ADS 201 Additional Help

DISAGGREGATING MONITORING INDICATORS

This document provides guidance and best practices on how to disaggregate monitoring indicators, supplementing policy guidance in ADS 201.3.5.6(G).

What is Data Disaggregation?

Data disaggregation is the process by which performance indicator data are separated into subgroups to meet analytical needs of USAID staff. Typically, these subgroups reflect demographic characteristics. For example, an indicator monitoring the number of nurses trained by an activity must be disaggregated by sex to track the number of male nurses trained and the number of female nurses trained.

Why Does USAID Disaggregate Indicator Data?

Disaggregating indicator data by subgroups can help increase the utility of an indicator by revealing levels and trends for relevant subgroups that are important to the success of an activity or project. For instance, a program to increase child literacy may be particularly interested in disaggregating by household income to determine if the literacy rates of the poorest children are improving.

Disaggregating indicator data by subgroups also invites comparison across the subgroups, which can enhance understanding of programmatic challenges and opportunities, successes and failures. For instance, an indicator monitoring the number of farmers applying new farming technologies may be disaggregated by region, revealing those regions where the activity is relatively more and less successful. With this information, USAID is better equipped to adaptively manage its programs.

Disaggregated data are also important for accountability purposes. Some USAID programming may be directly tied to funding streams that require monitoring data on both the entire beneficiary population and specific subgroups.

What Characteristics Does USAID Disaggregate?

When determining whether or how performance indicator data should be disaggregated, there are generally three important considerations: (1) complying with USAID and Mission-specific data disaggregation requirements, (2) balancing utility and costs of disaggregation, and (3) ensuring the privacy and security of beneficiaries about whom data is collected.

REQUIRED SEX DISAGGREGATION

USAID requires the disaggregation of performance data by sex for all performance indicators that capture data about people (see ADS 201.3.5.6(G) and ADS 205.3.6). Any indicator reporting about people (e.g., number of people trained, number of beneficiaries, percent of farmers using new technologies, etc.) must be disaggregated by male and female. Some Missions work in countries where a third sex is recognized. For those countries, sex designations can reflect host country determinations, and can be represented as an additional option when disaggregating indicators by sex.

RECOMMENDED DISAGGREGATION BY GEOGRAPHIC LOCATION

Though not required, USAID recommends performance indicator data be disaggregated by a geographical level that is feasible and useful for management purposes. Understanding how successful (or unsuccessful) an intervention is in various geographic contexts may have implications not only for the project, but across the entire Mission. Geographic disaggregation at the sub-national level may range from the district or province level to the village or community level. While collecting indicator data at a very granular level of geographic detail (e.g., latitude and longitude point locations) can provide the most detailed information, that level of granularity may not always be necessary or feasible. PPL recommends each Mission establish a common minimum standard for geographic disaggregation. In making this decision, Missions should balance the utility of sub-national data disaggregation against the cost and effort required to geographically disaggregate data. For more information about geographic disaggregation, see Monitoring Data Disaggregation by Geographic Location.

Common Types of Disaggregation

- Sex
- Geography
- Age
- Marital status
- Urban/Rural
- Income level
- Education level
- Occupation
- Value Chains
- Industry
- Business size

OTHER DISAGGREGATION CONSIDERATIONS

Beyond sex and geographic disaggregation, USAID staff and partners should choose any number of additional ways to disaggregate data for a given performance indicator. It is not uncommon for a single indicator to have more than one disaggregation (sex and geographic location and education level) or for a disaggregation to be disaggregated, referred to as "nested disaggregation" (e.g., disaggregating by sex within age groups, or disaggregating by unique commodities per province). Data for each indicator can be disaggregated in any number of ways for analysis and reporting purposes, as long as the relevant information for disaggregating the indicator data is collected along with the indicator data itself. It is important to remember there is a trade-off between the utility of additional data and the resources necessary to collect and analyze that data. Collect only the data needed to make management decisions.

PRIVACY & SECURITY CONSIDERATIONS

It is also important to consider potential privacy or security implications of collecting personally identifiable information for use in disaggregating data. While reporting high-level aggregated performance indicator data may not put individual beneficiaries at risk, the collection of detailed demographic data on individual beneficiaries for the purposes of reporting disaggregated performance monitoring data may put individuals at risk. For example, if USAID simply counts and reports on the total number of people

participating in a specific training, it is unlikely to reveal the identity of any training participants. However, if age, marital status, and occupation of training participants are collected for the purposes of disaggregated reporting, this information could be combined and used to identify an individual.

Some methods to protect beneficiaries include: anonymizing personal information when collecting data, storing data in an encrypted code, and choosing to only report the aggregated data. However, even when these methods are used, combinations of disaggregated data could still be used to identify an individual. In these instances, a manager may determine it is not worth the security risk to collect or report these data. Specifically, USAID staff should be cautious when collecting information on individuals, such as ethnicity, religious affiliation, disability, sexual orientation or other characteristics, that, if revealed, could result in negative consequences in a given country context. For more information about securely collecting, storing, reporting, and using monitoring data, please see the Data Security Guidance: Protecting Beneficiaries.

How Does USAID Disaggregate Data?

The following section clarifies USAID's disaggregation requirements.

PLANNING INDICATOR DISAGGREGATION

Data disaggregation should be defined when the indicator is being developed to allow for appropriate data collection, analysis, and comparison of the subgroup data. Disaggregated data that will be necessary for reporting purposes or to make management decisions are identified and specified in the indicator's Performance Indicator Reference Sheet (PIRS). Any changes in the way an indicator is disaggregated must be reflected in the PIRS. For more information about a PIRS see Recommended PIRS Guidance and Template.

