# **LASER PULSE**

Long-term Assistance and Services for Research (LASER)
Partners for University-Led Solutions Engine (PULSE)

BHA/TPQ/SPADe Madagascar Resilience Food Security Activity (RFSA)

**Annotated Bibliography** 

SUPPLEMENT TO AGREEMENT NO. AID-7200AA18CA00009
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**FEBRUARY 2, 2024** 

This publication was produced as part of the LASER PULSE program, led by Purdue University and funded by the United States Agency for International Development (USAID). The views expressed in this publication do not necessarily reflect the views of USAID, the United States Government, or the LASER PULSE program.









### ABOUT THE PROJECT/DELIVERABLE

This annotated bibliography summarizes the sources used to develop the desk-based literature review for three studies undertaken in the USAID/BHA/TPQ/SPADe Madagascar RFSA Activity Design project: a Desk Review and Market Study, a Political Economy Analysis, and a Secondary Data Analysis. The research undertaken in this project will inform the design of future multi-year Resilience and Food Security Activities (RFSA) in the country, 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.

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#### **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, that 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.

#### **SUGGESTED CITATION**

Andriamisaina Antsa, Estelle Antilahy, Karri Byrne, Sarah Carson, Cheryl Doty, Ayesha Enver, Valentina Ijeoma-Akpa, Keya Jacoby, Eugene Lee, Anthony Leegwater, Matilda Nash, Betsy Ness-Edelstein, Sarahena Rojas, Peter Simpson. 2023. BHA/TPQ/SPADe Madagascar Resilience Food Security Activity (RFSA) Annotated Bibliography. West Lafayette, IN: Long-term Assistance and Services for Research - Partners for University-Led Solutions Engine (LASER PULSE Consortium).



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#### **ACRONYMS**

ADRA Adventist Development and Relief Agency

AVSF Agronome et Vétérinaire Sans Frontière

BNGRC Bureau National de Gestion des Risques et des Catastrophes

BHA Bureau for Humanitarian Assistance

BoViMa Bonne Viande de Madagascar

CHAID Chi-square Automatic Interaction Detector

CRS Catholic Relief Services

CSO Civil Society Organization

CTAS Centre Technique Agro-écologique du Sud

DRMS Desk Review and Market Study

FAO Food and Agriculture Organization

FEWS NET The Famine Early Warning Systems Network

FNG Fill the Nutrient Gap

FOFIFA Fikarohana ampiharina amin'ny Fampandrosoana ny eny Ambanivohitra

(Agricultural research institute)

GYSD Gender, Youth, and Social Dynamics

HEA Household Economy Analysis

IFC International Finance Corporation

INSTAT Institut National de la Statistique

IMF International Monetary Fund

IOM International Organization for Migration

IPC Integrated Food Security Phase Classification

LASER PULSE Long-term Assistance and Services for Research – Partners for University-Led

**Solutions Engine** 

MICS Multiple Indicator Cluster Surveys

MINAE Ministère de l'Agriculture et de l'Elevage

NFI Non-Food Items

NGO Non-governmental Organization
PAM Programme Alimentaire Mondial
PAMF Première Agence de Microfinance

PEA Political Economy Analysis



# Delivering Practical, Research-Driven Solutions to Global Development Challenges

PFM Public Financial Management

QMM QIT Madagascar Minerals

REAP Risk-informed Early Action Partnership

RF Random Forest

RFSA Resilience Food Security Activities

SDA Secondary Data Analysis

SDGs Sustainable Development Goals

SEED Sustainable Environment, Education & Development

SPADe Strategic Planning and Activity Design

SRH Sexual and Reproductive Health

TPQ Office of Technical Program Quality

UN United Nations

UNDP United Nations Development Programme

UNPF United Nations Population Fund

WFP World Food Programme

USAID United States Agency for International Development

WASH Water, Sanitation, and Hygiene

WHO World Health Organization

YP2LE YouthPower 2: Learning and Evaluation



### **EXECUTIVE SUMMARY**

# **Purpose**

The USAID Bureau of Humanitarian Assistance (BHA) Office of Technical Program Quality (TPQ) Strategic Planning and Activity Design (SPADe) engaged Abt Associates through the Long-term Assistance and Services for Research Partners for University-led Solutions Engine (LASER PULSE) mechanism to support the strategic planning and activity design for future Resilience Food Security Activities (RFSA) in Madagascar. Under this project, Abt Associates undertook a series of research activities to inform the design of a future multi-year RFSA in Madagascar, which will serve the needs of rural Malagasy communities affected by chronic nutrition and food insecurity. The scope of work includes three studies: a Desk Review and Market Study (DRMS), a Political Economy Analysis (PEA), and a Secondary Data Analysis (SDA).

The purpose of this Annotated Bibliography is primarily to provide LASER PULSE and USAID/BHA/TPQ/SPADe teams with a summary of literature under consideration for the desk-based portion of all three research studies. Based on this review, LASER PULSE and SPADe teams identified gaps and new sources to complement those reviewed already. In parallel, this Annotated Bibliography also serves as an important internal resource for the Abt research team during the analysis and report writing stages of the project. For example, if a DRMS team member is looking for a secondary source of vegetable oil in Madagascar to compare with the learnings from primary data collection, he or she could quickly refer to the tags in this document to identify the appropriate article. Finally, this document might also be of use to other researchers, program design teams, and implementing organizations interested in understanding the current extent of literature focused on the topic of food and nutrition security in Madagascar.

The study teams have reviewed more than 220 sources related to various aspects of food and nutrition security in Madagascar. These sources include both grey literature, such as reports from donors and implementing organizations, as well as academic articles, from journals including the Journal of Hunger & Environmental Nutrition, the Universal Journal of Agricultural Research, and Food Security. This review also incorporates less traditional sources, such as humanitarian update bulletins and blog posts from reputable sources. The authors featured include evaluators, academics, and practitioners, including Malagasy experts. For the most part, the research team only included sources from the past seven years, given the dynamic and rapidly changing nature of the Madagascar context. The researchers also focused primarily on literature focused solely on Madagascar, given the many distinct contextual factors. Our bilingual research team also incorporated literature in both French and English.

# Organizational Structure

This annotated bibliography is organized into three main sections, with one section for each of the study types: Desk Review and Market Study, Political Economy Analysis, and Secondary Data Analysis. Within each study, the authors categorized the sources thematically according to the major topics that will be addressed in the final reports for each study. The DRMS section will first discuss sources related to demographics and social characteristics, followed by market context and macroeconomy, humanitarian assistance, food availability and access, and finally food utilization and nutrition. The PEA section divides sources between key stakeholders, foundational factors, and the impact of governance, political instability, and conflict. Finally, the SDA section will discuss sources relevant to food security,



malnutrition, poverty, and socio-demographic and socio-economic characteristics. In cases where sources applied to more than one sub-category, they were placed under the topic of greatest relevance.

# Approach to thematic and geographic tags

To incorporate an additional layer of organization for the list of sources, the researchers also incorporated both thematic and geographic tags. These tags are particularly useful in a project like this one, in which there is a degree of overlap between studies, as well as between themes. These tags are included below the annotation of each source, and provide the user with a quick, searchable reference for the major topics addressed by each source.

Some tags are used consistently across all three studies. These include cross-cutting themes, and geographic tags to differentiate which sources cover Madagascar at a national level and which sources cover a particular region of interest. We have also included cross-study relevance tags to note which sources might be listed under one study, but also present information relevant to one or both of the other two studies.

- Thematic tags: Gender, Youth, Food security, Climate, Poverty
- **Geographic tags**: Madagascar National, Madagascar Southern, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsinanana region
- Cross-study relevance tags: Desk Review and Market Study, Political Economy Analysis,
   Secondary Data Analysis

In addition, each study also developed their own thematic tags specific to their respective focus areas and research questions, as summarized below:

#### • DRMS:

- Themes of inquiry: Supply Demand, Supporting functions, Market policies, Barriers to market, Household norms, Social capital, Livelihoods, Wealth profiles, Resilience, Humanitarian aid, Trends
- Commodities: Maize, Rice, Sorghum, Peas/beans, Groundnuts, Cows, Chickens, Sheep/goats,
   Vegetable oil

#### • PEA:

- Themes of inquiry: Resilience, Migration, Land tenure, Livelihoods, Instability, Conflict, Violence, Corruption, Governance, Politics, Historical trends, Community-driven development
- Research tool/PEA language: Stakeholder mapping, Political Economy Analysis,
   Development project, Foundational factors, Power, institutions, and rules

#### SDA:

- Additional Locations: Region West Africa, Region Ghana, Region Democratic Republic of the Congo, Region – Zimbabwe
- o Themes of inquiry: Poverty, Malnutrition, Socio-demographic correlates, Biodiversity



### **DESK REVIEW AND MARKET STUDY**

# **Demographics and Social Characteristics**

## **Census Data for Madagascar**

Institut National de la Statistique. 2021. "Census Data for Madagascar." Institut National de la Statistique. (February 18). https://knoema.com/KNMGCD2015/census-data-for-madagascar.

This database provides census data from 1975 to 2023 for major cities of Madagascar. Indicators include education, workforce participation, sex, age, literacy, marital status, fertility, migration, household composition, household infrastructure, salary, and other demographic and economic metrics. The recency and availability of each metric varies based on data availability per region. The city-level demographic and economic indicators in this dataset are a useful starting point for the Demographics focus of the DRMS in combination with additional context from implementer reports and research publications.

**Tags:** Gender, Madagascar – National, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsinanana region, Secondary Data Analysis

#### Childhood in Madagascar: A Promise of a Future

UNICEF, 2014. "Childhood in Madagascar: A Promise of a Future." UNICEF. <a href="https://www.unicef.org/madagascar/media/1076/file/SITAN%202014%20(summary)%20(EN).pdf">https://www.unicef.org/madagascar/media/1076/file/SITAN%202014%20(summary)%20(EN).pdf</a>.

This report consolidates literature and national survey data on children's rights in Madagascar. The report summarizes key contextual issues in nutrition and highlights disparities in maternal and child health, SRH, and WASH. Access to education is an important focus of this report, as school enrollment rates fall below 60% in all of southern Madagascar. Finally, the report highlights issues of child protection, including rates of child trafficking, gender-based violence, early marriage, sexual exploitation, child labor, child abandonment, and homelessness. The full version of this report, including recommendations for improving children's rights, is available in French. Although this report was published in 2014, the data in this report are supported by more recent UNICEF publications. Therefore, it is a useful tool for highlighting trends in youth issues in the DRMS.

Tags: Gender, Youth, Madagascar - National, Secondary Data Analysis

### **Demographic Characteristics for Madagascar**

Institut National de la Statistique. 2021. "Demographic Characteristics for Madagascar." Institut National de la Statistique. (May 4). <a href="https://knoema.com/MGDC2020/demographic-characteristics-of-madagascar">https://knoema.com/MGDC2020/demographic-characteristics-of-madagascar</a>.

This database provides demographic and household data from 1993 to 2018 in all regions of Madagascar. Demographic indicators include population size, population density, growth rate, rate of urbanization, and masculinity rate and ratio. Household indicators include number of households, average household size, and availability of basic infrastructure. The recency and availability of each metric varies based on data availability per region. The region-level demographic indicators in this dataset are a useful starting point for the Demographics focus of the DRMS in combination with additional context from implementer reports and research publications.



**Tags:** Gender, Madagascar – National, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsinanana region, Secondary Data Analysis

#### **Displacement Tracking Matrix: Madagascar**

International Organization for Migration (IOM). 2022. "Madagascar." International Organization for Migration. <a href="https://dtm.iom.int/madagascar">https://dtm.iom.int/madagascar</a>.

The IOM has a Displacement Tracking Matrix (DTM) to monitor population movements, particularly movements from southern Madagascar due to recurring crises, such as severe droughts. This monitoring is important for government and humanitarian knowledge and actions. The map can be broken down by region. As of September 2022, the DTM has tracked 90,219 internally displaced persons and 6,837 returnees in Madagascar. This map is useful to the DRMS for its representation of displaced households and returnees, particularly in the South of Madagascar.

Tags: Madagascar—Southern, Climate, Resilience

## Enquête par Grappes à Indicateurs Multiples, MICS Madagascar, 2018

UNICEF. 2019. "Enquête par grappes à indicateurs multiples, MICS Madagascar, 2018." UNICEF. https://mics-surveys-

prod.s3.amazonaws.com/MICS6/Eastern%20and%20Southern%20Africa/Madagascar/2018/Survey%20findings/Madagascar%202018%20MICS%20Survey%20Findings%20Report French.pdf.

This report contextualizes and summarizes the findings of the 2018 Madagascar Multiple Indicator Cluster Survey (MICS). This survey collected data on key indicators related to household and population characteristics, child survival, maternal and child health, reproductive health, education, child discipline, labor and marriage, child functioning, social transfers, and gender-based violence. This report provides valuable social and demographic data for the DRMS for the Anosy, Androy, Atsimo-Andrefana, and Atsimo-Atsinanana regions. Regional metrics can be compared against national household data for urban and rural residences.

**Tags:** Gender, Youth, Madagascar – National, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsimo Atsimo Atsimo Atsimo Atsimo Atsimo Androy Data Analysis

# FIOVANA Refine & Implement Year Research Study: Gender, Youth, and Social Dynamics (GYSD) Analysis

USAID. 2021. "FIOVANA Refine & Implement Year Research Study: Gender, Youth, and Social Dynamics (GYSD) Analysis." USAID. https://pdf.usaid.gov/pdf\_docs/PA00Z4ST.pdf.

The FIOVANA activity, implemented by ADRA International, is a food security program targeting populations in southern Madagascar. This report aims to determine the needs of the population with an emphasis on gender, youth, and social dynamics in this region. This study used a secondary desk review and did qualitative research that comprised interviews with key actors and community members. While policies and laws have been implemented to improve gender and social quality, cultural norms continue to persist and lead to the exclusion of women from the decision-making process and access to resources. Inequalities that affect women and children, like child labor or early marriages, worsen health and nutrition outcomes among these populations. By engaging community members through specialized training and targeted initiatives, women and children can be specifically emphasized and involved in future programming and development efforts in southern Madagascar.



**Tags:** Household norms, Social capital, Livelihoods, Gender, Youth, Food security, Atsimo Atsinanana region

#### Gender Analysis on SRH and Climate Resilience. Madagascar - Anosy and Diana regions

Harivola, Stella. 2021. "Gender analysis on SRH and climate resilience. Madagascar - Anosy and Diana regions." Care International UK, Aspire, UK Aid. <a href="https://careevaluations.org/wp-content/uploads/Gender-analysis-ASPIRE-Madagascar">https://careevaluations.org/wp-content/uploads/Gender-analysis-ASPIRE-Madagascar</a> FINAL-ENG.pdf.

This gender analysis seeks to understand SRH behaviors and norms in Madagascar to inform future CARE program activities. Specifically, the report investigates 1) the social, cultural, economic, and behavioral factors that drive SRH rights; 2) the opportunities to improve access to SRH services, materials, and information; and 3) the impact of SRH and gender norms on resiliency for people of all genders. Data collection from key informant interviews and focus groups took place in Tanandava and Sampona in Amboasary Atsimo and Ambanja in Tsimipaika Bay. The report's findings highlight the gender differences in the division of labor, household decision-making, control over assets, access to services and education, mutual aid and social support, participation in public affairs, autonomy, marriage and childbearing expectations, gender-based violence, and future aspirations. These findings are directly applicable to the gender focus of the DRMS. The report presents recommendations for improving program activities to better address SRH needs.

Tags: Social capital, Resilience, Gender, Household norms, Livelihoods, Anosy region

#### **Gender Data Portal: All indicators**

World Bank Group. N.d. "Gender Data Portal: All indicators." The World Bank Group. Accessed July 24, 2023. https://genderdata.worldbank.org/indicators/.

This data portal contains all available World Bank and United Nations data on population, Sustainable Development Goals, youth and children, assets, education, employment and time use, entrepreneurship, environment, health, leadership, norms and decision-making, technology, and violence. Data availability for Madagascar varies per indicator. These indicators are a useful starting point for the youth, gender, and health sections of the DRMS in combination with additional context from implementer reports and research publications.

Tags: Youth, Gender, Livelihoods, Household Norms, Nutrition, Madagascar - National

#### **Gender Data Portal: Madagascar**

The World Bank Group. N.d. "Gender Data Portal: Madagascar." The World Bank Group. Accessed July 24, 2023. <a href="https://genderdata.worldbank.org/countries/madagascar/">https://genderdata.worldbank.org/countries/madagascar/</a>.

This data portal provides data visualizations for key gender data indicators in Madagascar from 2000 to 2020. Key indicators include Madagascar's maternal mortality ratio, adolescent fertility rate, secondary completion rate by sex, adult literacy rate by sex, labor force participation by sex, account ownership by sex, and participation in household decision-making by sex. The metrics are also compared against trends in sub-Saharan Africa, all low-income countries, and global trends. These indicators are a useful starting point for the youth and gender focus of the DRMS in combination with additional context from implementer reports and research publications.

**Tags:** Youth, Gender, Livelihoods, Household norms, Madagascar – National



#### **Gender Inequalities in Madagascar**

Arciprete, Caterina, and Sebastian Silva Leander. 2022. "Gender Inequalities in Madagascar." UNICEF. <a href="https://www.unicef.org/madagascar/media/8671/file/Gender%20inequalities%20in%20Madagascar">https://www.unicef.org/madagascar/media/8671/file/Gender%20inequalities%20in%20Madagascar</a>. pdf.

This mixed-methods study on gender inequality and children's rights examines quantitative data from the 2018 Multiple Indicator Cluster Survey (MICS) and qualitative data collected in the Vakinankaratra, Atsimo Andrefana, Betsiboka and Atsinanana regions of Madagascar in 2021. The report highlights gender gaps in education, healthcare, food distribution, and overall well-being. Girls have an educational advantage in early childhood but have higher school dropout rates during adolescence compared to boys. Girls experience greater health risks related to sexual and reproductive health (SRH), and girls with child mothers also face a higher risk of sexual violence and early pregnancy. Boys tend to receive higher food distribution during economic hardship, particularly those who participate in agricultural labor. The report presents recommendations for furthering gender equality, including promoting education and awareness of women's roles through community-based programs, ending gender-based violence through awareness campaigns and community-level capacity building, expanding access to health services in rural areas, and prioritizing future data collection on gender differences in foster care experiences. This report provides valuable background for the DRMS on the gender and youth context in Madagascar, particularly for the Atsimo Andrefana region.

Tags: Gender, Youth, Madagascar - National, Atsimo Andrefana region, Secondary Data Analysis

#### Madagascar and the Social Impacts of Drought

De Berry, Joanna. 2023. "Madagascar and the Social Impacts of Drought." World Bank Blogs. <a href="https://blogs.worldbank.org/climatechange/madagascar-and-social-impacts-drought#:~:text=Between%202018%20and%202022%2C%20Southern,to%20reach%20near-famine%20proportions">https://blogs.worldbank.org/climatechange/madagascar-and-social-impacts-drought#:~:text=Between%202018%20and%202022%2C%20Southern,to%20reach%20near-famine%20proportions</a>.

This blog post provides an overview of the social consequences of the prolonged drought in southern Madagascar. The author highlights the increased rates of gender-based violence, cattle theft, and migration that have resulted from drought-related stressors, such as decreased water access, increased food insecurity, and higher poverty rates. This article provided insight for the DRMS on the impact of shocks on conflict in the study regions.

Tags: Gender, Climate, Poverty, Food Security, Madagascar—Southern

### Madagascar Crisis Response Plan 2022

International Organization for Migration. N.d. "Madagascar Crisis Response Plan 2022." Accessed July 14, 2023.

https://crisisresponse.iom.int/sites/g/files/tmzbdl1481/files/appeal/pdf/2022 Madagascar Crisis R esponse Plan 2022.pdf.

IOM Madagascar's priority areas cross several issues, including peacebuilding and peace preservation, and community stabilization. IOM specifically targets local communities in the regions characterized by migrant outflows, internal migrants and internally displaced persons, and security and defense forces working in the regions affected by insecurity. Key interventions to ensure peace include creating new and reinforcing existing women committees consisting of migrant and local women and building their capacities in conflict management, leadership, gender equality, advocacy, and environmental protection issues. Key interventions to ensure stabilization include conducting community-based dialogues and



planning processes in the communities most vulnerable to drought-induced migration. This holistic approach underscores the close relationship between climate change, social cohesion, and migration patterns; and speaks to a variety of sources aforementioned, all of which provide a compelling portrait of contemporary Madagascar.

Tags: Social capital, Climate, Gender, Resilience, Political Economy Analysis

## **Madagascar 2021 DHS Final Report**

Demographic and Health Surveys (DHS). 2021. "Madagascar 2021 DHS Final Report." https://dhsprogram.com/publications/publication-FR376-DHS-Final-Reports.cfm

The Madagascar 2021 DHS Final Report summarizes the results of a national survey of demographic characteristics, sexual and reproductive health, maternal and child health, nutrition, and infectious disease in Madagascar. This report outlines metrics by age group, household type, region, level of education, and socioeconomic status and serves as a key source of data about the study region. This report summarizes results from the same dataset that was used in the Secondary Data Analysis.

**Tags**: Madagascar – National, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsinanana region, Secondary Data Analysis

#### Madagascar Gender Landscape

World Bank Group. 2023. "Madagascar Gender Landscape." The World Bank Group. <a href="https://documents1.worldbank.org/curated/en/099046507012239653/pdf/IDU0f8caf1e0048e104d">https://documents1.worldbank.org/curated/en/099046507012239653/pdf/IDU0f8caf1e0048e104d</a> e20bb2e0b9b99d1512f0.pdf.

This briefing provides an overview of key metrics on health, education, and economic opportunity, broken down by gender. The briefing compares the latest available data for each metric against baseline data from 2009 and 2010 to track Madagascar's progress toward gender equality over time. Madagascar's metrics are also compared to those from all southern African countries, all low-income countries, and all countries in the database. These indicators are a useful starting point for the gender section of the DRMS in combination with additional context from implementer reports and research publications. The complete dataset summarized in this briefing is accessible through the World Bank Gender Data Portal.

Tags: Gender, Madagascar – National

### **Maharo Gender Analysis Report 2021**

Veroniaina, Ramananjohany, and Razafiarimanana Hobinasandratra. 2021. "Maharo Gender Analysis Report 2021" Catholic Relief Services. <a href="https://www.crs.org/our-work-overseas/research-publications/maharo-gender-analysis-report">https://www.crs.org/our-work-overseas/research-publications/maharo-gender-analysis-report</a>.

The analysis for the Maharo Gender Analysis Report is concentrated on Beloha and Tsihombe, in the Androy region, and Ampanihy West in the Atsimo Andrefana region for the Maharo project implemented by Catholic Relief Services (CRS). The report includes a gender profile of each district in the two regions, for further consideration in gender strategy implementation and integration in future development activities. This analysis highlights the role of gender in the following areas: roles and responsibilities, control of resources, power dynamics, leadership and public participation, and gender-based violence. Social and cultural norms in these regions generally disadvantage women and give men, as income earners, a greater role in controlling resources and public participation. However, norms are



evolving, and gender dynamics are changing as women take on a larger role, particularly in agricultural development. This report is useful to encourage equitable participation in development projects, improved collaboration and decision-making in households and communities, and empowerment of both genders through equitable access to resources.

**Tags:** Barriers to market, Household norms, Social capital, Livelihoods, Food security, Gender, Androy region, Atsimo Andrefana region

### Monographie Région Androy

Centre de Recherches, d'Etudes et d'Appui à l'Analyse Economique à Madagascar (CREAM). 2013a. "Monographie Région Androy." CREAM.

This report summarizes the results of one of the 22 regional monographs developed for Madagascar. Specifically, this report provides an overview of the geographic, administrative, demographic, social, economic, and financial characteristics of the Androy region. This report is intended to serve as a tool for understanding regional economic potential and monitoring and evaluating the implementation of the National Development Plan. For the DRMS specifically, this report provides key background on livestock populations and breeding practices for the goat market system. In the Androy region, the goat population totals 505,763, according to a 2009 CREAM survey. Goat breeding is an important livelihood activity in Androy and owning many goats is reflective of social status and wealth.

Tags: Sheep/goats, Androy region

#### Monographie Région Anosy

Centre de Recherches, d'Etudes et d'Appui à l'Analyse Economique à Madagascar (CREAM). 2013b. "Monographie Région Anosy." CREAM.

This report summarizes the results of one of the 22 regional monographs developed for Madagascar. Specifically, this report summarizes the geographic, administrative, demographic, social, economic, and financial characteristics of the Anosy region. This report is intended to serve as a tool for understanding regional economic potential and monitoring and evaluating the implementation of the National Development Plan. Similar to the report noted above, this source provides key background information on livestock populations and breeding practices for the goat market system. There are 89,592 goats in the Anosy region, according to a 2005 survey. Most goat breeding activity is concentrated in the Amboasary-Sud district and is practiced for self-consumption.

Tags: Sheep/goats, Anosy region

## Monographie Région Atsimo Andrefana

Centre de Recherches, d'Etudes et d'Appui à l'Analyse Economique à Madagascar (CREAM). 2013c. "Monographie Région Atsimo Andrefana." CREAM.

This report summarizes the results of one of the 22 regional monographs developed for Madagascar. Specifically, this report summarizes the geographic, administrative, demographic, social, economic, and financial characteristics of the Atsimo Andrefana region. This report is intended to serve as a tool for understanding regional economic potential and monitoring and evaluating the implementation of the National Development Plan. This report provides key background on livestock populations and breeding practices for the goat market system in the DRMS. There are 389,000 goats in the Atsimo Andrefana



region. The majority of the goat population is found in the Ampanihy West district (over 50%), followed by the Betioky South (25.7%) and Toliara II district (13%).

Tags: Sheep/goats, Atsimo Andrefana region

### Monographie Région Atsimo Atsinanana

Centre de Recherches, d'Etudes et d'Appui à l'Analyse Economique à Madagascar (CREAM). 2013d. "Monographie Région Atsimo Atsinanana." CREAM.

This report summarizes the results of one of the 22 regional monographs developed for Madagascar. Specifically, this report summarizes the geographic, administrative, demographic, social, economic, and financial characteristics of the Atsimo Atsinanana region. This report is intended to serve as a tool for understanding regional economic potential and monitoring and evaluating the implementation of the National Development Plan. This report provides key background on livestock populations and breeding practices for the goats market report in the DRMS. This report confirms the finding from field data collection that goat breeding is limited in the Atsimo Atsinanana region.

Tags: Sheep/goats, Atsimo Atsinanana region

## Protection Sociale : Stratégie Nationale de la Protection Sociale 2019-2023

Ministère de la Population, de la Protection Sociale et de la Promotion de la Femme (MPPSPF). "Protection Sociale : Stratégie Nationale de la Protection Sociale 2019-2023." MPPSPF. https://www.unicef.org/madagascar/media/8631/file/SNPS%202019%E2%80%932023.pdf

This report by MPPSPF provides an overview of the current social protection system in Madagascar. The report describes social protection program objectives, modalities, target populations, and target geographic areas. Most relevant to the DRMS, this source outlines several key ongoing social protection programs in the Grand South. The report also discusses shorter-term social protection programming introduced during shock periods in 2016-2018 to help vulnerable populations cope with drought. This is a key resource for describing social protection programming in the DRMS.

Tags: Resilience, Madagascar – National, Madagascar – Southern

#### Rapport Thematique Sur Les Résultats Du RGPH-3 Theme 16 : Ménages Agricoles A Madagascar

Institut National de la Statistique (INSTAT). 2021. "Rapport Thematique Sur Les Résultats Du RGPH-3 Theme 16 : Ménages Agricoles A Madagascar." INSTAT.

https://www.instat.mg/documents/upload/main/INSTAT-RGPH MenagesAgricoleMadagascar Fev2022.pdf.

This thematic report on the third general census of population and housing focuses on agricultural households in Madagascar. The report describes the environmental, social, and economic context of Madagascar and provides statistics, characteristics, volume, and distribution (agricultural, livestock, and fishing) of agricultural households. The study dissected household conditions, structure, access, agricultural techniques, barriers, and production. This report utilizes data from 2018. The results of the census and analysis can be used to triangulate and support data gathered during primary data collection.

**Tags:** Supply-Demand, Supporting functions, Market policies, Barriers to market, Livelihoods, Resilience, Food Security, Trends, Humanitarian aid



### **USAID/Madagascar Cross-Sectoral Youth Assessment Final Report**

Green, Kate, and Landy Miary Daniel Andrianaivosoa. 2020. "USAID/Madagascar Cross-Sectoral Youth Assessment Final Report." United States Agency for International Development Youth Power 2. <a href="https://www.youthpower.org/sites/default/files/YouthPower/files/resources/YP2LE%20Madagascar%20CSYA%20Report final.pdf">https://www.youthpower.org/sites/default/files/YouthPower/files/resources/YP2LE%20Madagascar%20CSYA%20Report final.pdf</a>.

This report presents key findings and recommendations of a Cross-sectoral Youth Assessment under the USAID YouthPower 2: Learning and Evaluation (YP2LE) activity. The assessment utilized a desk review and key informant interviews with USAID staff, implementing partners, and key country stakeholders to answer research questions on youth context, youth needs, and USAID programs in Madagascar. The report presents four key themes: 1) the need for relevant education that appropriately prepares youth for future opportunities; 2) the need for training programs and economic strengthening that prepare youth to enter and remain in the workforce; 3) the need to address key SRH issues for youth; and 4) the need to center youth voices in policy and program development. These themes were used to reflect upon bright spots in the current Malagasy youth context, highlight gaps in current programming, and inform recommendations for investing in the social and economic well-being of Malagasy youth.

Tags: Youth, Livelihoods, Social capital, Resilience, Madagascar - National

# **USAID/Madagascar Gender Analysis Report**

Kellum, Jane, Holitiana Randrianarimanana, Landy Miary Andrianaivosoa, and Sue Telingator. 2020. "USAID/Madagascar Gender Analysis Report." United States Agency for International Development. <u>https://banyanglobal.com/wp-content/uploads/2020/08/USAID-Madagascar-Gender-Analysis-forthe-2020-2025-CDCS.pdf</u>.

This gender analysis contributes key data to inform USAID/Madagascar's 2020-2025 Country Development Cooperation Strategy. The analysis centers around three development objectives (improved human capacity, government accountability, and sustainable economic opportunities for poor populations) and presents recommendations for furthering gender equality and women's empowerment in these areas. The report contains valuable context around gender norms for the DRMS. Specifically, it discusses how gender norms impact household division of labor, employment, earning potential, educational opportunities, and access to and control of assets. Men have access to higherpaying jobs and are seen as heads of household, giving them decision-making power over finances, livelihood, educational access, and health. Many women must rely on marriage to access resources, leading to high rates of early marriage, lower literacy rates among girls, and limited resilience to shock. Women take on the primary role in domestic work and childcare, with additional involvement in agricultural work in rural communities. Children suffer from malnutrition and growth stunting and face numerous barriers to education, including insufficient resources and inadequate facilities. The report covers additional topics related to SRH, resilience to shocks, gender-based violence, role in governance, natural resource management, and involvement in the private sector, and presents recommendations for strengthening USAID programming around gender in these areas.

**Tags:** Resilience, Climate, Market policies, Supporting functions, Barriers to market, Gender, Youth, Livelihoods, Household norms, Madagascar – National, Political Economy Analysis



# Market Context and Macroeconomy

### **2021 Investment Climate Statements: Madagascar**

U.S. Department of State. "2021 Investment Climate Statements: Madagascar." U.S. Department of State. <a href="https://www.state.gov/reports/2021-investment-climate-statements/madagascar/">https://www.state.gov/reports/2021-investment-climate-statements/madagascar/</a>.

This resource from the U.S. Department of State summarizes the investment climate in Madagascar. This resource highlights foreign investment policies, bilateral investment and taxation treaties, legal policies, industrial policies, property rights, financial sector updates, state-owned enterprises, responsible business conduct, corruption, labor policies and practices, investment insurance and development finance programs, and foreign direct investment statistics. The State Department found that Madagascar's efforts to enact policy and infrastructure reforms, including climate investments, fell short of investor expectations in the past year. This resource provides important context for the DRMS on the policies that govern market systems.

