

Introduction

This country scenario provides an illustrative example of how a Mission Project Team would collect and analyze data disaggregated by geographic location, as well as sex.¹ This document complements guidance found in the [ADS 201 Additional Help: Data Disaggregation by Geographic Location](#).

Background

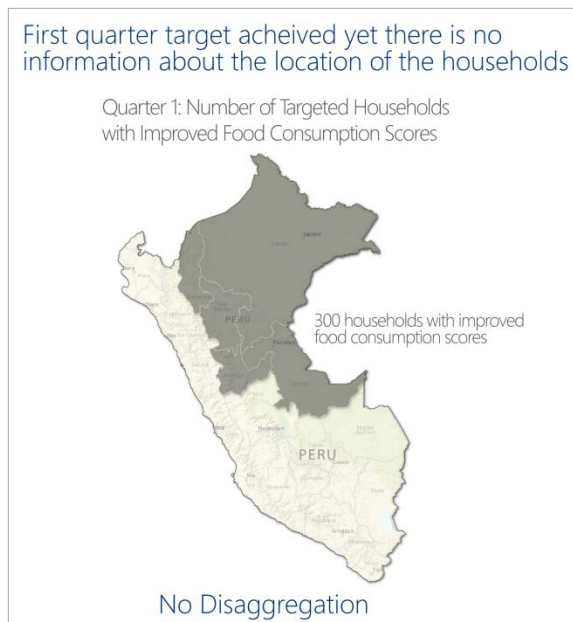
USAID/Peru's food security and nutrition project includes various activities promoting improved agriculture management, counseling and education about nutrition, and working with local governments to provide policy in support of this work. To monitor if these activities are collectively achieving the higher-level result of improved nutrition as envisioned in the Project Logic Model, the Project Team uses the indicator, "Number of Targeted Households with Improved Food Consumption Scores." The indicator data are collected by a partner who is implementing one of the activities. Data collection is done through head-of-household interviews about the type of food consumed in the past week.

First Quarterly Report Leaves the Team Asking for More Data

After the first quarter, the partner submitted a PDF report indicating that they had met the target of 300 households with improved food consumption scores. The report only included a table of indicators and first quarter performance. No other data were provided because the indicator definition did not include any disaggregation. The Project Team was excited to start using the data to conduct analysis to aid in adaptively managing the project, yet little analysis could be done and the only map they could make appears to the right.

The Team Contacts the Partner for Geographically Disaggregated Data

After reviewing the initial map, the Project Team knew that the performance target had been met but started to wonder, "Where are the households with improved food consumption scores? Are they equally distributed throughout the intervention area?" Dissatisfied with their ability to ask and answer these questions with the existing indicator data, the Project Manager has the COR for the activity inquire if there were additional data that the Team could analyze, such as indicator data disaggregated by region (administrative unit 1) and province (administrative unit 2).

