer measures that we are learning from MICS is the adoption of mobile data collection, which in some ways modernizes some of our data collection, and moves us away from paper-based data collection to computer-based, mobile data collection. Based on the MICS experience, we adopted this mode of data collection in other surveys, such as economic surveys.

UNICEF Mongolia: MICS also helped to create a culture of using probabilistic approaches towards sampling. This has been useful to ensure that MICS is implemented properly while it has built up the expectation that other surveys in Mongolia use probabilistic approaches. In fact, through the change in sampling culture, it has also let us review other historic surveys with a new lens, to

further understand the data and how they fit into the overall picture.

In terms of the attraction, MICS also comes out with novel kinds of data, and this really draws attention to unseen issues or issues that we were not cognizant of before MICS. For example, we have a large proportion of children living without their biological fathers in MICS3, a finding that was surprising and unexpected. This raised a lot of questions on the welfare of the children that live in these households, and enhanced the policy dialogue on the consequences of migration and divorce in Mongolia.

With a wealth of both national and sub-national data for Mongolia, what kinds of outcomes have you seen resulting from MICS?

NSOM: These kinds of data from MICS are providing for us a picture of our present and a reflection on our past. We essentially have two decades of data at the national and sub-national levels, which is useful for pointing out trends on so many social indicators. One of the key issues is getting the data out in the public domain. For this, we held dissemination workshops, inviting key participants from various sectors to engage with us and to familiarize themselves with the results. We also ensure that data can be easily accessible through the website of the NSOM and the MICS website, which makes distribution easier to a larger audience that is not even in Mongolia. Needless to say, that the MICS data are an integral part of the reporting mechanisms for the national government, with MICS being cited extensively, especially with the latest MDG report and Mongolia report on implementation of the Convention on the Rights of the Child.

UNICEF Mongolia: Apart from the usual kinds of data use, MICS also creates a lot of 'noise' around certain indicators, as the data come from the NSOM. Since the 2000s, under-five mortality has been the subject of extensive debate in the country. When MICS statistics were released by the NSOM, the counterparts in various government sectors reacted to these data. The longer-term effect was that the administrative systems had to be strengthened to really ensure that inconsistencies with MICS could be explained, to ensure that we understood what both sources of statistics were telling us. Recently, the Inter-agency Group for Child Mortality Estimation (who does country estimates of under-five mortality) accepted the use of the administrative data on mortality for children in Mongolia, which really is a testament to how far administrative systems have come in light of the reflection from MICS.

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USING MICS TO IDENTIFY THE VULNERABLE AND EXCLUDED IN AN UPPER-MIDDLE INCOME COUNTRY: THE CASE OF SERBIA

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This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

Serbia is an upper-middle-income country with a good civil registration and vital statistics (CRVS) system. Why use MICS?

SORS: There are maybe two things to consider. In Serbia, health data from the CRVS systems are high quality. While nationally, the averages show a good picture, there are many inequalities in Serbia which are not so apparent with data from these existing systems. MICS helps to solve these problems, by recording data that we do not necessarily have in the administrative systems, such as some indicators for the area of education, while pointing out inequalities in the country. Since SORS has invested for such a long time with MICS, we now have a data series in Serbia, which means we can critically examine progress in the country.

In the past three rounds of MICS, we have had a national MICS survey and then a Roma settlements MICS survey. I cannot even begin to speak about the importance of the Roma survey data. Even though the Roma are a small part of our population, they are one of the most vulnerable populations in the country, especially the Roma population living in Roma settlements. MICS is the only robust source of data from which we can understand the kinds of difficulties and vulnerabilities they face. Apart from this, MICS covers so many interesting topics, for which we did not have any data, which included the

position of children, child development and child protection issues which are important in our context.

UNICEF Serbia: The initial surveys for Serbia (there have been seven, if we include the surveys when Serbia was a part of the Federal Republic of Yugoslavia) were to measure outcomes for WSC goals. Apart from this, in 2005, which was the beginning of the Roma Decade of Inclusion in Europe, there were many attempts by many agencies to collect Roma data. These turned out to be non-representative, and not particularly robust, which translated into limited government use. In 2005, MICS interviewed Roma in Roma settlements as a part of the national survey, which increased the relevance of MICS in Serbia. Then, MICS subsequently added a separate Roma sample, which makes it even more relevant. In 2010, the Roma settlement sample increased in robustness and UNICEF was able to apply the same approach in 2014 MICS and translate this technique to other

surveys in the region. Now, MICS is the main source of data on this population for Serbia.

Overall, I find it difficult to name a process that does not use MICS data. MICS 2005 was the basis of the strategy of the advancement of the situation of Roma as well as the strategy of the development of Education 2012, which included the notion of inclusive education, for which MICS provided a great deal of data on disparities in education.

MICS has also increased its relevance to Serbia's context by including different modules. SORS has been good at nationalizing MICS without jeopardizing MICS methodology and comparability, which is the hallmark of the programme. For example, preschool education and health system data were included in the MICS at the request of partners. This sends the message to national stakeholders that MICS is theirs and they can apply and think of new ways to innovate and make this more appropriate.

The robustness and credibility of MICS is a huge draw to joining and staying with the programme. We enjoy that the quality assurance checks, when put in place, pay off in the quality of the data.

The overlaps of MICS and the data from health systems can potentially be a problem when these do not match. How are you able to deal with this?

SORS: We depend heavily on the flexibility of the MICS instrument. So, where there are plans to cover similar areas of work, the MICS does not cover these indicators. Additionally, MICS and administrative data are used to check the quality of each other; it forms a kind of

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interplay of the various data sources and provides some validation of each other. On some indicators, MICS provides the same levels as administrative data, but MICS provides disaggregation, which we cannot see through the administrative data sources.

UNICEF Serbia: To add to that, the National Health Survey (NHS) came out with data one year after MICS in 2006 and one year prior to MICS in 2013. We worked closely with the colleagues who managed this and we tried to ensure consistency among surveys. In 2006, the harmonization of HIV and Sexual Behaviour modules started but in 2013, the NHS adopted the MICS modules to be in tune with international indicators. This decreased the size of the MICS instrument, which is a bonus for us so we could include different kinds of Serbia-specific data in MICS without jeoparidizing high data quality.

What were some of the lessons learned from MICS? And the benefits of MICS?

SORS: The great advantage is the regional MICS workshops where we can hone our skills in any stage of the survey methods and implementation. This forms a large part of how we interact with MICS and how we learn about the process and guidelines. We also had a number of regional consultants who came to Serbia at critical times to corroborate the steps we were taking.

We have used the logic and technical work of MICS methodology in a number of other national surveys, such as the SILC survey. When we started developing the instruments and protocols for SILC, we used the steps outlined in MICS (such as the organograms, organization of fieldwork, quality control processes, etc.) to define how we work. SILC is

the only survey implemented by SORS that is conducted in teams, a MICS recommendation. This is well accepted by interviewers; they feel much safer, can share their experiences and solve problems immediately.

On a personal note, I improved my knowledge in SPSS (a data analysis programme) in MICS and then I applied this logic to the SILC survey. The regional workshops are very important to me. I have been to two data processing workshops where at each one I gain more from MICS. I was able to transfer this knowledge and share with colleagues in the office.