Note that many standard foreign assistance indicators include disaggregates that are expected to be collected. If deciding to change any disaggregates to a standard foreign assistance indicator, a Mission or Washington Operating Unit (OU) should work with the pillar bureau or sector office responsible for that standard foreign assistance indicator. A Mission or Washington OU may add any disaggregates to a standard indicator that will be useful for the local context.

Planning is critical. If disaggregation is not considered in the planning stage, it can be difficult if not impossible to gather or reconstruct the data later. Once implementation is underway, though, collecting data on a specific demographic characteristic may be revealed to be more or less useful than originally thought. Managers should initiate conversations to identify when disaggregated data are either unnecessary or insufficient, in which case the team may opt to adjust, add, or remove disaggregates. However, much of the utility of an indicator, including its disaggregated data, is in the trend line: comparing performance from the present to the past. Frequent changes to how an indicator is disaggregated may reduce the utility of the information and lessen the ability to conduct analysis.

BASELINES AND TARGETS FOR DISAGGREGATED DATA

When baseline data are collected for the indicator, baseline data for each of the indicator's defined disaggregates must be included. Targets are not required to be set for an indicator's disaggregated data.

It may nonetheless be useful to set targets for indicator disaggregates if different results are expected for sub-groups of the beneficiary population according to the project or activity's design.

Collecting baselines and setting targets for an indicator and all disaggregates can provide information for answering key questions of any development program: "Is our program on track? Is our work positively affecting the people it was intended to?" Often, the information for answering these questions comes from comparing the data from the disaggregated subgroups to their baseline and projected target. The Monitoring Toolkit has more information about establishing baselines and setting targets.

COLLECTING DISAGGREGATED DATA

Disaggregated data must have the same reporting frequency as their indicator. Data for the indicator, along with all disaggregations defined in the PIRS, are collected at the same time. For example, when collecting data for the indicator "number of farmers who are using a new technology," a data collector would record if a farmer is using a new technology and would also record information for each planned disaggregation of the indicator, e.g. the sex of the farmer, geographic location, and the types of technology used. This reinforces the need to plan in advance to not only pre-define disaggregations, but also to prepare the data collection instrument to include all necessary fields of information.

REPORTING DISAGGREGATED DATA

Each reported disaggregate of a performance indicator must have the same data type and reporting frequency as the aggregated value of the performance indicator. The purpose of disaggregating an indicator is to provide greater detail about the indicator subgroups that may be affected differently by programming. If an indicator's disaggregated data do not have the same data type as the aggregated indicator, the disaggregated data provide incomplete, or worse, misleading information.

To illustrate this point, consider an example from an education program. One of the intended results of this program is to decrease the dropout rate of high school students. The indicator "percent of students who do not graduate high school," is used to monitor this intended result.

Table 1

Percent students who do not graduate high school (i.e. dropout rate)			
	Percent	Numerator	Denominator
Total Students	22%	22	100
Disaggregations	Number of Students		
Male Students	10		
Female Students	12		

Table 1 displays data collected for the indicator, measured as a *percentage* of total students. However, when disaggregating the indicator data by sex, the table only reports the *number* of male and female students who did not graduate. Consequently, the data types do not match and the table provides potentially misleading information. When analyzing the information presented in this table, one might assume the dropout rate is higher for women because 12 female students dropped out compared to 10 male students.

Table 2 displays complete data with matching data types for the indicator and its disaggregated data. It is now clear that the male students are dropping out of high school at a higher rate than female students because the denominator of female students is much larger than the denominator of male students. USAID staff can use these data to adaptively manage programming, possibly targeting male students and increasing incentives for these students to stay in school.

Table 2

Percent students who do not graduate high school (i.e. dropout rate)			
	Percent	Numerator	Denominator
Total Students	22%	22	100
Disaggregations	Percent	Numerator	Denominator
Male Students	29%	10	35
Female Students	18%	12	65

How Does USAID Use Disaggregated Data?

Disaggregation improves the utility of USAID data by increasing our ability to make meaningful comparisons. When analyzing disaggregated data, three simple comparisons are the key to enabling use of the data.

1. **Comparing across sub-groups**: Disaggregation can reveal how results for one sub-group compare against other sub-groups, and if some sub-groups are doing much better or worse than others.
2. **Comparing to previous periods of performance**: Disaggregation can reveal if the trend of results for a disaggregated sub-group is moving in the expected direction. Such trends may be hidden in the aggregated indicator values.
3. **Comparing to targets**: Disaggregation enables the setting of targets specific to each disaggregate. When analyzing disaggregated data, comparing a disaggregated indicator value to its target can reveal if results for a particular sub-group are meeting, exceeding, or failing to meet expectations.

Such comparisons can help inform adaptations to programming. If one sub-group is doing much better than expected or much better than other sub-groups, it can prompt investigations to determine if there are useful strategies that might be adopted by other sub-groups. If a vulnerable sub-group is doing much worse than expected or much worse than other sub-groups, it might prompt adjustments to activities, or lead to additional efforts to ensure that the vulnerable sub-group is not left behind. If comparisons across geographic disaggregations suggest that one geographic area is doing better or worse than other geographic areas, it might prompt investigation into how the implementation of activities differs across the different geographic areas.

Disaggregation can be a powerful tool to support the management and effectiveness of USAID programs. Analysis of disaggregated data should be used during activity, project, and portfolio reviews, and to enrich conversations about programmatic progress and intended and unintended effects of USAID programming. Disaggregated data supports adaptive management and can help USAID determine if programming is achieving intended results, affecting beneficiary groups equitably, and reaching the most vulnerable populations.