Tags: Barriers to market, Madagascar – National

## Account Ownership at a Financial Institution or with a Mobile-money-service Provider

World Bank. "Account ownership at a financial institution or with a mobile-money-service provider (% of population ages 15+) – Madagascar." Global Findex Database, World Bank. Accessed October 30, 2023. https://data.worldbank.org/indicator/FX.OWN.TOTL.ZS?locations=MG.

This table from the World Bank's Global Findex Database provides data on account ownership at a financial institution or with a mobile money service provider in Madagascar, among individuals aged 15 or older. Notably, only 26.3% of individuals aged 15 or older have access to banking or mobile money services. These data inform the discussion on access to financial resources in the DRMS.

Tags: Madagascar - National

#### IFC Partners with Malagasy Financial Institutions to Boost Access to Finance for Smaller Businesses

International Finance Corporation. 2023. "IFC Partners with Malagasy Financial Institutions to Boost Access to Finance for Smaller Businesses." International Finance Corporation. <a href="https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=27644">https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=27644</a>.

This press release from the International Finance Corporation announces a \$27 million partnership between IFC and three Malagasy financial service providers to expand financial inclusion in Madagascar. IFC partnered with Première Agence de Microfinance (PAMF), UNICECAM (CECAM), and BFV - Société Générale Madagasikara (SGM) to increase access to financing for micro, small, and medium enterprises. This source informs the discussion on access to financial resources in the DRMS.

Tags: Madagascar – National, Supporting functions

#### **Madagascar Economic Update**

World Bank Group. N.d. "Madagascar Economic Update." Accessed July 11, 2023. documents1.worldbank.org/curated/en/099452505272217360/pdf/IDU063da38be0ec1a043a60b77 f0e8c615d431fb.pdf.

The World Bank Group's 2016 economic update report is divided into two parts focused on recent economic development and agriculture and regional development. The report highlights increasing the use of fertilizers, ensuring secure access to land, and contract farming, as low-cost, effective, and



innovative methods to develop high-value agricultural products for export. This report also paints an optimistic lens on Madagascar's economic outlook, in comparison to the 2022 report (below), which paints a challenging rise out of the impacts of COVID-19. To conclude, the report also touches on USAID's priority areas, including increased social cohesion between local land offices, farmer's organizations, and extension services, and the increased capacity of producers, extension services, production techniques, and safeguards.

**Tags:** Supply-Demand, Supporting functions, Market policies, Barriers to market, Livelihoods, Resilience, Food Security, Trends

#### Madagascar Economic Update: Navigating Through the Storm

World Bank Group. 2022. "Madagascar Economic Update: Navigating Through the Storm." World Bank Group.

 $\frac{documents 1. worldbank.org/curated/en/099452505272217360/pdf/IDU063da38be0ec1a043a60b77}{f0e8c615d431fb.pdf.}$ 

The World Bank Group's 2022 economic update report focuses on contemporary conditions impacting the Malagasy economy, namely the long-lasting impacts of the COVID-19 pandemic and the war in Ukraine. These significant shocks exacerbated ongoing challenges in-country, including droughts, limited access to food, and frequent exposure to poverty. In addition, this report also provides great summary data about Madagascar vis-à-vis its sub-Saharan African peers by honing in on additional focus areas such as education (teacher effectiveness, job satisfaction, and school management) and agricultural production (rice imports and food insecurity). This holistic picture is an asset to the DRMS because it provides ample evidence about post-pandemic Madagascar.

**Tags:** Supply-Demand, Supporting functions, Market policies, Barriers to market, Livelihoods, Resilience, Food Security, Trends, Humanitarian aid, Political Economy Analysis, Madagascar – National

#### Mobile Money and Inter-Household Financial Flows: Evidence from Madagascar

Bair, Sabrine, Ahmed Tritah. 2019. "Mobile Money and Inter-Household Financial Flows: Evidence from Madagascar." *Revue Economique* 70 (847-871). <a href="https://www.cairn.info/revue-economique-2019-5-page-">https://www.cairn.info/revue-economique-2019-5-page-</a>

 $\underline{847.htm\#:} $$\stackrel{\text{``:text=Mobile\%20money\%20in\%20Madagascar\%20offers,} and $$\stackrel{\text{``20the\%20the\%20thr}}{=} $$$ 

This article explores the ways in which the transfer of money between Malagasy households has been impacted by the introduction and expansion of mobile money. This paper seeks to fill the knowledge gap around the use of mobile money in Madagascar. Researchers found that access to mobile money services increases the likelihood that households will send and receive money, particularly households living in remote areas. Researchers also found that households transfer more money when they have access to mobile money services. This paper provides valuable background on the history and uptake of mobile money in Madagascar and how this technology has affected Malagasy households.

Tags: Poverty, Madagascar – National, Supporting functions

### The Mobile Money Regulatory Index 2021

GSMA. 2021. "The Mobile Money Regulatory Index 2021: Regional & Country Profiles." <a href="https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/10/Mobile-Money-Regulatory-Index-2021.pdf">https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/10/Mobile-Money-Regulatory-Index-2021.pdf</a>.



This report utilizes the mobile money regulatory index (MMRI) to review the feasibility and sustainability of mobile money service provision by region and country, based on national regulations around mobile money services. According to this report, mobile money regulations in Madagascar are progressive, with an overall MMRI score of 78.30. Nationally, 12% of the population aged 15 and older has a mobile money account. This report provides background for the discussion of financial services in the DRMS.

Tags: Madagascar – National, Supporting functions, Market policies

### Republic of Madagascar: 2022 Article IV Consultation, Third Review

International Monetary Fund. 2023. "Republic of Madagascar: 2022 Article IV Consultation, Third Review Under The Extended Credit Facility Arrangement, and Requests for A Waiver of Nonobservance of Performance Criteria and Modification of Performance Criteria-Press Release; Staff Report; and Statement by the Executive Director for Republic of Madagascar." International Monetary Fund. <a href="https://www.imf.org/en/Publications/CR/Issues/2023/03/21/Republic-of-Madagascar-2022-Article-IV-Consultation-Third-Review-Under-The-Extended-Credit-531196">https://www.imf.org/en/Publications/CR/Issues/2023/03/21/Republic-of-Madagascar-2022-Article-IV-Consultation-Third-Review-Under-The-Extended-Credit-531196</a>.

This Madagascar country report, by the International Monetary Fund, outlines key program and policy considerations for Madagascar following the COVID-19 pandemic and ongoing climate shocks. The report discusses the social, political, and climate risks facing the country and summarizes proposed policies to promote economic growth in the face of these risks. These policies include scaling up investments and social spending, increasing fiscal transparency to address corruption, implementing stronger monetary policy to combat inflation, and investing in social protection and infrastructure to improve resilience to climate change. This report provides key background for the DRMS on national economy and policy conditions.

Tags: Madagascar – National, Supporting functions, Market policies

#### States of Fragility: Madagascar

Organization for Economic Co-operation and Development (OECD). "States of Fragility: Madagascar." Compare your country. OECD. Accessed November 1, 2023.

http://www3.compareyourcountry.org/states-of-fragility/countries/MDG/.

OECD's States of Fragility resource provides fragile context country profiles. The Madagascar profile outlines key indicators on economic, environmental, human, political, security, and societal dimensions of fragility and compares Madagascar's indicators against comparison countries. Madagascar is experiencing moderate fragility in the security dimension; high fragility in the economic, political, and societal dimensions; and severe fragility in the environmental and human dimensions. This resource provides important vulnerability indicators for use in the DRMS.

Tags: Poverty, Resilience, Madagascar – National, Supporting functions, Political Economy Analysis

# The Urgency of Reforms: Structural Transformation and Better Governance at the Heart of the Strategy to Reduce Poverty

World Bank. 2022b. "Systematic Country Diagnostic Update for Madagascar, April 2022 – The Urgency of Reforms: Structural Transformation and Better Governance at the Heart of the Strategy to Reduce Poverty." World Bank.

https://documents1.worldbank.org/curated/en/551231652117328109/pdf/Madagascar-Systematic-Country-Diagnostic-The-Urgency-of-Reforms-Structural-Transformation-and-Better-Governance-at-the-Heart-of-the-Strategy-to-Reduce-Poverty.pdf.



This report summarizes key challenges and opportunities to reduce poverty and increase economic growth to achieve sustainable economic development in Madagascar. The report highlights patterns that have impeded long-term development in Madagascar, including lack of economic growth during stable periods and an ongoing pattern of crises. The report presents 1) trends in growth, poverty, and sustainability; 2) growth constraints; 3) strategies for rapid, inclusive, and sustainable growth; 4) strategies for resilience building; 5) strategies for improving governance; and 6) proposed prioritization of policy interventions. This source provides important background for the DRMS on the barriers to economic growth in Madagascar.

Tags: Poverty, Madagascar – National, Market policies, Supporting functions, Political Economy Analysis

#### Use of Financial Services, Mobile Banking

FRED. 2022. "Use of Financial Services, Mobile Banking: Active Number of Mobile Money Accounts for Madagascar." FRED. <a href="https://fred.stlouisfed.org/series/MDGFCMAANUM">https://fred.stlouisfed.org/series/MDGFCMAANUM</a>

This graph, summarizing data from the International Monetary Fund, depicts the use of financial services, mobile banking, and mobile money in Madagascar from 2012 to 2022. In 2022, 3,804,260 people in Madagascar utilized these services. This graph is used in the DRMS to discuss the utilization of financial services in Madagascar.

Tags: Madagascar – National, Household norms, Trends

#### What is "Fihariana"?"

Fihariana. 2019. "What is "Fihariana"?" https://fihariana.com/en/about/.

This website provides an overview of the Fihariana program, a national program developed by President Andry Rajoelina to provide tailored technical assistance and monetary support of 200,000 to 200 million Malagasy Ariary to entrepreneurs in Madagascar. The goal of the Fihariana program is to help address Madagascar's economic crisis by creating additional jobs. This background information informs discussions of production capacity and market systems in the DRMS.

Tags: Livelihoods, Madagascar - National

### **Humanitarian Assistance**

### Baseline Study of the FIOVANA Resilience Food Security Activity in Madagascar

Implementer-Led Evaluation & Learning (IMPEL). 2021. "Baseline Study of the FIOVANA Resilience Food Security Activity in Madagascar." IMPEL. <a href="https://www.fsnnetwork.org/resource/baseline-study-fiovana-resilience-food-security-activity-madagascar">https://www.fsnnetwork.org/resource/baseline-study-fiovana-resilience-food-security-activity-madagascar</a>.

This report utilizes data collected in 2021, for the FIOVANA Resilience Food Security Activity. This program is implemented by the Adventist Development Relief Agency (ADRA) to improve levels of food security in Eastern Madagascar. The report includes general demographics, food security indicators, child nutrition, and health, women's health, water, sanitation, and hygiene (WASH), agricultural practices, gender dynamics, and resilience building. Food insecurity, poor nutrition, and poverty are prevalent in households in this region of Madagascar. These factors contribute to health issues among the population, particularly children and pregnant women. Agriculture is an important factor in these regions, as most households contribute to crops or livestock. This baseline study provides meaningful data and indicators to further improve food security and nutrition in Eastern Madagascar, and an



endline survey to complement and demonstrate progress for the FIOVANA activity is expected to take place in 2025.

**Tags:** Food security, Wealth profiles, Social capital, Rice, Gender, Youth, Atsimo Atsinanana region, Poverty

# Community-Based Animal Health Workers (CAHWs) Guardians for Quality, Localised Animal Health Services in the Global South

Van Troos, Koen, Margherita Gomarasca, Hervé Petit. 2018. "Community-Based Animal Health Workers (CAHWs) Guardians for Quality, Localised Animal Health Services in the Global South." Vétérinaires Sans Frontières International. <a href="https://vsf-international.org/wp-content/uploads/2018/08/Policy-Brief-n.5-web.pdf">https://vsf-international.org/wp-content/uploads/2018/08/Policy-Brief-n.5-web.pdf</a>.

This Vétérinaires Sans Frontières (VSF) policy brief describes a community-based veterinarian health service approach developed to fill a gap of qualified veterinarians, particularly in rural regions of the Global South. In these areas, livestock plays a vital role in livelihoods, resilience, food security, and poverty. Without access to animal health services, livestock production, and rearing are threatened by diseases and other health risks. To fill this gap, CAHWs have been trained by non-governmental organizations (NGOs), governments, and local organizations to serve rural communities and their animal health needs. These CAHWs can provide local and more affordable health services to their communities. However, CAHWs experience some challenges concerning training, supervision, and government or legal statuses. This policy brief is relevant to the DRMS for its analysis of challenges and benefits to CAHWs, especially in rural regions like southern Madagascar.

Tags: Food security, Resilience, Humanitarian aid

### **Economics of Resilience to Drought: Ethiopia Analysis**

Venton, Courtenay Cabot. 2018. "Economics of Resilience to Drought: Ethiopia Analysis." USAID. https://reliefweb.int/report/ethiopia/economics-resilience-drought-ethiopia-analysis-january-2018.

This report on the economics of resilience to drought in Ethiopia examines the impacts of early responses to humanitarian crisis particularly in proactive responses. The study utilizes existing data and empirical evidence and a Household Economy Approach (HEA) to model the costs of different response scenarios in Ethiopia. This report details the impacts of droughts on households such as lowered resilience, market changes, and increased conflict. This report is useful to the DRMS, as it provides evidence that anticipatory financing, early responses, and resilience efforts can reduce the overall costs of aid.

Tags: Resilience, Climate Change, Humanitarian Aid

### Emergency Market Mapping and Analysis Toolkit: People, Markets and Emergency Response

Albu, Mike. 2010. "Emergency Market Mapping and Analysis Toolkit: People, Markets and Emergency Response." Practical Action Publishing. https://www.emma-toolkit.org/toolkit.

This Emergency Market Mapping and Analysis (EMMA) Toolkit is useful for understanding how markets are impacted by emergencies, and how markets and emergencies may influence food and livelihood security. The EMMA guides assessments of market systems, particularly during the start of an emergency. This quick analysis can be utilized in planning and improving responses and resource use. The toolkit emphasizes quick responses so that communities and decision-makers can act to prevent



long-term damage to markets and livelihoods. This toolkit has guided data collection activities and study methodology for the DRMS.

Tags: Food Security, Resilience, Humanitarian Aid

## **Evidencing the Impacts of the Humanitarian Crisis in Southern Madagascar on Migration**

International Organization for Migration. 2017. "Evidencing the impacts of the humanitarian crisis in southern Madagascar on migration and the multisectoral linkages that drought-induced migration has on the other sectors of concern." International Organization for Migration.

<a href="https://www.iom.int/sites/g/files/tmzbdl486/files/country/docs/Madagascar/IOM-Madagascar-Southern-Madagascar-Assessment-Report-EN.pdf">https://www.iom.int/sites/g/files/tmzbdl486/files/country/docs/Madagascar/IOM-Madagascar-Southern-Madagascar-Assessment-Report-EN.pdf</a>.

This qualitative assessment analyzes the impacts of the 2015 drought on migration and related sectors in Madagascar's Grand Sud. Migrants in Androy moved from rural areas to the capital to earn income. Both intra-region migration and outmigration increased due to the drought. Households were more self-sufficient during rainy periods, as they were less reliant on external sources of income. Given the increase in drought in recent years, communities have become more reliant on migration to cope with these shocks. Migrants tend to take on low-skill and low-pay jobs, often with unstable housing and terms of employment. The report presents short-, medium-, and long-term response strategies for mitigating forced migration in this region. This report provides important insight into the intersections between climate shocks and migration, which supports discussions of livelihoods in the DRMS.

**Tags:** Livelihoods, Climate, Resilience, Food security, Humanitarian aid, Resilience, Madagascar - Southern, Androy region

### **Index Insurance for Madagascar's Groundnut Farmers**

Tesfamariam Tekeste, Yohana, and Souha Ouni. 2021. "Index Insurance for Madagascar's Groundnut Farmers." The Columbia Climate School, Columbia University. (October 5) <a href="https://iri.columbia.edu/news/index-insurance-for-madagascars-groundnut-farmers/">https://iri.columbia.edu/news/index-insurance-for-madagascars-groundnut-farmers/</a>.

The financial instruments sector team (FISTeam) of the International Research Institute for Climate and Society designs financial tools and processes that help farmers bounce back from droughts and other extreme weather events. In this instance, the team developed index insurance to prepare countries such as Madagascar to adapt to longer-term climate change. To do so, the institute conducted a detailed climate-risk analysis for selected agricultural value chains, which demonstrated how droughts and other forecasted climate hazards could impact the revenues of smallholder farmers and threaten the livelihoods of rural communities. This pilot serves as a cross-cutting guide to prepare Madagascar for various shocks going forward, providing ample recommendations and best practices.

Tags: Supporting functions, Climate, Resilience, Food security, Resilience, Groundnuts

# Livelihoods in Migration Contexts and the Growing Challenge of Climate Change

Byrne, Karri. 2022. "Livelihoods in Migration Contexts and the Growing Challenge of Climate Change." Produced by Mercy Cops as part of the SCALE Award. <a href="https://www.fsnnetwork.org/sites/default/files/2022-11/Livelihoods-in-Migration-Contexts.pdf">https://www.fsnnetwork.org/sites/default/files/2022-11/Livelihoods-in-Migration-Contexts.pdf</a>.

This paper discusses migration and livelihoods and the impacts of climate change on both. It also discusses the need to address both in livelihoods programming. As the effects of climate change worsen,



people are forced to leave their homes in search of alternative livelihoods. These internally displaced individuals often struggle to establish sustainable new livelihoods.

Tags: Livelihoods, Resilience, Climate

# Madagascar to Expand Access to Social Protection for Extremely Poor Households Thanks to \$250 Million in World Bank Financing

World Bank. "Madagascar to Expand Access to Social Protection for Extremely Poor Households Thanks to \$250 Million in World Bank Financing." World Bank press release, February 6, 2023. <a href="https://www.worldbank.org/en/news/press-release/2023/02/06/madagascar-to-expand-access-to-social-protection-for-extremely-poor-households-thanks-to-250-million-in-world-bank-finan">https://www.worldbank.org/en/news/press-release/2023/02/06/madagascar-to-expand-access-to-social-protection-for-extremely-poor-households-thanks-to-250-million-in-world-bank-finan, accessed December 7, 2023.</a>

This press release provides an overview of the World Bank's approval of \$250 million in funding for the Madagascar Safety Nets and Resilience project. This project aims to sustain and scale up safety net programs for poor and vulnerable households in Madagascar. This funding will support human development cash transfers, productive cash-for-work activities, and shock response. A key goal of this project is to address the education, health, and economic needs of women through the provision of cash transfers. This source provides information for the discussion of national social protection programs in the DRMS.

Tags: Livelihoods, Madagascar – National

## A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries

Banerjee, Abhijit, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, Christopher Udry. 2015. "A multifaceted program causes lasting progress for the very poor: Evidence from six countries." *Science* 348 (6236). <a href="https://www.science.org/doi/10.1126/science.1260799">https://www.science.org/doi/10.1126/science.1260799</a>.

This study demonstrates the results of six randomized control trials testing if a graduation approach can aid very poor populations in establishing livelihood activities and improving overall well-being. The trials utilized an integrated approach to enhancing the livelihoods of very poor populations. Though the trials were similar basic programs, each was tailored to the geographic and institutional context with different implementing partners. The graduation approach utilized a multifaceted approach: asset grants, training and support, coaching, and access to health and financial services. The study found significant improvements in income and consumption and strong cost-effectiveness.

Tags: Livelihoods, Resilience, Food Security, Humanitarian Aid, Secondary Data Analysis

# Programming Considerations for Humanitarian-Development-Peace Coherence: A Note for USAID Implementing Partners

USAID. 2023. "Programming Considerations for Humanitarian-Development-Peace Coherence: A Note for USAID Implementing Partners." USAID. <a href="https://www.resiliencelinks.org/building-resilience/reports/programming-considerations-hdp-coherence">https://www.resiliencelinks.org/building-resilience/reports/programming-considerations-hdp-coherence</a>

This report provides an overview of USAID's principles around Humanitarian-Development-Peace (HDP) coherence and provides examples and recommendations for implementing these principles in programming. The authors recommend 1) adherence to humanitarian principles; 2) joint establishment of an agenda; 3) communication, coordination, and learning across assistance types; 4) strategic



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integration of HDP assistance, shock-response programming, and conflict integration, where appropriate; and 5) implementation via local partners and systems. These HDP considerations provide important background for programming discussions in the DRMS.

Tags: Humanitarian aid

### Programming Options: 'Cash Plus' Approaches In the Response to COVID-19

McLean, Calum, Rebecca Holmes, Courtenay Cabot Venton, Gabrielle Smith. 2020. "Programming Options: 'Cash Plus' Approaches In The Response To COVID-19." UK Aid and GIZ. <a href="https://www.calpnetwork.org/wp-content/uploads/ninja-forms/2/PROGRAMMING-OPTIONS-%E2%80%98CASH-PLUS%E2%80%99-APPROACHES-IN-THE-RESPONSE-TO-COVID-19.pdf#:~:text=%E2%80%98Cash%20plus%E2%80%99%20interventions%20combine%20cash%20transfers%20with%20one,a%20cash%20transfer%20programme%20%28or%20combinations%20of%20both%29.

This report details a "cash plus" approach in COVID-19 response programming. The report details the importance of complementary interventions to maximize the effects of cash transfers or vouchers. A multi-faceted approach can be useful for addressing multiple challenges and vulnerabilities. This report describes multiple options for combining cash aid with other additional programming in a COVID-19 crisis. This report is useful for understanding the effectiveness of cash and the multiplier effect of aid, particularly when layered with other aid programs.

Tags: Resilience, Humanitarian aid

# Qualitative Toolkit: Qualitative Methods for Monitoring Food Security Activities Funded by the USAID Bureau for Humanitarian Assistance

Fox, Karyn, Hilary Cook, Nancy Peek. 2023. "Qualitative Toolkit: Qualitative Methods for Monitoring Food Security Activities Funded by the USAID Bureau for Humanitarian Assistance." USAID. https://www.fsnnetwork.org/sites/default/files/2023-04/IDEAL Qualitative Toolkit 1.pdf.

This qualitative toolkit from the USAID Bureau for Humanitarian Assistance is useful for improving food and nutrition activities for communities, particularly the more vulnerable communities. By addressing knowledge and capacity gaps, future design and implementation of food security activities may be improved. These qualitative methods are important for the development of tailored indicators, research, and design of programming specific to the context. This qualitative toolkit has guided field data collection activities.

Tags: Food Security, Resilience, Humanitarian Aid

# **Food Availability**

# Analyse des Points Chauds de la Sécurité Alimentaire et de la Nutrition dans le Sud-Est

World Food Programme (WFP). 2023. "Analyse des points chauds de la sécurité alimentaire et de la nutrition dans le Sud-Est." WPF. (May 30). <a href="https://fscluster.org/madagascar/document/analyse-des-points-chauds-de-la-securite">https://fscluster.org/madagascar/document/analyse-des-points-chauds-de-la-securite</a>.

This hotspot analysis provides an overview of the current food security and nutrition context in southeastern Madagascar. The recent cyclone and ripple effects from the war in Ukraine have contributed to the high prices of staple foods. Food prices make up nearly three-quarters of household spending, yet staple food production is currently unable to meet population needs. To cope with recent



shocks, households must engage in crisis strategies such as selling livestock and begging to meet their food needs. As a result, several districts are at critical rates of malnutrition, with significant portions of the population experiencing food insecurity. Finally, weather conditions, infrastructure issues, and lack of availability of food and services pose barriers to the delivery of humanitarian aid. The report presents a set of recommendations to increase community resilience and support capacity building and surveillance around food security in this region.

**Tags:** Food security, Humanitarian aid, Resilience, Madagascar – Southern, Trends, Secondary Data Analysis

# Androy Semi-arid Cassava, Maize, Sweet Potato, and Livestock Livelihood Zone (MG24) Hot Spot Profile

Family Early Warning Systems Network. 2021. "Androy Semi-arid Cassava, Maize, Sweet Potato, and Livestock Livelihood Zone (MG24) Hot Spot Profile." Family Early Warning Systems Network. (December 8). <a href="https://reliefweb.int/report/madagascar/madagascar-special-report-december-2021">https://reliefweb.int/report/madagascar/madagascar-special-report-december-2021</a>.

This hot spot profile explores the impacts of the October 2019-March 2020 drought on 2020/21 consumption in three scenarios: 1) no humanitarian cash or food assistance; 2) humanitarian cash and food assistance at 2017-18 levels; and 3) cash assistance based on actual 2020 cash assistance levels. The profile centers on the MG24 livelihood zone, as this region is classified as an Integrated Food Security Phase Classification (IPC) Phase 3 (Crisis) and is experiencing droughts. The report includes historical data from this region and forecasts future food insecurity based on production, inflation, labor, price, and assistance projections. The report is a useful resource for the DRMS, as it provides a comparison point for current and food assistance and the need for future IPC monitoring in the Androy region.

**Tags:** Supply-Demand, Food security, Humanitarian aid, Resilience, Androy region, Maize, Cows, Sheep/goats, Chickens

# **Broad Improvements in Food Availability and Consumption Following Harvests**

Famine Early Warning Systems Network (FEWS NET). 2023. "Broad improvements in food availability and consumption following harvests." (April). <a href="https://fews.net/sites/default/files/generated-reports/2023/mg-food-security-outlook-update-2023-04-1684784415.pdf">https://fews.net/sites/default/files/generated-reports/2023/mg-food-security-outlook-update-2023-04-1684784415.pdf</a>.

This report provides a high-level overview of projected food security outcomes following the 2023 harvests in Madagascar. The report summarizes current harvest trends, wild food availability, livestock prices, labor opportunities, and staple food prices at the national level. The report projects food security trends for September 2023 across the Grand Sud, which provides valuable context on upcoming food needs for the DRMS. Food insecurity is expected to improve in the Grand Sud during the main harvest season, as market supply increases will increase household access to staple foods. However, inconsistent rainfall, pest damage, and lack of access to seeds in this region will likely lead to a leaner harvest and increased food insecurity following the harvest season. Poor households will likely struggle to meet non-food needs (farming inputs, health costs, firewood) even if basic food needs are met.

**Tags:** Livelihoods, Trends, Food security, Humanitarian aid, Madagascar – National, Madagascar – Southern

## **Country Wise Product Report**



"Country Wise Product Report," AgriExchange. 2020.

This product report summarizes the quantity and value of Madagascar's exports of kidney beans in 2020. The top importers of Madagascar's kidney beans are France, the United Arab Emirates, Portugal, India, and Canada. This product report informs the discussion of the bean market system in the DRMS.

Tags: Peas/beans, Madagascar – National

# **Crop Production Forecasts Brief Series: Madagascar—Maize**

Ndoye, A., M. Dia, and K. Dia. 2023. "AAgWa Crop Production Forecasts Brief Series: Madagascar—Maize. AAgWa Crop Production Forecasts Brief Series." Africa Agriculture Watch.

https://akademiya2063.org/publications/AAgWa%20Crop%20Production%20Forecasts/AAgWa%20Crop%20Production%20Forecasts%20Series%20No.%2024 Madagascar-Maize.pdf.

This brief focuses on harvest and yield data for maize in Madagascar. Broken down by regions, this brief includes data on the 2022/2023 production years and compares the change between the two years. In 2023, Madagascar maize production is expected to be 260,494 MT, which is an increase of more than 20 percent from 2022 levels. This brief is useful to the DRMS for its production and yield data on maize, particularly in Atsimo Andrefana and Androy.

**Tags:** Madagascar—National, Atsimo Atsinanana region, Atsimo Andrefana region, Androy region, Anosy region, Trends, Maize

### **Dusty Winds Exacerbate Looming Famine in Madagascar's Deep South**

Razafison, Rivonala. 2021. "Dusty winds exacerbate looming famine in Madagascar's deep south." Mongabay. <a href="https://news.mongabay.com/2021/01/dusty-winds-exacerbate-looming-famine-in-madagascars-deep-south/">https://news.mongabay.com/2021/01/dusty-winds-exacerbate-looming-famine-in-madagascars-deep-south/</a>.

This article provides an overview of the dust storms (*tiomena*) plaguing southern Madagascar. Ongoing drought and deforestation in the South have left behind drier and dustier land, which is swept into *tiomenas*, and covers crops, buildings, and roads in red dust. These storms cause crop damage resulting in food insecurity and health problems such as fever, respiratory infections, diarrhea, and eye infections. This article highlights the consequences of climate change and severe drought for food security and livelihoods in the Grand South.

**Tags**: Climate, Food security, Madagascar – Southern

# Effects of Soaking and Thermal Treatment on Nutritional Quality of Three Varieties of Common Beans (Phaseolus vulgaris L.) from Madagascar

Ravoninjatovo, Mboahangy, Charlotte Ralison, Adrien Servent, Gilles Morel, Nawel Achir, Herimihamina Andriamazaoro, Manuel Dornier. 2022. "Effects of soaking and thermal treatment on the nutritional quality of three varieties of common beans (Phaseolus vulgaris L.) from Madagascar." *Legume Science*. https://doi.org/10.1002/leg3.143.

This study investigated the impact that soaking and thermal treatment had on the nutritional quality of three types of beans that are commonly consumed in Madagascar. The article also provides background information on bean consumption in Madagascar. This article informs the bean market system report in the DRMS.



Tags: Peas/beans, Madagascar - National

# Exploring Intervention Options for Small-scale Family Poultry Development in the Atsimo Atsinanana Region, Madagascar

Kurz, Barbara, Arielle Sandrine Rafanomezantsoa, Sarah Tojo Mandaharisoa, Stefan Sieber and Jonathan Steinke. 2021. "Exploring Intervention Options for Small-scale Family Poultry Development in the Atsimo Atsinanana Region, Madagascar." Humboldt University.

https://www.tropentag.de/2021/abstracts/posters/208.pdf#:~:text=%E2%97%8F%20Interventions%20on%20health%2C%20animal%20husbandry%20and%20nutrition%3B,breeding%20and%20production%20improvements%2C%20egg%20candling%20and%20numbering.

This research snapshot aims to understand the importance of poultry rearing in rural areas, describe challenges and opportunities to small-scale family poultry rearing and egg consumption, and contribute to the local nutritional situation and health of rural populations. With a specific focus on gender and children, the authors implemented several interventions, including the following focus areas: interventions on health, animal husbandry and nutrition, training for farmers on poultry management practices, marketing, and poultry health, and awareness campaigns and sensitization. The large impacts of these interventions, particularly on marginalized Malagasy populations, underscores the importance of focusing on geographical and gender diversity within the wider field of international development. Going forward, this cross-cutting source touches on food access and sustainability, areas central to our analysis.

Tags: Gender, Atsimo Atsinanana region, Chickens

# FIOVANA Refine & Implement Year Research Study: Economic Opportunities and Challenges Assessment

United States Agency for International Development (USAID). 2022. "FIOVANA Refine & Implement Year Research Study: Economic Opportunities and Challenges Assessment." USAID. <a href="https://pdf.usaid.gov/pdf">https://pdf.usaid.gov/pdf</a> docs/PA00Z7TC.pdf.

The FIOVANA activity, implemented by ADRA International, is a food security program targeting populations in southern Madagascar. This study on economic opportunities and challenges aims to identify livelihood activities that will support the development project and households in the southern region of Madagascar. This study was accomplished with a desk review to identify potential economic opportunities and primary data collection to gather further information on relevant value chains. Limitations include uneven levels of information between value chains. The study highlighted several value chains with high potential and opportunities such as spices, beekeeping, and poultry. Other opportunities such as coffee, handicrafts, and fishing had lower potential opportunities. These findings guided the FIOVANA project to focus on high-potential value chains and can serve as a guide for future development initiatives.

Tags: Supply, Demand, Food security, Chickens, Atsimo Atsinanana region

### Food Value Chain (FVC) Survey in Madagascar

Japan International Cooperation Agency (JICA). 2020. "Food Value Chain (FVC) Survey in Madagascar." Chapter 7 in Data Collection Survey on Food Value Chain Development for Food Security and Nutrition Improvement in Sub-Saharan Africa. JICA. https://openjicareport.jica.go.jp/pdf/12357752 02.pdf.