UNICEF Serbia: There is so much data to analyse and to use. A number of further analysis topics is currently arranged to shed light on topics including Early Childhood Development, Child Protection and Gender. This could help us find better nuances to programming as well as build the evidence base around these topics in the country.

We also made an interesting partnership around data dissemination. By working with one of the largest newspapers in Serbia, *Politika*, there was an agreement that the newspaper would highlight selected topics related to child rights. This would relate to the Convention on the Rights of the Child, giving a space to people representing different standpoints and views to discuss child issues and raise their importance for the public agenda. We use and rely heavily on MICS data when documenting remaining disparities and advocating for more focus on the most vulnerable children. This of course highlights the results but also builds demand for good data and accountability to the facts.

CHAPTER 3

Facing new frontiers

Recognizing data needs and delivering sound statistics

THE CHANGING DATA LANDSCAPE

The twentieth anniversary of the launch of the Global MICS Programme coincides with a period of significant change in the discourse on monitoring and data collection, an unprecedented emphasis on data, and changes in the data landscape that are already shaping.

By the end of 2015, the MDG era will be over. With the launch of the United Nations Secretary-General's final assessment of the MDGs, the new era of the SDGs will commence. The SDGs offer a much broader agenda than the MDGs, including 17 goals and 169 targets, and possibly a large number of indicators[4] that will be tracked until 2030. A new monitoring architecture is in the making, with increased focus on country leadership. Indicators will be defined at global, regional and country levels.

The SDGs build upon the lessons learned during the MDG era. While the MDGs were instrumental in highlighting the importance of monitoring and data, and more broadly, of evidence, several shortcomings of the MDGs have led to the alteration of the discourse and to a distinct build-up to the SDGs. With developments in technology in mind, the High Level Panel of Eminent Persons in 2013 coined the term 'data revolution', calling for improvements to and increases in the quality and quantity, and citizens' access to data, and emphasizing the use of new technologies for data collection, analysis and dissemination. Two years into the discussions for better defining and operationalizing the concept

of data revolution and the related work on finalizing the SDGs and targets, it is now recognized that both traditional, robust data sources, such as household surveys, and new types of data, such as big data, will have important roles to play in the SDG era. Moreover, to fully realize the data revolution, it will be essential to improve all types of data in all settings, and establish linkages and complementarity between different types of data for achieving better results in sustainable development.

HOUSEHOLD SURVEYS IN THE NEW AGE

Open, transparent, accessible and disaggregated data, citizens' access, country leadership, universality, use of new technologies and new types of data, capacity building, investments in data at the global and national levels, and strengthening statistical systems have been at the heart of discussions around the data revolution and the SDGs. MICS is uniquely positioned to deliver on these promises, having made substantial efforts in the past 20 years and having committed to many of the themes of the data revolution, prior to the advent of the concept.

In fact, MICS has had its own revolution during the past two decades, like other credible household survey programmes. For more than a decade, micro datasets have been made available, free of charge, to users for secondary analysis. Over time, accessibility of data has been substantially improved,

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4 At the time of writing of this publication, discussions on the final indicator set and the monitoring architecture were ongoing.

making it a very easy procedure to download and use largely standardized datasets for hundreds of MICS surveys. Transparency has been at the centre of the technical support provided to countries, including the governance structure established during the survey process – enabling everyone with access to survey procedures, results and data. In the past two decades, profound changes have taken place in the way that MICS surveys are conducted and results are released – and many of these changes have been due to the increased use of new technology. Advances in data processing methodology, software and hardware have meant that better supervision and monitoring and improved data quality have been possible, as well as reduced times needed to process, analyse and release the data. The way that MICS technical support to countries has been set up has stamped MICS with a major capacity strengthening effort. Both the organization of regional workshops and the emphasis on the execution of all survey steps by the implementing agencies have helped to strengthen capacity. In several countries, MICS implementing agencies have used the experience gained from MICS to improve other household surveys, to better disseminate and analyse data.

Most important of all is that the MICS programme has been a leading global household survey programme to genuinely commit to country ownership. Every single decision taken during the survey process is by the government/implementing agency. UNICEF and MICS country support teams can go only as far as to provide technical feedback and review survey processes from a technical point of view, but consciously refrain from undertaking any survey activity – sometimes at the expense of delaying

the completion of survey steps and carrying the risk of political processes at the country level. The 'global' in the Global MICS Programme refers to the geographic breadth of the programme, not to the location where decisions are taken on the survey.

The relevance and importance of MICS in the SDG era will continue not only because of the consistency of the MICS approach with the new discourse, but also because of the nature of the data that MICS (and other household surveys) produce. The MICS programme collects representative information at the population level in a cost-effective fashion. As household surveys, MICS include a series of disaggregates by which differences and inequalities in status and outcomes can be brought to light, providing unique insights and invaluable input for programming, policymaking and priority setting. Data are not confined to generating official statistics; MICS produces a large amount of information on attitudes and practices or to gauge people's opinion. Such data usually cannot be readily found using other data collection tools. For indicators such as exclusive breastfeeding, life satisfaction or the early childhood development index, only household surveys can generate the robust data that are essential for situation analysis and for monitoring progress.

Often times, MICS and household surveys are described as tools that are used to compensate for the absence of good-quality information from other data sources, particularly from civil registration and administrative systems. For some indicators, this may indeed be true. Even in the case of such indicators, however, in so many low- and even middle-income countries, vital registration systems or health management information systems

are absent or so poorly functioning that household surveys offer a cost-effective alternative to fill important data gaps. In the SDG era, concerted efforts will be needed to invest in vital registration systems and other management information systems, but in the meantime household surveys such as MICS will remain of crucial importance to periodically collect data that are simply not available anywhere else. It should also be recognized that there are/will be a large number of indicators that will not be generated by registration systems and administrative systems – such as those based on behaviours and attitudes. For such indicators, reliance on household surveys to provide representative population-level data will continue.

It is therefore not surprising that the key documents of the SDG era are pointing to the need to generate key SDG data from household surveys, often naming MICS as a main data source. In its current form, MICS is able to generate data for two thirds of the 29 SDG indicators related to children. Of the 100 Core Health Indicators released by WHO, about 25 are currently captured by MICS, with a further 16 that can be covered by relatively modest improvements and changes. In the analysis of the investment needs assessment for SDG monitoring and statistical capacity development, MICS was identified as one of the few household data sources that will be needed to cover the data needs.

2015 AND BEYOND

With the already realized and projected changes that will take place in the SDG era, MICS is poised to evolve in various ways to adapt to the changing roles and content of household surveys, to form linkages with other initiatives, technically and institutionally, to better serve in generating the needed data on the lives of children.

New areas of measurement

As noted earlier, the SDGs arrive with a much broader agenda, depth- and width-wise, and with new areas of measurement. In the MDG era, MICS covered the vast majority of household-survey indicators. From climate to urban issues, to internally displaced populations, disabilities, social protection and violence, a much larger number of indicators will be needed by countries for monitoring purposes. Given its mandate to support countries in generating comparable, robust data on SDG indicators in particular, the content of the MICS tools is already being revisited to cater to new priority areas that must be covered, as long as they fit the criteria of inclusion in MICS – relevance to children's agenda, validity, and methodological robustness and applicability to household survey methodology. The MICS programme will continue to innovate and push the envelope; help elevate children's issues that have been left behind to national agendas; and generate optimal numbers of indicators useful for countries' efforts in achieving sustainable development.

