

PROJECT BACKGROUND

The supplementary documents shared presents the data preparation and analysis syntaxes (Stata do files) used in the Secondary Data Analysis (SDA) component of the USAID/BHA/TPQ/SPADe Madagascar RFSA Activity Design project. The research undertaken in this project will inform the design of the FY24 Resilience and Food Security Activity (RFSA) in Madagascar, which will serve the needs of rural Malagasy communities affected by chronic nutrition and food insecurity. This project is supported through a buy-in from USAID/BHA/TPQ/SPADe into the Long-term Assistance and Services for Research (LASER) project currently in place between USAID/DDI/ITR/R and Purdue University under a cooperative agreement # 7200AA18C00009. This project has been executed by Abt Associates under a sub-contract with Purdue University.

The SDA team from Abt Associates led the SDA study and prepared the data preparation and analysis supplementary documents to the Secondary Data Analysis (SDA) report. The report is publicly shared in the LASER PULSE website (<https://laserpulse.org/>) and USAID's Development Experience Clearinghouse (<https://dec.usaid.gov/dec/home/Default.aspx>). The full citation of the SDA report is:

Leegwater, Anthony, Sarah Carson, Ayesha Enver, Eugene Lee, and Sara Sokolinski. 2023. Secondary Data Analysis of Poverty, Food, and Nutrition Security in Madagascar. West Lafayette, IN: Long-term Assistance and Services for Research - Partners for University-Led Solutions Engine (LASER PULSE).

AUTHORS of the SDA Report

Anthony Leegwater, Co-PI and SDA Lead, Abt Associates
Ayesha Enver, SDA Advisor and Quality Reviewer, Abt Associates
Eugene Lee, Quantitative Research Assistant, Abt Associates
Sara Sokolinski, Quantitative Research Assistant, Abt Associates
Sarah Carson, Principal Investigator (PI)/Program Manager, Abt Associates

ABOUT LASER PULSE

LASER (Long-term Assistance and SErvices for Research) PULSE (Partners for University-Led Solutions Engine) is a \$70M program funded through USAID's Innovation, Technology, and Research Hub, which delivers research-driven solutions to field-sourced development challenges in USAID partner countries.

A consortium led by Purdue University, with core partners Catholic Relief Services, Indiana University, Makerere University, and the University of Notre Dame, implements the LASER PULSE program through a growing network of 3,500+ researchers and development practitioners in 86 countries.

LASER PULSE collaborates with USAID missions, bureaus, and independent offices, and other local stakeholders to identify research needs for critical development challenges, and funds and strengthens the capacity of researcher-practitioner teams to co-design solutions that translate into policy and practice.



Brief Description of the Dataset

The secondary data analysis (SDA) of the Madagascar Resilience Food Security Activities (RFSA) Design engagement aims to understand the correlates of poverty, food insecurity and malnutrition among affected households and individuals in Madagascar. The SDA relies on analysis data constructed from the 2021 Demographic and Health Survey (DHS) to address the research objectives through 1) descriptive analysis, 2) geospatial analysis, 3) regression analysis, and 4) machine learning analysis. The data from the 2021 Madagascar DHS are representative at the regional level.

Value of the Dataset

The analysis data, based on the 2021 DHS for Madagascar, include key indicators of interest (poverty, food access and diet diversity, and malnutrition) for the target population and potential socio-demographic, health, and socio-economic characteristics that may be correlated with these key indicators. The target population is considered to be households living in the bottom wealth quintile, children living with stunting, and children living below the minimum acceptable diet threshold.

The data can be used to investigate: 1) the demographic and socio-economic characteristics of the target population; 2) how demographic and other characteristics of the target population vary geographically across each of the targeted regions; 3) how demographic and other characteristics of the target population compare to those of households and individuals not in the target population; 4) and which household characteristics are significantly associated with the outcomes that define the target population, i.e., high levels of poverty, low levels of food access and diet diversity, high levels of food insecurity, and chronic malnutrition.

Where to get the raw dataset?

To use the data preparation and analysis syntaxes, users need the raw dataset publicly available from the Demographic and Health Survey website (<https://dhsprogram.com/>). To request dataset access, you must first be a registered user of the website.