The purpose of this study is to contribute to food security and nutrition in sub–Saharan Africa. It was conducted through research, collaboration with countries and key organizations, and field surveys conducted in 2019. Chapter 7 focuses on three value chains in Madagascar: beans, vanilla, and cacao. The value of this study to the DRMS is the depth of detail provided on bean varieties native to Madagascar, the inputs and support services available in the bean market system, and past trends in bean production and exports. It also addresses the role of government policies, laws, and regulations, and how they contribute to the constraints and opportunities of agricultural development in Madagascar.

Tags: Supply-Demand, Livelihoods, Food security, Trends, Peas/beans

#### Global Information and Early Warning System Country Briefs Madagascar

Food and Agriculture Organization of the United Nations. 2022. "GIEWS - Global Information and Early Warning System Country Briefs Madagascar." Food and Agriculture Organization of the United Nations. (December 19). <a href="https://www.fao.org/giews/countrybrief/country.jsp?code=MDG">https://www.fao.org/giews/countrybrief/country.jsp?code=MDG</a>.

This brief provides high-level information focused on five areas: rainfall amounts, rice harvest, national rice supplies, inflation rates, and food insecurity. Of relevance are the report's findings, which predict above-average rainfall amounts forecast for the 2022/23 cropping season and adequate national rice supplies in the 2022/23 marketing year. Despite these positive outcomes, the snapshot also indicated rising levels of inflation, increasing import costs, and worsening food insecurity throughout southern Madagascar regions. In doing so, the snapshot paints a mixed picture of prospects and provides tentative forecasting to best help farmers plan.

Tags: Supply-Demand, Climate change, Food security, Livelihoods, Market norms, Rice, Trends

# A Higher-yield Rice Variety Moves Madagascar Further on the Path to Self-sufficiency: How South-South Cooperation Helps Ensure Food Security for Family Farmers

Food and Agriculture Organization of the United Nations. 2020. "A Higher-yield Rice Variety Moves Madagascar Further on the Path to Self-sufficiency: How South-South Cooperation Helps Ensure Food Security for Family Farmers." Food and Agriculture Organization of the United Nations. (November 9). <a href="https://www.fao.org/fao-stories/article/en/c/1305040/">https://www.fao.org/fao-stories/article/en/c/1305040/</a>.

This article focuses on a south-south cooperation project between China and Madagascar, with the aim of better-yielding rice with the intention of ensuring the country's food security and reducing its reliance on imports of this staple. FAO provides training on seed preparation, nursery management (water control, fertilizer supply) and the use of products against insects, critters, and weeds. Collectively, this article underscores the centrality of countries sharing expertise, knowledge, and solutions. Working collaboratively is key to creating a stronger, more resilient global agricultural sector, and improving food security and livelihoods for all, underscoring the central role this south-south partnership plays in sustaining the United Nations Sustainable Development Goals (SDGs) and wider USAID priorities.

Tags: Supply-Demand, Food Security, Supporting functions, Rice

# Intervention Options for Small-scale Family Poultry Development in South-eastern Madagascar: An Expert Survey

Kurz, Barbera, Steinke, Jonathan, and Stefan Sieber. 2023. "Intervention options for small-scale family poultry development in south-eastern Madagascar: an expert survey." Journal of Agriculture and



Rural Development in the Tropics and Subtropics. <a href="https://www.researchgate.net/profile/Jonathan-Steinke/publication/369268988">https://www.researchgate.net/profile/Jonathan-Steinke/publication/369268988</a> Intervention options for small-scale family poultry development in south-eastern Madagascar an expert survey/links/6412c0b692cfd54f8403d0ce/Intervention-options-for-small-scale-family-poultry-development-in-south-eastern-Madagascar-an-expert-survey.pdf.

This article discusses poultry farming and interventions for the development of family poultry farming in the Atsimo Atsinanana region. This region has limited diversity and access to animal protein. While many households have poultry, production is limited, and egg consumption is not common. The main challenge to poultry production is disease, made more common by poor animal husbandry practices and a lack of veterinary services. This article is relevant to the DRMS for its identification of challenges and opportunities within small-scale poultry farming.

Tags: Atsimo Atsinanana region, Chickens, Food Security, Resilience

### Madagascar Acute Food Insecurity: September 2023 projected outcomes

Famine Early Warning Systems Network (FEWS NET). 2023b. "Madagascar Acute Food Insecurity: September 2023 projected outcomes." FEWS NET. https://fews.net/southern-africa/madagascar.

This FEWS NET map demonstrates a map of Madagascar and categorizes each region into food insecurity classifications. The classifications range from Minimal (1) to Famine levels (5). While most of Northern Madagascar is in a Minimal (1) food insecurity category, as one moves further south, food insecurity worsens. Large portions of Atsimo Andrefana and Anosy are in a Stressed (2) category of food insecurity. All of Androy, Atsimo Atsinanana, and Vatovavy-Fitovinany are in this Stressed (2) category. As of September 2023, no region was reported as more severe than Stressed. Some regions are marked with a symbol (!) to indicate that classifications would be worse without current or planned humanitarian assistance. In particular, Anosy and Atsimo Atsinanana would face higher levels of food insecurity without food assistance in these regions. This map is also useful for its prediction of classification in the medium term (October 2023 to January 2024). This is relevant to the DRMS, as FEWS NET projects that food insecurity will worsen to a Crisis level (3) in parts of all the study areas, including Atsimo Andrefana, Androy, Anosy, and Atsimo Atsinanana.

**Tags:** Madagascar—National, Androy region, Anosy region, Atsimo Atsimo Atsimo and region, Atsimo Andrefana region, Food security, Resilience

### Madagascar Corn Area, Yield, and Production

U.S. Department of Agriculture. 2023. "Madagascar Corn Area, Yield and Production" U.S. Department of Agriculture. <a href="https://ipad.fas.usda.gov/countrysummary/Default.aspx?id=MA&crop=Corn.">https://ipad.fas.usda.gov/countrysummary/Default.aspx?id=MA&crop=Corn.</a>

This webpage provides an overview of Madagascar's corn area, yield, and production by market year from 2012 to 2023. The data are presented in graphs and in subnational summaries. A graph depicts the trend in corn yields (tons/hectare) for 2012 to 2023; yields steadily increased until 2022/23, when there was a dramatic decrease. The data are used to calculate a five-year average yield and percent change from the year average. Additionally, the page provides a plant and harvest calendar for corn. The planting season occurs near the end of the calendar year, from October to December, while the harvest occurs in March and April. The page presents data for four subnational areas: Antananarivo, Fianarantsoa, Mahajanga, and Toliary. These data provide information on the wider market for corn.

Tags: Supply-Demand, Trends, Maize, Atsimo Andrefana Region



#### Madagascar Food Security Outlook October 2022 to May 2023

Famine Early Warning Systems Network (FEWS NET). 2022. "Madagascar Food Security Outlook October 2022 to May 2023: Emergency (IPC Phase 4) expected in the Grand South if food assistance is not sustained." FEWS NET.

https://fews.net/sites/default/files/documents/reports/MG FSO Oct2022 Final.pdf.

This report by FEWS NET provides an overview of the food security outlook in Madagascar for October 2022 to May 2023. Due to ongoing drought and low harvest yields, southern Madagascar remains in Crisis (IPC Phase 3) and Stressed (IPC Phase 2) status. Inflation continues to rise, driving food prices up and decreasing households' purchasing power, which further exacerbates food insecurity. FEWS NET projected that without sustained food assistance from aid agencies, southern Madagascar would experience Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes from February to mid-April 2023. This report provides key insights for the DRMS into food security trends in the study region.

Tags: Food security, Madagascar - South

#### **Madagascar Imports By Category**

Trading Economics. 2021. "Madagascar Imports By Category." https://tradingeconomics.com/madagascar/imports-by-category

This website summarizes Madagascar's imports based on data from the United Nations COMTRADE database. Cereals are the second largest national import and the largest national food import. In 2022, Madagascar imported \$410.05 million of cereals. This source informs discussions of sorghum imports in the sorghum market report of the DRMS.

Tags: Sorghum, Madagascar – National, Supply – Demand

# Madagascar Key Message Update: Maize Harvests in the Grand South Produce Minimal Seasonal Improvements, May 2022

Famine Early Warning Systems Network (FEWS NET). 2022. "Madagascar Key Message Update: Maize Harvests in the Grand South Produce Minimal Seasonal Improvements, May 2022." FEWS NET. Accessed July 12, 2023. <a href="https://reliefweb.int/report/madagascar/madagascar-key-message-update-maize-harvests-grand-south-produce-minimal-seasonal-improvements-may-2022.">https://reliefweb.int/report/madagascar/madagascar-key-message-update-maize-harvests-grand-south-produce-minimal-seasonal-improvements-may-2022.</a>

This snapshot provides a concise overview of the lingering impacts of massive consecutive droughts on maize harvests. Coupled with an atypically long dry season amidst above-average prices and below-average labor demand, these impacts continue to increase humanitarian food assistance programs in the regions of Androy, Anosy, Atsimo Andrefana, and Atsimo Atsimo Atsinanana. Taken together with little legume and cereal production and limited employment opportunities, migration and income from these livelihood options fell to below-normal levels. This portrait underscores contemporary experiences perhaps mirrored in our wider fieldwork.

**Tags:** Supply-Demand, Climate, Humanitarian aid, Food security, Maize, Androy region, Anosy region, Atsimo Andrefana region, Atsimo Atsinanana region

# Madagascar Key Message Update: Humanitarian assistance resumes but is insufficient to avert Crisis (IPC Phase 3) outcomes in the Grand South and Grand Southeast

Famine Early Warning Systems Network (FEWS NET). 2023c. "Madagascar Key Message Update: Humanitarian assistance resumes but is insufficient to avert Crisis (IPC Phase 3) outcomes in the



Grand South and Grand Southeast." FEWS NET. <a href="https://fews.net/southern-africa/madagascar/key-message-update/november-2023">https://fews.net/southern-africa/madagascar/key-message-update/november-2023</a>.

This update from the Family Early Warning Systems Network (FEWS NET) provides an overview of projected food outcomes from November 2023 to January 2024. Poor households in the Grand South and Southeast have used up their food stores and are reliant on market purchases and humanitarian food assistance, which is currently insufficient to meet household food needs. El Niño is anticipated to inhibit agriculture production for the 2023/24 growing season due to decreased rainfall across the region. Low wages and high transportation costs also create challenges for households with agricultural livelihoods. The findings from this update inform discussions of food security in the DRMS.

**Tags**: Humanitarian aid, Food security, Madagascar – Southern

#### Madagascar: Pacte pour l'Alimentation et l'Agriculture

African Development Bank Group. 2023. "Madagascar: Pacte pour l'alimentation et l'agriculture." African Development Bank Group. <a href="https://www.afdb.org/en/documents/madagascar-pacte-pour-lalimentation-et-lagriculture">https://www.afdb.org/en/documents/madagascar-pacte-pour-lalimentation-et-lagriculture</a>.

The Pact on Food Security and Resilience outlines the Government of Madagascar's production priorities and strategic objectives. The priority sectors include rice, maize, cassava, oilseed (soybeans and groundnuts) production, and animal husbandry for small ruminants and zebu. The Government of Madagascar aims to increase the production and processing of these commodities by 2028 and improve conservation efforts. The objectives outlined in this report inform the rice market report in the DRMS.

**Tags:** Food security, Maize, Rice, Groundnuts, Madagascar – National

#### Madagascar Price Bulletin, February 2021

Famine Early Warning Systems Network (FEWS NET). 2021. "Madagascar Price Bulletin, February 2021" FEWS NET. Accessed July 11, 2023. <a href="https://reliefweb.int/report/madagascar/madagascar-price-bulletin-february-2021">https://reliefweb.int/report/madagascar/madagascar-price-bulletin-february-2021</a>.

This FEWS NET bulletin, part report, and part infographic, monitors Malagasy food staples, including rice, maize, and cassava. It also includes nominal retail prices for these crops across four southern Malagasy regions (Ambovombe, Tsihombe, Amboasary, and Fianarantsoa). The accompanying bar and line graphs provide great visual aids that allow users to compare current markets with five-year average prices, inclusive of seasonal trends, and prices in the previous year. This USAID-funded activity is an ideal complement to the aforementioned reports, which do not often disaggregate data based on region or speak about multiple agricultural products simultaneously. Both of these are an asset to the DRMS.

Tags: Supply-Demand, Market policies, Trends, Food security, Androy region, Anosy region, Rice, Maize

# Madagascar Price Bulletin, September 2023

Famine Early Warning Systems Network (FEWS NET). 2023e. "Madagascar Price Bulletin, September 2023. FEWS NET. <a href="https://reliefweb.int/report/madagascar/madagascar-price-bulletin-september-2023">https://reliefweb.int/report/madagascar/madagascar-price-bulletin-september-2023</a>.

This price bulletin from FEWS NET provides updated price trends for rice (local and imported), dried cassava, and maize in Madagascar. This bulletin includes current year (2023-24) price trends, last year's price trends (2022-23), and 2-year average price trends (2021-23) for retailers in Antananarivo,



Fianarantsoa, Toliara, and Toamasina. These price trends inform the market reports on rice and maize in the DRMS.

Tags: Maize, Rice, Madagascar - National

### Madagascar Rice Area, Yield, and Production

"Madagascar Rice Area, Yield and Production" U.S. Department of Agriculture, 2023. <a href="https://ipad.fas.usda.gov/countrysummary/default.aspx?id=MA&crop=Rice.">https://ipad.fas.usda.gov/countrysummary/default.aspx?id=MA&crop=Rice.</a>

This webpage provides an overview of Madagascar's rice area, yield, and production by market year from 2012 to 2023. The data are presented in graphs and at the subnational level. A graph depicts rice yield (tons/hectare) from 2012 to 2023. The graph represents the trend in rice yield, as rice yields have been decreasing since 2012. The data are used to calculate a five-year average yield and percent change from the year average. Additionally, the page provides a plant and harvest calendar for rice. The planting season occurs near the end of the year from November to January while harvest occurs from April to June. The page presents this data for six subnational areas: Antananarivo, Antsiranana, Fianarantsoa, Mahajanga, Toamasina, and Toliary. These data provide information on the wider market for rice.

Tags: Supply-Demand, Trends, Rice, Atsimo Andrefana Region

#### Madagascar - Rice Imports Quantity

Institut National de la Statistique (INSTAT). 2020. "Madagascar – Rice imports quantity." Knoema. <a href="https://knoema.com/atlas/Madagascar/topics/Agriculture/Trade-Import-Quantity/Rice-imports-quantity">https://knoema.com/atlas/Madagascar/topics/Agriculture/Trade-Import-Quantity/Rice-imports-quantity</a>.

This database reports data from INSTAT, Madagascar's national statistics institute. This source provides data on the quantity of rice imported by Madagascar in 2022, which totaled 500 tons. This metric informs the rice market report in the DRMS.

Tags: Rice, Madagascar – National

#### **Madagascar Storage Assessment**

Logistics Cluster. N.d. "Madagascar Storage Assessment" Logistics Cluster, https://dlca.logcluster.org/26-madagascar-storage-assessment. Accessed July 25, 2023.

This assessment provides a detailed mapping of warehouses and describes the types, access, and conditions of these warehouses in Madagascar. Warehousing is not a fully developed service in the country; warehouses are most commonly found in the main towns. Many factories have constructed their warehouses according to their needs, and the storage or capabilities are not generally offered to other actors. Warehouses outside of big cities are not as well maintained. They are older and in poorer condition than warehouses in main city centers. The state-owned several warehouses during a previous regime, but these are now neglected. Rural areas are least served, as there are few facilities, and they are overburdened with seasonal crops such as vanilla, coffee, and peanuts.

Tags: Supporting functions, Madagascar - National



### **Madagascar Vegetable Oil Imports**

Volza. 2023. "Madagascar Vegetable Oil Imports." <a href="https://www.volza.com/p/vegetable-oil/import-in-madagascar/">https://www.volza.com/p/vegetable-oil/import-in-madagascar/</a>.

This source provides an overview of Madagascar's vegetable oil import trends, including the number of importers, the top importing countries, and the top imported oil products. Madagascar imports vegetable oil from 44 importers across 19 suppliers. These data inform the vegetable oil market report in the DRMS.

**Tags:** Vegetable oil, Madagascar – National

#### Madagascar - Vegetable Oil

Data Privacy Framework Program. N.d. "Madagascar – Vegetable Oil." Data Privacy Framework Program. Accessed July 24, 2023. <a href="https://www.privacyshield.gov/ps/article?id=Madagascar-vegetable-oil">https://www.privacyshield.gov/ps/article?id=Madagascar-vegetable-oil</a>

This country commercial guide provides some past information on opportunities for vegetable oil trade and includes a market overview. It indicates that since 2009, Madagascar has relied mainly on imports of vegetable oil (increasing 10-fold since) and recommends that United States exporters increase their sales in this sector through the establishment of a sales agent or by negotiating with a well-known importer or distributor. This resource was developed by the United States Government and provides information to support trends analysis.

Tags: Supply-Demand, Trends, Vegetable oil

# Opportunities for Strengthening the Sorghum Value Chain in Madagascar for More Sustainable Livelihoods

Kansas State University. 2023. "Opportunities for strengthening the sorghum value chain in Madagascar for more sustainable livelihoods" Feed the Future Innovation Lab for Collaborative Research on Sorghum and Millet. <a href="https://smil.k-state.edu/wp-content/uploads/2023/06/MadagascarSorghumValueChain.pdf">https://smil.k-state.edu/wp-content/uploads/2023/06/MadagascarSorghumValueChain.pdf</a>.

This draft report provides a complete assessment of opportunities and barriers to the sorghum value chain in Madagascar. The study used existing resources and data and conducted field visits and interviews to assess the current state of sorghum and opportunities for development. Challenges include lack of quality seed, poor soil, and environmental hazards like drought, but Madagascar climate conditions remain favorable for growing sorghum. Private sector actors, like larger commercial producers, have played an important role in agricultural development by investing in research in high-quality seeds and sorghum varieties and providing employment, training, and technical support to smallholder farmers and communities in Madagascar.

The report also includes a section assessing Madagascar's poultry and livestock sector. Population growth and livestock investments have increased demand for livestock products and provide opportunities to further develop this sector. Challenges to the development of this sector include a low production capacity of animal feed, high input costs, unreliable energy and water supplies, and poor infrastructure. Sorghum value chain development can contribute to animal and human feed, further advancing food security and livestock development in Madagascar.

**Tags:** Supply-Demand, Supporting functions, Market policies, Barriers to market, Climate, Household norms, Sorghum, Chickens, Food Security, Resilience, Madagascar – Southern



### Panier De Dépenses Minimum MEB Madagascar

Cash Working Group. 2019. "Panier De Dépenses Minimum MEB Madagascar" Cash Working Group. <a href="https://fscluster.org/sites/default/files/documents/meb\_sud\_madagascar\_26">https://fscluster.org/sites/default/files/documents/meb\_sud\_madagascar\_26</a> aout 2019.pdf.

This presentation explains the "minimum expenditure basket' used for calculating humanitarian cash and in-kind interventions for households in Madagascar. Stakeholders involved in developing the MEB include Ministère de la Population, UNICEF, WFP, World Bank, Instat, and CARE. Minimum expenditure food baskets describe the basic needs of a household for a given period. The committee and this presentation include findings, the construction of a food basket that meets caloric requirements, nutrient levels, and household needs, to guide investments and priorities for household food security in Madagascar.

**Tags:** Food security, Humanitarian aid, Resilience, Anosy region, Androy region, Atsimo Andrefana region

### Potential Impacts of 1.5°C, 2°C Global Warming Levels on Temperature and Rainfall Over Madagascar

Barimalala R. et al. 2021. "Potential impacts of 1.5°C, 2°C global warming levels on temperature and rainfall over Madagascar." Environmental Research Letters, Volume 16 No 4. <a href="https://iopscience.iop.org/article/10.1088/1748-9326/abeb34">https://iopscience.iop.org/article/10.1088/1748-9326/abeb34</a>.

This article explores the effect of global warming levels of 1.5°C and 2°C in Madagascar. Researchers utilized the CORDEX-Africa multi-model ensemble to simulate the impacts of warming on temperature and rainfall. Researchers found that global warming levels of 1.5°C and 2°C are projected to cause an overall rise in temperature in Madagascar, increasing the potential for heat-related mortality, infectious disease spread, and poor crop yields. Changes in rainfall varied by region and by model. Rainfall was generally projected to decrease during the planting season (October, November, December), thereby impacting agriculture livelihoods and food security. Rainfall was projected to increase in volume and severity in January, February, March, and April, particularly in the South, increasing the risk of infectious disease spread and extinction of biodiversity. This article provides important insight into the potential climate risks facing Madagascar and the impact that climate change will have on health, agriculture, and food security.

Tags: Climate, Madagascar – National, Madagascar – Southern

# Profil des Systèmes Alimentaires – Madagascar. Activer la Transformation Durable et Inclusive de nos Systèmes Alimentaires

FAO, European Union, and Cirad 2021. "Profil des Systèmes Alimentaires – Madagascar. Activer la transformation durable et inclusive de nos systèmes alimentaires." https://www.fao.org/documents/card/fr/c/cb6861fr

This report outlines agricultural production trends and challenges in Madagascar. Madagascar's current agricultural production is not sufficient to keep up with its population growth, leading to an increased dependence on imported goods. The report outlines the main agricultural products in five food system zones and highlights the main production challenges in these areas. The Grand South faces climate hazards, such as droughts, floods, and cyclones, and additional challenges such as poor infrastructure, and price volatility. Nationally, the lack of food availability, paired with poor nutritional education and knowledge of food preservation methods, results in high rates of child malnutrition and low dietary diversity. Rural communities face infrastructure and communication barriers and receive unequal



distributions of public resources and funds, which further isolates communities with high rates of food insecurity. Land constraints and production demands have led to environmentally destructive agricultural practices such as deforestation, slash-and-burn cultivation, and pesticide misuse, which contribute to poor soil quality and further slow production. The report presents a set of recommendations for addressing the structural, environmental, and political challenges in Madagascar's national food system.

Tags: Food Security, Climate, Barriers to market, Madagascar – Southern

#### Rapports de Synthèse par Pays: Madagascar

Food and Agriculture Organization (FAO). 2022b. "Rapports de synthèse par pays: Madagascar." https://www.fao.org/giews/countrybrief/country.jsp?code=MDG&lang=fr.

This source provides an overview of food security trends for the 2022-2023 crop season, as of December 2022. The report indicates that rainfall was above average for this crop season, which will aid crop production, but comes with the risk of cyclones and related damage. Rice production is above average at 4.6 million tons, and is estimated to be sufficient to meet national needs in 2022-23. However, food security in the Grand South has worsened following extended periods of poor harvest and climate shocks, and households' ability to cope with these stressors is strained. This resource provides important background for the DRMS on the state of food security in the Grand South and nationally.

Tags: Food security, Madagascar – National

# Retrospective Predictions of Rice and Other Crop Production in Madagascar Using Soil Moisture and an NDVI-Based Calendar

Rigden, Angela J., Christopher Golden, and Peter Huybers. 2022. "Retrospective Predictions of Rice and Other Crop Production in Madagascar Using Soil Moisture and an NDVI-Based Calendar from 2010–2017." *Remote Sensing* 14, no. 5:1223. https://doi.org/10.3390/rs14051223.

The authors use historical data to empirically assess the relationship between soil moisture and food production. Specifically, they focus on major staple crops that form the foundation of Malagasy food systems and nutrition, including rice, cassava, maize, and sweet potato. In doing so, they build on the work of FEWS NET, covering a 10-year period (2010-2017). A major result is that soil moisture shows skill in predicting cassava, maize, and sweet potato production, but only when the months most vulnerable to water stress are isolated. This finding speaks to the relevance of building the capacity of farmers to understand which seasonal changes are most conducive to agricultural growth. Being one of few empirical research articles, Rigden et al. is a welcomed addition to our annotated bibliography.

Tags: Food Security, Livelihoods, Climate, Rice, Maize

## Rice Export Prices Highest in More Than a Decade as India Restricts Trade

U.S. Department of Agriculture (USDA). 2023. "Rice Export Prices Highest in More Than a Decade as India Restricts Trade." <a href="https://fas.usda.gov/data/rice-export-prices-highest-more-decade-india-restricts-">https://fas.usda.gov/data/rice-export-prices-highest-more-decade-india-restricts-</a>

<u>trade#:~:text=India%2C%20the%20world's%20largest%20rice,the%20next%20four%20exporters%2</u> 0combined.

This trade spotlight from the U.S. Department of Agriculture provides an update on rice export price trends following India's decision to ban white rice exports in July 2023. This export ban had a significant



impact on the global rice market, as India's rice exports made up 40% of this market in 2022. This source informs the rice market report in the DRMS; specifically, in discussions of Madagascar's rice imports.

Tags: Rice, Trends

## Seed Security Assessment Great South (Grand Sud) Madagascar

SeedSystem with Consulting Plus. 2023. "Seed Security Assessment Great South (Grand Sud) Madagascar." SeedSystem.

This source is a comprehensive assessment of the supply and demand of seeds across the Anosy, Androy, and Atsimo Andrefana regions of Madagascar. The assessment identified chronic challenges with seed availability, access, quality, and health across the regions of interest, but did not conclude that there was a need for urgent distribution of seed aid (although targeted assistance for vulnerable households may be necessary). Sowing trends were generally increasing for the 2022-23 and 2023-24 growing seasons, but among farmers who were sowing less, a lack of money and purchasing power were named as the main barriers to seed use. The assessment found that sorghum seed is primarily obtained through aid and behavioral change efforts are required to encourage sorghum seed uptake. In addition to providing broad insight into seed security trends, this assessment informs the sorghum market system report in the DRMS.

Tags: Supply – Demand, Supporting functions, Anosy region, Androy region, Atsimo Andrefana region

# Socio-economic Situation of Poultry Farmers and the Local Chicken Production System on the East-Coast of Madagascar

Ursul, Sendramampionona Rantenaina, Hantanirina Herisoa Isabelle, Rabearimisa Rivo Nirina, Zafitody Conscient, Bola Aldiel, Andriamananjara Andry, and Randrianariveloseheno Arsène Jules. 2020. "Socio-economic Situation of Poultry Farmer and the Local Chicken Production System of the East-Coast of Madagascar." *Universal Journal of Agricultural Research* 8, no. 6. https://www.hrpub.org/download/20201030/UJAR1-10417390.pdf.

This empirical journal article aims to characterize the socio-economic aspect and the local poultry production system on the east coast of Madagascar. The sample included 316 smallholder farmers in the district of Fénérive-Est. The authors found several factors limiting livestock production intended for sale, including losses due to diseases (more than 60%), theft (23%), and financing (12.3%). Data from this study can be used to triangulate and support the DRMS primary data collection.

Tags: Market barriers, Household norms, Wealth profiles, Livelihoods, Chickens, Poverty

## **Sorghum Production**

U.S. Department of Agriculture (USDA), International Production Assessment Division. 2023. "Sorghum Production." USDA. (July 15).

https://ipad.fas.usda.gov/cropexplorer/cropview/comm\_chartview.aspx?cropid=0459200&regionid =safrica&nationalGraph=false&cntryid=mdg&sel\_year=2022&startRow=11&fctypeid=24&fcattribute id=6.

This collection of interactive graphs depicts sorghum production across the entire country (80%) and six distinct regions: Fianarantsoa (25%), Toliary (19%), Mahajanga (16%), Antananarivo (16%), Antsiranana (11%), and Toamasina (11%). By comparing the years 2021/2022 and 2022/2023, readers can see production movements and the impact of climate on sorghum production levels. This resource is



particularly valuable because of its disaggregated data, which allows for comparisons throughout southern Madagascar. These data provide information on the wider market for sorghum and how temperature may be affecting production levels.

Tags: Supply-Demand, Trends, Climate, Madagascar-Southern, Sorghum, Atsimo Andrefana region

### Stratégie de Développement de l'Agroécologie dans le Grand Sud Malgache

GRET. 2020. "Stratégie de développement de l'agroécologie dans le grand sud malgache." GRET. <a href="https://gret.org/publication/strategie-de-developpement-de-lagroecologie-dans-le-grand-sud-malgache/">https://gret.org/publication/strategie-de-developpement-de-lagroecologie-dans-le-grand-sud-malgache/</a>.

GRET, an international NGO, produced the Development Strategy of Agroecology in the Malagasy Grand Sud. It is a report that details the use of agroecological blocks in the Androy region. The report presents relevant contexts, implementation, scaling up, and additional techniques implanted in GRET's development efforts in food security in southern Madagascar. Specifically, the analysis on agroecological blocks focused on agronomic, economic, food, nutrition, and environmental development in the region. Some emphasis was placed on tree planting, pigeon peas, lima peas, legumes, seed access, and crisis mitigation strategies. These results are useful to guide and expand the use of new techniques and development initiatives in furthering food security and agricultural production in southern Madagascar.

Tags: Supply-Demand, Food Security, Resilience, Androy region, Peas/beans

#### Study Reveals Ancient Cereal Grain may be the Link to Helping Drought-affected Countries

Adventist Development and Relief Agency International (ADRA). 2021. "Study reveals ancient cereal grain may be the linked to helping drought-affected countries."

<a href="https://reliefweb.int/report/madagascar/study-reveals-ancient-cereal-grain-maybe-link-helping-new-maybe-new-may

This article summarizes the findings of a program analysis by the Adventist Development and Relief Agency and USAID in the Bekily, Ampanihy, and Betioky Sud districts of Madagascar. The project aimed to re-introduce sorghum to help minimize the impact of ongoing drought, given that sorghum is a drought-resistant crop. The project included community education, training on production practices, seed distribution, cooking demonstrations, and the formation of farmer groups to improve information sharing. The project resulted in increased sorghum cultivation and an improved community perception of this crop. These findings inform the sorghum market report in the DRMS.

Tags: Sorghum, Androy region, Atsimo Andrefana region

drought-affected-countries.

## World Breaches Key 1.5C Warming Mark for Record Number of Days

McGrath, Matt, Mark Poynting, Becky Dale, Jana Tauschinski. 2023. "World breaches key 1.5C warming mark for a record number of days." BBC. https://www.bbc.com/news/science-environment-66857354.

This news article from the BBC discusses rising temperature trends in 2023. The average global temperature surpassed pre-industrial temperatures by 1.5C or more on roughly one-third of the days in 2023, and this trend is expected to worsen in 2024. El Niño weather conditions, high ocean temperatures, and greenhouse gas emissions contribute to rising global temperatures. This article informs discussion of climate change in the DRMS; specifically, the impact of rising temperatures on rainfall and other weather events in southern Madagascar.

Tags: Climate



## **Food Access**

#### **Annual Country Report 2022: Madagascar**

World Food Programme (WFP). 2022. "Annual Country Report 2022: Madagascar." WFP. <a href="https://www.wfp.org/operations/annual-country-report?operation">https://www.wfp.org/operations/annual-country-report?operation</a> id=MG02&year=2022#/24806.

This report outlines the WFP's food assistance programs and beneficiaries in Madagascar, including food, cash-based transfers, commodity vouchers, and capacity strengthening. The WFP worked alongside the Malagasy government, United Nations agencies, private sector groups, and NGOs to implement programming in alignment with six strategic outcomes. Natural disasters, cattle, and commodity theft, deteriorating infrastructure, and the diversion of nutritious foods from schools posed risks to program activities. Despite these risks, the report outlined progress toward gender equality, protection of and accountability to program beneficiaries, and environmental protection in targeted communities. This report provides a valuable overview of the structure and priorities of the WFP's food assistance programming in Madagascar for the DRMS.

Tags: Food security, Humanitarian aid, Madagascar – National, Modality considerations

#### Baseline Study of the Maharo Resilience Food Security Activity (RFSA) in Madagascar (Vol. I)

United States Agency for International Development (USAID). 2021. "Baseline Study of the Maharo Resilience Food Security Activity (RFSA) in Madagascar (Vol. I)." USAID. (August). https://pdf.usaid.gov/pdf\_docs/PA00XWV7.pdf.