Coordination and collaboration

One of the important themes of the post-2015 agenda is better coordination among stakeholders, particularly those working on similar initiatives, so as to ensure avoidance of duplication and save resources, and encourage the joining of forces in innovating and sharing experiences. To this end, two recent initiatives are worthy of mention: the MICS programme has now partnered with the Demographic and Health Surveys of the United States Agency for International Development and the Living Standards Measurement Study of the World Bank to form a Collaborative Group. The three largest global household survey programmes have already started working towards avenues of collaboration, sharing critical information on survey timings and examining the possibilities of teamwork, both on methodological work and joining forces at the country level. A second initiative is the establishment of the Inter-secretariat Working Group on Household Surveys, under the United Nations Statistical Commission, to foster collaboration among household survey programmes and coordinate methodological work, reporting to the Commission.

In the new era, collaboration will undoubtedly not be confined to take place among household surveys; equally important will be coordinating efforts to generate data by using methodologies other than household surveys. The MICS programme will attempt to ensure that MICS data can be linked to other types of data, both physically, such as in the case of facility surveys and geospatial data, and conceptually, at the analysis level. Such efforts will help to bring together

other types of data, such as big data, to make better sense of the knowledge base and evidence for better use in formulating policies and interventions, and identifying the most vulnerable.

MICS for different purposes

If and when systems that generate other types of robust and non-robust data, such as big data, develop sufficiently to deliver good-quality data with known limitations, MICS will serve purposes other than generating official data – which is the case in data-poor countries at present. The main function of MICS in such settings will be to validate official data, provide types of robust data that cannot be generated by other data sources – such as data on attitudes, behaviours and knowledge – and generate the type of robust equity/disparity data that can only be generated by household surveys. MICS will therefore need to evolve in ways to generate more of such data, particularly in settings where registration and administrative data will function sufficiently to produce official statistics. With the increasing percentage of middle-income, data-rich countries conducting MICS in recent years, MICS has gained experience in this area by increasing the number of dimensions of equity captured – such as ethnicity – and including more questions on attitudes and behaviours – such as data on life satisfaction.

Improvements in other data systems will in fact be for the benefit of the MICS programme – in creating more space to focus on topics not captured in other systems, in the reduction of sample sizes (since there will be less pressure on MICS to generate statistically stable indicators on rare events that will be

available elsewhere) and, clearly, in making better use of technologies utilized by other data systems to improve the effectiveness of MICS processes.

Disaggregation

Disaggregated data are a main feature of the SDGs, as is the case with UNICEF programmes. The emphasis on the population groups left behind – or, to use the current terminology, to leave no one behind – has grown to become an indispensable characteristic of any data that will be produced. Disaggregated data can be approached in different ways. Data at the lowest administrative and individual levels are obviously not a strength of household survey methodology – such data need to be generated by other, mostly non-robust data systems, and strongly linked to programmatic interventions to identify small-sized vulnerable groups and individuals so that services can be provided on a real-time basis. The data revolution discussions offer a promise that such data will be improved to cater to these needs.

The MICS programme, on the other hand, has traditionally, and increasingly, offered disaggregated data not available from other data sources. Many disaggregates are not suitable or easy for inclusion in other robust data systems, such as civil registration systems and administrative systems. Generating data on indigenous or marginalized populations, wealth status and demographic disaggregates have been standard features of MICS surveys in the past. New disaggregates will need to be covered by MICS surveys in the near future – such as those on disabled populations, internally displaced populations and the like.

Use of technology

As noted earlier, technological advances in data processing, analysis and dissemination have been used by the Global MICS Programme to improve the quality of data and the turnaround of results. Advances in technology are likely to benefit the MICS programme even more in the future. Within a few years, it is very likely that MICS interviewers will no longer be using paper questionnaires to conduct interviews, but will be relying on mobile instruments, such as tablets, to do so. From the current 30 per cent of surveys using tablets, a few years will be needed to have all surveys use tablets for data collection. Using Internet technology and advances in communication, compilation of data from field teams will likely require much less time, reducing the time needed for the production of survey results.

New technology should also be expected to enhance, accelerate and improve various steps of the MICS process. Availability and accessibility of geospatial data and digitized, standard information on sample frames should cut down both costs and time required for sampling. As communication technologies improve, compilation of data should be easier to complete. In particular, dissemination of survey results would be enhanced, improving the provision of findings into the hands of policymakers and the public.

Dissemination, utilization and accessibility

The highly technical nature of MICS and household surveys in general usually means that most of the focus is on ensuring that the surveys produce good-quality data. Effective dissemination of survey results is sometimes neglected, which means that the use of survey results is confined to specialized, data-literate audiences. In the new era, the MICS programme is poised to continue advances in improving effective dissemination, including the reduction of time required to release the results, transforming survey findings into formats accessible by a broader audience, ensuring that secondary analysis of MICS data is increased and that data and results are more accessible. To this end, it will be necessary to further standardize datasets and develop internet interfaces to make possible the online access of non-statistical audiences to data to perform analysis in real time. Enlarging the scope of dissemination tools to cater to varied audiences, in the same spirit of the child-friendly MICS reports, as noted earlier, will also be crucial to enhance citizens' accessibility to MICS.

ANNEXES

EXECUTIVE DIRECTIVE THAT LAUNCHED THE MICS PROGRAMME

Multiple Indicator Cluster Surveys for the Mid-Decade Goals

EXECUTIVE DIRECTIVE
▶ CF/EXD/1994-011

DATE
▶ 14 November 1994

TO
▶ Regional Directors

REPRESENTATIVES
▶ Assistant Representatives
▶ Division Directors/Section Chiefs

FROM
▶ James P. Grant
▶ Executive Director

Multiple Indicator Cluster Surveys for the Mid-Decade Goals

My first Executive Directive of this year, (CF/EXD/1994-001) Reporting on Progress towards the Mid-Decade Goals, set out UNICEF's internal reporting requirements to track progress towards the mid-decade goals and gave you a checklist of action required of country and regional offices to support national partners in their reviews of progress. I expect those actions to now be in place.

With this Directive I ask you to focus your efforts on the steps required in 1995 and 1996 to obtain current, statistically robust, and nationally representative estimates of the primary indicators agreed upon for reporting on the mid-decade goals. It is imperative that we assist national partners in generating measures that are acceptable to both governments and the international community, as part of their own reviews of progress. National statistical offices are key partners, as are the intersectoral agencies established in National Programmes of Action for monitoring progress towards the Summit goals. Results from surveys conducted in early 1995 can help adjust and strengthen programmes in the coming year. Surveys conducted in early 1996 will provide governments and the international community with the information needed for an assessment of progress for children at mid-decade.

This Executive Directive encourages you, when appropriate, to use the multiple indicator surveys--as recommended in my first executive directive of this year and in the Technical Guidelines for Monitoring Mid-Decade Goals(CF/PROG/IC/94-003)--to meet reporting needs. The surveys will, in most settings, complement and strengthen existing reporting systems and fill information gaps for seven of the mid-decade goals.

