**APPENDIX**

to the MEMORANDUM OF UNDERSTANDING

on

TECHNICAL COLLABORATION

between

the NATIONAL STATISTICAL OFFICE and the UNICEF COUNTRY COUNTRY OFFICE

for the execution of the project

"***Multiple Indicator Cluster Survey (MICS) Year***"

**I. Governance and Resources**

1. **Attendance to the Workshop on Survey Design**. Prior to or following the signing of this Memorandum of Understanding, the Country Survey Team, including the UNICEF MICS focal point, the survey coordinator, the sampling expert and, if identified, the national MICS consultant participates in the Workshop on Survey Design, organised by UNICEF.

Discussions are held during the workshop with the UNICEF MICS Team, that is, the UNICEF Headquarters (HQ) MICS team, UNICEF Regional MICS Coordinator and MICS expert consultants (on Sampling and Household Surveys) on planning for the survey. Using MICS templates, the Country Survey Team works on an initial outline of the Country Survey Plan and Budget and presents at the end of the workshop.

1. **Country Survey Plan and Budget**. At the end of or soon after the Workshop on Survey Design, the Country Survey Plan and Budget is drafted at country level, shared with the Regional MICS Coordinator for review, and then finalised. The Household Survey Expert Consultant and/or the Regional MICS Coordinator may visit the country at this stage to support planning for the MICS. This visit may coincide with the visit of the Sampling Expert Consultant (described in II.2).
2. **Identification and Recruitment of Survey Personnel. All** key technical experts from the NSO are identified, a National MICS Consultant is hired, and if appropriate, a National Survey Data Processing Consultant is identified. The Regional MICS Coordinator supports the recruitment of the National MICS Consultant (by sharing generic Terms of References (ToR) template, names of potential candidates and by supporting the selection process).
3. **Survey Committees.** Steering and Technical Committees are established. The Steering Committee is the main body responsible for the Country MICS, constituting a forum for a consultative process. The main role of the Technical Committee is to advise the Steering Committee on technical decisions, processes, and survey content. Templates of generic ToRs for Steering and Technical Committees are provided by the UNICEF MICS Team.