This report summarizes baseline data from February to March 2021 of the Maharo RFSA in southern Madagascar. The study used a clustered randomized controlled trial to assess the impact of additional community-tailored livelihood support on food security and development outcomes. COVID-19-related challenges and high rates of outmigration due to drought conditions in the south were cited as study limitations. Rates of severe food insecurity were lower among groups that received community-tailored livelihood support. Dietary diversity was poor among children and women of reproductive age across both the treatment and control groups and many children across both groups were underweight (30%) or severely underweight (15%). Most households (93%) farmed either crops or livestock, including cassava, cowpeas, and sorghum, and the majority of farmers owned the land they cultivated. Households reported dealing with shocks such as drought, crop pests, and rising food prices and felt less prepared to handle these shocks than in previous years. The report also summarizes key demographic, gender, and poverty indicators for this population.

**Tags:** Household norms, Social capital, Wealth profiles, Livelihoods, Resilience, Madagascar – Southern, Poverty

## Considerations for Integrating the Graduation Approach Within Resilience Food Security Activities

Bernagros, A., A. Kirton, and N. Toussaint. 2022. "Considerations for Integrating the Graduation Approach Within Resilience Food Security Activities." Implementer-led Design, Evidence, Analysis and Learning (IDEAL) Activity. <a href="https://www.fsnnetwork.org/sites/default/files/2022-12/IDEAL\_UPGReport.pdf">https://www.fsnnetwork.org/sites/default/files/2022-12/IDEAL\_UPGReport.pdf</a>.

This report explores the use of graduation approaches across three USAID RFSAs: the Graduating to Resilience Activity (Uganda), the Nobo Jatra Activity (Bangladesh), and the Nuyok Activity (Uganda). The report explores both "fully integrated" and "subset" graduation approaches, to understand how graduation approaches have been integrated into USAID programming and their impact on food security



outcomes. The report highlights important questions about how to address the needs of participants who qualify for but cannot be included in graduation programming, and around sustainable exit strategies to prevent regression among individuals who do participate in graduation programming. The report also highlighted important findings around staffing needs, asset transfer approaches, harm reduction strategies for consumption support, and inclusivity around financial literacy training. This report summarizes key lessons learned from prior implementation of graduation approaches, which informs recommendations in the DRMS.

Tags: Food security, Humanitarian aid, Resilience, Secondary data analysis

#### Diagnosis of the Degree of Inclusiveness of the MAHARO Consortium

Rukezamiheto, Alexis and Alix Pelisset. "Diagnosis of the Degree of Inclusiveness of the MAHARO Consortium." Accessed July 21, 2023.

MAHARO is a five-year (2019-2024) food security and nutrition project in the south of Madagascar, particularly in the Androy and Atsimo Andrefana regions. This report provides an in-depth look at the attitudes, practices, and behaviors of Maharo's operational partners and the degree to which they understand inclusiveness and are practicing inclusivity. It provides clear definitions, for example, of "persons with disabilities" as distinct from the more situational nature of a "person with a disability" and articulates how internal culture impacts inclusiveness. Although not written with a market systems audience in mind, many of the findings on inclusive practices, attitudes, and behaviors concerning people with disabilities are applicable.

Tags: Livelihoods, Resilience, Androy region, Atsimo Andrefana region, Social elements

## Distribution of Agricultural Inputs Relieves Some Access Challenges at the Outset of the 2022/23 Season

Famine Early Warning Systems Network (FEWS NET). N.d. "Distribution of Agricultural Inputs Relieves Some Access Challenges at the Outset of the 2022/23 Season." FEWS NET. Accessed July 25, 2023. <a href="https://fews.net/southern-africa/madagascar/key-message-update/november-2022">https://fews.net/southern-africa/madagascar/key-message-update/november-2022</a>.

This key message report provides a descriptive update on the status of food availability in Madagascar. Unfortunately, throughout southern Madagascar, households continue to face significant limitations in accessing food as reserves as the main agricultural season has largely been exhausted, leaving them reliant on market purchases to meet their food needs amidst rising food prices. Nonetheless, the Malagasy government and NGOs are currently in the process of delivering seeds, cuttings, and other agricultural inputs to targeted households across the country, particularly in the Grand South.

Tags: Madagascar- Southern, Supporting functions, Food security

#### Enquête Sur Les Cheptels De La Région Androy (Rapport 2017-2018)

Institut National de la Statistique (INSTAT), APRM, UNDP. 2021. "Enquête Sur Les Cheptels De La Région Androy (Rapport 2017-2018)." UNDP. <a href="https://www.undp.org/fr/madagascar/publications/enquete-sur-les-cheptels-de-la-region-androy-rapport-2017-2018">https://www.undp.org/fr/madagascar/publications/enquete-sur-les-cheptels-de-la-region-androy-rapport-2017-2018</a>.

This report presents the findings of a livestock survey carried out in the Androy region by INSTAT and APRM from November to December 2017. The report provides data on herd composition, herd management, animal production and productivity, and other key livestock characteristics in the Androy region. These findings inform the analysis of the goat and zebu market systems in the DRMS.



Tags: Livelihoods, Sheep/goats, Cows, Androy region

## **Ethiopia Resilience Evidence Gap Analysis**

Gobin, Stacie, Karri Byrne, Matthew Klick. 2023. "Ethiopia Resilience Evidence Gap Analysis." USAID. <a href="https://linclocal.org/wp-content/uploads/2023/06/Ethiopia-Resilience-Evidence-Gap-Analysis-RLA-External-Version">https://linclocal.org/wp-content/uploads/2023/06/Ethiopia-Resilience-Evidence-Gap-Analysis-RLA-External-Version</a> 508.pdf.

This report presents the findings of the USAID Ethiopia Resilience Learning Activity's Resilience Evidence Gap Analysis (REGA). The report analyzed USAID-funded literature on resilience in Ethiopia to identify the impacts of interventions on household food security, sustainability of shock-resilient livelihoods, natural resources and water management, and access to social services. The REGA found three key findings: 1) systems approaches involving multiple interventions have a greater impact than isolated interventions; 2) earlier funding and implementation of interventions yield more cost-effective results; and 3) social cohesion from interventions helps communities feel more resilient to future shocks. The findings from this report inform the analysis of programmatic implications in the DRMS.

**Tags**: Resilience, Livelihoods, Food security

### Etude d'évaluation des risques agricoles sur les chaînes de valeur Maïs et Arachide à Madagascar

Platform for Agricultural Risk Management (PARM) and Ministère De L'Agriculture et de L'Elevage (MINAE). 2023. "Etude d'évaluation des risques agricoles sur les chaînes de valeur Maïs et Arachide à Madagascar. "

This presentation summarizes an evaluation of the value chains for maize and groundnuts in Madagascar. This presentation provides key information for the maize and groundnut market systems reports in the DRMS.

Tags: Maize, Groundnuts, Madagascar – South

#### **Evaluation Approfondie Multisectorielle de la Sécurité Alimentaire**

World Food Programme (WFP). 2022. "Evaluation Approfondie Multisectorielle de la Sécurité Alimentaire." WFP/PAM. https://docs.wfp.org/api/documents/WFP-0000139764/download/.

This evaluation is an assessment of 2,477 households distributed throughout three regions of southern Madagascar. The assessment provides an overview of demographics, socio-economic context, living conditions, and household food security indicators. The assessment provides a deeper understanding of economic means, shocks, vulnerabilities, food access, and availability of households in this region. Many households have low levels of education, have poor access to water and energy sources, and participate in the agricultural sector. Most expenditures are to secure food: the climate crisis greatly impacts food security and the economic conditions of households. The assessment analyzes challenges to food availability and access such as the climate crisis, pests, and the high prices of agricultural inputs. This assessment and household analysis are useful for monitoring trends of prices and production, vulnerabilities, resilience, and development in food security for households in the south of Madagascar.

**Tags:** Supply-Demand, Food security, Trends, Resilience, Androy region, Anosy region, Atsimo Andrefana region



## Final Performance Evaluation of the ASOTRY Development Food Security Activity in Madagascar

Implementer-Led Evaluation & Learning (IMPEL). N.d. "Final Performance Evaluation of the ASOTRY Development Food Security Activity in Madagascar." USAID, TANGO, and Save the Children. Accessed July 21, 2023. https://pdf.usaid.gov/pdf\_docs/PA00WK4Z.pdf.

The goal of the ASOTRY activity was to effect substantial, tangible improvements in nutrition, agricultural productivity, and household and community resilience by addressing the underlying causes of food insecurity. In doing so, the program aimed to improve the health and nutrition of women of reproductive age and children under 5 years of age, to increase knowledge, improve technologies and techniques, and promote crop diversification through an innovative farmer training model. This source provides ample information about changes in malnutrition, sustainable access to food, disaster mitigation, and vulnerable communities. In doing so, it is relevant to several foci, namely, demographic and social characteristics and food access.

**Tags:** Supply-Demand, Supporting functions, Barriers to market, Household norms, Livelihoods, Resilience, Food security, Atsimo Andrefana region

#### **Global Price of Groundnuts**

FRED. 2023. "Global Price of Groundnuts." International Monetary Fund. https://fred.stlouisfed.org/series/PGNUTSUSDM.

This source provides a graph of the global price of groundnuts from 1990 to 2023. The price is depicted as U.S. dollars per metric ton of groundnuts, and the graph is updated monthly with the global price. The value on the graph depicts benchmark prices representative of the global market. This source is useful for its representation of global price trends since 1990. As groundnuts are a staple cash crop in southern Madagascar, this graph is useful for analyzing price trends through the years and potential export opportunities for producers in the groundnut market system.

Tags: Food security, Livelihoods, Barriers to market

#### Madagascar

Humanitarian Data Exchange. N.d. "Madagascar." Humanitarian Data Exchange. Accessed July 24, 2023. <a href="https://data.humdata.org/group/mdg">https://data.humdata.org/group/mdg</a>

This database consolidates datasets related to Madagascar from United Nations agencies and NGOs. Datasets in this database span a range of humanitarian topics, including conflict events, food insecure populations, food prices, health indicators, rainfall indicators, immunization campaigns, displacement data, and other economic, environmental, social, and health indicators.

**Tags:** Livelihoods, Wealth profiles, Resilience, Climate, Food security, Humanitarian aid, Trends, Madagascar – National, Secondary Data Analysis, Poverty

#### **Madagascar Beefs Up Zebu Export Business**

Hopps, Jason, and Neha Sud. 2018. "Madagascar Beefs Up Zebu Export Business." Last modified July 9, 2018. https://www.ifc.org/en/types/stories/2010/madagascar-beef-export-business.

Backed by a \$7 million International Finance Corporation (IFC) loan and extensive advisory support from IFC and the World Bank, BoViMa—short for Bonne Viande de Madagascar—is expected to be a modern feedlot and slaughterhouse close to Tolanaro in Madagascar's impoverished South. The feedlot intends



to source zebu and animal feed from local breeders and farmers, supporting a wide network of jobs and trade. The DRMS team will visit this feedlot and slaughterhouse to determine whether it is operating as a market leader and whether poor households can access export markets through this or similar routes.

Tags: Supply-Demand, Livelihoods, Madagascar- Southern, Cows

#### **Madagascar: Emergency Dashboard**

World Food Programme (WFP). 2022. "Madagascar: Emergency Dashboard." WFP. (July). Accessed July 25, 2023. <a href="https://dataviz.vam.wfp.org/version2/southern-africa/madagascar/overview/emergency-dashboard">https://dataviz.vam.wfp.org/version2/southern-africa/madagascar/overview/emergency-dashboard</a>.

The World Food Program's Data Visualization Dashboard provides a high-level overview of humanitarian assistance in Madagascar, with a particular focus on food assistance delivery in the Grand Sud and Grand Sud-Est, where food insecurity is the highest. The dashboard tracks prices, food security, and climate issues, and tracks emergency support provided by WFP and other agencies. The World Food Programme assisted over 1.1 million people during recent droughts through cash-based transfers and inkind food distributions. These high-level metrics provide important triangulation of primary data gathered for the DRMS.

**Tags:** Food security, Humanitarian aid, Climate, Supporting functions, Madagascar – National, Madagascar - Southern

#### **Madagascar Enhanced Market Analysis**

Famine Early Warning Systems Network (FEWS NET). 2018. "Madagascar Enhanced Market Analysis." FEWS NET.

https://fews.net/sites/default/files/documents/reports/Madagascar\_EMA\_Report\_20180930\_508% 20compliant.pdf.

The FEWS NET Enhanced Market Analysis report presents data and analysis from a previous study similar to the DRMS and therefore provides a reference point and guide. The report used a mixed-method approach, gathering primary and secondary data from stakeholders through field assessment in 2018 in Antananarivo, Fianarantsoa, and prioritized areas of interest. The Enhanced Market Analysis prioritized five major commodities: rice, sorghum, pulses, edible oil, and Corn Soya Blend. Other food staples and wild foods were examined as relevant by region, including livestock markets and fish markets in southern regions. This report provides economic, environmental, and social context to food security and considerations for future programming and assistance in the south of Madagascar.

**Tags:** Supply-Demand, Livelihoods, Trends, Madagascar – Southern, Rice, Sorghum, Peas/beans, Vegetable oil, Cows, Sheep/goats

#### **Madagascar Food Inflation**

Trading Economics. 2023. "Madagascar Food Inflation." https://tradingeconomics.com/madagascar/food-inflation.

This website summarizes food inflation trends in Madagascar through 2023, based on data from the Institut National de la Statistique de Madagascar. According to these data, inflation in Madagascar reached 8.20% in September 2023 and food inflation reached 10.20%. Food inflation has been at 9.27%, on average, between 2002 and 2023. These data provide important context for discussions of household purchasing power and food security in the DRMS.



Tags: Madagascar – National, Barriers to market

### **Madagascar Grand South Livelihood Zones Revision**

Famine Early Warning Systems Network (FEWS NET). 2017. "Madagascar Grand South Livelihood Zones Revision." FEWS NET.

https://fews.net/sites/default/files/documents/reports/Madagascar Grand South Livelihood Zoning Revision.pdf.

This Household Economy Analysis (HEA) uses a well-known and robust methodology to define livelihood zones, wealth breakdowns, and livelihood strategies in Madagascar's Grand South and investigates the impact of shocks on food access and income in these areas and continues to provide the basis for livelihoods analysis to date. During the initial analysis, primary data was collected at the district-, community-, and household levels (from November 2016 to October 2017). The report outlines the main productive assets, food sources, income sources, markets, hazards, and coping strategies for six livelihood zones: MG22 (Anosy and eastern Atsimo-Andrefana), MG23 (Mahafaly plain), MG24 (Androy), MG25 (Bekily district of Androy, parts of Ambovombe-Androy district), MG26 (Anosy), MG27 (Tuléar II district, Taolagnaro district). The report also describes production potential, livelihood activity, trade and market access, food access, expenditure patterns, and hazard response across neighboring livelihood zones, highlighting differences by season and wealth group.

**Tags:** Livelihoods, Wealth profiles, Trends, Anosy region, Androy region, Atsimo Andrefana region, Poverty

#### Madagascar [Grand South & Grand Southeast]: IPC Acute Food Insecurity Snapshot

Integrated Food Security Phase Classification (IPC). 2022. "Madagascar [Grand South & Grand South East]: IPC Acute Food Insecurity Snapshot." IPC. (May 30).

https://www.ipcinfo.org/fileadmin/user\_upload/ipcinfo/docs/IPC\_Madagascar\_AcuteFoodSecur\_22 Apr23Mar\_Snapshot\_English.pdf

This briefing provides an overview of food insecurity classifications in Madagascar's Grand Sud-Est and Grand Sud from November 2022 to March 2023, with projections through October 2023. Most districts in the Grand Sud-Est remain in IPC Phase 3 (Crisis), with some improvements anticipated in the future. Humanitarian aid has successfully reduced the number of people who qualify for IPC Phase 4 (Emergency) compared to 2022. Food insecurity in this region is driven by drought, cyclones, floods, and price shocks. The war in Ukraine and the COVID-19 crisis have also exacerbated food insecurity, due to inflation and decreased purchasing power.

**Tags:** Food security, Humanitarian aid, Madagascar – National, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsinanana region

## Madagascar: Humanitarian Response Dashboard (January-March 2023)

United Nations Office for the Coordination of Humanitarian Affairs. 2023. "Madagascar: Humanitarian Response Dashboard (January-March 2023)." United Nations Office for the Coordination of Humanitarian Affairs. (May). <a href="https://reliefweb.int/report/madagascar/madagascar-humanitarian-response-dashboard-january-march-2023">https://reliefweb.int/report/madagascar/madagascar-humanitarian-response-dashboard-january-march-2023</a>.

Published in May 2023, this infographic provides an overview of humanitarian needs and funding levels from key donors. It outlines current funding allocations, funding gaps, and humanitarian aid impact. Funding is primarily allocated towards school kits, cash transfers, NFI kits, food assistance, agricultural



revival, vaccinations and health services, malnutrition treatment, prevention services, awareness campaigns, WASH kits, and clean water access. It also outlines the improving humanitarian situation. This is helpful to the DRMS for understanding which donors are key stakeholders in the south.

Tags: Food security, Humanitarian aid, Madagascar - National, Madagascar - Southern

#### Madagascar: PARM Presents the Preliminary Results of the Value Chain Risk Assessment Study

Platform for Agriculture Risk Management (PARM). 2023. "Madagascar: PARM presents the preliminary results of the value chain risk assessment study." Madagascar: PARM presents the preliminary results of the value chain risk assessment study - PARM (p4arm.org).

This article provides a summary of the presentation of the initial results of the Value Chain Risk Assessment Study. Presenters highlighted pests, health, market, and weather as key challenges to value chains. Women and children, small-scale producers, and migrants faced the greatest exposure to these challenges. This presentation provides key insights into the barriers to market faced by market actors in Madagascar.

Tags: Barriers to market, Madagascar - National

## **Madagascar Port Assessment**

Logistics Cluster. 2022a. "Madagascar - 2.1 Madagascar Port Assessment." https://dlca.logcluster.org/madagascar-21-madagascar-port-assessment.

This excerpt from the Madagascar report by the Logistics Cluster provides an overview of the port system in Madagascar, including international shipment, national shipment, and internal waterway navigation capacity. Five of the seventeen ports in Madagascar have adequate port facilities, including the three ports that serve the study area. This source provides key background on ports for the DRMS, particularly for use in discussions around the connectivity of value chains in the South.

Tags: Barriers to market, Madagascar - National

#### Madagascar Port of Taolagnaro (Ehoala – Fort Dauphin)

Logistics Cluster. 2022d. "2.1.4 Madagascar Port of Taolagnaro (Ehoala – Fort Dauphin)." <a href="https://dlca.logcluster.org/214-madagascar-port-taolagnaro-ehoala-fort-dauphin">https://dlca.logcluster.org/214-madagascar-port-taolagnaro-ehoala-fort-dauphin</a>.

This excerpt from the Madagascar report by the Logistics Cluster provides an overview of the Port of Taolagnaro, located in Ehoala-Fort Dauphin. This port is a privately managed port with the capacity to receive general and refrigerated cargo, including from international vessels. Port facilities also include warehouse facilities. This source provides key background on ports for the DRMS, particularly for use in discussions around the connectivity of value chains in the Grand South.

Tags: Barriers to market, Anosy region

#### **Madagascar Port of Toliara**

Logistics Cluster. 2022c. "2.1.2 Madagascar Port of Toliara." <a href="https://dlca.logcluster.org/212-madagascar-port-toliara">https://dlca.logcluster.org/212-madagascar-port-toliara</a>.

This excerpt from the Madagascar report by the Logistics Cluster provides an overview of the Port of Toliara, located in Tulear. This port is a government-operated port, which operates 24/7 with capacity to accommodate oil tankers, bulk carriers, container ships, and cruise ships carrying a range of cargo. Port



facilities also include warehouse facilities. This source provides key background on ports for the DRMS, particularly for use in discussions around the connectivity of value chains in the Grand South.

Tags: Barriers to market, Atsimo Andrefana region

### **Madagascar Port of Toamasina (Tamatave)**

Logistics Cluster. 2022b. "Madagascar - 2.1.1 Madagascar Port of Toamasina (Tamatave)." <a href="https://dlca.logcluster.org/madagascar-211-madagascar-port-toamasina-tamatave">https://dlca.logcluster.org/madagascar-211-madagascar-port-toamasina-tamatave</a>.

This excerpt from the Madagascar report by the Logistics Cluster provides an overview of the Port of Toamasina, located in Tamatave. This port falls outside of the study area, but is the largest port in the country, handling a total monthly cargo of 194,169 MT. Port facilities also include warehouse facilities. This source provides key background on ports for the DRMS, particularly for use in discussions around the connectivity of value chains in the Grand South.

Tags: Barriers to market, Madagascar - National

#### **Madagascar Price Bulletin**

Famine Early Warning Systems Network (FEWS NET). July 2022. "Madagascar Price Bulletin." FEWS NET. <a href="https://fews.net/sites/default/files/documents/reports/PB MG 202207 EN.pdf">https://fews.net/sites/default/files/documents/reports/PB MG 202207 EN.pdf</a>.

FEWSNET price data provide monitoring and information on staple food prices, including rice and maize, two of the target commodities for DRMS. This information can be used in the DRMS to understand price trends and contribute to the analysis of the impact of food price increases on vulnerable populations.

Tags: Food Security, Rice, Maize, Trends, National-Madagascar

#### **Madagascar Road Network**

Logistics Cluster. 2022e. "2.3 Madagascar Road Network." <a href="https://dlca.logcluster.org/23-madagascar-road-network">https://dlca.logcluster.org/23-madagascar-road-network</a>.

This excerpt from the Madagascar report by the Logistics Cluster provides an overview of the road network in Madagascar, including national highways, provincial highways, and municipal roads. This source describes distances and travel times between major towns and the national capital, Antananarivo. This source provides key background on roads and transportation for the DRMS, particularly for use in discussions around the connectivity of value chains in the South.

Tags: Barriers to market, Madagascar - National

### **Market Systems Resilience: A Framework for Measurement**

Downing, Jeanne, Michael Field, Matt Ripley, Jennefer Sebstad. 2018. "Market Systems Resilience: A Framework for Measurement." USAID. <a href="https://www.usaid.gov/document/market-systems-resilience-framework-measurement">https://www.usaid.gov/document/market-systems-resilience-framework-measurement</a>.

This paper on market systems resilience discusses strategies for market systems strengthening and examines how dynamic market systems adapt to shocks and stresses. The report presents the Market System Resilience Assessment (MRSA) Tool, which utilizes eight domains (connectivity, diversity, power dynamics, rule of law, business strategy, decision-making, cooperation, and competition) to assess market system resilience. This tool serves as a key methodological framework for the market systems analysis in the DRMS.



Tags: Supply – Demand, Market policies, Barriers to market

#### **OECD-FAO Agricultural Outlook 2020-2029**

Organization for Economic Co-operation and Development and Food and Agriculture Organization. N.d. "OECD-FAO Agricultural Outlook 2020-2029" The Organization for Economic Co-operation and Development and Food and Agriculture Organization. Accessed July 24, 2023. <a href="https://www.oecd-ilibrary.org/docserver/1112c23b-en.pdf?expires=1690289397&id=id&accname=guest&checksum=A111C90F531A3D4F7E24DA3092F04035">https://www.oecd-ilibrary.org/docserver/1112c23b-en.pdf?expires=1690289397&id=id&accname=guest&checksum=A111C90F531A3D4F7E24DA3092F04035</a>.

Chapter 4 of this report focuses exclusively on oilseeds and oilseed products. The chapter describes the market situation and highlights the medium-term projections for world oilseed markets for the period 2020-29. Factors such as price, production, consumption, and trade developments for soybean, other oilseeds, protein meal, and vegetable oil are discussed. This is an important context for the vegetable oil value chain of the DRMS, as most oil appears to be imported. Given the scant literature thus far found about Malagasy oil, this is a useful contextual resource for our project.

Tags: Supply-Demand, Market norms, Trend, Vegetable oil

#### Process Evaluation of the Maharo Resilience Food Security Activity in Madagascar

United States Agency for International Development. September 2022. "Process Evaluation of the Maharo Resilience Food Security Activity in Madagascar." United States Agency for International Development. <a href="https://pdf.usaid.gov/pdf\_docs/PA00ZKPM.pdf">https://pdf.usaid.gov/pdf\_docs/PA00ZKPM.pdf</a>.

This report assesses the implementation of seven key interventions under the Maharo RFSA in southern Madagascar. Primary data collection via key informant interviews, validation exercises, and ground-truth sessions with technical staff informed the findings of this report. Information on the findings related to gender norms around women's participation and leadership, youth participation, private input service providers, savings groups, and lead farmer interventions will inform the primary data collection for the DRMS. The report also notes how social stigma and physical barriers make it challenging for implementers to ensure the inclusion of people with disabilities.

**Tags:** Supporting functions, Barriers to market, Social capital, Gender, Youth, Household norms, Livelihoods, Madagascar - Southern

#### Rapport Market Functionality Index (MFI) dans les régions du Grand Sud et Grand Sud-Est

Cash Working Group. 2022. "Rapport Market Functionality Index (MFI) dans les régions du Grand SUD et Grand Sud-Est." https://docs.wfp.org/api/documents/WFP-0000139762/download/.

This report describes the market functionality in key study regions of the Grand Sud and Grand Sud-Est including Atsimo Atsimanana, Atsimo Andrefana, Anosy, and Androy. Price instability is a concern in some circumstances, particularly for cereal products on the market; these unpredictable changes are a risk for cash transfer assistance. Rural, inaccessible areas are more likely to face problems such as climate crisis, conflict, and supply chain interruptions. Other barriers in this market include limited infrastructure, access to services, financial institutions, and customer diversification. This source is relevant to the DRMS, as it indicates that three-quarters of the markets could support cash and voucher assistance with complementary measures to address barriers in markets.



**Tags:** Madagascar—Southern, Atsimo Atsinanana region, Atsimo Andrefana region, Anosy region, Androy region, Barriers to market, Livelihoods, Resilience, Humanitarian Aid

## Reproductive and Economic Performance of Local Livestock in Southwestern Madagascar: Potentials and Constraints of a Highly Extensive System

Feldt, Tobias, Regina Neudert, Pascal Fust, and Eva Schlecht. 2016. "Reproductive and Economic Performance of Local Livestock in Southwestern Madagascar: Potentials and Constraints of a Highly Extensive System. *Agricultural Systems* 149. doi: 10.1016/j.agsy.2016.08.007.

The authors analyzed the reproductive performance of local breeds (zebu, cattle, and goats) along with livestock owners' culling strategies to determine herd dynamics, opportunities for economic development, and potential improvements. Qualitative data involved interviews on the progeny history of breeding females (506 cows and 593 does) and their offspring (721 calves and 1,073 kids). Based on the results, reproduction parameters were calculated and entered into the PRY Herd Life model to simulate herd development for present management and two alternate scenarios assuming either improved feeding and resulting higher productivity of breeding females or improved culling. Findings indicate that, despite the profitable nature of the current livestock husbandry system, it might reach its limits soon due to the region's restricted ecological carrying capacity. The authors recommend increasing livestock offtake, which would allow livestock keepers to raise their economic benefit without compromising herd development or enhancing the pressure on pasture resources. This resource provides additional information about how to best maximize Malagasy conditions while limiting their impacts on the wider livestock population.

Tags: Supply-Demand, Climate, Livelihoods, Madagascar - Southern, Cows, Sheep/goats

## The Role of Seed Vouchers and Fairs in Promoting Seed Market Development: Opportunities and Limitations

Croft, Marcia, Valerie Davis, Shaun Ferris, Catherine Longley, Noel Templer. 2021. "The Role of Seed Vouchers and Fairs in Promoting Seed Market Development: Opportunities and Limitations." A Feed the Future Global Support Seed Systems for Development activity report.

<a href="https://www.crs.org/sites/default/files/role\_of\_seed\_vouchers\_fairs\_in\_seed\_market\_development.pdf">https://www.crs.org/sites/default/files/role\_of\_seed\_vouchers\_fairs\_in\_seed\_market\_development.pdf</a>.

This report details an expansion of seed vouchers, fairs, and other types of development programming designed to strengthen the capacity of the seed sector and develop a sustainable, market-based seed system. This report contains case studies that detail gaps in developing this sustainable seed system including low capacity of seed actors, low demand, low purchasing power, and limited access to finance. Annex II includes a case study in Madagascar entitled "Changing Businesses Practices for Local and Regional Seed Vendors" which is particularly relevant to the DRMS.

Tags: Supporting functions, Barriers to market

## Seasonal Improvements Expected, but Likely Limited in Some Areas by Erratic Rainfall and Cyclone Strikes

Early Warning Systems Network. 2023. "Seasonal improvements expected, but likely limited in some areas by erratic rainfall and cyclone strikes." Famine Early Warning Systems Network. <a href="https://fews.net/sites/default/files/generated-reports/2023/mg-food-security-outlook-2023-02-1680304804.pdf">https://fews.net/sites/default/files/generated-reports/2023/mg-food-security-outlook-2023-02-1680304804.pdf</a>.



This report provides a high-level overview of projected food security outcomes in June-September 2023, given rainfall, weather, and harvest patterns. The report summarizes national rainfall, natural disasters, soil moisture levels, crop coverage and conditions, livestock and food prices, economic conditions, and humanitarian assistance. Most relevant to the DRMS, the report discusses the current food security situation in southern Madagascar, which was in peak lean season at the time of this report. It explains the timing when households rely on market purchases for staple foods, as poor harvests in 2021-2022 depleted household food stocks, and how households have diversified their livelihood activities to cope with these conditions. The report forecasts food security, harvest trends, and household coping strategies in the Grand South and Grand Southeast.

**Tags:** Climate, Livelihoods, Barriers to market, Trends, Food security, Humanitarian aid, Madagascar – National, Madagascar - Southern, Anosy region, Atsimo-Andrefana region, Resilience

## South-West Region Agricultural Infrastructure Rehabilitation Project (PRIASO) Project Appraisal Report

Beileh, A, M. Kanga, J. Mwangi, A. Bendjebbour, A. Ba. "South-West Region Agricultural Infrastructure Rehabilitation Project (PRIASO) Project Appraisal Report." 2013. African Development Bank Group. <a href="https://www.afdb.org/sites/default/files/documents/projects-and-operations/madagascar - south-west region agricultural infrastructure rehabilitation project priaso - appraisal report.pdf">https://www.afdb.org/sites/default/files/documents/projects-and-operations/madagascar - south-west region agricultural infrastructure rehabilitation project priaso - appraisal report.pdf</a>

This project appraisal report by the African Development Bank Group is a review of PRIASO. This project aims to improve socio-economic conditions in the South-West region of Madagascar by supporting land development and infrastructure construction, including canals, feeder roads, water boreholes, warehouses, and rural markets. This report provides key baseline indicators on infrastructure in the region to inform the infrastructure discussion in the DRMS.

Tags: Barriers to market, Madagascar - National

#### Suivi Mensuel de la Réponse dans le Grand Sud & le Grand Sud-Est

Madagascar Food Security Cluster. 2023. "Suivi mensuel de la réponse dans le Grand Sud & le Grand Sud-Est."

https://app.powerbi.com/view?r=eyJrljoiNWRkNzgyYTktNDlkYy00NWUwLTg1NWYtM2Q3ODQzZmUwODhkliwidCl6ImE3MDZmMWMwLWFiMTQtNDZjNS1hMjl1LWUyY2Q4Yzl0YzNjYyJ9

This dashboard summarizes humanitarian food assistance in the Grand South and Southeast from January to April 2023. The dashboard provides data visualizations summarizing data on beneficiaries, food assistance activities, humanitarian aid targets, and overall aid coverage. Metrics are available by project, partner, and funder. This dashboard provides key information for the DRMS about food assistance programming in the study region.

**Tags:** Humanitarian aid, Food security, Madagascar – National

#### Value Chain Analyses (VCA) for Maharo RFSA

Panlibuton, Henry et al. 2022. "Value Chain Analyses (VCA) for Maharo RFSA."