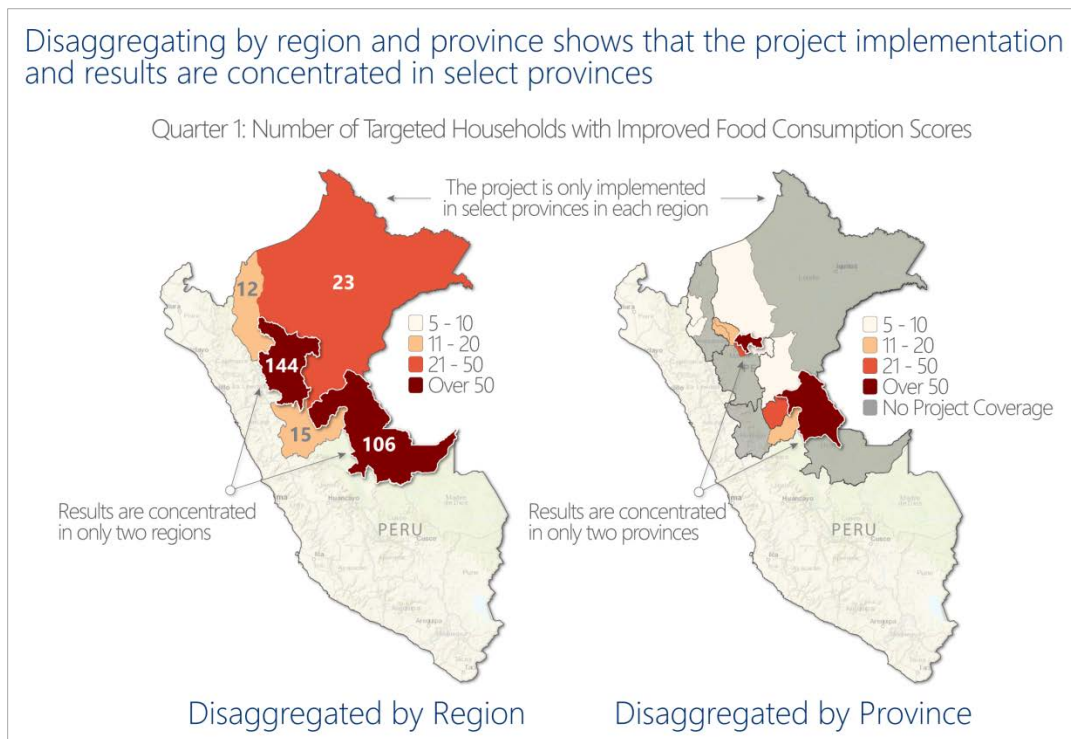


Fortunately, the implementing partner confirmed that they could provide data at those geographic scales – they had recorded the locations of the 300 households with a GPS-enabled device when collecting

¹ The data used do not reflect actual USAID programming and were manipulated for the sake of creating an example.

Country Example: Analyzing Geographic Monitoring Data

information about household food consumption. Because data collected at the household level can be aggregated to lower levels of geographic detail, such as the province and region levels, the partner was able to provide the data at those geographic scales. After receiving the new data from the partner, the Project Team produced the maps below to better understand the geographic variation in performance.



Immediately, the Project Team noted the different patterns that appear when the data are displayed at the region versus the province scale. At the region scale, it's clear that over 80% of the 300 households are concentrated in only two regions.

Upon reviewing these additional data, the Project Team realized that the regional scale data conceals patterns that only appear at the province scale. First, the vast majority of households with improved food consumption scores are isolated in two provinces. And second, implementation is not occurring across each region, but rather in a select number of provinces. These two maps tell two very different stories based on the scale of the data that they depict.

Data Visualization Sparks New Analytical Questions for the Team

Visualizing the geographically disaggregated data immediately sparked new questions that the Project Team hadn't considered asking before, such as "What is the distribution of female-headed households versus male-headed households in the 300 households with improved food consumption scores in the first quarter?" The Project Manager again has the COR contact the partner to see if the partner had disaggregated any data by sex. Fortunately, the partner recorded the sex for each head-of-household. Upon receiving the additional data, the Project Team created the following data visualization.