Recommendation of the WHO-UNICEF Intersecretariat

There is widespread consensus that focused, practical steps to obtain up-to-date, nationally representative indicators of status on these mid-decade goals are both necessary and possible. Information gaps persist in almost all countries. Without new surveys many of these gaps will remain through 1995, thus limiting any objective assessment of

progress against quantified benchmarks. It has been demonstrated that good national estimates of goal indicators can be obtained using modified cluster surveys. They are intended to reinforce, not replace, monitoring systems that are already in place.

This September the WHO-UNICEF Intersecretariat for the Joint Committee on Health Policy recommended that

"Where data are lacking or out-of-date, ...WHO, UNICEF and other international agencies...collaborate across all sectors in assisting countries to monitor progress, using wherever appropriate and feasible multiple indicator surveys."

and *"all international agencies... give special attention in 1995 to supporting national efforts to monitor and report on progress to policymakers for the mid-decade review. This collaborative support should bring together all sectors in*

the shared emphasis on collecting internationally comparable data on the essential indicators agreed upon between governments, WHO and UNICEF for reporting, making certain that these measurements reinforce programmatic action on all levels and contribute to policymakers' taking corrective measures and management actions that build and sustain progress."

Multiple Indicator Survey Methodology

A collaborative effort involving many participants, both within and outside UNICEF, has now produced a standardized survey instrument for goal measurement. It is based on a modification of the EPI and CDD cluster survey approach that has been used so successfully all over the world. It uses a series of questionnaire modules designed to provide data for most of the primary indicators of mid-decade goals, as agreed to by both WHO and UNESCO, including those relating to vaccine coverage, vitamin A status, salt iodization, ORT use in diarrhoea, malnutrition, educational attainment, and the availability of water supply and sanitation facilities…It can be easily adapted to specific country situations; so that if, for example, very good and current data already exists for an indicator in a particular country, the relevant module can be dropped. The questionnaire modules can also be appended to other surveys. In addition to those designed specifically to measure goal indicators, several other modules are provided, to be included or not at the discretion of particular country offices and counterparts. The survey can be implemented at reasonable cost in a variety of country situations.

Action at Country Level

A concerted effort is required in 1995. This directive requires all UNICEF offices, as part of their current work planning for 1995,

1. to review current status on availability of data on mid-decade goals and identify for each of the goals the source of data that will be used to report at mid-decade. Recall that my earlier directive (CF/EXD/1994-001) underscored the need to give priority to methodologies that yield nationally representative results that meet international reporting standards. It is important, therefore, as part of this review, that the input and agreement of technical counterparts and the Central Statistical Office be obtained on data sources and methodologies.

2. on the basis of this review, to decide how they may use multiple indicator cluster surveys in 1995 and 1996. Each representative should fax to me by December 15th (Fax: 212-303-7959) the completed checklist on goal reporting included with this executive directive, specifying which methods will be used by government to report on the seven mid-decade goals measurable with cluster surveys. The survey questionnaire, with its optional modules, and a planning aid accompany this executive directive to enable you to review choices with national partners. Full technical guidelines for those managing and conducting surveys will go to all UNICEF offices in December.

3. to initiate surveys, wherever appropriate and feasible, in the first quarter of 1995, in order to use the results for policy adjustment, improved programme delivery, and social mobilization in 1995. As required in my earlier directive (CF/EXD/1994-001) results should be reported to

headquarters as and when they become available with a full annual update due with the 1995 CRING report, to be received at headquarters and the regional offices by 31 May.

4. to plan for surveys in the first quarter of 1996, in order to generate data that are officially endorsed by national governments and can withstand international scrutiny, in time for reporting status at mid-decade. Final country office reports on all indicators needed for the mid-decade review are due in headquarters and the regional offices with the 1996 CRINGe report on 31 May 1996.

5. IMMEDIATE ACTION: country offices that decide on using data sources other than the multiple indicator surveys for those indicators which can be measured by the surveys should, by 15 December, provide me with details of the alternative sources and methods so that their adequacy can be evaluated.

Interagency Support for Country Initiatives and UNICEF Offices

Assistance from the United Nations Statistical Office, with support from UNFPA, and consultation with other United Nations agencies, especially the World Health Organization and UNESCO, in addition to guidance from the London School of Hygiene and Tropical Medicine and the Centers for Disease Control, have helped build on country experience to prepare this survey instrument for the mid-decade goals. Under the guidance of the Planning and Coordination Office, all relevant technical clusters within UNICEF and the Evaluation and Research Office have also contributed to the modules.

The instrument developed in response to a clear demand by countries and field offices. In August of this year, a global workshop on the multiple indicator surveys was hosted by UNICEF Bangladesh in Dhaka, where an interagency team, supported by Bangladesh's Bureau of Statistics as well as regional and international centers of excellence, prepared all UNICEF regional advisers in monitoring and evaluation to put in place regional support for such surveys. Over thirty UNICEF country offices, from a wide range of countries with differing capacities, also went through hands-on training in Bangladesh in using this methodology.

Adaptations to Country Situations

As the end of 1995 approaches there are limited options available, beyond these simple surveys, for closing existing data gaps. Very few countries will be able to rely on the results of surveys by other agencies which, by chance, cover the same ground and also promise timely results. Routine systems, which now rarely produce data of adequate quality, will require longer-term support, and should continue to receive UNICEF's attention as part of building sustainable national monitoring systems for the year 2000 goals. Most countries are likely to find the multiple indicator surveys immediately useful both for goal monitoring and influencing, at affordable cost, policy, programme design and resource allocations to social priority sectors. Moreover, most countries can take advantage of a substantial national technical capacity developed as a result of extensive experience with cluster surveys.

Surveys can be adapted to each country situation. Recent surveys in Bangladesh, Kenya, and Cape Verde provide examples. I will be sharing with you examples of national reports from these and other countries as they become available.

Each UNICEF country programme is well placed to assess where the strongest entry point may be to help national counterparts. The challenge is to bring together different sectors, as has been done in Bangladesh and Kenya, to collaborate in the cost-effective use of a shared tool. What data are needed and how they may be used by policymakers, programme managers, communities and the general public should inform all planning decisions. Special opportunities for intersectoral collaboration exist, and should be reinforced, in those countries where National Programmes of Action have created interministerial commissions or councils for improved monitoring of the situation of children and women.

Action at Regional Level

Regional offices are prepared to offer countries additional guidance and technical support where needed, as part of regional networking in capacity building and information exchange. Each region is expected to agree upon and initiate regional action in late 1994 or early 1995, that will strengthen the network of shared experience. In consultation with country representatives, regional offices may designate one country where early in 1995 a multiple indicator survey can provide national managers from other countries an opportunity to learn while participating. The Bangladesh country office has offered to host additional training activities.

Regional offices are entrusted with preparing any immediate backup required to help country offices plan for their surveys. Regional and national centers of excellence and experienced individuals should be part of a shared roster for matching existing capacity with measurement needs. Regional offices have already taken various initiatives with WHO, UNESCO, PAHO and UNDP to provide support for reporting on progress.