Maharo is a BHA/USAID-funded Resilience Food Security Activity (RFSA) of Catholic Relief Services (CRS) Madagascar. It aims to prevent and reduce food insecurity among the most vulnerable people, households, and communities in the Ampanihy district (Atsimo-Andrefana region) and Beloha and Tsihombe districts (Androy region) over five years (2019-2024). Several of the value chains explored are



within the scope of the DRMS, specifically sorghum. The report finds that sorghum is widely imported into Madagascar, far exceeding local production. Furthermore, sorghum is often not a highly soughtafter grain, with most communities in this area favoring alternatives such as rice and maize. This is due to taste preferences as well as the comparatively longer cooking time, which consumers note as inconvenient and requiring additional fuel. Only 9% of smallholder farmers in the study cultivated sorghum.

**Tags:** Supply-demand, Market barriers, Food security, Livelihoods, Gender, Madagascar-regional, Atsimo Andrefana region, Androy region, Sorghum

#### **WFP Madagascar Country Brief**

This report summarizes the World Food Program's delivery of food assistance and cash-based transfers in Madagascar as of May 2023. To improve resilience, WFP supports the production of drought-resistant seeds, the implementation of rainwater harvesting systems, and the dissemination of early warning messages. Poor infrastructure and damaged roads and airstrips remain key barriers to the distribution of humanitarian aid.

Tags: Food security, Humanitarian aid, Madagascar – National

#### Where Are GMO [Genetically Modified Organism] Crops and Animals Approved and Banned?

"Where are GMO crops and animals approved and banned?" Genetic Literacy Project. Accessed November 1, 2023. <a href="https://geneticliteracyproject.org/gmo-faq/where-are-gmo-crops-and-animals-approved-and-banned/">https://geneticliteracyproject.org/gmo-faq/where-are-gmo-crops-and-animals-approved-and-banned/</a>.

This resource from the Genetic Literacy Project provides an overview of international policies on the cultivation and import of GMO crops and animals. The cultivation and import of GMO crops are banned in Madagascar. This resource informs the DRMS's discussion on national policies governing markets.

Tags: Madagascar - National

#### World Bank-Backed Attempt to Commercialize Madagascar's Beef Industry Falters

Vyawahare, Malavika. 2020. "World Bank-backed attempt to commercialize Madagascar's beef industry falters." Mongabay. <a href="https://news.mongabay.com/2020/07/world-bank-backed-attempt-to-commercialize-madagascars-beef-industry-falters/">https://news.mongabay.com/2020/07/world-bank-backed-attempt-to-commercialize-madagascars-beef-industry-falters/</a>.

This article provides an overview of the World Bank's efforts to invest in Madagascar's beef industry. The source discusses the World Bank's investments in Bonne Viande de Madagascar (BoViMa), a private company that originally aimed to purchase cattle from local producers to process and export to Middle Eastern countries as a means of commercializing the beef industry in Madagascar. Several political and social factors have complicated the commercialization of the beef industry, including the social value of zebu and the ban on meat exports by President Andry Rajoelina. This article provides key insights on policies impacting the Zebu market system.

Tags: Barriers to market, Cows, Madagascar – National



# World Bank Provides \$100 Million to Protect Livelihoods and Improve Food Security in Southern Madagascar

World Bank Group. December 10, 2021. "World Bank Provides \$100 Million to Protect Livelihoods and Improve Food Security in Southern Madagascar." World Bank Group.

https://www.worldbank.org/en/news/press-release/2021/12/10/world-bank-provides-100-million-to-protect-livelihoods-and-improve-food-security-in-southern-madagascar

This press release details the World Bank Group's provision of USD 100 million in additional financing to the support resilient livelihoods in the south of Madagascar (Mionjo) project. This is part of the World Bank's ongoing engagement to strengthen the government's response to the drought-induced crisis, address vulnerabilities, and enhance the resilience of communities and sustainability of food production and livelihood systems. The value of this resource to the DRMS is to recognize the investments of the World Bank and their impacts on the local economy, to potentially identify key informants with knowledge of these investments, and to recognize the World Bank as an important stakeholder.

Tags: Climate, Livelihoods, Madagascar – Southern, Resilience, Humanitarian aid

#### **World Food Situation: FAO Price Index**

Food and Agriculture Organization (FAO). 2023. "World Food Situation: FAO Price Index." 2023. <a href="https://www.fao.org/worldfoodsituation/foodpricesindex/en/">https://www.fao.org/worldfoodsituation/foodpricesindex/en/</a>.

This article provides an update on the FAO Food Price Index as of January 2024. The FAO Price Index is used to measure monthly price changes of key food commodities, including sugar, cereals, dairy, meat, and vegetable oils. The food price index is available by year, and by month in 2023, for each commodity. This index is an important reference point for the discussion of price trends in the DRMS market reports.

Tags: Madagascar - National, Trends

#### Food Utilization and Nutrition

#### **Bean Consumption per Capita**

"Bean Consumption per Capita," Helgi Library. October 29, 2023. https://www.helgilibrary.com/indicators/bean-consumption-per-capita/

This website provides an overview of bean consumption per capita across 155 countries, utilizing 2021 data from FAOSTAT. According to this source, average bean consumption in Madagascar averages 1.3kg per capita. These data inform the discussion of the bean market system in the DRMS.

Tags: Peas/beans, Madagascar – National

## **Country Nutrition Profiles: Madagascar**

Global Nutrition Report. 2023. "Country Nutrition Profiles: Madagascar." https://globalnutritionreport.org/resources/nutrition-profiles/africa/eastern-africa/madagascar/.

This country nutrition profile on Madagascar discusses global targets and Madagascar's advancements in nutrition, particularly among women and children. Madagascar is making progress in meeting some global nutrition targets, but other metrics, like breastfeeding and anemia, are worsening. These data are relevant to the DRMS for their depiction of nutritional trends and monitoring of global nutrition targets in Madagascar. This report includes national nutrition policies and policy targets to improve nutrition.



Other factors measured in the report include education levels, environmental impacts of the food system, poverty, and sanitation.

Tags: Madagascar—National, Nutrition, Trends

### Egg Consumption Per Capita fell 3.64% to 0.520 kg in Madagascar in 2021

HelgiLibrary. 2021 "Egg Consumption Per Capita fell 3.64% to 0.530 kg in Madagascar in 2021." <a href="https://www.helgilibrary.com/charts/egg-consumption-per-capita-fell-364-to-0530-kg-in-madagascar-in-2021-2/">https://www.helgilibrary.com/charts/egg-consumption-per-capita-fell-364-to-0530-kg-in-madagascar-in-2021-2/</a>

This graph depicts egg consumption per capita (measured in kg) from 1961 to 2021. The graph shows a trend of declining egg consumption since 1961. The data show that in 2021, egg consumption fell 3.64 percent from the previous year to 0.530 kg per capita. In comparison to other countries in the region, like South Africa and Tanzania, Madagascar consumes far fewer eggs per capita. Within a group of 164 countries, Madagascar ranks 151<sup>st</sup> in egg consumption. These data are useful for understanding poultry farming and the potential opportunity for poultry development in Madagascar.

Tags: Madagascar—National, Food security, Chickens

### Evaluation Approfondie Multisectorielle de la Sécurité Alimentaire Grand Sud de Madagascar

Food and Agriculture Organization (FAO), Government of Madagascar, UNICEF, World Food Programme. 2022. "Evaluation approfondie multisectorielle de la sécurité alimentaire Grand Sud de Madagascar (Avril 2022)." <a href="https://reliefweb.int/report/madagascar/evaluation-approfondie-multisectorielle-de-la-securite-alimentaire-grand-sud-de-madagascar-avril-2022">https://reliefweb.int/report/madagascar/evaluation-approfondie-multisectorielle-de-la-securite-alimentaire-grand-sud-de-madagascar-avril-2022</a>.

This report summarizes the results of an evaluation of household living conditions and food security across the Androy, Anosy, and Atsimo Andrefana regions in Madagascar. The evaluation covers 2,477 households across these three regions. The report found that access to education, drinking water, and food are limited. Households scored poorly on dietary diversity and malnutrition indicators. Households' primary sources of income were agriculture, trade, and animal husbandry, and were therefore vulnerable to shocks such as drought and pest-related crop damage. Harvests for the 2021-22 season were below average, further exacerbating food insecurity. This report provides insight for the DRMS into household vulnerability and food security trends.

Tags: Food security, Anosy region, Androy region, Atsimo Andrefana region, Livelihoods

# FIOVANA Refine & Implement (R&I) Year Research Study, Social and Behavior Change (SBC) Formative Research: Trials of Improved Practices (TIPs) for Nutrition and Handwashing

United States Agency for International Development. 2022. "FIOVANA Refine & Implement (R&I) Year Research Study, Social and Behavior Change (SBC) Formative Research: Trials of Improved Practices (TIPs) for Nutrition and Handwashing." United States Agency for International Development. <a href="https://pdf.usaid.gov/pdf\_docs/PA00Z72H.pdf">https://pdf.usaid.gov/pdf\_docs/PA00Z72H.pdf</a>.

This report summarizes the results of two social and behavior change studies aimed at investigating the dietary diversity of infants aged 6-9 months and the handwashing habits of household members as part of the FIOVANA project in Vatovavy-Fitovinany and Atsimo Atsimanana. The studies employed a Trials of Improved Practices (TIPs) methodology to test new practices and assess the factors that influenced uptake of these behaviors among target populations. The study identified limited dietary diversity in infant diets, due to limited food availability and access, as well as high food costs. The findings from



these studies bring data on dietary diversity and nutrition to the analysis of the targeted DRMS value chains.

**Tags:** Nutrition, Barriers to market, Household norms, Resilience, Food security, Atsimo Atsinanana region

#### HungerMap

World Food Programme (WFP). 2023. "HungerMap" https://hungermap.wfp.org/.

The World Food Programme's Hunger Map dashboard summarizes food security and nutrition data by country. Metrics include hazards, conflict, current food consumption, vegetation, rainfall, and IPC categorization. HungerMap summarizes data at the regional level for Madagascar. These data are used in the DRMS to summarize key food security metrics for the four study regions.

**Tags**: Food security, Madagascar – National, Anosy region, Androy region, Atsimo Andrefana region, Atsimo Atsinanana region

### Madagascar Vegetables, Leguminous; Kidney Beans, Including White Pea Beans

The World Bank Group. n.d. "Madagascar Vegetables, Leguminous; Kidney Beans, Including White Pea Beans (Phaseolus Vulgaris), Dried, Shelled, Whether or not Skinned or Split Imports by Country in 2019." The World Bank Group.

https://wits.worldbank.org/trade/comtrade/en/country/MDG/year/2019/tradeflow/Imports/partne r/ALL/product/071333

This product listing describes various types of legumes (kidney beans, white pea beans) exported by Madagascar, and provides data such as quantity and trade value. In order of highest import are the following countries: France and the Netherlands. The scant information about these exports coincides with the more recent 2021 report (detailed below), underscoring additional areas of expansion for Malagasy farmers (i.e., maize and plant-based oils). This provides context to the DRMS primary data collection.

Tags: Supply-Demand, Trends, Peas/beans

#### Madagascar Vegetables, Leguminous; (Other Than Peas and Beans)

The World Bank Group. n.d. "Madagascar Vegetables, Leguminous; (Other Than Peas and Beans), Shelled or Unshelled, Fresh or Chilled Exports by Country in 2021." The World Bank Group. <a href="https://wits.worldbank.org/trade/comtrade/en/country/MDG/year/2021/tradeflow/Exports/partne-r/ALL/product/070890">https://wits.worldbank.org/trade/comtrade/en/country/MDG/year/2021/tradeflow/Exports/partne-r/ALL/product/070890</a>

This product listing describes various types of legumes not including peas and beans exported by Madagascar and includes data such as quantity and trade value. In order of highest import are the following countries: France and Comoros. The little information about this export despite the report's recent development underscores that this may be a weaker area of exportation for Madagascar. This provides further context to the DRMS primary data collection.

Tags: Supply-Demand, Trends, Peas/beans

#### Madagascar Vegetable Oils; Palm Oil and Its Fractions, Other Than Crude

The World Bank Group. n.d. "Madagascar Vegetable Oils; Palm Oil and its Fractions, Other Than Crude, Whether or not Refined, but not Chemically Modified Imports by Country in 2019." The World Bank



Group.

https://wits.worldbank.org/trade/comtrade/en/country/MDG/year/2019/tradeflow/Imports/partne r/ALL/product/151190

This product description highlights various types of oil (vegetable, palm) exported by Madagascar. In order of highest import are the following countries: Indonesia, Malaysia, Singapore, United Arab Emirates, South Africa, India, Saudi Arabia, France, and Italy. Vegetable oil is one of the selected commodities for the DRMS and this report provides context for DRMS primary data collection.

Tags: Supply-Demand, Trends, Vegetable oil

#### **SORGHO:** La Céréale d'Avenir

Centre Technique Agro-écologique du Sud. 2023. "SORGHO: La céréale d'avenir." Centre Technique Agro-écologique du Sud. <a href="https://ctas.mg/sorgho-la-cereales-davenir/">https://ctas.mg/sorgho-la-cereales-davenir/</a>.

This article makes the case for the benefits of sorghum in the food-insecure southern region of Madagascar. The Technical Center for Agroecology (CTAS) is a local NGO working to improve seed quality and availability and support sustainable solutions to affected populations. This includes the promotion of more drought-resistant crops like sorghum. The article presents the two main categories of sorghum. One is used for animal feed, and the other is a grain used as human food. CTAS prioritized grain sorghum and produced a variety of seeds for small farmholders in the region. The article explores other additional benefits to the production of sorghum in the southern region. Sorghum is ideal for its climate resistance, profitability, and nutrients which further contribute to food security in Madagascar. Because sorghum is one of the crops selected for the DRMS this provides contextual information as well as information on a local NGO stakeholder involved in one of the DRMS's key value chains.

Tags: Supply-Demand, Climate, Sorghum, Resilience, Androy region, Food security

## Strong Seasonality in Diets and Alarming Levels of Food Insecurity and Child Malnutrition in Southeastern Madagascar

Rousseau, Samuel, Jonathan Steinke, Méloé Vincent, Hanitriniavo Andriatseheno, and Julie Pontarollo. "Strong seasonality in diets and alarming levels of food insecurity and child malnutrition in southeastern Madagascar." Frontiers in Sustainable Food Systems. June 2, 2023. https://www.frontiersin.org/articles/10.3389/fsufs.2023.1126053/full

This article presents research findings on household food and nutrition security across three seasons in the Farafangana District of Atsimo-Atsinanana. Using household surveys and anthropomorphic data, researchers examined dietary diversity, food availability, and child malnutrition trends in this region. Findings reveal that many households in this region experience year-round food insecurity and are not self-sufficient, purchasing staple foods even in the post-harvest season. Given seasonal fluctuations in food availability, households experience significant variations in nutritional intake across different seasons and often supplement staple foods with self-produced alternatives such as sweet potato and jackfruit in the lean period. Household food insecurity leads to high rates of child malnutrition in this region. Researchers highlight the need for context-specific interventions that target the underlying causes of food insecurity in the Atsimo-Atsinanana region, including short-term aid, such as food and cash transfers, and longer-term solutions, such as increased access to agricultural technologies and education, health, and infrastructure investments.

Tags: Food security, Atsimo-Atsinanana region, Household norms, Trends



### **POLITICAL ECONOMY ANALYSIS**

#### Foundational factors

### An Urgent Nutrition and Food Security Response is Needed in the Great South-East of Madagascar

Global Food Security Cluster. 2023. "An urgent nutrition and food security response is needed in the Great South-East of Madagascar." Global Food Security Cluster.

https://www.unicef.org/madagascar/media/10366/file/Nutrition%20and%20food%20security%20situation Southeast%20Madagascar.pdf

This brief provides context to the Southeastern region's (Atsimo Atsinanana, Vatovavy and Fitovinany) crisis and food security situation in 2023. The 2022 cyclone season has increased food insecurity and impeded ongoing development and humanitarian interventions in the region. At least two tropical cyclones caused losses and damage to farmers' livelihoods, like food and cash crops, which lead to further food insecurity. In these dire situations, households resort to negative coping strategies: selling agricultural inputs, child labor, earlier marriages, and decreasing health service demand. The report provides an overview of key drivers of food insecurity, like accessibility and financial barriers, while providing an overview of key actors and development projects in the region. Moreover, it presents the biophysical conditions of the southeastern regions of Madagascar, making it prone to tropical cyclones and floods. Key recommendations include a stronger state presence and coordination at the regional level, technical assistance and capacity building, and frequent assessment to continue progress and development in the region.

Tags: Foundational factors, Stakeholder mapping, Food security, Governance, Atsimo Atsinanana region

# Classement des Pays Ayant le Plus Faible Produit Intérieur Brut (PIB) par Habitant dans le Monde en 2022

Statista. 2023 "Classement des pays ayant le plus faible produit intérieur brut (PIB) par habitant dans le monde en 2022." https://fr.statista.com/statistiques/917055/pays-les-plus-pauvres-monde/.

This Statista graph demonstrates a ranking of countries with the lowest gross domestic product (GDP) per capita in the world in 2022 in U.S. dollars. This source is relevant to the PEA for its comparison of other low GDP states. In Sub-Saharan Africa, Madagascar has the fifth lowest GDP per capita.

Tags: Madagascar—National, Foundational factors, Poverty

#### **Climate Change Knowledge Portal: Madagascar**

World Bank. n.d. "Climate Change Knowledge Portal: Madagascar" Accessed Oct 23, 2023. <a href="https://climateknowledgeportal.worldbank.org/country/madagascar/climate-data-historical#:~:text=The%20southwest%20and%20the%20extreme,C%20in%20the%20central%20mountains.">https://climateknowledgeportal.worldbank.org/country/madagascar/climate-data-historical#:~:text=The%20southwest%20and%20the%20extreme,C%20in%20the%20central%20mountains.</a>

The World Bank Climate Change Knowledge Portal for Development Practitioners and Policy Makers is helpful for historical and projected climate data of a specific country. The annual and seasonal data are particularly useful for understanding agriculture production in Madagascar. This climate portal is useful to the PEA for its historical data and information on how climate change is affecting Madagascar.

Tags: Madagascar—National, Foundational factors, Climate, Resilience



#### **Creating Markets In Madagascar: Country Private Sector Diagnostic**

International Finance Corporation. 2021. "Creating Markets In Madagascar: Country Private Sector Diagnostic." International Finance Corporation. <a href="www.ifc.org/en/types/insights-reports/2021/cpsd-madagascar">www.ifc.org/en/types/insights-reports/2021/cpsd-madagascar</a>.

The Creating Markets in Madagascar: Country Private Sector Diagnostic report from the International Finance Corporation, a member of the World Bank Group, focuses on the development of the private sector in emerging markets like Madagascar. The report provides an overview of the latest economic trends amidst the effects of COVID-19 and a deeper analysis of challenges that affect private sector development. The major constraints in Madagascar include governance, infrastructure, and limited factors for market development like low human capital, finance, and land access. Prioritizing sectors with high potential, the report details opportunities to develop competitiveness in agribusiness, tourism, and apparel. Agribusiness, a vital sector to the South of Madagascar, for livelihood opportunities and food security, would benefit from investments into Madagascar's business environment including transportation, energy, finance, and land access.

Tags: Madagascar - National, Foundational factors, Markets, Livelihoods, Supporting functions, Trends

#### Crime, Transitory Poverty, and Isolation: Evidence from Madagascar

Fafchamps, Marcel and Bart Minten. Crime, Transitory Poverty, and Isolation: Evidence from Madagascar, The Journal of Development Studies, 2005. https://web.stanford.edu/~fafchamp/crimepo.pdf.

Following the 2002 political and economic crisis in Madagascar, renewed attention was placed on the relationship between poverty and crime. This paper examines this relationship following a contentious presidential election and fuel supply shortage which sparked a sizable increase in transaction costs and poverty. This paper utilized survey data from 2002 at the peak of the crisis. While the sample size was small, the timing of the survey, during a massive shock, provided an opportunity to assess the effects of the sharp rise of poverty on crime. The results demonstrated that an increase in poverty resulted in an increase in crop theft as a coping strategy especially in rural areas. The resulting increased transportation costs from the fuel shortage caused an increase in crop and cattle theft. The paper found that these types of thefts were more common in geographically isolated areas like rural Madagascar. The survey found that an increase in law enforcement presence locally worked to reduce these types of crime. The results of this paper can be useful in guiding future policy by encouraging the provision of a larger safety net as a coping mechanism for extreme levels of poverty and to reduce thefts that might occur due to transitory poverty.

**Tags**: Madagascar – National, Conflict, Instability, Power, institutions, and rules, Politics, Trends, Resilience, Poverty, Livelihoods, Violence

#### **Decentralization in Madagascar**

World Bank. 2014. "Decentralization in Madagascar."

 $\frac{https://documents1.worldbank.org/curated/en/884421468055158895/pdf/298890ENGLISH01zation0in0Madagascar.pdf.$ 

This World Bank country study focuses on decentralization in Madagascar. The uncertainty of Madagascar's decentralization strategy has affected the various levels of government, and Madagascar is further constrained by limited resources, a weak legal system, and a lack of capacity. This resource is



useful to the PEA for its examination of risks and recommendations for improving coordination between the various levels of government, access to services, and economic development.

Tags: Madagascar—National, Foundational factors, Governance, Instability

### Face of Poverty in Madagascar: Poverty, Gender, and Inequality Assessment

D'Hoore, Alain W. and Sulla, Victor. "Face of poverty in Madagascar: poverty, gender, and inequality assessment (English)." The World Bank Group, 2014. Group,

http://documents.worldbank.org/curated/en/538821468271809604/Face-of-poverty-in-Madagascar-poverty-gender-and-inequality-assessment.

This report analyzes Madagascar's ongoing challenges with high levels of poverty in the country. The report attributes the high levels of poverty to inequalities in the country. The data and analysis of this report were conducted with the National Institute of Statistics (INSTAT). This document presented changes in levels of poverty and analyzed the relationship between poverty levels and inequality within households such as gender, age, structure, and location of the household. Inequality in growth, education, and health further contributed to the high rates of poverty. This report describes the poverty trends determined through data and household surveys. Poverty levels in rural areas have continued to increase while the levels in urban areas demonstrate small improvements. Increases in poverty can be attributed to shocks in the country like the 2002 or 2009 political and economic crisis in Madagascar. The staggering levels of poverty in Madagascar require an organized response from the government and international actors to reduce poverty through investments in education, health, and economic opportunities. This report is useful for its analysis of the foundation factors, like the household inequalities, that contribute to high levels of poverty; this analysis can be utilized to guide future development efforts and government priorities to reduce poverty especially in rural areas and in times of crisis.

**Tags**: Madagascar – National, Poverty, Conflict, Instability, Trends, Foundational Factors

#### Global Wealth Databook 2023: Leading Perspectives to Navigate the Future

UBS. 2023. "Global Wealth Databook 2023. Leading perspectives to navigate the future." <a href="https://www.ubs.com/global/en/family-office-uhnw/reports/global-wealth-report-2023.html">https://www.ubs.com/global/en/family-office-uhnw/reports/global-wealth-report-2023.html</a>.

This UBS report on global wealth describes macro and micro trends contributing to the development of wealth. The report details a decline in global wealth, particularly in wealthier countries. Global wealth inequality fell in this period, and median wealth increased due to large increases in wealth in China. The report projects continued growth to global wealth, particularly in middle income countries.

Tags: Poverty, Historical trends

#### Heterogeneity in Migration Responses to Climate Shocks: Evidence from Madagascar

Marchetta, Francesca, David Sahn, Luca Tiberti, and Johany Dufour. 2021. "Heterogeneity in Migration Responses to Climate Shocks: Evidence from Madagascar." AERC. Working Paper Series CC:003, 37p. <a href="https://docs.iza.org/dp14052.pdf">https://docs.iza.org/dp14052.pdf</a>

This working paper assesses how Malagasy rural young adults migrate internally as a response to severe climate shocks such as droughts and floods. The datasets are related to transitioning youth to adults male and female, between 2004 and 2011. Ethnicities being surveyed are Antakarana, Antambahoaka, Antandroy and Antanosy. The findings show that internal migration does not recurrently follow a



weather shock, a finding that is consistent with the fact that prior asset and savings accumulations are usually set to absorb such a shock. Connections outside the village, however, made young adults likely to migrate. Additionally, young adult women are less likely to migrate due to liquidity constraints. Young men: the latter choose to migrate for job searching. The PEA tests this finding during youth group discussions and complete information regarding other causes of migration.

Tags: Madagascar National, Migration, Gender, Resilience, Desk Review and Market Study

## Historical Statistics of the World Economy: 1-2008 AD

Maddison, A. 2011. "Historical Statistics of the World Economy: 1–2008 AD." Groningen, University of Groningen. www.ggdc.net/maddison/oriindex.htm.

This data source contains historical statistics of the world economy spanning 1-2008 AD. The data provide comparative economic growth measures and income levels over two millennia and across countries. These data are useful to the PEA for demonstrating trends of growth and any important economic changes that have affected Madagascar over time.

Tags: Poverty, Historical trends

### **How Madagascar Can Break a Vicious Cycle of Poverty**

Uwanyiligira, M.C., Ayo, M. & Mulangu F.M. 2023. "How Madagascar Can Break a Vicious Cycle of Poverty." World Bank. <a href="https://blogs.worldbank.org/africacan/how-madagascar-can-break-vicious-cycle-poverty">https://blogs.worldbank.org/africacan/how-madagascar-can-break-vicious-cycle-poverty</a>.

This article describes Madagascar's potential for economic growth through its natural resources, touristic potential, and youthful population. One of the poorest nations, Madagascar is unique due to its trend of decreasing income per capita without the presence of widespread violent conflict. The absence of economic growth can be largely attributed to recurring political, climate, and health (COVID-19) crises. The high rates of poverty are highly correlated to the low income per capita in the country. The World Bank Systematic Country Diagnostic report on Madagascar found that lack of competition and elite capture are impeding the economic potential. An underdeveloped private sector, low productivity, market inaccessibility, weak governance, and climate crisis have all contributed to low economic growth and increased poverty. This article is useful to the PEA for its analysis of factors impeding on economic growth and increasing poverty in Madagascar. Urgent action is needed to encourage economic growth, such as reforms to increase competition, transparency, and improved governance, to sustain economic growth and reduce poverty in Madagascar.

Tags: Madagascar—National, Poverty, Livelihoods, Resilience, Governance, Climate, Corruption

## Income Diversification, Wealth, Education and Well-being in Rural Southwestern Madagascar: Results from the Mahafaly Region

Regina Neudert, Johanna F Goetter, Jessica N Andriamparany & Miandrazo Rakotoarisoa. 2015. "Income diversification, wealth, education and well-being in rural southwestern Madagascar: Results from the Mahafaly region" Development Southern Africa, 32:6,

758-784, https://www.tandfonline.com/doi/full/10.1080/0376835X.2015.1063982.

Madagascar is a country with high levels of poverty especially in rural areas and especially in the southwest. This region is structurally disadvantaged, as it is mainly composed of smallholder farms with



limited economic opportunities. This report surveyed 665 households in the south-west region to determine the relationship between livelihood opportunities and household wealth. The report found that rural households employ strategies of income diversification to increase wealth. The diversification strategy is preferred due to the prevalence of recurring crises and low economic opportunities of agriculture in the south of Madagascar. Larger fields, crop diversity, and various income sources can reduce household vulnerability to shocks while increasing economic opportunities. Additionally, households chose to invest in education as it improves the household opportunities for non-agriculture income sources and lessens the dependence on smallholder practices. Both income diversification and its effect on household wealth demonstrate an improvement in wellbeing among households in the south-west. These results can be used to guide further household improvements and development efforts in the region to enhance household wealth and resilience through education and investment into diversification.

Tags: Madagascar – Atsimo Andrefana, Resilience, Livelihoods, Poverty, Foundational Factors

#### L'Agriculture à Madagascar: Évolution, Chiffres Clés et Défis

Garruchet, V., Bosc, P.M. & Mialet-Serra, I. 2023. "L'Agriculture à Madagascar: Évolution, chiffres clés et défis." PRéRAD Océan Indien.

https://agritrop.cirad.fr/603909/1/OA OI Madagascar synthese agriculture%20Vef%20janvier%202023.pdf.

This report provides a geographical and physical overview of Madagascar, including environmental and climate concerns as well as the demographics. This report is useful to the PEA for its background on the country overall and particularly the historical significance of agriculture in Madagascar. Today, agriculture plays a vital role in Madagascar's economy and the livelihoods of the population.

Tags: Madagascar—National, Foundational factors, Poverty, Food security, Climate

#### L'énigme et le Paradoxe : Économie Politique de Madagascar

Razafindrakoto, M., Roubaud, F. and Wachsberger, J.M. 2017. "L'énigme et le paradoxe. Économie politique de Madagascar." Agence Française de Développement. <a href="https://horizon.documentation.ird.fr/exl-doc/pleins">https://horizon.documentation.ird.fr/exl-doc/pleins</a> textes/divers18-03/010070526.pdf.

This book on Madagascar's political economy is an important overview of Madagascar's development trajectory and factors blocking the advancement of its economy. The objective of this book is to provide a framework for a long-term projection of Madagascar's development. The book traces the trajectory of development, including throughout periods of social and political upheaval. This resource is relevant to the PEA for its details on the structural, political, and economic challenges that Madagascar faces in its development.

Tags: Madagascar—National, Foundational factors, Instability, Historical trends

#### Madagascar - Context and Land Governance

De Stagé, Rick. 2021. "Madagascar – context and land governance." *Land Portal*. https://landportal.org/book/narratives/2021/madagascar.

This weblog presents the historical background of Madagascar land tenure and land rights dating back to the pre-colonial era and how the colonial system has greatly impacted current land tenure and rights



across the country. The author assesses the land regulation changes through particular political events post-independence, the difference between rural and urban challenges, and women's access to land. This weblog is being peer-reviewed by Amber Huff, a research fellow at the Institute of Development Studies at the University of Sussex, UK. Perspectives on Madagascar land tenure and rights proposed by the author are linked to recent analysis by Emilie Combaz examining the effects of Madagascar's political economy on development and the environment, used as reference for this political economy analysis study.

**Tags:** Madagascar – National, Land tenure, Historical trends, Politics, Conflicts, Political Economy Analysis

#### **Madagascar Country Economic Memorandum**

World Bank. 2020. "Scaling Success Building a Resilient Economy: Madagascar Economic Memorandum." World Bank.

https://documents1.worldbank.org/curated/en/699781575279412305/pdf/Madagascar-Country-Economic-Memorandum-Scaling-Success-Building-a-Resilient-Economy.pdf.

This World Bank report is a national-level analysis of the economic conditions in Madagascar and their effects on development and growth. Labor, investment, and production play a significant role in driving growth and constraining development in Madagascar. Economic analysis on trade, investment, policy, and governance largely depicts an unfavorable business environment. The report conducted a deeper analysis on important sectors like agribusiness, textiles, and IT outsourcing. The analysis on agribusiness revealed constraints in markets, value chains, production, land access, infrastructure, and institutional governance. Still, agricultural products in Madagascar, like cocoa and vanilla, are valued for their quality and competitive costs. This sector is important for its impact on livelihoods and economic opportunities for Malagasies, especially in the Southern regions. By building production and storage capacity, agribusiness can further develop value chains and markets while enhancing food security and economic growth. These sectors face economic, social, and political challenges to growth, but there are opportunities for Madagascar to enhance inclusive growth and improve the economic conditions for a more sustainable future. This resource is useful for PEA to dive deep in foundational factors of food insecurity and how the poor are "left behind." The PEA tests the [potential] role of WB and the host government in the fight against poverty through interviews with host government department recipients. In addition, the report informs DRMS's in-depth interviews regarding food access and availability in the focus regions.

**Tags:** Madagascar – National, Foundational factors, Governance, Land tenure, Livelihoods, Value chains, Politics



#### **Madagascar Country Environmental Analysis**

"Madagascar Country Environmental Analysis." The World Bank Group, 2022.

<a href="https://documents1.worldbank.org/curated/en/099635010242211316/pdf/P17701803653a407f0b">https://documents1.worldbank.org/curated/en/099635010242211316/pdf/P17701803653a407f0b</a>
bd80a9da77fa6f51.pdf.

