

User Notes for PMA Uganda Phase 3 Service Delivery Point Survey Dataset, Version 2.0

Disclaimer: PMA cannot provide in-depth support for data analysis or data related questions, however, to assist the end-user, explanation of some variables is provided below.

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PMA Survey Design

Performance Monitoring for Action (PMA), formerly PMA2020, builds on the previous success of PMA2020 surveys in Uganda and focused on collecting routine data on key global indicators in family planning and reproductive health, while expanding content area to address questions related to contraceptive decision-making and autonomy. The aim of PMA project is to conduct cross-sectional and panel surveys at the female, household, and service delivery points to measure and monitor key family planning indicators of programmatic relevance in Uganda cross-sectionally on an annual basis; and facilitate an improved understanding of the determinants and consequences of contraceptive availability and use dynamics and reproductive patterns in Uganda.

In Uganda, a cross-sectional and panel household and female surveys (HQFQ) are conducted annually, with follow-up for the panel occurring at Year 2 and 3. The Service Delivery Point Survey (SQ) panel baseline data is collected at Year 1 and follow-up data is collected annually. The Service Delivery Point Client Exit Survey (CQ) is conducted biannually with a baseline and a phone interview follow-up occurring 6 months after the baseline enrollment each year.

Sampling

PMA survey uses a multi-stage cluster design, with stratification at the urban/rural level. The enumeration area (EA) is the primary sampling unit, obtained from the national statistics agency of Uganda. Within each urban/rural stratum, EAs are selected using probability proportional to size (PPS) method. In each of the EAs, all households and private health facilities are listed and mapped prior to baseline data collection. Listings of public health facilities that serve the selected EAs at all three levels are obtained from the Ministry of Health.

For the service delivery point (SDP) panel survey, up to three private SDPs are selected within each EA at baseline. Public SDPs at the three levels (primary, secondary, and tertiary) of the healthcare system assigned to serve the sampled EA are also included in the sample. This baseline sample of SDPs is followed-up annually at year 2 and 3. Private SDP interviews are conducted by REs, public SDP interviews are conducted by supervisors with facility in-charges, who provide consent for their facility to participate. Other personnel may participate in the survey as well, depending on in-charge knowledge and facility size.

The SDP panel surveys provide data to monitor service availability and quality, understand attributes for the availability and readiness, and explore the association of these SDP results with individual behaviors in the EA, by geospatially linking data from both the SDP and household surveys. The SDP panel surveys linked to the household panel surveys will inform government policies and programs regarding the influence of service environment on service utilization behaviors among a population. In Uganda, additional questions have been added to the SDP questionnaire to assess changes or reductions in service delivery that could have impacted women's ability to access family planning or reproductive health services during the period of COVID-19-related restrictions.

Questionnaires

PMA uses standardized questionnaires to gather data about households, individual females and health facilities that are comparable across program countries and consistent with existing national surveys. Prior to launching the survey in each country, local experts review and modify these questionnaires to ensure all questions are appropriate to each setting. All questionnaires were translated into the eight local languages based on the UBOS sub-regions, and translations were reviewed for appropriateness.

All PMA questionnaires are administered using Open Data Kit (ODK) software and Android smartphones. The ODK questionnaires were in English and could be switched into eight local languages (Luganda, Ngakarimojong, Runyankole-Rukiga, Runyoro-Rutoro, Luo, Lugbara, Ateso, and Lusoga) on the phone. The interviews were conducted in the local language, or English in a few cases when the respondent was not comfortable with the local language. Female resident enumerators (REs) in each EA administered client exit interview surveys in the selected facilities.

Training

The PMA Uganda Phase 3 fieldwork started with a five-day training of 17 new REs, held between August 22-26, 2022. The field supervisors and quality control supervisors were trained for two days between August 27-28, 2022. Ahead of these trainings, a needs assessment was performed by the

central PMA Uganda team to identify gaps in RE knowledge and establish topics to cover and emphasize in the trainings.

Subsequently, all 138 REs attended a 7-day refresher training, held between August 29- September 4, 2022, and the supervisors supported this RE refresher training. The objective of the refresher training was to address the gaps and errors identified during Phase 2 data collection, to understand the questionnaire changes for Phase 2, and to refresh the knowledge and skills on questionnaire content and the art of asking questions through paired interviews. In addition, field staff were also reminded of key survey protocols they needed to abide by, including consent administration and research ethics. Training content focused on the PMA study design that includes relocation protocols and tools for tracking and re-interviewing panel women. For the training, all participants were given comprehensive instruction on how to complete the household, female, and service delivery point (SDP) questionnaires.