The regional planning officers, health and education advisers, and monitoring and evaluation advisers form part of the technical support team for multiple indicator surveys. Special sessions or consultations may be arranged for further guidance and the sharing of experience. Strategies for social mobilization at regional and country levels, research design, sampling strategies, costs, and programme linkages are all subjects that will benefit from regional opportunities to share knowledge.

Presidential reviews, such as the ones led this October in Mexico by President Salinas and in the Philippines by President Ramos, have demonstrated the mobilization potential of effectively presenting recent results on goal status. Regional offices are playing a leadership role in multiplying the impact of these examples within and across regions. I expect all Regional Directors to keep me informed of regional developments and country progress on a monthly basis.

Headquarters Support

I have entrusted the Planning and Coordination Office at Headquarters with channeling additional guidance and technical support as needed. This is a shared effort with regional offices and with the technical clusters, the Evaluation and Research Office and the desks in New York to ensure adequate response to issues as they arise.

Requests for further information, a sharing of views or country examples may be faxed to: ACTION: FAX: 212-303-7959. Any message to a similar address on the UNICEF Internet gopher (action@unicef.org) will also be shared with an interagency core group coordinated by the Planning Office for swift, supportive action.

Proposals to global funds, on an exceptional basis, may help support regional networking and special needs in using this methodology.

We have only a small window of opportunity. It will soon close for those country offices that postpone strategic work-planning that would enable their counterparts to initiate surveys to strengthen monitoring of the mid-decade goals. These are not easy challenges, but they can be met. I wish you well in all your efforts to make 1995 a landmark year for children everywhere.

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MICS5 INDICATORS

MICS INDICATOR [M]		MDG Indicator Reference
1.1	Neonatal mortality rate	
1.2	Infant mortality rate	MDG 4.2
1.3	Post-neonatal mortality rate	
1.4	Child mortality rate	
1.5	Under-five mortality rate	MDG 4.1
2.1	Underweight prevalence	MDG 1.8
2.2	Stunting prevalence	
2.3	Wasting prevalence	
2.4	Overweight prevalence	
2.5	Children ever breastfed	
2.6	Early initiation of breastfeeding	
2.7	Exclusive breastfeeding under 6 months	
2.8	Predominant breastfeeding under 6 months	
2.9	Continued breastfeeding at 1 year	
2.10	Continued breastfeeding at 2 years	
2.11	Duration of breastfeeding	
2.12	Age-appropriate breastfeeding	
2.13	Introduction of solid, semi-solid or soft foods	
2.14	Milk feeding frequency for non-breastfed children	
2.15	Minimum meal frequency	
2.16	Minimum dietary diversity	
2.17	Minimum acceptable diet	
2.18	Bottle feeding	
2.19	Iodized salt consumption	
2.20	Low-birthweight infants	
2.21	Infants weighed at birth	
3.1	TB immunization coverage	
3.2	Polio immunization coverage	
3.3	DPT immunization coverage	

MICS INDICATOR [M]		MDG Indicator Reference
3.4	Measles immunization coverage	MDG 4.3
3.5	Hepatitis B immunization coverage	
3.6	Haemophilus influenzae type B (Hib) immunization coverage	
3.7	Yellow fever immunization coverage	
3.8	Full immunization coverage	
3.9	Neonatal tetanus protection	
3.10	Care-seeking for diarrhoea	
3.11	Diarrhoea treatment with oral rehydration salts and zinc	
3.12	Diarrhoea treatment with ORT and continued feeding	
3.13	Care-seeking for children with ARI symptoms	
3.14	Antibiotic treatment for children with ARI symptoms	
3.15	Use of solid fuels for cooking	
3.16	Household availability of insecticide-treated nets	
3.17	Household vector control	
3.18	Children under age 5 who slept under an insecticide-treated net	MDG 6.7
3.19	Population that slept under an insecticide-treated net	
3.20	Care-seeking for fever	
3.21	Malaria diagnostics usage	
3.22	Anti-malarial treatment of children under age 5	MDG 6.8

MICS INDICATOR [M]		MDG Indicator Reference
3.23	Treatment with artemisinin-based combination therapy among children who received anti-malarial treatment	
3.24	Pregnant women who slept under an insectide-treated net	
3.25	Intermittent preventive treatment for malaria during pregnancy	
4.1	Use of improved drinking water sources	MDG 7.8
4.2	Water treatment	
4.3	Use of improved sanitation	MDG 7.9
4.4	Safe disposal of child's faeces	
4.5	Place for hand washing	
4.6	Availability of soap or other cleansing agent	
5.1	Adolescent birth rate	MDG 5.4
5.2	Early childbearing	
5.3	Contraceptive prevalence rate	MDG 5.3
5.4	Unmet need	MDG 5.6
5.5	Antenatal care coverage	MDG 5.5
5.6	Content of antenatal care	
5.7	Skilled attendant at delivery	MDG 5.2
5.8	Institutional deliveries	
5.9	Caesarean section	
5.10	Post-partum stay in health facility	
5.11	Post-natal health check for the newborn	
5.12	Post-natal health check for the mother	
5.13	Maternal mortality ratio	MDG 5.1
6.1	Attendance to early childhood education	
6.2	Support for learning	
6.3	Father's support for learning	
6.4	Mother's support for learning	

MICS INDICATOR [M]		MDG Indicator Reference
6.5	Availability of children's books	
6.6	Availability of playthings	
6.7	Inadequate care	
6.8	Early child development index	
7.1	Literacy rate among young women[M]	MDG 2.3
7.2	School readiness	
7.3	Net intake rate in primary education	
7.4	Primary school net attendance ratio (adjusted)	MDG 2.1
7.5	Secondary school net attendance ratio (adjusted)	
7.6	Children reaching last grade of primary	MDG 2.2
7.7	Primary completion rate	
7.8	Transition rate to secondary school	
7.9	Gender parity index (primary school)	MDG 3.1
7.10	Gender parity index (secondary school)	MDG 3.1
8.1	Birth registration	
8.2	Child labour	
8.3	Violent discipline	
8.4	Marriage before age 15[M]	
8.5	Marriage before age 18[M]	
8.6	Young women age 15–19 years currently married or in union[M]	
8.7	Polygyny[M]	
8.8	Spousal age difference	
8.9	Approval for female genital mutilation/cutting	
8.10	Prevalence of female genital mutilation/cutting among women	
8.11	Prevalence of female genital mutilation/cutting among girls	
8.12	Attitudes towards domestic violence [M]	

MICS INDICATOR [M]		MDG Indicator Reference
8.13	Children's living arrangements	
8.14	Prevalence of children with one or both parents dead	
8.15	Children with at least one parent living abroad	
9.1	Knowledge about HIV prevention among young women[M]	MDG 6.3
9.2	Knowledge of mother-to-child transmission of HIV[M]	
9.3	Accepting attitudes towards people living with HIV[M]	
9.4	Women who know where to be tested for HIV[M]	
9.5	Women who have been tested for HIV and know the results[M]	
9.6	Sexually active young women who have been tested for HIV and know the results[M]	
9.7	HIV counselling during antenatal care	
9.8	HIV testing during antenatal care	
9.9	Young women who have never had sex[M]	
9.10	Sex before age 15 among young women[M]	
9.11	Age-mixing among sexual partners	
9.12	Multiple sexual partnerships[M]	
9.13	Condom use at last sex among people with multiple sexual partnerships[M]	
9.14	Sex with non-regular partners[M]	
9.15	Condom use with non-regular partners[M]	MDG 6.2
9.16	Ratio of school attendance of orphans to school attendance of non-orphans	MDG 6.4
9.17	Male circumcision	
10.1	Exposure to mass media[M]	

MICS INDICATOR [M]		MDG Indicator Reference
10.2	Use of computers[M]	
10.3	Use of Internet[M]	
11.1	Life satisfaction[M]	
11.2	Happiness[M]	
11.3	Perception of a better life [M]	
12.1	Tobacco use[M]	
12.2	Smoking before age 15[M]	
12.3	Use of alcohol[M]	
12.4	Use of alcohol before age 15[M]	

[M] The indicator is also calculated for men, for the same age group, in surveys where the Questionnaire for Individual Men has been included. Calculations are carried out by using modules in the Questionnaire for Individual Men.