The World Bank's Country Environmental Analysis analyzes three key areas to promote sustainable and inclusive development in Madagascar: landscape management, a blue economy, and nature tourism. The report emphasized environmental challenges and the need to build resilience to continue development in Madagascar. High levels of poverty persist in Madagascar, and the rates worsened with the COVID-19 pandemic. While poverty remains a big challenge, Madagascar has wealth in natural resources, but these resources are underdeveloped. The vast coastline and marine ecosystems offer opportunities to develop a blue economy through fisheries, aquaculture, and shipping opportunities. These resources can also be capitalized in developing nature tourism through nature preserves and water activities. Still, to encourage these investments there must also be emphasis on environmental challenges and crises that occur in Madagascar. Cyclones, flooding, and droughts will become more severe with climate change. This report provides recommendations to the government, like the Ministry of Environment and Sustainable Development, and development actors in the country in building resilience to climate change while capitalizing on the country's natural resources in creating more sustainable economic opportunities and growth in Madagascar.

Tags: Madagascar – National, Climate, Resilience, Livelihoods, Conflict, Instability, Foundational Factors

#### **Madagascar Country Report**

Bertelsmann Stiftungs Transformation Index. 2022. "Madagascar Country Report." Bertelsmann Stiftungs Transformation Index (BTI). <a href="https://bti-project.org/en/reports/country-report/MDG">https://bti-project.org/en/reports/country-report/MDG</a>

BTI country reports assess the foundational factors of poverty and unstable economic growth, tracing back to the pre-colonial era through the lens of 1) political transformation analysis such as stateness, political participation, rule of law, stability of institutions, social and political integration, 2) economic transformation analysis such as private property and welfare regime, and 3) governance analysis such as level of difficulty, steering capability, consensus building and international cooperation. The report presents a strategic outlook emphasizing strengthening institutions and governance at all levels, limiting source of migrations and conflicts, and investing in young people and women.

Tags: Madagascar - National, Politics, Power structure, Governance, Power, institutions and rules

#### Madagascar's Mobile Money Boom

Monnier, Oliver. 2023. "Madagascar's Mobile Money Boom." International Finance Corporation. https://www.ifc.org/en/stories/2023/madagascars-mobile-money-boom.

This IFC article, Madagascar's Mobile Money Boom, provides an overview of the mobile money market in Madagascar. This is a quickly growing and evolving sector of digital financial services in the country. In 2021, the Première Agence de Microfinance (PAMF), a microfinance institution, capitalized on Facebook's large presence and widespread app use to launch a financial service that allows Malagasies to open financial accounts. The article details the many benefits of mobile money's expansion, but still there are challenges. Mobile money is a key to development in Madagascar, as it is easy to use, inexpensive, and quick at providing financial services. Over a third of the population is using mobile money, and it is propelling financial inclusion in the country. The access to and availability of financial services provide financial infrastructure to further develop business opportunities, improve tax



collection, and increase access to basic services. Still, regulations and infrastructure can be improved to further an enabling business environment. The modernization and efficiency of these financial services can serve to expand access to services and economic development in Madagascar. This article acknowledges physical infrastructure poverty across the country and is useful in providing information regarding foundational factors at the country and regional level. Besides, this article is useful for the DRMS study.

**Tags:** Madagascar – National, Foundational factors, Markets, Supporting functions, Resilience, Desk Review and Market Study

#### **Madagascar Political Economy Analysis**

Ivo Gijsberts et al. 2017. "Madagascar Political Economy Analysis." UNICEF. <a href="https://www.unicef.org/esa/sites/unicef.org.esa/files/2018-09/UNICEF-Madagascar-2017-Political-Economy-Analysis.pdf">https://www.unicef.org/esa/sites/unicef.org.esa/files/2018-09/UNICEF-Madagascar-2017-Political-Economy-Analysis.pdf</a>

This report aims to analyze the budget process in order to find entry points to influence budget allocation and increase the financing available for child-friendly policies in Madagascar. Findings show that among all ministries, the Ministry of Finance and Budget is the most powerful actor, driving the entire budget process with the support of the IMF. Non-state actors, with donor support, contribute to a more transparent process. The entry points are linked to the strategic planning and budget preparation phases, such as supporting line ministries with targeted technical assistance and engaging with the IMF. Continued support to CSOs working on budget issues contributes to increasing the transparency of the process and public awareness. This resource provides a broad scheme of "rules of the game" in allocating financial resources to economic and social sectors in Madagascar, and how a given department could be prioritized or not.

**Tags:** Madagascar – National, Political Economy Analysis, Politics, Governance, Power, institutions and rules

#### **Maddison Project Database**

Bolt, Jutta, and Jan Luiten van Zanden (2020), "Maddison style estimates of the evolution of the world economy. A new 2020 update." *Maddison Project Database, version 2020*. https://www.rug.nl/ggdc/historicaldevelopment/maddison/publications/wp15.pdf

The 2020 version of the Maddison Project Database provides data on comparative economic growth and income levels in 169 countries up to 2018. The PEA uses this database to corroborate other sources of economic data and to cross-check periods of economic downturn in Madagascar with domestic political crises.

Tags: Madagascar—National, Foundational factors, Historical trends, Poverty

#### **Mapping the Connections**

Center for Conservation Unit, WWF. 2002. "Mapping the Connections: The population-environment lessons from Madagascar." Center for Conservation Unit, WWF.

<a href="https://wwf.panda.org/wwf\_news/?4222/Mapping-the-Connections-The-Population-environment-Lessons-from-Madagascar">https://wwf.panda.org/wwf\_news/?4222/Mapping-the-Connections-The-Population-environment-Lessons-from-Madagascar</a>

The report presented the population-environment mapping in the spiny forest ecoregion of southern Madagascar (Atsimo Andrefana, Androy and part of Anosy regions) where WWF began to implement conservation projects. Several maps based on the 1993 general census of the population are also



included, of which the most important are conservation priority areas, migration, and female literacy. These maps could be used to analyze how conservation projects have impacted population livelihoods, migrations, and food insecurity over the last 20 years. Until now, no newer resource has provided a similar analysis. Controversies around conservation projects and their unattended impacts to rural populations' livelihoods are numerous and being continuously debated. The PEA tests the role of conservation projects as causes of migration and/or conflicts through group discussions with local communities.

Tags: Climate, Migration, Livelihoods, Development project

#### **Mobile Money in Madagascar**

WorldRemit. 2018. "Mobile Money in Madagascar." WorldRemit. <a href="https://fews.net/southern-africa/malawi/enhanced-market-analysis/september-2018">https://fews.net/southern-africa/malawi/enhanced-market-analysis/september-2018</a>.

The article provides frequent questions and answers regarding mobile money in Madagascar. Frequent questions revolve around mobile money accounts, funds, timings, exchanges, and regulations. Emphasis is placed on the instant availability to transfer, send, and receive money through mobile money accounts. These accounts specifically only accept Malagasy Ariary (MGA), Madagascar's national currency. There are daily, weekly, and monthly limits to orange money accounts. The information needed to send mobile money is a full name, address, account number, phone number, and a reason for the transaction. These ensure transactions are completed with accuracy, as once transactions are made, they are difficult to halt or amend. These rules demonstrate the ease of mobile money, and how mobile money can be used by the Malagasy people and expanding financial services in Madagascar.

Tags: Madagascar - National, Foundational factors, Markets, Desk Review, and Market Study

#### Projet de Développement Agricole de la Commune de Beraketa, District de Bekily Region de l'Androy

Andriantsalama, Robson Eric et al. 2005. "Projet de Développement Agricole de la Commune de Beraketa, District de Bekily Region de l'Androy" Université d'Antananarivo. <a href="http://biblio.univ-antananarivo.mg/pdfs/andriatsalamaRobsone">http://biblio.univ-antananarivo.mg/pdfs/andriatsalamaRobsone</a> GES M1 05.pdf.

This paper discusses the obstacles in development and poverty reduction in Madagascar, particularly in the Bekily region of Androy. Resource constraints and a large number of stakeholders are some of the barriers to the success of agricultural development projects in the region. This paper further examines a project in Androy targeting households to enhance production of groundnuts and increase access to agricultural inputs like machinery. This paper is relevant to the PEA for its detailed evaluation of an agricultural project in the south, and its suggestions for improvements to future agricultural development projects in the region.

Tags: Madagascar—Androy, Foundational factors, Food security, Development project

#### Property Rights in a Flea Market Economy, Economic Development and Cultural Change

Fafchamps, Marcel and Bart Minten. "Property Rights in a Flea Market Economy." Economic Development and Cultural Change, vol. 49, no. 2, 2001. https://www.jstor.org/stable/10.1086/452501.

Property Rights in a Flea Market Economy studies Madagascar's grain markets and analyzes the consequences of weak public institutions, insecure property rights and unenforceable contracts among traders in these markets. The paper determined traders do not rely on formal contracts or legal



institutions to protect themselves as police and court actions are rare and unreliable. Even so, the paper found that incidents of theft and breaches of contract are low, and the losses were low as traders seek to protect themselves by building social capital with their peers. In the grain market, past experiences and established relationships serve as the foundation for transactions. Building trust and relationships serves as the basis of contracts, enforcement, and trade in this market. In Madagascar's culture, repeated interactions can build trust and relationships in society. While this paper is from 2001, the conclusions of this paper can serve to inform the Madagascar government how to improve institutions and policies to protect traders and enhance market growth through the establishment of property rights and contract enforcement.

Tags: Madagascar – National, Foundational factors, Livelihoods, Conflict, Power, institutions, and rules

## Qui Pilote si Personne ne Gouverne ? La Politique Publique de Protection Sociale à Madagascar au Prisme de l'Analyse des Réseaux Sociaux

Berrou, Jean-Philippe et al. 2020. "Qui pilote si personne ne gouverne? La politique publique de protection sociale à Madagascar au prisme de l'analyse des réseaux sociaux." Sciences Po Bordeaux. <a href="https://hal.science/hal-02918286">https://hal.science/hal-02918286</a>

This study assesses the Government of Madagascar's role from the conception to implementation of the social protection policy via the Ministry of Population, Social Protection and Women Promotion and the Ministry of Public Health. The development of social protection policy was dominated by "pro-poor and pro-cash" actors, constituents of humanitarian organizations active on the ground. Findings show that the Government does not play a central role in governing the social protection policy; rather it is more a broker between international donors and the underserved population, being a vector of principles and ideas. The study presents this finding as a feature of fragile statehood, a long-term consequence of political instability. The PEA tests these findings with in-depth interviews of representatives of the ministry in charge of social protection both at national and regional level.

Tags: Madagascar – National, Politics, Governance, Historical trends, Power, institutions, and rules

#### **Relationships and Traders in Madagascar**

Fafchamps, Marcel and Bart Minten. "Relationships and Traders in Madagascar." The Journal of Development Studies, 1999, 35:6, 1-35. DOI: 10.1080/00220389908422600.

Based on survey research, this paper examines the role that relationships play in economic exchanges. The focus on the impact of risk, uncertainty and contracting difficulties is relevant to farmers as well as traders. The surveys determined traders view relationships as the most important success factor for their businesses. These relationships are used for many different purposes like information sharing on prices and market conditions, trade flows, trade credits, and risk mitigation. The most important information from these relationships concern the trade flow, such as supply and demand information, and risks involved in trade. These relationships serve more than just information sharing; they foster a sense of trust among traders to honor contracts and seek resolutions when conflict arises without formal legal institutions. The survey demonstrated the most successful traders could contribute their success to these established relationships and their benefits. While this paper is from 1999, the importance of relationships and their impacts on trading markets can serve as an example for further market development especially in environments that lack institutional and legal regulations like the agricultural markets in southern Madagascar.

Tags: Madagascar – National, Livelihoods, Foundational Factors, Power, institutions, and rules



# Situation Nutritionnelle, Insécurité Alimentaire et Mortalité dans les Onze Districts des Trois Régions du grand Sud-Est de Madagascar

Andrianianja R et al. 2922. "Situation nutritionnelle, insécurité alimentaire et mortalité dans les onze districts des trois régions du grand Sud-Est de Madagascar." UNICEF.

https://www.unicef.org/madagascar/media/9846/file/Situation%20nutritionnelle,%20ins%C3%A9curit%C3%A9%20alimentaire%20et%20mortalit%C3%A9%20dans%20le%20Grand%20Sud%20Est%20de%20Madagascar%20.pdf

Based on a SMART survey, this report assesses the nutritional and mortality situation of children under 5 years of age and the population in 11 districts of the Vatovavy, Fitovinany and Atsimo Atsinanana regions of Madagascar. Findings show that 7 out of 11 districts are food and nutrition insecure, particularly Ikongo, Midongy Sud and Befotaka. Unsustainable strategies have increased following the decapitalization of household assets in the aftermath of a recent cyclone. Humanitarian assistance and access to water and sanitation need to be strengthened, particularly in the districts of Ikongo and Befotaka Atsimo.

Tags: Madagascar - National, Atsimo Atsinanana region, Food security, Resilience

#### Social Capital and the Firm: Evidence from Agricultural Trade

Fafchamps, Marcel and Bart Minten. "Social Capital and the Firm: Evidence from Agricultural Trade." 1999. https://web.stanford.edu/~fafchamp/social.pdf

This paper presents evidence from Madagascar on the economic importance of social capital in a context where risk, uncertainty and transaction costs are high. It shows that 1) agricultural traders rank the importance of relationships for success in business higher than input prices, output prices, and access to credit or equipment; 2) better connected traders have significantly larger sales and gross margins than less-connected traders after controlling for physical and human inputs as well as for entrepreneurial characteristics; and 3) traders who do not develop the appropriate social capital, do not grow. Various dimensions of social capital are examined. While this paper is from 1999, markets in Madagascar continue to suffer from high transaction costs and social capital continues to play an important role in livelihood opportunities and markets in Madagascar. The findings from this paper can guide future policy and efforts to encourage raising social capital to reduce transaction costs in Madagascar's economy.

**Tags**: Madagascar – National, Power, institutions, and rules, Livelihoods, Corruption, Supporting Functions, Resilience, Food Availability

## Social-ecological Traps Hinder Rural Development in Southwestern Madagascar

Hänke, H et al. 2017. "Social-ecological traps hinder rural development in southwestern Madagascar, Ecology and Society." *Ecology & Society*. https://doi.org/10.5751/ES-09130-220142

Using a Social-Ecological Traps (SET) approach and Causal Loop Diagrams (CLD), this case study analyzes the root causes of poverty in the Mahafaly area. The findings reveal a complex interplay of pronounced seasonality in income generation due to recurrent droughts and crop failures, which makes local farmers highly risk averse. This interplay leads to a gradual depletion of environmental assets and hinders capital accumulation and improvements in agricultural production, even where environmental conditions would allow it. As a result, households are insufficiently buffered and insured against recurrent income and food security shocks. The article suggests that environmental degradation, poverty, and hunger should be addressed simultaneously by identifying trajectories where both local livelihoods and



biodiversity can thrive in the long term. This resource acknowledges the key contributions of biophysical conditions to food insecurity in the Atsimo Andrefana regions and how economic activities (life deforestation) have worsened the situation over time. The analysis provides information on variation in the depth of poverty across households. Although most households are poor, they are not equally poor. BHA is very interested in better understanding the lives of the poor. Understanding the varying patterns, causes and consequences of poverty is central to this analysis.

**Tags:** Madagascar – Southern, Atsimo Andrefana region, Foundational factors, Livelihoods, Resilience, Poverty, Stakeholder mapping

#### Southern Madagascar Food Insecurity, Technical Report

Narvaez, Liliana, and Caitlyn Eberle. 2021. "Southern Madagascar Food Insecurity, Technical Report." Institute for Environment and Human Security (UNU-EHS). http://collections.unu.edu/eserv/UNU:9026/SouthernMadagascarFoodInsecurity.pdf

Through the results of IPC covering the period of November to December 2021 in the Southern and Atsimo Atsinanana region of Madagascar, the report presents how the biophysical features of the regions combined with harsh climatic conditions drive food insecurity for at least 25% of the population in those regions. Among the root causes are human-induced greenhouse gas emission, colonial legacy with regard to land tenure that has decreased land for food crop production, political uncertainty, and inequality in livelihood opportunities. The solutions proposed revolve around reforestation, climate-smart agriculture, planning for risks, social protection, and investments related to critical infrastructure (pipeline system, road), presenting examples from UN agencies' ongoing interventions in the Southern regions. These five solutions are designed to work together as a solution package.

**Tags:** Madagascar – Southern, Atsimo Andrefana region, Anosy region, Androy region, Atsimo Atsinanana region, Politics, Foundational factors, Land Tenure

# Strong Seasonality in Diets and Alarming Levels of Food Insecurity and Child Malnutrition in Southeastern Madagascar

Rousseau S., Steinke J., Vincent M., Andriatseheno H., and Pontarollo J. 2023. "Strong seasonality in diets and alarming levels of food insecurity and child malnutrition in south-eastern Madagascar." *Frontiers in Sustainable Food Systems*.

https://www.frontiersin.org/articles/10.3389/fsufs.2023.1126053/full

Based on a survey of 492 households in Farafangana District, this case study analyzes rural households' diets and levels of child malnutrition at three-time points within one year: the minor lean season, the major lean season, and the main post-harvest season. The results show that food insecurity is high at all times, reaching 78% before the main rice harvest, with 57% of children stunted. Patterns of food acquisition differ between the three periods, reflected in the substitution of cassava, unripe jackfruit (minor lean period), and local tuber *tavolo* (major lean period) for rice, and in the reduced diversity of side dishes. The results underscore the need for long-term agricultural development strategies that are underlying structural causes of food insecurity and acknowledge the absence of active government interventions at the local level. The PEA tests these findings through interviews with local government representatives at the Agriculture Department and elected officials. This resource is also helpful for the DRMS team to test food availability in Farafangana district through discussions with local populations.

Tags: Madagascar - National, Foundational factors, Atsimo Atsinanana region, Food security



#### Système d'Alerte Précoce Madagascar - Grand Sud-Sècheresse et Insécurité Alimentaire

Raonivelo, Nianja. 2021. "Système d'Alerte Précoce Madagascar – Grand Sud-Sècheresse et insécurité alimentaire." Bureau National De Gestion Des Risques et Des Catastrophes (BNGRC). https://fscluster.org/sites/default/files/documents/bulletin\_sap\_n1.pdf

Based on the Household Economy Analysis (HEA), this report provides an overall diagnosis of food insecurity in southern Madagascar. It also categorizes rural households in terms of economic wellbeing and assesses the impact of shocks on their income sources, expenditures, and food sources. Findings show that drought, insufficient rainfall, and poor harvests are the main drivers of food insecurity. The impact of this phenomenon varies by household category, defined as wealthy, average, poor, and very poor, depending on their annual income and land ownership. The 2022 projection shows an improvement in food consumption with normal rainfall for all categories, with the availability of seeds and agricultural inputs as differentiating factors.

Tags: Madagascar - Southern, Androy region, Anosy region, Atsimo Andrefana region, Climate

#### **Systematic Country Diagnostic Update for Madagascar**

"Systematic Country Diagnostic Update for Madagascar." The World Bank Group, 2022. https://documents1.worldbank.org/curated/en/551231652117328109/pdf/Madagascar-Systematic-Country-Diagnostic-The-Urgency-of-Reforms-Structural-Transformation-and-Better-Governance-at-the-Heart-of-the-Strategy-to-Reduce-Poverty.pdf.

The World Bank's Systematic Country Diagnostic Update for Madagascar is an assessment on development constraints and opportunities in Madagascar for more sustainable growth. This 2022 report highlights recent development trends in Madagascar such as rising poverty and uneven development in economic, social, and environmental sustainability. The consequences of COVID-19 increased poverty and lowered the standard of living in Madagascar, and urgent reforms are needed to combat these trends. The major constraints to more sustainable growth are due to weak governance, insufficient investment in physical capital, and recurring shocks. Madagascar, to build resilience, must build on economic opportunities, service delivery, governance, and interventions to enhance productivity. Through reforms and increased investments, Madagascar can facilitate a faster, more inclusive growth. The report, prepared by a multisectoral team of experts, delves into opportunities in specific Malagasy sectors like agriculture, apparel, tourism, and mining. This report's analysis provide insights and guides growth and poverty reduction in Madagascar through development organization's efforts.

Tags: Madagascar - National, Resilience, Instability, Poverty, Governance, Institutions, and rules

#### The Case of Madagascar: Scaling Up Nutrition Movement In-Depth Country Studies

Victoria, Paola, Christopher Coffey, Fanny Grandchamp. 2019. "The Case of Madagascar: Scaling Up Nutrition Movement In-Depth Country Studies." Scaling Up Nutrition. https://scalingupnutrition.org/wp-content/uploads/2019/01/Madagascar In-depth-Study-draft.pdf

This case study assessed the political economy of nutrition in Madagascar from the perspective of the Scaling Up Nutrition (SUN) movement. Multiple key players' relationships in the nutrition sector—such as among the government, private sector, traditional leaders, community organizations, elected officials, donors, and international civil society organizations—are described and analyzed, from the post-independence era until 2018. Political instability, unbalanced power structure regarding the



devolution and decentralization structure, evolution and changing norms and beliefs about nutrition status, and varying social dynamics between communities are considered as factors hindering nutrition status improvement of the most vulnerable family. Cases from the southern regions are systematically presented in this report.

**Tags:** Madagascar – National, Androy region, Anosy region, Politics, Stakeholder mapping, Power, institutions, and rules.

### The Deep South

Healy, Timothy. 2017. "The Deep South." The World Bank. https://documents1.worldbank.org/curated/en/587761530803052116/pdf/127982-WP-REVISED-deep-south-V27-07-2018-web.pdf.

This report discusses the constraints and opportunities in southern Madagascar towards sustainable policies amid a climate crisis. The report includes socio-economic, historic, cultural, political, and environmental analysis of the nine districts within the Atsimo Andrefana, Androy, and Anosy regions and their effects on stagnation in the southern region, useful to understand the foundational factors of food insecurity. The report provides a historical analysis of the South, its development, and comparison with the country's other regions. The report details agricultural production, barriers and access to markets, commodities primarily grown in target regions, and the greatest risks associated with production in the targeted area. Includes metrics on the distribution of age, education indicators, and poverty incidence in each of the three target regions. Includes metrics on annual consumption per capita of principal food products, subsistence production for target regions. Additionally, the report details insecurities, instabilities, and barriers to further resilience in the South of Madagascar. Healy notes that "In these societies, the clan that established a village often has a say over newcomers and dependent clans, and some lower clans may be marginalized". This phenomenon is common in many parts of Africa. It sometimes explains variation across clans in terms of power and authority, and control over land, water, and other natural resources. It can be the source of a correlation between clan-based identity and depth of household poverty.

**Tags:** Madagascar – Southern, Atsimo Andrefana region, Androy region, Anosy region, Conflict, Governance, Politics, Instability, Stakeholder mapping

## Patterns and causes of conflict

#### Effects of Madagascar's Political Economy on Development and Environment

Combaz, Emilie. 2022. "Effects of Madagascar's political economy on development and environment." K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.

https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15137/743 Madagascar political economy.pdf?sequence=1&isAllowed=yhttps://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15137/743 Madagascar political economy.pdf?sequence=1&isAllowed=y...

This case study aims to explain the roles of key actors and dynamics in Madagascar's socio-political crisis. Findings show that the underlying causes evolve around the entrenched hierarchical system and unstable political orders. These factors are related to political violence, social segmentation, disengagement in public affairs, and the disconnection between key actors. This disconnect is related to non-development elites, the fragmentation of the population, the ambiguous role of the churches, and foreign actors. The dynamics are characterized by the power games of the elites and the "quasi-imperial"



position" of the president, which has led to a reduction in the people's capacity and the legitimacy of the institutions, aggravated by violence, climate shocks, etc. The result is a situation in which the population is unable to participate in public affairs or organize itself.

**Tags:** Madagascar – National, Political Economy Analysis, Politics, Governance, Stakeholder mapping, Power, institutions and rules

# Exploring the Conflict-Readiness of Parties: The Dynamics of Proclivity Towards Conflict and/or Violence in Madagascar

Razakamaharavo, V.T. 2022. "Exploring the conflict-readiness of parties: The dynamics of proclivity towards conflict and/or violence in Madagascar." Accord. <a href="https://www.accord.org.za/ajcrissues/exploring-the-conflict-readiness-of-parties-the-dynamics-of-proclivity-towards-violence-and-or-conflict-in-madagascar/">https://www.accord.org.za/ajcrissues/exploring-the-conflict-readiness-of-parties-the-dynamics-of-proclivity-towards-violence-and-or-conflict-in-madagascar/</a>.

This article assesses the factors influencing peace or conflicts starting from the early years of Madagascar's independence. Multiple socio-economic dimensions contributed to escalating or deescalating violence and political conflicts, including the role played by external actors in resolving the conflict or not, and elitist agreements that lack connection to local ownership of the peace process.

Tags: Madagascar – National, Conflict, Politics, Power, institutions, and norms.

## Les Migrations dans le Sud de Madagascar : Entre Sécheresses Occasionnelles et Crise Socioéconomique Structurelle

Canavesio, R. 2015. "Les migrations dans le sud de Madagascar : Entre sécheresses occasionnelles et crise socio-économique structurelle." *Autrepart*, 74-75, 259-278. https://doi.org/10.3917/autr.074.0259.

This paper investigates drought as a push factor of migration of the southern Madagascar population as early as 1990. However, it is also one of the rare resources to openly challenge the prominent role of weather and climate severity causing food insecurity and therefore being the main driver of migration from the Southern regions. Until now, the findings show that climate conditions are disproportionately presented as the main factor of migration from the South. In fact, the migration crisis occurs during conflict and social instability, and amid other economic stressors such as increases in food prices, health crises, and economic opportunities in other regions.

Tags: Atsimo Andrefana region, Anosy region, Androy region, Migration, Instability, Conflict, Violence

#### Madagascar, Analyse Commune de Pays

United Nations. 2020. "Madagascar Analyse Commune de Pays." The United Nations. <a href="https://minio.dev.devqube.io/uninfo-production-main/ef7c65dc-bf07-41af-ba28-56d75d53b87d">https://minio.dev.devqube.io/uninfo-production-main/ef7c65dc-bf07-41af-ba28-56d75d53b87d</a> Madagascar CCA 2020.05.pdf.

This common country analysis provides background, contexts, and analysis of Madagascar to further development efforts and improve the lives of Malagasies and, in particular, vulnerable populations in the country. The analysis is useful for the government and other stakeholders to implement in planning, action, and responses to advance economic and social issues while mitigating crises and conflicts. An overview of systemic problems flows into a deeper analysis of issues such as lack of resources, access, limited social protections, poverty, poor infrastructure, and governance. The United Nations report details the progress Madagascar has made toward the 2030 UN agenda for sustainable development.



The analysis is useful for the government and other stakeholders to implement in planning, action, and responses to advance economic and social issues while mitigating crises and conflicts.

**Tags:** Madagascar – National, Conflict, Foundational factors, Governance, Politics, Stakeholder mapping, Food security

#### Rapport de Diagnostic de Conflits

Rajoelison, Sedera Arnaud. 2015. "Rapport de Diagnostic de Conflits." Search for Common Grounds. https://www.sfcg.org/wp-content/uploads/2015/10/Rapport-diagnostic-de-conflits-Androy.pdf.

This report presents different types of recurring conflicts at the local level, how the locals perceive the intensity of conflicts, who might be the triggers and instigators, and the local mechanisms to mitigate them. As developed by the author, most local conflicts can be related to impunity (power and authority abuses), land tenure, access to resources, food insecurity, and humanitarian assistance. Rarely, conflict resolutions go straight to the public administration judiciary system (from "gendarmerie" to court"), Rather, conflict is often resolved at three layers of local mechanism trials that come out with pacts and deals; the public administration is perceived as unfair or corrupt.

Tags: Androy region, Conflict, Power, institutions, and norms

## Resource Warfare, Pacification, and the Spectacle of "Green" Development: Logics of Violence in Engineering Extraction in Southern Madagascar

Huff, Amber, and Orengo Yvonne. 2020. "Resource warfare, pacification, and the spectacle of 'green' development: Logics of violence in engineering extraction in southern Madagascar." *Political Geography*. <a href="https://doi.org/10.1016/j.polgeo.2020.102195">https://doi.org/10.1016/j.polgeo.2020.102195</a>

This article situates the historical dynamics of social, environmental, and legal conflicts since the inception of the Rio Tinto QIT-Madagascar Minerals (QMM) ilmenite mine in the southeast (Taolagnaro or Fort-Dauphin district) Madagascar. The paper explores QMM's strategies and its alleged "double land grab" to accommodate mining activities, and compensatory biodiversity offsetting. The authors argue that "pacification," theorized as a productive form of violence that works through the re-ordering of socio-nature, underwrites the forms of "security," "stability" and even "sustainability" that facilitate multiple and overlapping strategies of value extraction in the territorial and extra-territorial spaces occupied by the QMM mine partnership.

Tags: Madagascar – Southern, Anosy region, Stakeholder mapping, Instability, Governance, Violence

# This Is Not About Cows: Historic and Contemporary Challenges to South-Central Madagascar's Cattle Systems

Myers, Dan. 2015. "This Is Not About Cows: Historic and Contemporary Challenges to South-Central Madagascar's Cattle Systems." Independent Study Project (ISP) Collection. <a href="https://digitalcollections.sit.edu/isp\_collection/2285">https://digitalcollections.sit.edu/isp\_collection/2285</a>

This paper examines the broader state of cattle-based livelihoods in two regions, namely Ihorombe and Haute Matsiatra (which are the intermediate markets between the Southern regions and the consumers in the capital city). The findings show that the cattle economy has cyclically experienced high levels of related violence, foreign involvement in cattle trafficking, and conflict between and among the local and Malagasy state institutions involved in the process. However, the paper also finds that this historically cyclical system is under increasing duress from two mutually worsening sets of stressors: one



constituted by deepening poverty, environmental adversity, and population growth, the other a pervasive process of social disintegration within pastoralists communities and the institutions that work with them. It concludes with a set of recommendations for relevant actors in an attempt to avoid the worst-case scenario: the collapse of cattle-based livelihoods due to a rapid decline in Madagascar's cattle population. While this article is from 2015, it is a rare case of cattle-based livelihood analysis, highlighting the conflicts among actors involved in cattle value chains.

**Tags:** Madagascar – National, Livelihoods, Power, Conflict, Governance, Value Chains, Desk Review and Market Study

Impact of governance, political instability, and conflict on household resilience

## Adaptation Finance Failing to Reach the Most Vulnerable: A Multi-level Model of Household Political Power in Madagascar

Browne, Katherine Elizabeth and Claudien Razafiarimanana. 2022. "Adaptation finance failing to reach the most vulnerable: A multi-level model of household political power in Madagascar." Public Library of Science (PLOS Climate). https://doi.org/10.1371/journal.pclm.0000050

Based on a Multi-Level Model (MLM), this case study aims to identify the root causes of the failure of UN climate aid in the Alaotra Mangoro region. Findings show that political connections, in the form of patronage and project participation, enable elite capture of international aid and prevent benefits from reaching relatively vulnerable households. Unintentionally reinforcing pre-existing inequalities is a common risk of international aid. PEA study can help identify and mitigate the risk of elite capture. We envisage these power dynamics have implications for future USAID programming. Our PEA examines the case study to identify any lessons that might be transferable to food security in the Southern and Southeastern regions.

Tags: Madagascar – National, Governance, Politics, Poverty, Livelihoods

#### Crisis and Resilience in Madagascar: Relationships with Demographic and Social Dynamics

Garenne, Michel. 2017. "Crisis and Resilience in Madagascar: Relationships with Demographic and Social Dynamics." Nova Science Publishers. <a href="https://www.researchgate.net/publication/320138234">https://www.researchgate.net/publication/320138234</a>.

There are temporal correlations between demographic trends with political crises in Madagascar. This study provides an overview of the relationship between political and economic crises through the 1960-2010 period. The study did not explain the underlying causes of demographic changes in conjunction with political and/or economic crises. It shows that populations are mostly resilient to shocks with some well-drafted policies and programming (health programs, international aid, etc.). The study concluded that anthropometry and education levels have a direct relationship with the country's economy, and marriage levels demonstrated an indirect relationship with economic crisis. Levels of child mortality affected both economic and political crises. This source is useful for understanding the impact of governance (policy and programming of health and education) on the population's resilience.