Staff from the Makerere University School of Public Health (MakSPH), PMA Uganda's implementing partner, led all Phase 3 trainings with support from PMA staff from the Bill & Melinda Gates Institute for Population and Reproductive Health of the Johns Hopkins Bloomberg School of Public Health.

Data Collection & Processing

Uganda Phase 3 (UGP3) Service Delivery Point Survey was conducted between September and October 2022. The ODK application enabled REs and supervisors to collect and transfer survey data to a central ODK Aggregate cloud server. This instantaneous aggregation of data also allowed for daily monitoring of data collection progress, concurrent data processing, and course corrections while PMA was still active in the field.

Throughout the data collection, the central staff at MakSPH in Uganda and the Gates Institute at Johns Hopkins in Baltimore, Maryland routinely monitored the incoming data and notified field staff of any potential errors, missing data, or problems found with form submissions on the central server. The use of mobile phones combined data collection and data entry into one step, and hence, the data entry was completed when the last interview form was uploaded at the end of data collection.

Once all data were on the server, data analysts cleaned and de-identified the data, applied survey weights, and prepared the final data set for analysis using Stata® version 16 software.

Who is in the Data?

Uganda Phase 3 (UGP3) Service Delivery Point Baseline Survey includes 141 enumeration areas (EAs) selected using a multi-stage stratified cluster design with urban-rural and region strata. Of the 141 enumeration areas, 19 new enumeration areas were added for a CIFF (Children's Investment Fund Foundation) sponsored study that are now part of the PMA Uganda cross-sectional sample. The results are representative at the national level and within urban/rural strata. The final sample included 382 facilities which completed the interview.

Materials included in this Data Zipped File

This data zipped file includes:

1. Client exit Interview questionnaire pdf file
2. User notes pdf file
3. Dataset in 3 file formats: .csv, .xlsx and Stata .dta

Codebook

The latest version of the PMA Service Delivery Point Survey master codebook can be downloaded from the <https://www.pmadata.org/data-codebooks>.

General Variables

SIF variables: Date and time variables are provided in both string format and as Stata Internal Format (SIF) values. The variable name of any variable that has been changed into SIF is appended with SIF (e.g. **system_date** and **system_dateSIF**).

Select multiple variables: Some questions allow for the selection of multiple answers. These variables are in string format and the values are the concatenation of answer choices (e.g. if a respondent said that she was counselled for contraceptive methods: female sterilization, implant and IUD, the response for the variable **fp_couns_mtd** would read “fster impl iud”). Multi-select options are generally, though not always, transformed into binary variables for analysis.

Variable Response Options

Select one: Most select one numeric variables have consistent values for option choices across all PMA countries (e.g. **fees ==1** is equivalent to charging contraceptive fees in all PMA countries). Exceptions include the variables which have country-specific options and numbering. For examples:

- Geographic variable (e.g. **region, county**): geographic variable names and response options vary across countries
- **facility_type**: facility types vary across countries

Select multiple: Similarly, most select multiple variables have the same response options across all PMA countries, with exceptions for variables with choices that are country specific.

See the PMA Service Delivery Point Master Codebook for complete details on variables and answer choices for each survey.

Specific Variables

metainstanceID: A unique ID generated by ODK for each form submitted to the central server. This variable is unique for each client within a survey.

facility_ID: Facility names are masked with randomly assigned unique ID numbers. This is a unique ID of the facilities across different PMA surveys. This variable, hence, serves as a panel merge key variable and can be used to combine different phases of the datasets for panel analysis.

PMA2020_facility_ID: Facilities that were included in the previous PMA2020 (2014-2018) surveys also has PMA2020 IDs. This ID is unique across all survey rounds of PMA2020 cross-sectional surveys.

EAserved#: Some SDPs serve more than one EA. The **EAserved#** variables indicate the additional EAs that a given facility serves, if any. Information regarding which EAs an SDP serves comes from the country/local government. Only public facilities are assigned to serve more than one EA.

EA_ID: The primary sampling unit masked with a random number for anonymity. The same random number is applied to the same EA across multiple survey phases.

RE_ID: Identification number of the resident enumerator (RE), or interviewer. RE names are masked with the PMA random numbers. The same random number is applied to the same REs across different phases of the PMA survey.

PMA2020_RE_ID: The resident enumerators (REs), or interviewers, who were involved in the previous PMA2020 surveys (2014-2018), also had PMA2020 IDs. This ID is unique for all survey rounds of the PMA2020 grant.

