The Multiple Indicator Cluster Surveys

From MDGs to SDGs
Multiple Indicator Cluster Surveys (MICS)

• Developed by UNICEF in the 1990s
  - To assist countries in filling data gaps on children’s and women’s well-being for tracking progress toward World Summit for Children Goals, in 1995 and 2000
• Representative household sample surveys (at national & sub-national levels)
• Standard tools - face to face interviews
• Modular structure – modules can be easily added/deleted
• Standardized/harmonized data and reports
Where is MICS implemented?

Notes: Countries with at least one MICS survey
Including sub-national surveys
<table>
<thead>
<tr>
<th>Round</th>
<th>Year/Period</th>
<th>Emphasis</th>
<th># of Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICS1</td>
<td>1995-1999</td>
<td>World Summit for Children Goals (Mid-decade monitoring)</td>
<td>64</td>
</tr>
<tr>
<td>MICS2</td>
<td>1999-2004</td>
<td>World Summit for Children Goals (End-decade monitoring)</td>
<td>65</td>
</tr>
<tr>
<td>MICS3</td>
<td>2004-2009</td>
<td>World Fit For Children Goals, MDGs, Other Global Monitoring Frameworks (e.g. HIV, Malaria)</td>
<td>53</td>
</tr>
<tr>
<td>MICS4</td>
<td>2009-2012</td>
<td>MDGs, Other Global Monitoring Frameworks (e.g. HIV, Malaria)</td>
<td>60</td>
</tr>
<tr>
<td>MICS5</td>
<td>2012-15</td>
<td>Final MDG Assessment, A Promise Renewed, Other Global Monitoring Frameworks (e.g. HIV, Malaria), baseline for post 2015 goals/targets</td>
<td>54</td>
</tr>
</tbody>
</table>
MICS and the MDGs

MICS contributed **20-40%** of data for the MDGs on many key indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>MICS</th>
<th>DHS</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8 Prevalence of underweight children under-five years of age</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>5.2 Proportion of births attended by skilled health personnel</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>5.3 Contraceptive prevalence rate</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>5.5 Antenatal care coverage (at least four visits)</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>5.5 Antenatal care coverage (at least one visit)</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>5.6 Unmet need for family planning</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>6.2 Condom use at last high-risk sex</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>6.3 Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>6.7 Proportion of children under 5 sleeping under insecticide-treated bednets</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs</td>
<td>28%</td>
<td>36%</td>
<td>36%</td>
</tr>
</tbody>
</table>

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. Date 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.
SDGs and the new era of data

- List of SDG indicators soon to be finalized
- Potentially large source of data for SDGs, particularly on equity
- MICS6 to be launched in Fall 2016 including SDGs and other key indicators relevant to UNICEF
mics.unicef.org

Open access to MICS data!
Demands for additional data on learning

Learning Metrics Task Force (LMTF)

In countries where enrollment or attendance are low, or a large proportion of children are served by non-formal education programs, household surveys can be useful to provide information on learning levels of all children and youth.

DFID Think Piece Paper

To keep track of learning inequalities, longitudinal household surveys are needed that include information on children’s learning (whether in or out of school) together with information on their characteristics.
Development of MICS learning questionnaire

Collaborative effort

Expert group meetings in late 2014, mid-2015 and early 2016:
  • ASER: household-based assessment
  • GMR
  • GPE
  • Hewlett Foundation
  • RTI: EGMA
  • Save the Children: Literacy Boost
  • UNESCO Institute for Statistics
  • World Bank
  • Academia/individual experts
Structure of MICS learning questionnaire

1) Parental Participation – Mothers or caregivers
   - Learning environment – Reading materials at home etc.
   - Parental involvement in school – SMC/PTA etc.

2) Child learning – Children aged 7-14
   - Learning environment – Parental support at home etc.
   - Reading skills
     1. Oral reading accuracy (>=90% words correct)
     2. Literal comprehension (2/3 questions)
     3. Inferential comprehension (1/2 questions)
   - Number skills
     1. Number reading (6 items)
     2. Number discrimination (5 items)
     3. Addition (5 items)
     4. Pattern recognition & completion (5 items)
Recent developments and way forward

- Refinement of questionnaire based on Ghana/Belize results – Jan-March 2016
- Second field test in Kenya focused on concurrent validity and inter-rater reliability – May 2016
- Final MICS pilot in Costa Rica – July 2016
- Launch of MICS 6 – Fall 2016
- Implementation of learning questionnaire in MICS 6 countries – late 2016 onwards
Assessment for Quality Education: Southeast Asia Primary Learning Metrics (SEA-PLM)
• Goals
• Why regional?
• Main elements and unique features
• Implementing partners and governing structure
• National and regional endorsement
• Dissemination of findings
• Improve quality of education through system-level monitoring of learner outcomes

• Support SEAMEO Member Countries to better measure and understand learning achievement amongst the general population and specific groups
• Focus on common issues and interests of the region
• Be part of the process of development from the start
  • Gain support from local regional associations and institutions
• Create and enhance networks with neighboring countries
  • Share ideas and techniques with neighbors
• Implement capacity building more effectively
“SEA-PLM will contribute towards improving and redefining learning outcomes by providing regional culturally appropriate metrics and thereby towards a more equitable and meaningful education for all children across the region”
Target population - Grade 5 (age 10)

Assessment domains – Reading, Writing, Mathematics, Global Citizenship

Context domains – questionnaires: students, schools (principals), teachers and parents; to identify factors related to achievement

Test development – a regional assessment framework developed in collaboration with the countries to guide item development
• Framework based on curricula from all SEAMEO
• Only assessment in region to date to include global citizenship
• First worldwide to assess writing across scripts and languages
• Major focus on capacity building
• Developed in collaboration with countries
• Embedded into national systems and structures
• Reference for curriculum review and standards
• Based on international best practice
• Room for comparison to other assessments
‘Global citizens appreciate and understand the interconnectedness of all life on the planet. They act and relate to others with this understanding to make the world a more peaceful, just, safe and sustainable place’.