Tags: Madagascar – National, Historical trends, Governance, Politics, Conflict, Resilience, Poverty

#### Freedom in the World 2023: Madagascar

Freedom House. 2023. "Freedom in the World 2023: Madagascar." https://freedomhouse.org/country/madagascar/freedom-world/2023



Freedom House's latest review of political rights and civil liberties in Madagascar rates the country as 61/100 ('partly free') in 2023, compared to 56/100 in 2018. The report notes that despite increased political stability, government corruption, weak accountability, and restrictions on free press still hamper the development of an open society. This is compounded in the south where lawlessness, violence, and poverty afflict the population. This summary – along with earlier iterations (for comparative purposes) – sheds light on both formal and informal institutions that impact how power is distributed in Malagasy society and politics. This informs the PEA, particularly in testing whether proposed solutions are grounded in how things *really* are or how things are *supposed* to be.

**Tags:** Madagascar – National, Madagascar – Southern, Politics, Governance, Power, institutions, and rules, Corruption, Instability, Violence, Foundational Factors

#### Global Progress in Reducing Extreme Poverty Grinds to a Halt

World Bank. 2022. "Global Progress in Reducing Extreme Poverty Grinds to a Halt." <a href="https://www.worldbank.org/en/news/press-release/2022/10/05/global-progress-in-reducing-extreme-poverty-grinds-to-a-halt">https://www.worldbank.org/en/news/press-release/2022/10/05/global-progress-in-reducing-extreme-poverty-grinds-to-a-halt</a>

This article describes the setbacks in reducing global poverty due to the consequences of the COVID-19 pandemic. The World Bank has been working on a goal to eliminate extreme poverty by 2030, but the consequences of COVID-19 and a worsening war in Ukraine will make this goal extremely difficult to achieve. The effects of the pandemic produced the largest increase in global poverty since 1990. Other economic conditions like high inflation, depreciated currencies, and concurrent crises are slowing global economic growth. Increased government spending and strong fiscal policy, focusing on targeted cash transfers, long-term growth, and mobilizing domestic resources, are beneficial to reducing these effects, but developing countries, without the necessary resources, are less able to offset the increases in poverty.

Tags: Governance, Institutions, Foundational factors, Instability

#### Les Conditions de Travail des Femmes dans les Mines de Mica de Madagascar

Rakotoarindrasata, Mina. 2022. "Les conditions de travail des femmes dans les mines de mica de Madagascar." Gender in Geopolitics Institute. <a href="https://igg-geo.org/?p=8066">https://igg-geo.org/?p=8066</a>.

This article provides a description of the working conditions for women in the mica mines of Madagascar. Mica mining is a traditional practice, and global demand is growing. However, mica mining is dangerous. Both women and children have been working in inhumane conditions in these mines. In 2017, Madagascar was the third-largest producer of mica in the world. This article is useful for its description of the dangers of child labor and women in mica mining.

Tags: Madagascar—Southern, Anosy region, Gender, Livelihoods

## Madagascar-Cyclone Gretelle Situation Report No. 3

United Nations Department of Humanitarian Affairs. 1997. "Madagascar-Cyclone Gretelle Situation Report No. 3." United Nations. <a href="https://reliefweb.int/report/madagascar/madagascar-cyclone-gretelle-situation-report-">https://reliefweb.int/report/madagascar/madagascar-cyclone-gretelle-situation-report-</a>

no3?\_gl=1\*1ugxtbz\*\_ga\*ODIwOTM5MjlwLjE2OTUyMTM4OTE.\*\_ga\_E60ZNX2F68\*MTY5NTI5NzQ2 Mi40LjEuMTY5NTI5ODMzMi42MC4wLjA.



This UN Department of Humanitarian Affairs situation report details an international call for assistance following Cyclone Gretelle. The report details the damages, casualties, and consequences of the region's first cyclone in 41 years. The report details coordination efforts and programs to improve conditions and mobilize relief efforts as well as unmet needs still requiring attention. This report is useful to the PEA for its description of a major cyclone, its effects, and the gaps in capacity to respond to disaster events.

Tags: Madagascar—National, Climate, Resilience, Stakeholder mapping

#### **Madagascar Food Insecurity Crisis in the Grand Sud Regions**

ACAPS. 2022. "Madagascar Food Insecurity Crisis in the Grand Sud Regions." ACAPS. <a href="https://www.acaps.org/fileadmin/Data\_Product/Main\_media/20220310">https://www.acaps.org/fileadmin/Data\_Product/Main\_media/20220310</a> acaps thematic\_report madagascar food security.pdf

The report provides a comprehensive overview of the main drivers of the current food insecurity situation in the Grand Sud and its impact on affected households across humanitarian response sectors. The report also provides an overview of coping mechanisms used by people in need, which have further adverse effects. The report covers only some of the main drivers of the current food insecurity crisis. It does not investigate factors related to governance and local and international politics and is acknowledged by authors to be missing.

Tags: Atsimo Andrefana region, Anosy region, Androy region, Governance, Politics

## Madagascar: Peace and Conflict Impact Assessment (PCIA)

Jütersonke, Oliver and Moncef Kartas, Isabelle Dauner, Julie Mandoyan and Christoph Spurk. 2010. 
"Madagascar: Peace and Conflict Impact Assessment (PCIA.)" Centre on Conflict, Development and Peacebuilding (CCDP), Graduate Institute of International and Development Studies.

<a href="https://repository.graduateinstitute.ch/record/3960/files/PCIA">https://repository.graduateinstitute.ch/record/3960/files/PCIA</a> Madag EN COUL WEB2
final.pdf?subformat=pdfa&version=1

This study assesses 1) the economic dimensions of Madagascar's recurring crises, 2) the characteristics of power and authority in Madagascar, 3) the media as a "fourth power" in politics, and 4) security sector governance. Drawing from economic policies from the colonial time until the 2009 crisis, the study presented several fault lines (oral/written, rural/urban, periphery/center) that may drive crises and political conflicts. The study investigates the narrative in media that could have influenced public opinion and was also used by politicians to escalate or de-escalate conflicts. It presented the potential roles of "the military," "the *gendarmerie*" and "the police" in crises and political conflicts, and how they have been politicized over time, which are unique since most articles tend to confound them into "army." Since this study, no other has assessed quite so thoroughly the security sector governance and the media's role in crisis resolution.

Tags: Madagascar – National, Politics, Power, Institutions and rules, Governance, Stakeholder mapping

## Politique Ouverte : Structures Locales de Concertation dans les Municipalités de Sahanivotry et Masindray Madagascar

Ravelomanantsoa, Harilanto and Rajaonarivo Andrianarivelo. 2021. "Politique Ouverte: Structures locales de concertation dans les municipalités de Sahanivotry et Masindray Madagascar." Institut International de Planification de l'Education (IIPE-UNESCO).

<a href="https://etico.iiep.unesco.org/sites/default/files/2022-01/OPEN">https://etico.iiep.unesco.org/sites/default/files/2022-01/OPEN</a> GOV EDU MADAGASCAR.pdf



Based on a survey of 224 people from the municipalities of Sahanivotry and Masindray in the Analamanga region, this report focuses on local concentration structures (SLC) assessment. Findings show that elected officials are afraid of being held accountable. Teachers have also pointed out the limits regarding pedagogy, curricula and recruitment. The effectiveness of SLCs requires better communication, transparency and accountability, as well as better mobilization of local resources. The PEA tests community role change and incentives in food security programming through group discussions.

**Tags:** Madagascar – National, Politics, Community-driven development, Governance, Stakeholder mapping

### Strategic Program for Climate Resilience: Madagascar Pilot Program for Climate Resilience

Government of Madagascar-Bureau National De Coordination des Changements Climatiques (BNCCC). 2017. "Strategic Program for Climate Resilience: Madagascar Pilot Program for Climate Resilience." Government of Madagascar-Bureau National De Coordination des Changements Climatiques (BNCCC). <a href="https://www.primature.gov.mg/cpgu/wp-content/uploads/2017/11/SPCR">https://www.primature.gov.mg/cpgu/wp-content/uploads/2017/11/SPCR</a> Madagascar FINAL-10-11-17-1.pdf.

The World Bank and African Development Bank are implementing a Pilot Program for Climate Resilience in collaboration with the Cellule de Prévention et Gestions des Urgences (CPGU). This report provides a detailed overview of the program, objectives, and expected results. The report identifies the main climate resilience challenges in the short, medium, and long term. By proposing priority activities, development projects may coordinate to achieve these objectives. Some of the priorities include improving the hydro-meteorological system, strengthening household resilience, and improving public infrastructure. The report provides a description of climate risks and their effects on development projects, which is useful in understanding some foundational factors. Major climate consequences most impact key sectors like agriculture, health, and infrastructure. Climate change policy and disaster risk planning have been implemented by the government of Madagascar, but challenges persist in gaps between institutions and governance. This report analyzes the economic, social, and environmental context and framework for adapting and mitigating the effects of climate change on Madagascar's development and resilience, and this is useful to future program implementation and encourages collaborating with key partners. This resource presents the standpoint of two major donors of the Government of Madagascar in resilience by partnering directly with a government agency (under the Bureau of Prime Minister).

**Tags:** Madagascar – National, Development project, Governance, Climate, Resilience, Stakeholder mapping

#### The Kere of Madagascar: A Qualitative Exploration of Community Experiences and Perspectives

Ralaingita, M. et al. 2022. "The Kere of Madagascar: a qualitative exploration of community experiences and perspectives." *Ecology and Society* 27 (1):42. https://doi.org/10.5751/ES-12975-270142

Based on a qualitative approach, this case study describes the mechanism of the *kere* phenomenon through the experiences and perceptions of affected communities in southern Madagascar. Results show that *kere* is a complex socio-ecological disaster. Among the root causes are deforestation, drought, pests and diseases, poverty, lawlessness, and political disengagement. The PEA integrates these findings in understanding the impacts of structural and situational factors on recurring food insecurity in the



southern regions. The PEA also tests the report's findings on the perspectives of the local stakeholders through focus group discussions.

**Tags:** Madagascar – National, Androy region, Atsimo Andrefana Region, Foundational factors, Food Security, Resilience, Power, Institutions and rules, Stakeholder mapping

### The Puzzle of Madagascar's Economic Collapse Through the Lens of Social Sciences

Razafindrakoto, Mireille, François Roubaud and Jean-Michel Wachsberger. 2021. "The puzzle of Madagascar's economic collapse through the lens of social sciences." Développement, Institutions et Mondialisation (DIAL/IRD). <a href="https://dial.ird.fr/wp-content/uploads/2021/10/focus-dialogue-ENG-51.pdf">https://dial.ird.fr/wp-content/uploads/2021/10/focus-dialogue-ENG-51.pdf</a>

Based on a multidimensional and long-term analysis of economic development (since the 2010s), this case study analyzes Madagascar's economic trajectory through the socio-political system and its crisis. Results show that development theories, economic policy choices, structural weakness of institutions, and ethnic diversity seem powerless to explain Madagascar's poor long-term performance. However, social fragmentation and inertia, traditional political theology, and the taboo on political violence all contribute to long-term political instability.

**Tags:** Madagascar – National, Political Economy Analysis, Politics, Governance, Power, Institutions and rules, Poverty

# Understanding the Causes of and the Solutions to Political Corruption In Madagascar: Information Asymmetry, Culture and Perception of Corruption

Randriantarika, Adellin Packistani. 2017. "Understanding the Causes of and the Solutions to Political Corruption In Madagascar: Information Asymmetry, Culture and Perception of Corruption." Seoul National University (SNU). <a href="https://s-space.snu.ac.kr/bitstream/10371/137297/1/000000146482.pdf">https://s-space.snu.ac.kr/bitstream/10371/137297/1/000000146482.pdf</a>

Based on principal-agent theory and cultural theory, this thesis aims to understand the main causes of political corruption in Madagascar. The survey, conducted on 167 randomly selected individuals, shows that information asymmetry has a significant effect on the level of political corruption. Those with more political knowledge are more likely to engage in political corruption than those with less political knowledge. Although respondents were divided on the solution, it was found that the lack of information and transparency in government activities significantly hampers the fight against corruption. The PEA tests these findings to understand the causes of conflicts, political instability and corruption through in-depth interviews with key informants.

Tags: Madagascar – National, Politics, Conflict, Corruption, Stakeholder mapping

### **Development Landscape**

#### AFAFI-SUD: Appuyer l'Agroécologie ans le Sud et le Sud-Est de Madagascar

GRET. 2020. "AFAFI-SUD : Appuyer l'agroécologie dans le Sud et le Sud-Est de Madagascar." GRET. https://gret.org/projet/appuyer-lagroecologie-dans-le-sud-et-le-sud-est-de-madagascar/.

The AFAFI-SUD project, implemented by the French NGO GRET along with FOFIFA, CTAS, AVSF, and CIRAD, aims to strengthen the agricultural resilience of the Androy and Anosy populations, two Southern regions of Madagascar. The project factsheet provides an overview of its goals through climate-friendly solutions and innovative technology in agriculture and pastoralism. The project aims to build the



resilience of 30,000 small-scale farmers while increasing nutrition awareness in vulnerable populations such as women and children under 5 years. The project prioritizes the implementation of so-called "agroecological blocks" for about 1,000ha which can be used to grow various crops simultaneously while strengthening environmental and social resilience. Agroecological blocks are gradually set through discussion and social acceptance among traditional leaders and community members. This resource informs the PEA team's mapping of key actors involved in food security and resilience in the southern and southeastern regions of Madagascar in recent years. The PEA team uses this information to analyze their incentives to intervene in food security and assess their positions towards other actors locally, during in-depth interviews.

**Tags:** Development project, Stakeholder mapping, Food Security, Resilience, Androy region, Anosy region

#### Agriculture: le Ministère Mise sur l'Aménagement des Périmètres Agricole

Mandimbisoa, R. 2023. "Agriculture: le Ministère mise sur l'aménagement des périmètres agricoles." Madagascar Tribune. <a href="https://www.madagascar-tribune.com/Agriculture-le-ministere-mise-sur-l-amenagement-des-perimetres-agricoles.html">https://www.madagascar-tribune.com/Agriculture-le-ministere-mise-sur-l-amenagement-des-perimetres-agricoles.html</a>.

This 2023 article in the *Madagascar Tribune* describes the 2022 activities, 2023 priorities, and the budget for the Ministry of Agriculture and Livestock. In 2022, around 50,000 hectares of land were newly developed and rehabilitated for more than 100 irrigated areas in 23 regions. Some of these areas were developed for rice production, and these developments aim to improve food security and livelihoods in the region. Additionally, MINAE distributed other agricultural inputs, like seeds, to producers. The ministry partners with aid agencies to distribute improved seed varieties to improve yields. The ministry is also targeting locust infestations with aerial treatments. The ministry has also distributed 165 heifers to increase milk production in the area. This article is useful to the PEA for its overview of activities and budget for the Ministry of Agriculture and Livestock.

Tags: Stakeholder mapping, Governance, Institutions, Food Security, Resilience, Livelihoods

#### Applied Political Economy Analysis (PEA) Data Collection Template

USAID. 2023. "Applied Political Economy Analysis (PEA): Immediate Post-Interview Analyses." [Data Collection Template.] USAID Learning Lab.

https://usaidlearninglab.org/sites/default/files/resource/files/supplemental\_resource\_sample\_data\_collection\_template.pdf

The Immediate Post-Interview Analyses tool forms part of USAID's package of reference materials that accompany the Guide for Practitioners (Menocal et al. 2018). The PEA study team adapted this tool to support primary data collection for this study. This allowed the study team to analyze information from key informant interviews and focus group discussions on a rolling basis, which meant they could test and triangulate information with different stakeholders in upcoming interviews.

Tags: Political Economy Analysis

# Assessing Farmers' Diverse Preferences and Expectations for Tailoring Food and Nutrition Security Interventions in Southeastern Madagascar

Mandaharisoa, S. T., Randrianarison N., Steinke J., and Kubitza C. 2022. "Assessing Farmers' Diverse Preferences and Expectations for Tailoring Food and Nutrition Security Interventions in



Southeastern Madagascar." Current Developments in Nutrition.

https://www.researchgate.net/publication/363502147 Assessing Farmers' Diverse Preferences a nd Expectations for Tailoring Food and Nutrition Security Interventions in Southeastern Madagascar

This study focused on the three most populated districts in the Atsimo Atsinanana region: Vondrozo, Farafangana, and Vangaindrano. The Atsimo Atsinanana region is one of the most affected regions of elevated poverty and low resilience to shocks in Madagascar. This study assessed the perceptions of local communities towards a range of intervention options that could help improve the food and nutrition security in this region. The results show that communities prefer interventions that lead to income and food self-sufficiency, such as food and nutrition security interventions. Yet it is worth noting that income-generating activities are preferred by coastal communities whereas food production is preferred in inland areas. Moreover, women have relatively stronger preferences for interventions related to dietary habits than men. Geography and gender significantly influence the preference of communities over food security and nutrition interventions.

Tags: Stakeholder mapping, Food security, Climate, Gender, Atsimo Atsinanana region

### End of Phase Report for COVID-19 Emergency Food Response: Round 1

Seed Madagascar. 2021. "End of Phase Report for COVID-19 Emergency Food Response: Round 1." Seed Madagascar. https://madagascar.co.uk/download\_file/2188/547.

SEED Madagascar responded to the emergency food crisis in Madagascar during COVID-19. In particular, the southern region of Madagascar is facing extreme food shortages and a rise in prices due to recurrent crises like droughts, diseases, and the economic downfalls of COVID-19. These consequences most affect the vulnerable populations of the regions like women and children. SEED implemented a food distribution program targeting rural areas through health clinics and villages. While responding to emergency needs, SEED intends to increase the region's capacity to provide health services and food to the population. The report provides context, finances, results, and recommendations for future programs in this region of Madagascar. This SEED report determined that a community-driven approach to emergency situations is an effective strategy, but resource management continues to be a cause for concern in food security programs in Madagascar. The PEA tests this specific finding through discussions with the most vulnerable population.

Tags: Foundational factors, Governance, Stakeholder mapping, Resilience, Food security, Anosy region

# Expert-based Analysis of Successful Intervention Strategies for Enhancing Food and Nutrition Security in Madagascar

Konzack, Alexandra et al. 2020. "Expert-based analysis of successful intervention strategies for enhancing food and nutrition security in Madagascar," Humboldt-Universität zu Berlin. doi: 10.13140/RG.2.2.21778.53445.

This analysis aims to support the design and implementation of the German Development Cooperation (GIZ) Projet pour la Sécurité Alimentaire, Nutrition et Renforcement de Résilience (ProSAR) in the Atsimo Atsinanana region of Madagascar. This activity's objective is to improve the nutritional status and health of Madagascar's rural population with an emphasis on women and children. Various development actor stakeholders have implemented food security and nutrition security programs in Madagascar, and there are resources and insights into the successes and challenges through experience in the region. This analysis compiles information gained through available materials and reports found online and



interviews with program representatives and stakeholders in Madagascar in 2020. The analysis presents findings and recommendations for the development of food availability, food access, food utilization, and WASH initiatives in Madagascar. Key recommendations include 1) coordination and collaboration with locals and relevant stakeholders, 2) market-oriented agricultural development, 3) increasing incomes through sustainable opportunities, and 4) disaster mitigation strategies. The primary use of this resource is to map the key stakeholders in the southeastern regions and their incentives in choosing a specific approach and implementing a set of activities related to food security.

Tags: Stakeholder mapping, Development project, Food Security, Resilience, Atsimo Atsinanana Region

#### Final Performance Evaluation of the Fararano Development Food Security Activity in Madagascar

IMPEL. 2020. "Final Performance Evaluation of the Fararano Development Food Security Activity in Madagascar." IMPEL The Implementer-Led Evaluation & Learning Associate Award. <a href="https://www.fsnnetwork.org/sites/default/files/2020-12/Fararano">https://www.fsnnetwork.org/sites/default/files/2020-12/Fararano</a> Endline Report 7March2020 508 0.pdf.

This report examines the Fararano project performance. Fararano is a USAID program aiming to reduce food insecurity in Atsinanana, Vatovavy Fitovinany, and Atsimo Andrefana. The program is implemented by Catholic Relief Services (CRS), and the evaluation used a mixed-methods approach to evaluate project outputs and outcomes and identify factors that contributed to the success of, and challenges faced by the program during implementation. The Fararano project made gains in child health and nutrition outcomes, income and agricultural markets, and disaster risk management. The evaluation analyzed gaps in the program's purposes. The sustainability and scale of the project remain a concern in development efforts in Madagascar. The report presents findings that can be useful in future programs and activities to reduce food insecurity in Madagascar. The PEA tests, through in-depth interviews and group discussions, the degree of local government and local community ownership. These were identified as gaps during the implementation. This evaluation is useful for its examination of factors that affect outcomes of programming in Madagascar. The evaluation determined that stakeholders preferred integrated approaches, as they can be tailored to local contexts and enhance the sustainability of the project. The evaluation determined that Fararano's over-ambitious and complex design negatively impacted implementation. Other factors like investments into governance, capacity building, coordination, and integration make for stronger, more sustainable outcomes in Madagascar.

**Tags:** Stakeholder mapping, Development Project, Food Security, Resilience, Gender, Atsimo Andrefana region

### Flash Appeal: Madagascar—Grand Sud and Grand Sud-Est

United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 2023. "Flash Appeal: Grand Sud Est January-December 2023. Revised in March 2023." <a href="https://reliefweb.int/attachments/9e7c5899-3b28-4905-9679-0f0c837a8192/MDG\_24%20mai%2023\_Grand%20Sud\_Cyclones\_Appel\_eclair\_revise.pdf">https://reliefweb.int/attachments/9e7c5899-3b28-4905-9679-0f0c837a8192/MDG\_24%20mai%2023\_Grand%20Sud\_Cyclones\_Appel\_eclair\_revise.pdf</a>.

This flash appeal details the urgent needs of the Grand South and Southeast regions of Madagascar in 2023. The report notes that humanitarian aid is improving the food insecurity situation, but a more targeted approach is necessary to reach isolated rural areas in the South. Vulnerability to climate crises is also a major obstacle to improving food security. Cyclones and drought both impact the production and harvest of vital crops, worsening food security and malnutrition. The report concludes by stating that a coordinated response is needed in this region to strengthen resilience and improve food security.



Tags: Madagascar—Southern, Climate, Resilience, Food security, Humanitarian aid

#### **IOM Madagascar Response Crisis Plan 2023**

International Organization for Migration. 2023. "IOM Madagascar Response Crisis Plan 2023." International Organization for Migration.

https://crisisresponse.iom.int/sites/g/files/tmzbdl1481/files/appeal/pdf/2023 Madagascar Crisis R esponse Plan 2023.pdf

The project plan factsheet presents the IOM Bureau of Madagascar's objectives and activities targeting internally displaced persons, most of them from southern Madagascar. About 15% of the pledged budget will address the drivers and long-term impacts of crises and displacement, and the data related to displacement tracking. This resource is used to characterize youth migration from the southern regions and how migration differs for girls and boys, and how it may impact local population resilience in the aftermath of droughts and/or floods.

Tags: Madagascar - National, Southern Region, Migration, Gender, Climate

# Les Communautés Royales et Traditionnelles de Madagascar s'Engagent pour la Vaccination de Routine et Anti-COVID

Razafison, Rivonala. 2023. "Les communautés royales et traditionnelles de Madagascar s'engagent pour la vaccination de routine et anti-COVID." Gavi.

https://www.gavi.org/fr/vaccineswork/communautes-royales-traditionnelles-madagascar-sengagent-vaccination-routine-anti-covid.

This article describes the cooperation between WHO; UNICEF; and the Federation of Royal, Traditional, Customary, and Cultural Communities of Madagascar (FCRTM). The FCRTM is a network of customary leaders, royal dignitaries, and traditional priests. WHO and FCRTM collaborated on vaccine campaigns during COVID-19. WHO engages these actors to raise awareness and encourage healthy behavior changes in communities through legitimate community actors. This article is useful to the PEA for its description of power, traditional authorities and their roles in communities, and opportunities for further collaboration in development.

Tags: Madagascar—Southern, Stakeholder mapping, Power, institutions, and rules

#### Le Sud Cimetière De Projet

"Le Sud Cimetière De Projet." 2011, <a href="https://www.etudier.com/dissertations/Le-Sud-Cimeti%C3%A8re-De-Projet/52306538.html">https://www.etudier.com/dissertations/Le-Sud-Cimeti%C3%A8re-De-Projet/52306538.html</a>.

This paper is an important examination of the failures of development efforts in South Madagascar. The ineffectiveness of development programs is linked to their lack of understanding of socio-cultural values and the real needs of the community, which threatens local social, political, and religious dynamics. Shame about emergency aid, tensions over the appropriation of water points, etc. are manifestations of these incongruous logics. Positive factors for projects include knowledge of the environment (structures and conflicts), potential benefits, ongoing dialogue, participatory planning involving traditional authorities, and integration of the team into the community. While this study was conducted in 2011, the results can provide insights into social, political, and religious norms that do not align with development programs and guide improved strategies for development and collaboration in southern Madagascar.



**Tags**: Madagascar – South, Androy, Anosy, Atsimo Andrefana, Stakeholder mapping, Foundational factors, Resilience, Conflict, Livelihoods, Power, institutions, and rules

### **Madagascar Country Development Cooperation Strategy**

USAID. 2020. "Madagascar Country Development Cooperation Strategy (CDCS)." <a href="https://www.usaid.gov/sites/default/files/2023-05/CDCS-Madagascar-September-2025%20-%20508%20compliant%20-%2011-05-2020.pdf">https://www.usaid.gov/sites/default/files/2023-05/CDCS-Madagascar-September-2025%20-%20508%20compliant%20-%2011-05-2020.pdf</a>.

Madagascar's Country Development Cooperation Strategy (CDCS) is a five-year strategic planning document that serves as a results-based guide to future development efforts and collaboration with the country and other key stakeholders to promote investment and development in key sectors. The CDCS is designed to improve the stability, well-being, and resilience of the most vulnerable populations. The mission focuses on health programs (malaria, maternal and child health, STDs), governance, education, environment, and economic opportunities, especially for women in the agricultural and environmental arenas. It also includes a MEL system that is based on a Performance Management Plan (indicators), and a Performance Indicator Management System (monitoring progress and evidence). The document provides the global context of the country and its gender, governance, and economic development challenges. This document is helpful for mapping key stakeholders and can be used to test incentives and positions of the U.S. government and its implementing partners regarding its interventions in Southern and Southeastern Madagascar.

Tags: Madagascar - National, Foundational factors, Stakeholder mapping, Resilience, Governance

#### **Madagascar Food Security Activities**

USAID Madagascar. n.d. "Madagascar Food Security Activities." USAID Madagascar, <a href="https://20172020.usaid.gov/sites/default/files/documents/1860/Fact-Sheet\_FSDA-Food-Security\_ENG-RBG.pdf">https://20172020.usaid.gov/sites/default/files/documents/1860/Fact-Sheet\_FSDA-Food-Security\_ENG-RBG.pdf</a>. Accessed Jul 24, 2023.

This USAID Madagascar brief provides an overview of USAID Madagascar's development programs Asotry and Fararano. These projects focus on health and nutrition activities; agriculture and livelihood activities; and disaster mitigation and preparedness activities. These multi-sector approach projects aim to improve the livelihoods and well-being of the population of target communities in Madagascar. Each of these projects addresses important components like women's empowerment and youth engagement. ADRA is implementing the Asotry program in the Amoron'i Mania, Haute Matsiatra, and Atsimo Andrefana regions. Catholic Relief Services (CRS) implements Fararano, which operates in Atsinanana, Vatovavy, Fitovinany, and Atsimo Andrefana regions. This brief is useful for its overview of activities and opportunities for improving agriculture and livelihoods, health and nutrition, and disaster mitigation and preparedness. The PEA tests the active role of USAID implementing partners in food security activities implemented in the Atsimo Andrefana region.

Tags: Stakeholder mapping, Food Security, Resilience, Gender, Youth, Atsimo Andrefana region

### **Madagascar Safety Nets and Resilience Project**

World Bank. n.d. "Madagascar Safety Nets and Resilience Project." https://projects.worldbank.org/en/projects-operations/document-detail/P179466?type=projects.

This page provides a summary and key details for the World Bank's Madagascar Safety Nets and Resilience project. This is a USD \$250 million project currently being implemented in Madagascar. The project will aid the government in further developing the social protection system and promoting



resilience to recurring shocks in Madagascar. This page is useful to the PEA for its description and documentation of social protection programs in Madagascar.

Tags: Madagascar—National, Stakeholder mapping

#### **Madagascar- Tropical Cyclone and Food Insecurity**

Save the Children. 2022. "Madagascar- Tropical Cyclone and Food Insecurity." Save the Children. <a href="https://fscluster.org/sites/default/files/documents/madagascar">https://fscluster.org/sites/default/files/documents/madagascar</a> - tropical cyclone and food insecurity may update.pdf.

In 2022, Madagascar experienced five storms and tropical cyclones that greatly affected the country. This report details the cyclones' impacts on food security in different regions and identifies key objectives for the government of Madagascar, donors, and international development organizations. Cyclones and tropical storms affect three regions in the Grand Sud-Est. Cyclones and storms are not the only hazards in Madagascar; global warming and climate change increase the probability of a climate crisis that further deteriorates food security. Nutrition deficiencies and food insecurity are most dire in southern regions and affect vulnerable populations like women and children the most. This report provides an overview of Save the Children's activities and efforts to improve food security and nutrition amid the climate crisis, especially in the Southeast region, which is useful when exploring opportunities for coordination or collaboration with other development actors. Importantly, it also provides high-level statistics on the impact on the population, including the percentage of people who are food insecure and the number of children who are malnourished.

Tags: Foundational factors, Stakeholder mapping, Climate, Androy region, Atsimo Atsinanana region

### Process Evaluation of the FIOVANA Resilience Food Security Activity in Madagascar

Implementer Led Evaluation & Learning Associates. 2022. "Process Evaluation of the FIOVANA Resilience Food Security Activity in Madagascar." Implementer Led Evaluation & Learning Associates. https://www.fsnnetwork.org/sites/default/files/2022-10/FIOVANA%20Process%20Eval%20Final.pdf.

The FIOVANA activity, implemented by ADRA International, is a food security program targeting populations in southern Madagascar. This process evaluation study presents an assessment and evaluation of the program's implementation. The study seeks to provide information surrounding the efficiencies, objectives, and critical tools that reduce food insecurity and enhance resilience in this region of Madagascar. The report prioritized the evaluation of eight intervention activities and relied on primary data. The study reports on general findings and intervention-specific findings. Crises, like cyclones and COVID-19, had significant effects on FIOVANA and the food security situation in the region. Inclusion of vulnerable populations, like youth, women, and people with disabilities, was a challenge for FIOVANA, but these components are critical to enhancing food security and household resilience in the target area. The evaluation of implementation successes and challenges is useful for future food security program design and implementation.

**Tags**: Stakeholder mapping, Development project, Food Security, Resilience, Gender, Atsimo Atsinanana region

#### Republic of Madagascar Country Strategic Opportunities Programme 2022-2026

International Fund for Agricultural Development (IFAD). 2021. "Republic of Madagascar Country Strategic Opportunities Programme 2022-2026." International Fund for Agricultural Development (IFAD). https://webapps.ifad.org/members/eb/133/docs/EB-2021-133-R-21.pdf



The document presents Madagascar country context and challenges regarding agriculture and food security. The four focus regions of the political economy analysis study, Atsimo Andrefana, Anosy, Androy, and Atsimo Atsinanana, are presented as priority areas of IFAD future interventions. The DEFIS program comprises the ongoing interventions supported by IFAD in those regions. DEFIS aims to strengthen rural value chains and target vulnerable family farming affected by seasonal or chronic food deficits, with a focus on women, youth, people with disabilities, migrants, and rural microenterprises. IFAD supports the Malagasy Department of Agriculture in implementing this eight-year program directly across its regional offices. IFAD appears as a key international player in the southern, southwestern, and southeastern regions of Madagascar until 2026. The PEA integrates it into the stakeholder mapping and tests some of the findings through interviews with informants at the regional department of agriculture in the focus regions and with private sector actors, and through group discussions with small-scale farmers in the focus districts.