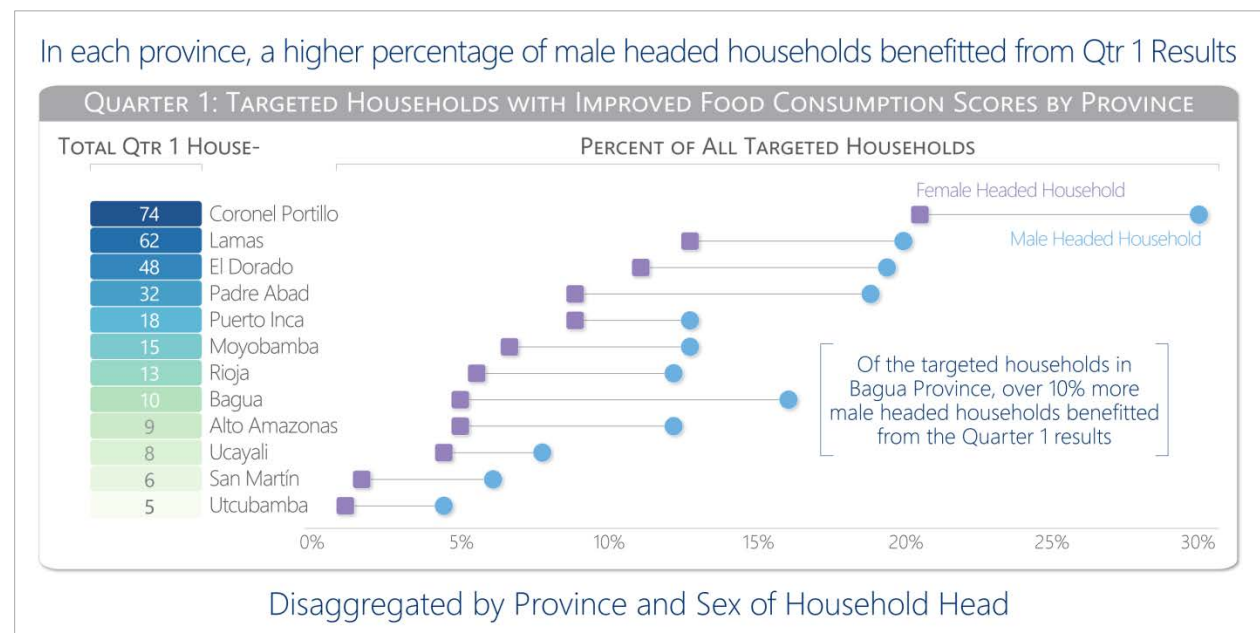
Collaborating with Partners

Partners report what is required in their Activity MEL Plan. However, experience suggests partners often collect more detailed information about their activity than the MEL Plan specifies, and thus these data are not always reported to USAID. While it is critical to discuss the data needs of the activity and project upfront, as implementation progresses and analysis needs are better determined, it's not too late to ask your partner for this information – they just may have it.

Country Example: Analyzing Geographic Monitoring Data

On the left, the color ramp displays the total number of households with improved consumption scores by province in quarter I. On the right, the plot displays the male- and female-headed households represented in quarter I results as a percentage of all households targeted by the activity. The length of the horizontal line between the symbols for male- or female-headed households indicates amount of inequality, where longer lines indicate greater inequality between male- and female-headed households.

Upon reviewing the visualization of the indicator data disaggregated by both geography and sex, a clear pattern emerges: female-headed households are not equally represented in the quarter I results when compared to male-headed households. While the inequality between male- and female-headed households varies by region, female-headed households consistently lag behind male-headed households in improved food consumption scores. Similar to the maps displaying indicator data at the region and province scale, this visualization changes the Project Team's understanding of the project's performance.



The Team Begins to Learn and Adapt in Coordination with Partner

Conducting analysis and visualization of the disaggregated indicator data have led the Project Team to understand the project's performance in new ways that wouldn't have been possible with the initial information that was submitted in the quarterly report. The Project Team is again asking new questions based on sex and geographic disaggregation:

- Is the underrepresentation of female-headed households in quarter I a result of contextual factors?
- Do female-headed households have the same level of physical and economic access to foods needed to improve their food consumption score?
- Are quarter I households concentrated in certain provinces due to contextual factors or because the project's activities were most focused in these areas during implementation?

The COR is coordinating with the partner to help answer these questions and identify if any critical assumptions are embedded in the project's approach to improving food consumption scores that need to be revised. Although quarter I results for "improving food consumption scores" were successfully achieved, the Project Team now understands the project's performance at a much deeper level and can adapt their activities' implementation approaches to account for what has been learned through data analysis and visualization of disaggregated indicator data.