Three content sub-domains:
- Systems, issues and dynamics
- Awareness and identities
- Engagement

Student questionnaire: the most appropriate and feasible instrument to measure attitudes and values associated with global citizenship

Examples: Attitudes and Values towards students with disabilities, climate change, level of identity and identification with other children locally/regionally/globally, interactions between communities.
• Enhanced capacity to generate and analyse assessment data at regional, national and sub-national levels
• Enhanced capacity to utilise assessment data for education improvement and more equitable learning outcomes at regional, national and sub-national levels
• Enhanced ASEAN integration in terms of approaches to assessment, with initial focus on Primary Grade 5 in the domains of literacy (reading & writing), numeracy (mathematics) and global citizenship
• Political commitment is required at all levels in the development and roll out
• Need to link to broader capacity building in assessment and education improvement
• Timing of the survey in relation to other Government’s commitments to assessment
• Ensuring SEA-PLM analysis will support development and improvement of standards for all children
• SEA-PLM and its developments has been continuously supported and endorsed by the Ministers of Education and High Officials of the SEAMEO Member Countries
• The relevance and importance of SEA-PLM has been recognized by regional and international stakeholders, and is included in the ASEAN 5-Year Work Plan on Education 2016–2020
2012: 35th SEAMEO High Officials Meeting: Proposal
Desk Review: SEAMEO INNOTECH, curricula; ACER: learning metrics
2014: Launch, ACER recruited
2015: Domain Technical Review Panel: frameworks developed
Country Visits: Cambodia, Lao PDR, Brunei Darussalam, Myanmar
Items and questionnaires developed
Field Operations Planning & Data Management Workshop
Field Trial in Brunei Darussalam (Nov.)
2020: Regional metrics for all SEAMEO Member Countries

2015 – 2017: At least 8 SEAMEO Member Countries will have done field trials (2016) and main surveys, including: Brunei Darussalam, Cambodia, Lao PDR, Malaysia, Myanmar, Philippines, Vietnam & Timor Leste
Concluding thoughts

• The field trial of the SEA-PLM will provide information on the relevance and appropriateness of the items and processes.

• The SEA-PLM main survey will provide information on learning outcomes of Grade 5 students and the factors affecting learning.

• Targeted communication strategy will be essential to disseminate the findings at all levels and ensure appropriate measures are taken to improve quality in education.
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Indicator 4.2.1: Percentage of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being
Data availability for indicator 4.2.1

- Data collected for the first time in fourth round of MICS (MICS4; 2009-2012); since then, data collected at regular intervals every 3-5 years in MICS, for children aged 36-59 months

- MICS ECDI module also used to collected data in some DHS and other surveys

- Currently comparable data collected in around 60 countries
# Early childhood development index (ECDI)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Literacy-numeracy</strong></td>
<td><em>Developmentally on track if they can do at least TWO</em></td>
</tr>
<tr>
<td></td>
<td>EC8. Can (name) identify or name at least ten letters of the alphabet?</td>
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<tr>
<td></td>
<td>EC9. Can (name) read at least four simple, popular words?</td>
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<tr>
<td></td>
<td>EC10. Does (name) know the name and recognize the symbol of all numbers from 1 to 10?</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td><em>Developmentally on track if they can do ONE or the OTHER</em></td>
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<tr>
<td></td>
<td>EC11. Can (name) pick up a small object with two fingers, like a stick or a rock from the ground?</td>
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<td></td>
<td>EC12. Is (name) sometimes too sick to play?</td>
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<tr>
<td><strong>Social-emotional</strong></td>
<td><em>Developmentally on track if they can do at least TWO</em></td>
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<td></td>
<td>EC15. Does (name) get along well with other children?</td>
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<td></td>
<td>EC16. Does (name) kick, bite, or hit other children or adults?</td>
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<tr>
<td></td>
<td>EC17. Does (name) get distracted easily?</td>
</tr>
<tr>
<td><strong>Learning</strong></td>
<td><em>Developmentally on track if they can do ONE or the OTHER</em></td>
</tr>
<tr>
<td></td>
<td>EC13. Does (name) follow simple directions on how to do something correctly?</td>
</tr>
<tr>
<td></td>
<td>EC14. When given something to do, is (name) able to do it independently?</td>
</tr>
</tbody>
</table>
Data availability

- Number of countries with MICS data on ECDI
- Number of MICS surveys that collected data on ECDI

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Countries</th>
<th>Number of Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Asia</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>MENA</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>EAPR</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>ESAR</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>LACR</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>CEE/CIS</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>WCAR</td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>
Technical papers and ongoing methodological work

- Forthcoming methodological paper to document the development of the ECDI between 2007 and 2010

- Technical consultation on the measurement of ECD — 35 participants (January 2015) – to take stock of the work completed on the ECDI

- Review of other instruments that have been developed since 2010 to measure developmental outcomes

- Exploration of new items for possible inclusion in the ECDI

- Testing of ECDI questions for children aged 2 (Belize and Serbia) – completed

- Cognitive testing of ECDI questions (India and Jamaica) – completed – Field test will follow
Ongoing regional initiatives that can complement ECDI and generate national level data

• East Asia Pacific Early Childhood Development Scales (EAP-ECDS)
  – Based on ELDS; Validated regionally and used in 7 countries

• West Central Africa Early Learning Assessment Prototype
  – 8 countries in the region have used the prototype to generate national data on early learning