**Tags:** Madagascar – National, Atsimo Andrefana region, Anosy region, Androy region, Atsimo Atsinanana region, Stakeholder mapping, Governance

### Résilience et Systèmes Alimentaires au Sud du Madagascar

World Food Programme. 2022. "Résilience et Systèmes Alimentaires au Sud du Madagascar: Perspectives pour la Contribution du PAM." World Food Programme.

This report describes the recurrent crises and challenges in food security in the South of Madagascar. The report identifies some of the main causes of food insecurity. Low levels of nutrition, productivity, and infrastructure all contribute to the hunger problem in South Madagascar. These negative effects intensify with climate change, and vulnerable populations, like women and children, are most affected by these crises. The report describes key stakeholders working on improving food security, like other donor organizations and NGOs, that all work to improve food availability and access in the region. The report analyzes strategies and general considerations in implementing solutions and programs while building resilience and improving the well-being of target populations. The PEA tests these findings through interviews with local government and implementing organizations and through discussions with the most vulnerable.

**Tags:** Southern – Madagascar, Atsimo-Andrefana region, Androy region, Anosy region, Stakeholder mapping, Climate

# Ressources Halieutiques Potentielles et Propositions d'Adaptation aux Variabilités Climatiques dans l'Extrême Sud de Madagascar

Mahatante T.P., Fanazava R. & Mara E. R. 2015. "Ressources halieutiques potentielles et propositions d'adaptation aux variabilités climatiques dans l'extrême Sud de Madagascar." Mediterranea Serie De Estudios Biológicos.

https://rua.ua.es/dspace/bitstream/10045/52639/3/Mediterranea 2015 Especial 09.pdf.

This paper discusses potential resources and opportunities to reduce vulnerability in Madagascar's Grand South. Famine and food insecurity in this area are exacerbated by climate change, particularly recurring droughts. The source discusses a socio-economic assessment in three fishing villages to identify key activities and resources that enhance livelihoods and resilience in southern communities. This paper is relevant to the PEA for its evaluation of opportunities in the coastal areas that can aid in improving food security, livelihoods, and resilience in the region.

Tags: Madagascar—Southern, Climate, Resilience, Food security, Livelihoods



### Southern Africa. Early Recovery, Risk Reduction, and Resilience (ER4) Assistance in FY 2022

USAID's Bureau for Humanitarian Assistance (BHA). 2022. "Southern Africa. Early Recovery, Risk Reduction and Resilience (ER4) Assistance in FY 2022." USAID'S Bureau for Humanitarian Assistance (BHA), Southern Africa. Early Recovery. <a href="https://www.usaid.gov/sites/default/files/2023-04/USAID-BHA">https://www.usaid.gov/sites/default/files/2023-04/USAID-BHA</a> Southern Africa ER4 Fact Sheet-FY 2022.pdf

The factsheet presents USAID's financial support to the Southeastern region in the aftermath of tropical cyclones in 2022. The support was made through the ADRA-Fiovana project targeting 60 communes across the southeastern region, by training 19,000 PLWs, on health and nutrition practices and 1,800 health workers. The NGO also revitalized 900 farmer field schools and 600 savings and loan associations and provided tools to reduce the cyclone devastation and support a faster recovery. This resource is helpful in analyzing key actors' interventions in the Southern regions: alliances, incentives, and progress in addressing food insecurity due to climate shocks in recent years. The PEA included conducting indepth interviews with ADRA key partners in the Atsimo-Atsinanana region, in particular communal elected officials and representatives of districts and the ministry in charge of social protection.

Tags: Madagascar – Southern, Atsimo Atsinanana region, Stakeholder mapping, Governance

#### Soutenir Le Développement Agricole À Madagascar

United Nations Office for Project Services. 2023. "Soutenir Le Développement Agricole À Madagascar."

United Nations Office for Project Services (UNOPS). <a href="https://www.unops.org/fr/news-and-stories/news/supporting-agricultural-development-in-madagascar">https://www.unops.org/fr/news-and-stories/news/supporting-agricultural-development-in-madagascar</a>.

This article describes UNOPS' work in supporting agricultural development in Madagascar. UNOPS is partnering with the International Fund for Agricultural practices, specifically in the south-eastern region of Madagascar, to improve the infrastructure to further enhance sustainable agricultural development in Madagascar. This 10-year program will facilitate the construction of at least three solar-powered pumping stations, which will be used to irrigate land like rice fields. Increasing investments into infrastructure will restore land while improving yields and overall production. This program will also address the conditions of some rural roads and provide the Malagasy Ministry of Agriculture and Livestock with technical inputs and vehicles. These investments demonstrate the priorities for donors and development in improving food security, resilience, and access to agricultural markets.

Tags: Stakeholder mapping, Development project, Governance, Livelihoods, Atsimo Atsinanana region

### Strategic Framework for Early Recovery, Risk Reduction, and Resilience (ER4)

USAID Bureau for Humanitarian Assistance (BHA). 2022. "Strategic Framework for Early Recovery, Risk Reduction, and Resilience (ER4)." USAID's Bureau for Humanitarian Assistance (BHA). <a href="https://www.usaid.gov/sites/default/files/2023-01/ER4">https://www.usaid.gov/sites/default/files/2023-01/ER4</a> Framework-10.13.2022.pdf

The document provides a description of the current state of ER4 global challenges. ER4 aims to strengthen risk management and climate resilience capacities to reduce future humanitarian needs. It promotes early warning systems, third-party monitoring of humanitarian activities, remote management, food aid, nutrition treatment, health services, protection programming, climate-smart agriculture, etc. In designing ER4 activities, BHA staff focused on technical considerations (resilience capacities, integrated programming, duration of activities, adaptive management, long-term impact, etc.), planning and programming, legal and procurement considerations, and so forth. The document presents the unique role BHA will play in a given country: 1) targeting the most vulnerable, 2) deep understanding of the impact of crises, 3) intimate relationships with host government disaster risk

management agencies, 4) multiple, un-earmarking funding sources. The PEA tests this finding through interviews with BNGRC and/or CGPU and implementing partners.

Tags: Madagascar - National, Governance, Foundational factors, Resilience, Climate

### The World Bank Maps: Madagascar

World Bank. 2023. "The World Bank Maps: Madagascar."

https://maps.worldbank.org/projects/wb/country/MG/Madagascar?status=active.

This World Bank map of Madagascar provides valuable information on climate risks, GDP per capita, foreign direct investment, and trade trends within the country. The PEA also incorporates information from this map summarizing World Bank-funded projects throughout Madagascar. The projects on the website are categorized by sector and region. The PEA focused on projects involving agriculture, fishing, and forestry; industry, trade, and services; water, sanitation, and waste management; transportation; energy and extractives; and social protection.

Tags: Madagascar – National, Stakeholder mapping

### Thinking and Working Politically Through Applied Political Economy Analysis: A Guide for Practitioners

Menocal, Alina Rocha et al. 2018. "Thinking and Working Politically Through Applied Political Economy Analysis: A Guide for Practitioners." USAID. <a href="https://www.usaid.gov/sites/default/files/2022-05/PEA2018.pdf">https://www.usaid.gov/sites/default/files/2022-05/PEA2018.pdf</a>.

This USAID guide is important for its detailed guidance to political economy analysis (PEA). The guide details the purpose and objectives of a PEA. This resource was useful to the PEA to guide the data collection and data analysis methodology.

Tags: Political Economy Analysis

#### World Development Report 2017: Governance and the Law

World Bank. 2017. "World Development Report 2017: Governance and the Law." https://openknowledge.worldbank.org/bitstream/handle/10986/25880/981464809507.pdf

The World Bank's 2017 World Development Report (WDR) marked a pivotal point in the theory and practice of development. The report explicitly recognized the impact that governance has on policy making and policy implementation. Importantly, the 2017 WDR provided definitions for governance and power that have become central to how development practitioners and researchers design, implement, and evaluate interventions. These definitions and the key messages laid out in the 2017 WDR have informed the PEA methodology and analysis.

**Tags:** Political Economy Analysis, Foundational factors, Power, institutions, and rules, Governance, Politics



### **SECONDARY DATA ANALYSIS**

### **Food Security**

### **Food Insecurity and Climate Shocks in Madagascar**

Fayad, Dominique. 2023. "Food Insecurity and Climate Shocks in Madagascar: Republic of Madagascar." *Selected Issues Papers*, no. 037. <a href="https://www.imf.org/en/Publications/selected-issues-papers/lssues/2023/06/05/Food-Insecurity-and-Climate-Shocks-in-Madagascar-Republic-of-Madagascar-534103">https://www.imf.org/en/Publications/selected-issues-papers/lssues/2023/06/05/Food-Insecurity-and-Climate-Shocks-in-Madagascar-Republic-of-Madagascar-534103</a>.

This issue paper highlights the extent of Madagascar's exposure to extreme climate shock, with food insecurity being one of the primary results. This paper also looks into the underlying causes of food insecurity and proposes policies such as Green PFM and climate-related public investment management to invest in long-term resilience and mobilize external financing. The article relies on the most recent data and surveys conducted by reputable sources such as UN Agencies and local authorities, ensuring reliability and accuracy. It identifies various root causes of food insecurity in Madagascar, including demographic vulnerabilities, multidimensional poverty, limited education, structural weaknesses in the food value chain, and inadequate basic infrastructure like irrigation and transportation, which hinder agricultural development.

Tags: Madagascar – National, Climate, Food security

# Food Insecurity Related to Agricultural Practices and Household Characteristics in Rural Communities of Northeast Madagascar

Herrera, James P., Jean Yves Rabezara, Ny Anjara Fifi Ravelomanantsoa, Miranda Metz, Courtni France, Ajilé Owens, Michelle Pender, Charles L. Nunn, and Randall A. Kramer. 2021. "Food insecurity related to agricultural practices and household characteristics in rural communities of northeast Madagascar." *Food Security* 13, no. 6: 1393-1405. <a href="https://link.springer.com/article/10.1007/s12571-021-01179-3">https://link.springer.com/article/10.1007/s12571-021-01179-3</a>.

This article examines food insecurity in northeast Madagascar, with over 70% of respondents reporting insufficient food in the past three years, primarily attributed to small land sizes. The research identifies higher yields in vanilla and rice production and larger land holdings as factors associated with lower food insecurity. Moreover, it suggests potential strategies like agricultural diversification, improved crop yields, increased market access, and off-farm income to mitigate food stress and poverty in these communities. The study provides detailed insights into agricultural practices and food security in Madagascar, offering valuable references for understanding the limited impact of other socioeconomic and agricultural variables that may play a significant role.

**Tags:** Madagascar – National, Desk Review and Market Study, Food security

# Food Security and Agricultural Challenges in West-African Rural Communities: A Machine Learning Analysis

Ahn, Jaehyun, Gary Briers, Mathew Baker, Edwin Price, Dagbegnon Clement Sohoulande Djebou, Robert Strong, Manuel Piña, and Shahriar Kibriya. 2022. "Food security and agricultural challenges in West-African rural communities: A machine learning analysis." *International Journal of Food Properties* 25, no. 1: 827-844. https://www.tandfonline.com/doi/full/10.1080/10942912.2022.2066124



The article examines food insecurity at the household level in West African countries. The researchers used data-driven methods like Random Forest and Chi-Square Automatic Interaction Detection (CHAID) decision trees to classify households based on food security indicators. The study highlights important factors like community support, selling channels, farmland disputes, and community-level investment that influence food availability and access. The article serves as a valuable reference on using decision tree analysis, specifically RF or CHAID, for studying food security and agriculture using Madagascar DHS data.

Tags: Region – West Africa, Food security, Methods

# Food Systems Profile – Madagascar: Activating Sustainable Transformation and Inclusive Food Systems

Rabefarihy, Andriantsoa Tahiry, Holy Raharinjanahary, Henri-Michel Tsimisanda, T. Randriarilala, T. Rakotomavo, F. Urena-Lara, Hélène David-Benz et al. 2021. "Profil des systèmes alimentaires—Madagascar. Activer la transformation durable et inclusive de nos systèmes alimentaires." <a href="https://agritrop.cirad.fr/599987/">https://agritrop.cirad.fr/599987/</a>.

The article evaluates key reasons for the unsustainability of food systems in Madagascar. A prevalent cause of this unsustainability on the island is the degradation of natural resources at the level of both land and water. Also, the unequal distribution of natural resources and social amenities has worsened food insecurity in Madagascar. With widespread poverty throughout the island, the sustainability of the food system would then depend on the ability to address the eight challenges proposed.

Tags: Madagascar – National, Food security, Poverty

### Global Hunger Index 2021: Hunger and Food Systems in Conflict Settings

von Grebmer, Klaus, et al. 2021. Global Hunger Index 2021: Hunger and food systems in conflict settings. Bonn: Welthungerhilfe. <a href="https://www.welthungerhilfe.org/news/publications/detail/global-hunger-index-2021/">https://www.welthungerhilfe.org/news/publications/detail/global-hunger-index-2021/</a>

This 2021 Global Hunger Index report shows the intricate relationships between conflict and hunger, emphasizing how conflict settings led to an increase in food insecurity and malnutrition. It provides an analysis of global hunger levels, with a specific focus on areas affected by conflict. The report lists Madagascar as the fifth-ranked country with 43.2% of the population experiencing undernourishment. This report also details the trends in undernourishment in Madagascar from 2010. The report underscores the need for integrated approaches in food systems to address and mitigate the impacts of conflict on food security.

Tags: Food security

#### 2022 Global Hunger Index - Food Systems Transformation and Local Governance

von Grebmer, K., J. Bernstein, D. Resnick, M. Wiemers, L. Reiner, M. Bachmeier, A. Hanano, O. Towey, R. Ní Chéilleachair, C. Foley, S. Gitter, G. Larocque, and H. Fritschel. 2022. "2022 Global Hunger Index: Food Systems Transformation and Local Governance." Bonn: Welthungerhilfe; Dublin: Concern Worldwide. https://www.welthungerhilfe.org/news/publications/detail/global-hunger-index-2022.

This report details the progress in fighting hunger globally and presents its findings using the Global Hunger Index. The report lists Madagascar as the third-ranked country with nearly half (48.5%) of the population experiencing undernourishment.



Tags: Food security

# Mapping the Spatial Dimension of Food Insecurity Using GIS-based Indicators: A Case of Western Kenya

Mathenge, M., Sonneveld, B.G.J.S. & Broerse, J.E.W. 2023. Mapping the spatial dimension of food insecurity using GIS-based indicators: A case of Western Kenya. Food Sec. 15, 243–260. https://doi.org/10.1007/s12571-022-01308-6

This paper presents a spatial analysis methodology for analyzing food insecurity in Western Kenya. It uses data from a household survey and small-area analysis to construct a composite index and four individual indices on food insecurity. A combination of methods, spatial and non-spatial were used to identify key contributing factors for food insecurity. The results showed low levels of farming skills, farming technology, agriculture information, and farm inputs were the main determinants of food insecurity in the region.

Tags: Food security, Methods

## Strong Seasonality in Diets and Alarming Levels of Food Insecurity and Child Malnutrition in South-Eastern Madagascar

Rousseau, Samuel, Jonathan Steinke, Méloé Vincent, Hanitriniavo Andriatseheno, and Julie Pontarollo. 2023. "Strong seasonality in diets and alarming levels of food insecurity and child malnutrition in south-eastern Madagascar." *Frontiers in Sustainable Food Systems* 7: 1126053. https://doi.org/10.3389/fsufs.2023.1126053

This article presents data on important demographic factors that characterize sample households, with a focus on their reliance on smallholder agriculture, land ownership, cattle possession, and involvement in external farm labor. Additionally, it highlights the prevalence of household food insecurity, which varies across different survey periods, and discusses the patterns of staple food consumption, particularly rice, and its availability over time. The paper also notes how diets change during agricultural seasons and provides supporting sources for these findings.

Tags: Madagascar – Southern, Desk Review and Market Study, Food security

### Malnutrition

Factors Associated with Risk of Developmental Delay in Preschool Children in a Setting with High Rates of Malnutrition: A Cross-Sectional Analysis of Data from the IHOPE Study, Madagascar

Miller, Ann C., Andres Garchitorena, Faramalala Rabemananjara, Laura Cordier, Marius Randriamanambintsoa, Victor Rabeza, Hery-Tiana Rahaniraka Razanadrakoto et al. 2020. "Factors associated with risk of developmental delay in preschool children in a setting with high rates of malnutrition: a cross-sectional analysis of data from the IHOPE study, Madagascar." *BMC Pediatrics* 20, no. 1: 1-11. <a href="https://bmcpediatr.biomedcentral.com/articles/10.1186/s12887-020-1985-6.">https://bmcpediatr.biomedcentral.com/articles/10.1186/s12887-020-1985-6.</a>

This article examines the factors associated with developmental delay in preschool-aged children in Ifanadiana, Madagascar. This article also focuses on malnutrition and stunting within Malagasy children and found that it was not independently associated with developmental risk. The article uses a cross-sectional analysis of the 2016 wave of IHOPE panel data to determine malnutrition in preschool children, with proper citation of sources. Moreover, the article discusses associations between socio-





demographic characteristics and child development, offering potential insights for statistical inference modeling related to poverty, food access, and nutrition.

Tags: Madagascar – National, Malnutrition, Socio-demographic correlates, Poverty

### **Madagascar: Poverty and Equity Brief**

World Bank Group. Africa Eastern & Southern. 2023. "Madagascar: Poverty and Equity Brief." The World Bank Group.

https://databankfiles.worldbank.org/public/ddpext\_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global\_POVEQ\_MDG.pdf.

This document provides background on poverty data and estimates in Madagascar. The latest publicly available, absolute poverty data are based on a household consumption expenditure survey (ENSOMD) conducted in 2012. A consumption expenditure survey was subsequently conducted in 2022, but the final results have not yet been made public. There are some indications, based on preliminary data from the survey, that the poverty situation may be worsening, at least in urban areas. "Early results from the 2022 household survey reveal that consumption across all income deciles in urban areas has decreased."

**Tags:** Madagascar – National, Poverty

# Poverty and Malnutrition in the Democratic Republic of the Congo: Secondary Data Analysis Findings from the Provinces of Tanganyika, Kasai, and Kasai Central

LASER PULSE. February 7, 2023. Poverty and Malnutrition in the Democratic Republic of the Congo: Secondary Data Analysis Findings from the Provinces of Tanganyika, Kasai, and Kasai Central. LASER PULSE. <a href="https://laserpulse.org/publication/poverty-and-malnutrition-in-the-democratic-republic-of-the-congo-secondary-data-analysis-findings-from-the-provinces-of-tanganyika-kasai-and-kasai-central/">https://laserpulse.org/publication/poverty-and-malnutrition-in-the-democratic-republic-of-the-congo-secondary-data-analysis-findings-from-the-provinces-of-tanganyika-kasai-and-kasai-central/</a>.

This article uncovers high poverty rates in targeted provinces compared to the national average, with Tanganyika at 29%, Kasai at 54%, and Kasai Central at 50%. It identifies education, electricity access, and asset ownership as distinguishing factors for poor households. The study also reveals prevalent wasting among boys in Tanganyika and Kasai and stunting in boys, with variations in breastfeeding and household composition. Despite the fact that the study is based in the Democratic Republic of the Congo, it provides the clearest analog in research questions and approaches to the current study in Madagascar.

**Tags:** Region – Democratic Republic of the Congo, Poverty, Malnutrition, Food security, Sociodemographic correlates, Methods

#### Poverty and Malnutrition in Zimbabwe: Findings from Manicaland Province

Viceisza, Angelino, Kodjo Aflagah, Jala Abner, and Kerlisha Hippolyte. 2020, "Poverty and Malnutrition in Zimbabwe: Findings from Manicaland Province." https://pdf.usaid.gov/pdf\_docs/PA00WC2Q.pdf.

This article reveals associations between poverty incidence and factors like education, water and sanitation access, and ownership of specific assets, with variations based on household heads' gender. It highlights prevalent child malnutrition, particularly stunting, influenced by household characteristics, parental factors, and child-related factors. Emphasizing the interconnectedness of poverty and malnutrition, the study underscores the importance of addressing both aspects in intervention design in Manicaland. The article provides reliable data on poverty and hunger from the region in Zimbabwe



where the program is implemented. Despite being located in Zimbabwe, the study aligns with our research questions and potential analytical approach.

Tags: Region – Zimbabwe, Poverty, Socio-demographic correlates, Malnutrition, Food security, Methods

### **Republic of Madagascar: Economic Development Document**

International Monetary Fund. African Dept. 2017. "Republic of Madagascar: Economic Development Document." International Monetary Fund.

www.imf.org/en/Publications/CR/Issues/2017/07/18/Republic-of-Madagascar-Economic-Development-Document-45099

This article outlines the general economic situation of Madagascar, including the persistent challenge of high poverty. It presents a picture of poverty by region based on the 2012 ENSOMD survey by the national statistical agency, in which Androy has the highest poverty rate (96.7%) of all regions and the other three target regions are in the poorest 7 regions (out of 22 regions total). It discusses the possible determinants of high poverty, including weak economic growth, a disjointed economy, limited structural transformation, ineffective government budgeting, political instability, and other factors. The document notes that poverty is linked to reduced access to nutritious foods.

**Tags:** Madagascar – National, Poverty

# Simultaneous Quantile Regression and Determinants of Under-Five Severe Chronic Malnutrition in Ghana

Aheto, Justice Moses K. 2020. "Simultaneous quantile regression and determinants of under-five severe chronic malnutrition in Ghana." *BMC Public Health* 20: 1-12.

https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-08782-7

This article aims to identify critical risk factors for malnutrition in Ghana using multivariable quantile regression modeling. Analyzing data from Ghana's Demographic and Health Survey, the study found significant risks at the child, maternal, and household levels. The regression analysis highlighted factors like type of birth, sex, age, maternal age and education, household wealth status, and others that could aid in improving child nutrition and health policies, particularly for different age groups. The article serves as a valuable reference on how DHS data can be used in regression analysis, providing unbiased sources and comprehensive statistical analyses for our own research.

Tags: Region – Ghana, Food security, Malnutrition, Methods

# Socioeconomic Determinants of Malnutrition Among Mothers in the Amoron'i Mania Region of Madagascar: A Cross-Sectional Study

Ravaoarisoa, Lantonirina, Lalhyss Randriamanantsaina, Julio Rakotonirina, Jean de Dieu Marie Rakotomanga, Philippe Donnen, and Michèle Wilmet Dramaix. 2018. "Socioeconomic determinants of malnutrition among mothers in the Amoron'i Mania region of Madagascar: a cross-sectional study." *BMC Nutrition* 4, no. 1: 1-8. <a href="https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-018-0212-4">https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-018-0212-4</a>.

This article addresses maternal malnutrition in Madagascar, specifically in the Amoron'l Mania region, where 17% of mothers were found to be undernourished. The study identifies significant factors associated with malnutrition in this population, including larger household sizes, use of unsafe water



sources, and an increased number of children. The article emphasizes the necessity for interventions, particularly in ensuring access to safe water and improving family planning. By analyzing the socioeconomic determinants of mothers in the region, the study's methods shed light on crucial factors for a comprehensive survey. The literature provides valuable evidence on maternal undernutrition, highlighting its connection to household size and access to safe water resources.

Tags: Malnutrition, Socio-demographic correlates

### Socio-demographic and socio-economic correlates

# Child Malnutrition in Ifanadiana District, Madagascar: Associated Factors and Timing of Growth Faltering Ahead of a Health System Strengthening Intervention

McCuskee, Sarah, Andres Garchitorena, Ann C. Miller, Lara Hall, Mohammed Ali Ouenzar, Victor R. Rabeza, Ranto H. Ramananjato et al. 2018. "Child malnutrition in Ifanadiana district, Madagascar: associated factors and timing of growth faltering ahead of a health system strengthening intervention." *Global Health Action* 11, no. 1: 1452357. https://www.tandfonline.com/doi/full/10.1080/16549716.2018.1452357

This study aims to identify factors associated with malnutrition and stunting in Ifandiana, Madagascar. The results indicate that stunting is influenced by increasing child age, small birth size, and low maternal and paternal height while wasting is associated with younger child age, small birth size, and low maternal body mass index. The paper provides relevant citations and employs unbiased analytic methods for studying child malnutrition in the Ifandiana district, Madagascar. The findings, including child health, birth history, maternal and paternal health, and household wealth as potential predictors, can be valuable for understanding the connections between poverty, food access, food insecurity, and chronic malnutrition in the targeted provinces, serving as a useful comparison for our own research.

Tags: Malnutrition, Food Security, Poverty, Socio-demographic correlates

### Enquête Démographique et de Santé de Madagascar 2008-2009

Institut National de la Statistique (INSTAT) et ICF Macro. 2010. "Enquête Démographique et de Santé de Madagascar 2008-2009." Antananarivo, Madagascar : INSTAT et ICF Macro. Madagascar Enquête Démographique et de Santé 2008-09 (French) [FR236] (dhsprogram.com)

This article provides detailed insights into the populations, health, and socio-economic conditions of Madagascar. The survey that collected these data was conducted in 2008-2009, and the survey findings play a crucial role in shaping health policy and development programs aimed at improving the well-being of the Malagasy population.

Tags: Madagascar – National, Malnutrition, Food security, Socio-economic correlates

#### Global Hotspots of Conflict Risk between Food Security and Biodiversity Conservation

Molotoks, Amy, Matthias Kuhnert, Terence P. Dawson, and Pete Smith. 2017. "Global hotspots of conflict risk between food security and biodiversity conservation." *Land* 6, no. 4: 67. <a href="https://www.mdpi.com/2073-445X/6/4/67">https://www.mdpi.com/2073-445X/6/4/67</a>.

This article delves into the relationship between food insecurity and biodiversity globally, particularly examining how certain agricultural practices, such as expansion, have impacted biodiversity in particular



countries such as Madagascar. It presents biodiversity and food security as a global challenge, offering detailed insights through the use of indexes and tables to enhance the report's explanation.

**Tags:** Region – Madagascar, Biodiversity, Food security

### **Hunger in Madagascar: A Case Study**

Fry, Lincoln J. 2020. "Case Study Hunger in Madagascar: A Case Study." Food Science and Nutrition 4, no. 2. <a href="https://www.researchgate.net/publication/341552024">https://www.researchgate.net/publication/341552024</a> Hunger in Madagascar A Case Study.

This case study focuses on hunger in Madagascar and uses a national probability sample. The findings suggest that employment in the agricultural sector, economic status, level of education, and age are consistent predictors of hunger. The paper presents a regression-based approach to analyze the significance of predictors related to hunger, making it a valuable reference for our own logistic analysis, allowing for meaningful comparisons.

Tags: Madagascar - National, Food security, Socio-demographic correlates, Methods

# Risk Factors for Malnutrition Among School-Aged Children: A Cross-Sectional Study in Rural Madagascar

Aiga, Hirotsugu, Kanae Abe, Vonjy Nirina Andrianome, Emmanuel Randriamampionona, Angèle Razafitompo Razafinombana, Toshiyasu Murai, and Masahiro Hara. 2019. "Risk factors for malnutrition among school-aged children: a cross-sectional study in rural Madagascar." *BMC Public Health*: 1-13. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7013-9.

This article focuses on assessing malnutrition issues among schoolchildren aged 5-14 in Madagascar. The research reveals high rates of stunting, underweight, and unhealthy thinness, with older children from larger households being at greater risk of malnutrition. Using a cross-sectional method with logistic regression, the study emphasizes the adverse effects of food insecurity on nutrition. The survey draws on relevant research, including on stunting and underweight in children, while citing unbiased sources to carry out the study. The literature highlights the association between age and household size with the effects of stunting and underweight among school-aged children.

Tags: Madagascar - National, Malnutrition, Food security, Socio-demographic correlates

# Socioeconomic Determinants of Malnutrition Among Mothers in the Amoron'i Mania Region of Madagascar: A Cross-Sectional Study

Ravaoarisoa, Lantonirina, Lalhyss Randriamanantsaina, Julio Rakotonirina, Jean de Dieu Marie Rakotomanga, Philippe Donnen, and Michèle Wilmet Dramaix. 2018. "Socioeconomic determinants of malnutrition among mothers in the Amoron'i Mania region of Madagascar: a cross-sectional study." *BMC Nutrition* 4, no. 1: 1-8. <a href="https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-018-0212-4.">https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-018-0212-4.</a>

This article addresses maternal malnutrition in Madagascar, specifically in the Amoron'l Mania region, where 17% of mothers were found to be undernourished. The study identifies significant factors associated with malnutrition in this population, including larger household sizes, use of unsafe water sources, and an increased number of children. The article emphasizes the necessity for interventions, particularly in ensuring access to safe water and improving family planning. By analyzing the socioeconomic determinants of mothers in the region, the study's methods shed light on crucial factors



for a comprehensive survey. The literature provides valuable evidence on maternal undernutrition, highlighting its connection to household size and access to safe water resources.

Tags: Malnutrition, Socio-demographic correlates

### Social-Ecological Traps Hinder Rural Development in Southwestern Madagascar

Hänke, Hendrik, Jan Barkmann, Claudia Coral, Elin Enfors Kaustky, and Rainer Marggraf. 2017. "Social-ecological traps hinder rural development in southwestern Madagascar." *Ecology and Society* 22, no. 1. <a href="https://www.jstor.org/stable/26270090">https://www.jstor.org/stable/26270090</a>

This article explores why some regions remain poor by studying how the environment and communities interact. In southwestern Madagascar, frequent droughts and crop failures lead to seasonal income variations, making it hard for farmers to save money and causing environmental problems. This situation results in long-lasting poverty and declining environmental productivity. The study highlights the importance of considering environmental factors when addressing poverty and promoting sustainable development in similar regions.

Tags: Madagascar – Southern, Desk Review and Market Study, Poverty, Climate

# The Importance of Public Health, Poverty Reduction Programs, and Women's Empowerment in the Reduction of Child Stunting in Rural Areas of Moramanga and Morondava, Madagascar

Rabaoarisoa, Chitale Remonja, Rado Rakotoarison, Nivo Heritiana Rakotonirainy, Reziky Tiandraza Mangahasimbola, Alain Berthin Randrianarisoa, Ronan Jambou, Inès Vigan-Womas, Patrice Piola, and Rindra Vatosoa Randremanana. 2017. "The importance of public health, poverty reduction programs and women's empowerment in the reduction of child stunting in rural areas of Moramanga and Morondava, Madagascar." *PloS one* 12, no. 10: e0186493. <a href="https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0186493.">https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0186493.</a>

This article examines the prevalence of stunting in children under five, revealing a rate of 47.4% in the population. Focusing on Moramanga and Morondava Districts, the study identifies specific risk factors, including interactions with poorer families, infections, and maternal actions. The article also discusses the World Health Organization's (WHO's) plan to reduce child stunting by 40%, presenting methodological and unbiased approaches. Additionally, the journal explores risk factors for stunting, highlighting correlations with parasite worm infestation and wealth status.

Tags: Malnutrition, Poverty, Socio-demographic correlates

#### Understanding the Drivers of Food Choice and Barriers to Diet Diversity in Madagascar

Farris, Alisha R., Sarah Misyak, Keely O'Keefe, Lauren VanSicklin, and Ingrid Porton. 2019. "Understanding the drivers of food choice and barriers to diet diversity in Madagascar." *Journal of Hunger & Environmental Nutrition*. <a href="https://doi.org/10.1080/19320248.2019.1566110.">https://doi.org/10.1080/19320248.2019.1566110.</a>

This article focuses on the prevalence of malnutrition and limited dietary diversity among children in Madagascar. The authors found that factors such as sanitation, health, and cost played significant roles in decision-making regarding food choices. The article thoroughly explains the drivers of food choices in Madagascar, with references to both international and local sources. It provides valuable evidence on the factors influencing food choices, particularly the emphasis on energy-dense foods and the lack of dietary diversity.

Tags: Madagascar – National, Malnutrition, Food security, Desk Review and Market Study



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