The PMA-CIFF Uganda: Management of Self-Care Study

The PM CIFF Uganda study was funded by the Children's Investment Fund Foundation (CIFF) to collect data on aspects of self-care and measurement of poverty, for the purposes of monitoring their investments and informing local policy. The PMA-CIFF study aims to measure various features of self-injection of a contraceptive method, HIV self-testing, and multidimensional poverty such as distance to water source, sharing of water source with other households, and type of fuel used for cooking.

In order to estimate the change in self-injection over time, the original PMA sample size was increased by adding 19 new enumeration areas to the PMA Phase 2 survey for the CIFF study. Eligible family planning service clients who were interviewed for the PMA Phase 3 survey were also administered CIFF questionnaires.

Preparing Data for Longitudinal Analysis

To perform panel SDP analysis, users need to use **facility_ID** variable (*described above*) to merge the datasets. Variable of interests need to be renamed by adding prefixes or suffixes before merging to prevent the data loss at the merge.

GPS Variables

GPS coordinates are not released in this dataset.

Notes for Missing Data

In Stata, Missing data is expressed as "." in the cell. Generally, Stata commands perform computations of any type handle missing data by omitting the row with the missing values. However, this may vary across commands. PMA does not impute missing values. Missing data in datasets should be studied and/or treated before proceeding to analysis.

Reasons for missing data:

Normal situations:

1. Incomplete forms: If a household, female, or SDP form is not marked as completed (**HHQ_result**, **FRS_result**, **SDP_result** and **CEI_result** not equal to 1), the observation is likely to miss most of the information. Incomplete forms should not be included in the analysis.
2. Observations that are ineligible for subsequent forms: Only eligible respondents will receive subsequent forms. For example, males and ineligible females will not receive female questionnaires in family planning surveys, hence their observations will have all missing values in female forms.
3. Question not administered due to skip logic: PMA surveys use ODK's skip logic function. The subsequent questions are administered selectively based on the respondent's previous answers. Irrelevant or inapplicable questions are skipped. For example, a woman who is not a contraceptive user will not be asked questions about contraceptive usage subsequently.

Uncommon situations:

1. Lost forms: Due to technical constraints in some challenging data collection areas, forms can be lost in the process of data submission. Although most forms were recoverable, there are occasionally a few that cannot be found. For example, an observation from an eligible woman with completed female form information but missing household form information, or vice versa. These observations may be dropped based on analysis needs.
2. Missing due to incorrect skip logic: PMA surveys were conducted under rigorous quality control. However, in rare cases, there can be incorrect skip logic, which skipped a question that was supposed to be administered, resulting in missing values. These errors are documented in the PMA codebook, which can be downloaded from PMA website. It's not necessary to drop the entire observation since this will likely affect only a few questions.

Distinguish missing data from negative values:

1. -99: No response. The respondent was administered with the question but did not provide an answer. PMA survey requires consent from the respondent and the respondent has the right to refuse to answer any questions at any point. -99 is recorded to reflect that the respondent did not provide an answer to a certain question.
2. -88: Did not know. The respondent consented to answer a specific question but without knowing the answer.
3. -77: Not applicable. The question is administered to the respondent but not applicable to the respondent's situation.

Dataset Version Updates

Any updates made to datasets after their initial release will be documented here. PMA releases new versions on as needed basis and users who have been approved previously to get access to the datasets will be notified via email upon the release of the new versions. Users can then log onto the PMA website and re-download the datasets without having to submit a new request.

Users should always be using the latest version of the datasets available on the PMA website. However, if users need an access to the old versions of the datasets for any reasons, users can contact datamanagement@pma.org directly with an explanation for why the access to the old version was needed.

In March 2024, version 2.0 of this dataset was released with the following updates:

- Questionnaires was updated adding ODK logic text.
- User notes was updated adding more information on PMA and CIFF study.

PMA GitHub Repository

The PMA GitHub Repository https://github.com/PMA-DM/PMA_Analyses_Public has Stata .do files which could be used to generate indicators in the briefs, using the Household and Female, Service Delivery Point and Client Exit Interview Datasets that are publicly available.

Note: Data presented in the online briefs represent preliminary results. Therefore, there may be slight differences between the .do file results and those in the brief. Please access the PMA DataLab <https://datalab.pma.org/> to cross check any discrepancies and get the final estimates.

Dataset Citations

Suggested citation: Makerere University, School of Public Health at the College of Health Sciences and The Bill & Melinda Gates Institute for Population and Reproductive Health at The Johns Hopkins Bloomberg School of Public Health. Performance Monitoring for Action (PMA) Uganda Phase 3 Service Delivery Point Survey (version 2.0), PMA2022/UGP3-SQ. 2022. Uganda and Baltimore, Maryland, USA. <https://doi.org/10.34976/mw81-8089>

To report errors or inconsistencies:

Please email datamanagement@padata.org