



**AFRICAN INITIATIVE FOR MANKIND PROGRESS  
ORGANIZATION -AIMPO**

**Data Flow, Data Management, and Data Quality guidelines**

## A. INTRODUCTION

Established in 2001, the African Initiative for Mankind Progress Organization (AIMPO) is a nationally recognized, non-governmental and non-profit organization dedicated to the advancement of Rwanda's indigenous, Batwa population, legally categorized as 'Historically Marginalized Peoples' (HMP) in Rwanda. The Government of Rwanda (GoR) required our organization to change its name from the African Indigenous Minority People's Organization to its current name in 2007, claiming that the recognition of ethnicity and indigeneity is not relevant to Rwanda.

- **Our vision** is to advance the cause and integration of marginalized people (i.e. the Indigenous Batwa population) into a society in which all citizens should be equal in terms of political decision-making, economic opportunities, and access to education and healthcare. This will contribute to a decrease in the discrimination against the Indigenous Batwa.
- **Our goal** is to deliver high-impact, cost-effective, and culturally competent capacity-building programs to Historically Marginalized People in our target regions in Rwanda.
- **Our missions** are to promote the individual and collective rights of HMP; to facilitate sustainable development in Historically Marginalized Communities; and to accelerate the social, political, and economic integration of these communities into Rwandan society.

In its habit to better serve the community partners and improve the packaging and the sharing of information, AIMPO has developed a guideline on data flow, data management and data quality guidelines.

## B. Purpose of the guideline

The goal of this guideline is to provide the staff, members and other stakeholders with various steps that data take on their journey through the M&E system and the ways in which those steps are managed to support the highest-quality data at AIMPO. It is providing hints for the above stated parties on understanding what a data management system is and how it can help with data quality assurance and identify ways to ensure data quality at each step of a data management system.

## Six key steps that data go through as they move through an M&E system at AIMPO



*N.B: These are not only steps as the data flows through AIMPO M&E system, but also steps to be managed through the data management system that AIMPO establishes for its M&E data. At AIMPO, we believe that the way that we manage the data has important implications for the quality of data we get out of the system.*

### D. Source

Data may originate from primary (training participants' lists, talking to the participants and collect their quotes, etc.), secondary (list of trained Community health workers) and tertiary (national census data, EICV). The source of the data is where you first find the data. It can include primary, secondary, or even tertiary data. Primary data are data that you collect yourself. Secondary data that you will be using are data collected by others. An example of secondary data is information from a district health office that already tracks hospitals with trained clinicians. The training organization can then use this secondary data source to report the indicator or validate their numbers from their primary data collection. Tertiary data are data collected for other purposes but are still

relevant for your use. For example, national census data might have information about the number of households served by a particular hospital. You can then calculate how many households have now gained access to a trained clinician.

## E. Collection

Data collection is the way in which you get the data from the source and put it into a format for the later stages in the data flow. Different data collection tools are used depending on the specific data and the environment. Questionnaires, interviews, observations, existing records are all ways in which data is collected and made available for the next step.

## F. Collation

Collation refers to taking all the data that's been collected and combining it to create summary information for use in data analysis. E.g: taking the numbers from all the training registration forms and add them up to determine the total number of participants for all the trainings combined. It is a process of combining data into summarized (often standardized) formats electronically or manually and, at different levels.

## G. Analysis

At this step, we are expected to review and manipulate data. Depending on the type of data and the purpose, this might include: application of statistical methods, selecting or discarding certain subsets based on specific criteria. Analysis enables data users to understand or interpret the results.

## H. Reporting

At this stage, crude and processed data is described and presented. It is the process that provides program implementers and stakeholders an opportunity to inform themselves of progress, problems, difficulties encountered, successes, and lessons learned during implementation. It can take many forms such as narratives, graphics, etc.

## I. Use

The final step of the data flow is the actual use of the data. This is based on the fact that a lot of resources go into moving the data from the source, through collection, collation, analysis, and reporting. At AIMPO it is believed that if the data are not actually used to manage programs or inform policy, then these resources are wasted. The data collected in an M&E system should be used to make timely and appropriate decisions

1. **SUMMARIZED DATA FLOW AND USE**

Source	Collection	Collation & Storage	Analysis	Reporting	Use
What are we collecting ?	Who collects this data, from where, and how often?	How are data aggregated?  Where are the data stored?	List any possible opportunities to transform the data into more meaningful information and thus for further review  Are there other pieces of information available?	To whom will this information be reported?	How can this information be used to make informed decisions? List specific opportunities for use.  Link to Data Use Template
Data elements	Data elements	Data elements  Indicators	Data elements  Indicators	Indicators	Indicators

*This table, which is a section of the M&E plan, provides a way to document the flow of data through the system from source to use*

**J. Issues to be taken into account for the data quality insurance**

At AIMPO, staffs at different levels and steps of data management are required to pay attention to some issues;

#### **K. 6.1. On the data source**

*Poor recording of the data:* Incomplete information, illegible notes, etc. Examples: Data could be incomplete (e.g., incomplete Village Agents lists notes), Inconsistent recording of information by different staff, data that are not available or feasible to collect. In this case, AIMPO pay attention to designing data instruments carefully, correctly and realistically. It is also recommended to include data providers and data processors in decisions to establish what is feasible to collect, review, and process, and how to draft instruments. AIMPO also makes sure and develop detailed instructions for data collection process and ensure all personnel are trained in their assigned task.

#### **L. On the data collection**

It is recommended not to use different instruments to collect the same data, to pay attention to avoid entering data incorrectly or in wrong fields in a database, inconsistent entries of data by different data capturers. It is thus recommended to develop specific instructions for data collection and routinely check to see if they are followed, identify procedures for making changes (if necessary) to the data collection process as well as for reporting problems during data collection, to develop standard operating procedures for the collection and management of data as well as for revising collection tools and reporting problems and to see if people follow implemented changes to the process by conducting on-site reviews

#### **M. On the data collation**

Collation issues to be paid attention to include: Data inconsistently collated, data entry errors or other errors associated with manual collation, problematic sampling or estimation, no verification or other quality control mechanisms, data not kept secure, develop checklists and approval procedures for key steps, conduct reviews during entry process, create an electronic or manual collation tool that includes a data review process by a second individual who is not entering the data, randomly sample data and verify, ensure problems are reported and documented, corrected and communicated, and tracked back to the source.

#### **N. On the analysis**

Data quality issues during analysis include incorrect analysis, inconsistent analysis, misrepresentation of results. To ensure quality during analysis AIMPO staff should make sure analysis techniques meet the

requirements for proper use; disclosing all conditions/assumptions affecting interpretations for data; and having experts review reports to ensure the analysis is reasonable.

#### **O. On the reporting**

Data quality issues during reporting include too little reporting or feedback; not presenting information in an accessible manner and misrepresentation of results. All layers of data management at AIMPO are recommended to maintain integrity in reporting (not leaving out any key information). The supervisors and the senior managers are recommended to synthesize results for the appropriate audience, act as reviewers within the organization, protect confidentiality in reports and communication tools and review data and provide feedback to those who have a stake in the results.

#### **P. On the use**

Quality issues during use may involve not having complete data for programmatic decisions; and not using data to inform programmatic decisions. It is thus recommended to make timely, data-driven decisions for the program.