LIST OF MICS SURVEYS

Country/Survey	Region	MICS Round				
		1	2	3	4	5
CENTRAL AND EASTERN EUROPE AND THE COMMONWEALTH OF INDEPENDENT STATES						
Albania	CEE/CIS		N	N		
Azerbaijan	CEE/CIS		N			
Belarus	CEE/CIS			N	N	
Bosnia and Herzegovina	CEE/CIS		N	N	NP	
Croatia	CEE/CIS	N				
Georgia	CEE/CIS		N	N		
Kazakhstan	CEE/CIS				N	N
Kosovo[1]	CEE/CIS	N				NP
Kyrgyzstan	CEE/CIS	N		N		N
The former Yugoslav Republic of Macedonia	CEE/CIS		N	N	NP	
Republic of Moldova	CEE/CIS		N		N	
Montenegro[1]	CEE/CIS	N	N	N		NP
Serbia[1]	CEE/CIS	N	N	N	NP	NP
Tajikistan	CEE/CIS		N	N		
Turkey	CEE/CIS	N				
Turkmenistan	CEE/CIS	N		N		N
Ukraine	CEE/CIS		N	N	N	
Uzbekistan	CEE/CIS		N	N		
Sub-total	**18**	**5**	**10**	**13**	**10**	**9**
EAST ASIA AND THE PACIFIC						
China	EAP	N				
Indonesia	EAP	N	N		PP	
Democratic People's Republic of Korea	EAP	N	N		N	
Lao People's Democratic Republic	EAP	N	N	N	N	
Mongolia	EAP	N	N	N	NPP	N
Myanmar	EAP	N	N	N		
Philippines	EAP	N	N			
Thailand	EAP			N	N	NP
Vanuatu	EAP			N		
Viet Nam	EAP	N	N	N	N	N
Sub-total	**10**	**8**	**7**	**6**	**9**	**4**
EASTERN AND SOUTHERN AFRICA						
Angola	ESA	N	N			
Botswana	ESA		N			
Burundi	ESA	N	N	N		
Comoros	ESA		N			
Ethiopia	ESA	N				

Country/Survey	Region	MICS Round				
		1	2	3	4	5
Kenya	ESA	P	N	P	PP	PPP
Lesotho	ESA	N	N			
Madagascar	ESA	N	N		P	
Malawi	ESA	N		N		N
Mozambique	ESA	N		N		
Rwanda	ESA		N			
Somalia	ESA	PP	N	N	PP	
South Sudan[2]	ESA	N	N		N	N
Swaziland	ESA	N	N		N	N
United Republic of Tanzania	ESA	N				
Zambia	ESA	N	N			
Zimbabwe	ESA			N		N
Sub-total	**17**	**13**	**12**	**6**	**7**	**7**
LATIN AMERICA AND THE CARIBBEAN						
Argentina	LAC				N	
Barbados	LAC				N	
Belize	LAC			N	N	N
Bolivia (Plurinational State of)	LAC	N	N			
Costa Rica	LAC				N	N
Cuba	LAC		N	N	N	N
Dominican Republic	LAC		N			N
El Salvador	LAC					N
Guyana	LAC		N	N		N
Jamaica	LAC			N	N	
Mexico	LAC					N
Panama	LAC	N				N
Paraguay	LAC					N
Saint Lucia	LAC				N	
Suriname	LAC		N	N	N	N
Trinidad and Tobago	LAC		N	N	N	
Uruguay	LAC				N	
Venezuela (Bolivian Republic of)	LAC		N			
Sub-total	**18**	**2**	**7**	**6**	**10**	**10**
MIDDLE EAST AND NORTH AFRICA						
Algeria	MENA	N	N	N	N	
Djibouti	MENA			N		
Egypt	MENA	N				P
Iran (Islamic Republic of)	MENA	NN	N			
Iraq	MENA	N	N	N	N	N
Lebanon	MENA		NP	P	P	
Libya	MENA		N			
Oman	MENA	N				N

Country/Survey	Region	MICS Round				
		1	2	3	4	5
Qatar	MENA				N	
State of Palestine	MENA	N	N		N	N
Sudan[3]	MENA	N	N		N	N
Syrian Arab Republic	MENA	N	NP	NP		
Tunisia	MENA		N	N	N	
United Arab Emirates	MENA					N
Yemen	MENA	N		N		
Sub-total	**15**	**10**	**11**	**8**	**7**	**6**
SOUTH ASIA						
Afghanistan	SA	N	PP		N	
Bangladesh	SA	NN		N		N
Bhutan	SA				N	
India	SA	N	N			
Maldives	SA	N	N			
Nepal	SA	N			P	N
Pakistan	SA	N			PP	PPP
Sub-total	**7**	**7**	**4**	**1**	**5**	**5**
WESTERN AND CENTRAL AFRICA						
Benin	WCA					N
Burkina Faso	WCA	N		N		
Cameroon	WCA		N	N		N
Central African Republic	WCA	N	N	N	N	N
Chad	WCA		N		N	
Congo	WCA					N
Côte D'Ivoire	WCA	N	N	N		N
Democratic Republic of the Congo[4]	WCA	N	N		N	
Equatorial Guinea	WCA	N	N			
Gabon	WCA	N				
Gambia	WCA	N	N	N	N	
Ghana	WCA	N		NP	NP	
Guinea	WCA	N				N
Guinea-Bissau	WCA	N	N	N	N	N
Liberia	WCA	N				
Mali	WCA	N			N	N
Mauritania	WCA	N		N	N	N
Niger	WCA	N	N			
Nigeria	WCA	N	N	N	N	N
Sao Tome and Principe	WCA	N	N	N		N
Senegal	WCA	N	N			P
Sierra Leone	WCA	N	N	N	N	N
Togo	WCA	N	N	N	N	

Country/Survey	Region	MICS Round				
		1	2	3	4	5
Sub-total	23	19	14	13	12	13
Total number of countries	108					
Total number of surveys	296	64	65	53	60	54

1 Survey implemented as Yugoslavia, The Federal Republic of, including the current Serbia, Montenegro and Kosovo in MICS1 and Serbia and Montenegro in MICS2.