**II. Technical Preparations for Data Collection**

1. **Questionnaire Design.** Draft questionnaires based on the standard MICS questionnaires are customised at the country level and shared with the UNICEF MICS Team for review. Once an agreement is reached among the Parties on the questionnaires as a result of multiple reviews and feedback, questionnaires are drafted for the pre-test. During or towards the end of the review process, the questionnaires are translated into local language(s) and back translated to make sure that the standard MICS questionnaires and the local versions are fully compatible. Translation of the Manual for Mapping and Household Listing (described in II.6) and the instructions for interviewers, supervisors and measurers take place at about the same time. Back translations are also reviewed by the UNICEF MICS Team.
2. **Sampling.** The survey sample is designed in the country. The Regional MICS Coordinator organises a visit and/or online consultation of the Sampling Expert Consultant to discuss the key parameters of sampling design. The sample design document is drafted by the national sampling expert and reviewed by the Sampling Expert Consultant, who must have access to all the information on the sample frame. After the sampling design document is finalised, inputs which are required for sample selection and for calculation of sample weights are produced in line with the MICS template and shared with the UNICEF MICS Team for review. The first-stage selection of the sample is made.
3. **Geocode.** The availability of each sampled cluster’s geocodes (cluster centre points, multi-points, boundaries or sampled households’ coordinates) is assessed by the Country Survey Team and shared with the UNICEF MICS Team, together with the boundary shapefile representing the sampling frame, including one administrative level below the boundaries of sample stratification. If geocodes and shapefiles are already available (typically from Census digital cartography), they should be shared in advance of mapping and household listing, but if geocodes are unavailable, such data should be collected during the mapping and household listing operation and shared in advance of the main fieldwork, so that the information can be integrated into field operations, for navigation and validation purposes. The UNICEF MICS Team will not share cluster coordinates with anyone at any point during the survey process. The UNICEF MICS Team will help in anonymisation of the geocodes using the MICS GIS methodology and make them publicly available on the MICS website in coordination with the NSO.
4. **Ethical review.** Following agreement between the UNICEF MICS Team, the UNICEF Country Country Office and the NSO on the survey materials which summarise the survey protocols (i.e., draft Survey Plan & Budget with draft questionnaires, protection protocols, sampling plan, etc.) these are shared with an appropriate ethics review board. Based on the observations from the review board, materials are adapted and finalised and final approval for survey implementation is sought. The ethical review is timed such that final approvals are received around the time of the pre-test (see below).
5. **Supplies.** Based on the content of the questionnaires, sample size and availability of cluster geocodes, and according to the Procurement Instructions for Recommended Equipment and Software for MICS surveys, the types and quantities of supplies needed for the survey are determined and discussed with the Regional MICS Coordinator. Supplies are ordered by the UNICEF Country Office. Sufficient time should be allowed between the procurement time and the expected date of delivery of the items prior to the start of pre-test training and data collection.
6. **Household Mapping and Listing.** Household mapping and listing training is conducted for listers and mappers according to the recommendations described in the MICS Manual for Mapping and Household Listing. The agenda of the training as well as listing forms planned to be used are reviewed by the Sampling Expert Consultant. The CAPI listing application is developed in-country and reviewed by the Sampling and/or the Data Processing Expert Consultants. If cluster geocodes are to be collected during listing, the GIS Expert Consultant also reviews the listing forms and the CAPI listing application. Based on the sample selection and according to the Manual for Mapping and Household Listing, the NSO conducts household listing and selection in sampled clusters. As needed, the Regional MICS Coordinator sends the Sampling and/or the Data Processing Expert Consultant to support the training and/or the first days of listing. either remotely or while in the country. If needed, the GIS Expert Consultant also supports training remotely. The second-stage selection of the sample is completed.
7. **Pre-test of Questionnaires.** The questionnaires are pre-tested after appropriate training. The training agenda, which should be similar in content to the main training agenda, is reviewed by the Regional MICS Coordinator in advance. The Household Survey Expert Consultant supports the training and the pre-test. The pre-test report is developed and shared with the Regional MICS Coordinator for review. Questionnaires are finalised after the agreement of Parties. Sufficient time should be allowed between the questionnaire pre-test and the CAPI/data entry application test to make sure that all the questionnaires can be carefully reviewed before the CAPI/data entry application is tested. Around the time of pre-test training, the first draft of the tabulation plan is customized by the Country Survey Team.
8. **Second Workshop on Data Processing.** The Country Survey Team, including the National MICS Data Processing Coordinator and National MICS Consultant, and if appropriate, the National Survey Data Processing Consultant participate in the workshop on data processing. This workshop is conducted to strengthen skills in the utilisation of the two software packages used by MICS (CSPro and SPSS) and enhance understanding of MICS data processing methodology, protocols, standards, and technical guidelines. The Data Processing Expert Consultant participates in the workshop and supports the country team, together with the data processing experts of the UNICEF HQ MICS team, with adaptation of the data entry application. At the same workshop, the Country Survey Team gets familiarised with customisation of survey archives. The technical coordinator of the NSO and the UNICEF MICS focal point also participate to this workshop.

During the MICS Data Processing Workshop, participants are trained in customising the MICS CAPI/data entry and editing application and tabulation programmes.

1. **Data Entry Application. Following the MICS Data Processing Workshop, the MICS CAPI/data entry and editing application and tabulation programmes** are fully customised and completed in the country, based on the pre-tested and final questionnaires and then sent to the UNICEF MICS Team for review and feedback. The CAPI/data entry application is then tested and finalised. The test is supported by the Data Processing Expert Consultant.

**III. Fieldwork**

1. **Fieldwork Training and Pilot Study.** A 3 to 5-week field staff training is conducted in the country, including field practice and a pilot study. The Household Survey Expert Consultant mobilised by the Regional MICS Coordinator supports the training. The GIS Expert Consultant provides online support to the use of cluster geocodes for navigation purposes during fieldwork. The agenda of the training is shared in advance with the Regional MICS Coordinator for review and feedback.
2. **Fieldwork/Data Collection.** The Household Survey Expert Consultant and the Regional MICS Coordinator support monitoring of field work (in particular during the early stages). Real-time monitoring reports are produced in- the country and shared with the UNICEF MICS Team on a weekly basis, together with the anonymised interim SPSS data files for review and feedback. Data quality and consistency checks are performed simultaneously. During fieldwork/data collection, the survey team produces final drafts of the tabulation plan and the corresponding SPSS syntax.