2 Survey implemented as part of the Republic of Sudan in MICS1 and MICS2.

3 In MICS2, two surveys were implemented: Sudan (North) and Sudan (South).

4 Survey implemented as Zaire.

N = national survey

P = sub-national/special geographic area survey or special population

LIST OF MICS5 TOOLS

MICS5 Survey Planning Tools

Survey Plan Template

Supply Procurement Instructions

Budget Calculations Template

Fieldwork Duration, Staff, Data
Processing and Supply Estimates
Template

Memorandum of Understanding
Template

Terms of Reference for Steering
Committee Template

Terms of Reference for Technical
Committee Template

Terms of Reference for UNICEF MICS
Consultant

Guidelines for Customization of MICS
Questionnaires

MICS5 Questionnaires

Flow of Questionnaires

Household Questionnaire

Questionnaire for Individual Women

Questionnaire for Individual Men

MICS5 Indicator List

Questionnaire for Children under Five

Questionnaire Form for Vaccination
Records at Health Facility

MICS5 Sampling Tools

Sample Size Calculation

Manual for Mapping and Household
Listing

Household Selection Template

Sample Weight Calculation Template

Data collection tools

Fieldwork manuals

Instructions for Interviewers

Manual for Anthropometry

Instructions for Supervisors and Editors

Fieldwork monitoring and supervision tools

Field Check Tables

GPS data collection: Manuals and form

MICS5 Manual on GPS Data Collection

GPS Data Collection Form

GPS Coordinator's Manual

GPS Operator's Manual

Reference document

GPS Data Recording – example
monitoring sheet

Recommended GPS Device – eTrex 30

Quick Start Manual

Owner's Manual

Data processing tools

Standard MICS data entry and editing programmes: MICS5 Data Entry Application

Manual and data editing guidelines

Manual for Processing the Data

SPSS syntax files

Complete SPSS syntax files (all topics)

Tabulation syntaxes by topic

Preparing Your Data for Analysis	Child Development
Data Quality	Education
Sample and Survey Characteristics	Child Protection
Child Mortality	HIV/AIDS and Sexual Behaviour
Nutrition	Access to Mass Media and ICT Technology
Child Health	Subjective Well-Being
Water and Sanitation	Tobacco and Alcohol Use
Reproductive Health	Sampling Errors

Data analysis tools

Tabulation plan

Complete Tabulation Plan (all topics)

Tabulation plan by topic

Data Quality

Sample and Survey Characteristics

Child Mortality

Nutrition

Child Health

Water and Sanitation

Reproductive Health

Child Development

Education

Child Protection

HIV/AIDS and Sexual Behaviour

Access to Mass Media and ICT Technology

Subjective Well-Being

Tobacco and Alcohol Use

Sampling Errors

Report writing

Model reports

Model Key Findings Report   Model Final Report

Final Report cover template and instructions

Final Report cover template   Cover template instructions

DISSEMINATION

Dissemination templates and instructions

Dissemination templates

Template instructions

▶ Summary-Website-Children Book-Animations

▶ Brochures-CD-Poster-Stacked Sheets

▶ Presentations

▶ Workshop Agenda for Journalists

▶ Making MICS Available on the World Wide Web

QUESTIONNAIRES BY MICS ROUND

The actual number of modules listed below may differ slightly from Figure 2.4. For the figure, we categorized the past modules based on the current modules. As such, a single module may be counted more than once.

MICS1

In this round of MICS, data was collected using a series of modules, rather than separate questionnaires. The modules were:

▶ Household Information Panel

▶ Household Listing

▶ Household Characteristics

▶ Water and Sanitation

▶ Salt Iodization

▶ Education

▶ Fertility

▶ Pregnancy History of Last Three Pregnancies

▶ Tetanus Toxoid

▶ Care of Acute Respiratory Illness (optional)

▶ Diarrhoea

▶ Vitamin A (optional)

▶ Breastfeeding (optional)

▶ Immunization

▶ Anthropometry

MICS2

Household Questionnaire	Questionnaire for Individual Women	Questionnaire for Children under 5
▶ Household information panel	▶ Women's information panel (all eligible women, 15–49)	▶ Birth registration and early learning module
▶ Household listing form (all residents) and orphanhood questions (birth to 14)	▶ Child mortality module (all eligible women)	▶ Vitamin A module
▶ Education module: educational attainment (age 5 or over), school attendance (age 5–17)	▶ Tetanus toxoid module (all mothers with last birth within last year)	▶ Breastfeeding module
		▶ Care of illness module
▶ Child labour module (age 5–14)	▶ Maternal and newborn health module (all mothers with last birth within last year)	▶ Malaria module (for high-risk areas)
▶ Water and sanitation module (all households)		▶ Immunization module
	▶ Contraceptive use module (currently married women, 15–49)	▶ Anthropometry module
▶ Salt iodization module (all households)		
▶ Disability	▶ HIV/AIDS module (all women, 15–49)	
▶ Maternal mortality		

MICS3

Household Questionnaire	Questionnaire for Individual Women	Questionnaire for Children under 5
▶ Household Information Panel	▶ Women's Information Panel	▶ Under-Five Child Information Panel
▶ Extended Household Listing	▶ Child Mortality	▶ Birth Registration and Early Learning
▶ Education	▶ Tetanus Toxoid	▶ Child Development
▶ Water And Sanitation	▶ Maternal and Newborn Health with Intermittent Preventive Treatment for Pregnant Women	▶ Vitamin A
▶ Additional Household Characteristics + Security of Tenure and Durability of Housing	▶ Marriage/Union + Polygyny	▶ Breastfeeding
▶ Insecticide-Treated Nets with Source and Cost of Supplies for Insecticide-Treated Mosquito Nets	▶ Security of Tenure	▶ Care of Illness + Source and Cost of Supplies for Oral Rehydration Salts and Antibiotics
▶ Children Orphaned and Made Vulnerable by HIV/AIDS	▶ Contraception and Unmet Need	▶ Malaria + Source and Cost of Supplies for Antimalarials
▶ Child Labour	▶ Female Genital Mutilation/Cutting	▶ Immunization
▶ Child Discipline	▶ Attitudes towards Domestic Violence	▶ Anthropometry
▶ Disability	▶ Sexual Behaviour	
▶ Maternal Mortality	▶ HIV/AIDS	
▶ Salt Iodization		

MICS4

Household Questionnaire	Questionnaire for Individual Women	Questionnaire for Children under 5	Questionnaire for Individual Men
▶ Household Information Panel	▶ Woman's Information Panel	▶ Under-Five Child Information Panel	▶ Man's Information Panel
▶ Household Listing Form	▶ Woman's Background	▶ Age	▶ Man's Background
▶ Education	▶ Access to Mass Media and Use of Information and Communication Technology	▶ Birth Registration	▶ Access to Mass Media and Use of Information and Communication Technology
▶ Water and Sanitation		▶ Early Childhood Development	
▶ Household Characteristics		▶ Breastfeeding	▶ Child Mortality
▶ Insecticide-Treated Nets	▶ Child Mortality (with or without Birth History)	▶ Care of Illness	▶ Attitudes towards Domestic Violence
▶ Indoor Residual Spraying	▶ Desire for Last Birth	▶ Malaria	▶ Marriage/Union
▶ Child Labour	▶ Maternal and Newborn Health	▶ Immunization	▶ Sexual Behaviour
▶ Child Discipline	▶ Post-Natal Health Checks	▶ Anthropometry	▶ HIV/AIDS
▶ Hand Washing	▶ Illness Symptoms		▶ Circumcision
▶ Salt Iodization	▶ Contraception		▶ Tobacco and Alcohol Use
	▶ Unmet Need		▶ Life Satisfaction
	▶ Female Genital Mutilation/Cutting		
	▶ Attitudes towards Domestic Violence		
	▶ Marriage/Union		
	▶ Sexual Behaviour		
	▶ HIV/AIDS		
	▶ Maternal Mortality		
	▶ Tobacco and Alcohol Use		
	▶ Life Satisfaction		