**IV. Analysis**

1. **Creating Data Files.** Automated data editing and cleaning is completed at the country level. To support this process, the UNICEF MICS Team mobilises the Data Processing Expert Consultant to provide technical assistance in-country. CSPro data files are exported to SPSS. Automated calculation of sampling weights is also completed at country level, with the support of the Sampling Expert Consultant. CSPro files and SPSS syntaxes used for preparing data for analysis, as well as survey data files are shared with the UNICEF MICS Team for a remote review. Final survey data files are produced, ready for tabulation.
2. **Data Analysis and Tabulation.** A complete set of survey result tables is produced. Data analysis/SPSS outputs are produced in the country, based on the customized draft MICS tabulation plan, and shared with the Regional MICS Coordinator, who mobilises the Household Survey Expert Consultant to provide technical assistance as needed. Following this review, the Country Survey Team shares the final syntaxes, outputs and tabulation plan with the UNICEF MICS Team for final consolidated review. The Country Survey Team adapts tabulations and programmes based on feedback and populates the final tabulation plan for the Survey Findings Report (SFR).
3. **Workshop** **on Data Interpretation and Report Compilation.** The Country Survey Team organises this in-country workshop to review survey results, the draft SFR and Statistical Snapshots. The Regional MICS Coordinator and/or the Household Survey Expert Consultant participate, accompanied by the Data Processing Expert Consultant as needed. Subject matter experts within the NSO and from ministries and/or partner organisations participate. A complete draft SFR with all tables and annexes and selected Statistical Snapshots based on the MICS template are finalised during the workshop. At the same workshop, participants identify potential areas for further analysis, broaden their knowledge of various tools and methods for effective dissemination of MICS data and make progress on archiving work. UNICEF MICS Team shares examples of dissemination materials.

**V. Dissemination of Survey Results**

1. **Survey Findings Report. Draft versions of the** SFR and statistical snapshots, produced at the Data Interpretation and Report Compilation Workshop, are finalised in the country and shared with the UNICEF MICS Team for review. Once an agreement is reached among the Parties as a result of multiple reviews and feedback, the SFR and statistical snapshots are finalized.
2. **Publication.** The final designed, formatted pdf versions of the SFR and statistical snapshots are sent to the UNICEF MICS Team for final feedback, including on the design. At the time of, or immediately after the launch of the survey results at the country level, the UNICEF MICS Team uploads the SFR and statistical snapshots to mics.unicef.org for global dissemination.

If a printed version of the SFR and snapshots are planned, hard copies are shipped to the Regional MICS Coordinator and to the HQ MICS team.

1. **Completion of Archiving.** The NSO and UNICEF MICS Team agree on the final versions of key documents used and produced during the survey process and place them in local survey archives in-country. This is important for future surveys in the country. Final anonymised files and other documents, as described below, are added to these archives once finalized.
2. **Data Sharing.** With the support from the UNICEF MICS Team, survey data files are anonymised in accordance with international standards, so that no individual, household, or cluster location can be identified. A set of standard variables are added to the survey data files along with any necessary notes on using the data and contact information of the NSO. The UNICEF MICS Team anonymises geocodes and calculates several geospatial covariates from a range of open data sources, using the MICS GIS methodology. Results are shared with the NSO for review and concurrence. Online training on anonymization of survey data files and geospatial data is provided by the UNICEF MICS Team, as needed. Anonymized data files, tabulation syntax, metadata, anonymised cluster locations, associated boundary shapefiles and calculated covariates are uploaded to [mics.unicef.org](http://mics.unicef.org/).
3. **Dissemination and Further Analysis.** Dissemination materials are produced, and further analysis of MICS data is planned by the NSO and other national partners. Support to production of dissemination materials and further analysis is provided or facilitated, on request, by the Regional MICS Coordinator, and the UNICEF MICS Team. The UNICEF MICS Team may organise global Thematic Further Analysis Workshops relevant for survey team members.