Additional questionnaire forms: *Questionnaire Form for Vaccinations at Health Facility*

MICS5

Household Questionnaire	Questionnaire for Individual Women	Questionnaire for Individual Men	Questionnaire for Children under 5
▶ Household Information Panel	▶ Woman's Information Panel	▶ Man's Information Panel	▶ Under-Five Child Information Panel
▶ List of Household Members	▶ Woman's Background	▶ Man's Background	▶ Age
▶ Education	▶ Access to Mass Media and Use of Information and Communication Technology	▶ Access to Mass Media and Use of Information and Communication Technology	▶ Birth Registration
▶ Child Labour			▶ Early Childhood Development
▶ Child Discipline			▶ Breastfeeding and Dietary Intake
▶ Household Characteristics	▶ Fertility or Fertility/Birth History	▶ Fertility	▶ Immunization
▶ Insecticide-Treated Nets		▶ Attitudes toward Domestic Violence	▶ Care of Illness
▶ Indoor Residual Spraying	▶ Desire for Last Birth	▶ Marriage/Union	▶ Anthropometry
▶ Water and Sanitation	▶ Maternal and Newborn Health	▶ Sexual Behaviour	
▶ Hand Washing	▶ Post-Natal Health Checks	▶ HIV/AIDS	
▶ Salt Iodization	▶ Illness Symptoms	▶ Circumcision	
	▶ Contraception	▶ Tobacco and Alcohol Use	
	▶ Unmet Need	▶ Life Satisfaction	
	▶ Female Genital Mutilation/Cutting		
	▶ Attitudes towards Domestic Violence		
	▶ Marriage/Union		
	▶ Sexual Behaviour		
	▶ HIV/AIDS		
	▶ Maternal Mortality		
	▶ Tobacco and Alcohol Use		
	▶ Life Satisfaction		

Additional questionnaire forms: *Questionnaire Form for Vaccination Records at Health Facility*

REPORTING TEMPLATES IN MICS

Key findings reports, which contain the final data on all key indicators, have few tables and figures to facilitate the rapid release of results

REPORTING OF DATA FOR MICS: PRELIMINARY/KEY FINDINGS REPORTS

- TABLES
- FIGURES

	MICS 2	MICS 3	MICS 4	MICS 5
TABLES	16	20	5	
FIGURES	3	3	24	8
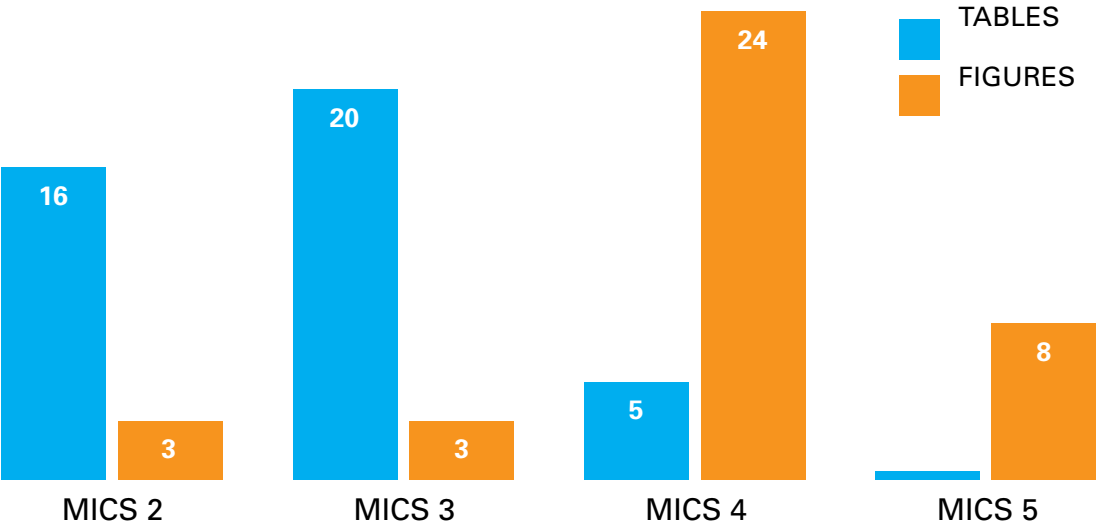
MICS final reports have grown tremendously through the past two decades, reporting on more tables and figures than before

REPORTING OF DATA FOR MICS: FINAL REPORTS

- TABLES
- FIGURES

	MICS 2	MICS 3	MICS 4	MICS 5
TABLES	42	108	163	184
FIGURES	7	15	16	28
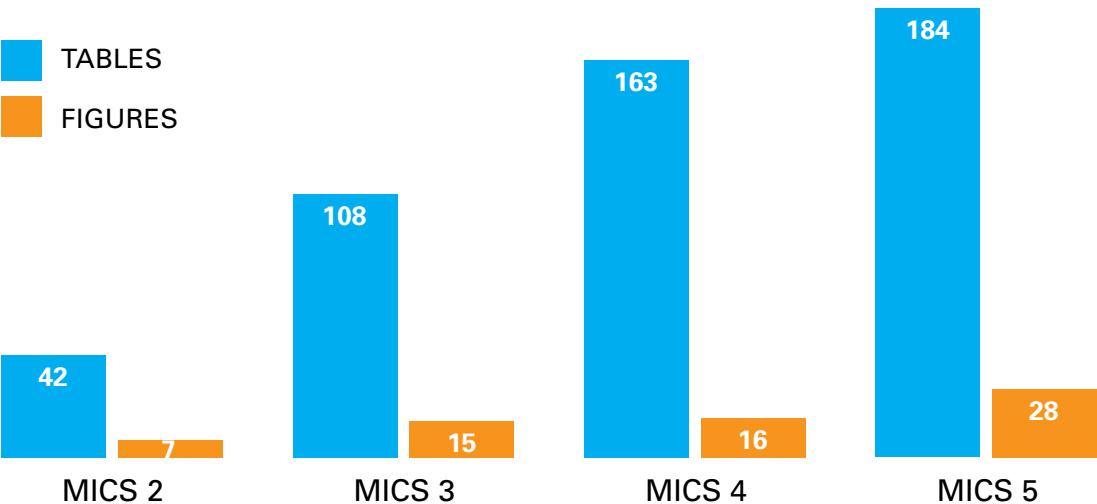
20 YEARS

**THE MULTIPLE INDICATOR
CLUSTER SURVEYS (MICS)
1995–2015**

**Monitoring the
Situation of
Children and Women
for 20 Years**

MICS   unicef