Madagascar: Nutrition Profile

Malnutrition in childhood and pregnancy has many adverse consequences for child survival and long-term well-being. It also has far-reaching consequences for human capital, economic productivity, and national development overall. The consequences of malnutrition should be a significant concern for policymakers in Madagascar, where 6 percent of children under five are acutely malnourished or wasted (have low weight-for-height) and 42 percent of children under five are stunted (have low height-for-age) (INSTAT and UNICEF 2019).

Background

Madagascar is the fifth largest island in the world with a population of 25.6 million (INSTAT and UNICEF 2019). The population is young—41 percent is under age 15—and predominantly rural, with 80 percent of the population living in rural areas (INSTAT and UNICEF 2019). Although the fertility rate in Madagascar has been slowly declining over the past 20 years, it remains high. On average, a Malagasy woman has 4.3 children, down from six children, on average, in 1997 (INSTAT and UNICEF 2019). The total population is expected to grow to 43.7 million by 2035 (PRB 2020).

Currently, Madagascar ranks 159th out of 162 countries in terms of progress toward meeting the Sustainable Development Goals (Sachs et al. 2019). According to the most recent data, the maternal mortality rate is 426 per 100,000 live births, 16 percent of female deaths are related to pregnancy or childbearing, and one in 16 children will die before reaching five years of age (INSTAT and UNICEF 2019).

Madagascar is extremely vulnerable to climate change and climate-related hazards, experiencing an average of three natural disasters per year. In 2017 alone, cyclone Enawo and a late start to the rainy season resulted in US$400 million in damage (4 percent of the gross domestic product [GDP]) and a nearly 20 percent reduction in agricultural activity (World Bank 2020a). Agriculture contributes about 25 percent of the country's GDP and employs 74 percent of the workforce. While the agriculture sector's contributions to GDP have declined over the past decade—down from 29 percent of GDP in 2009—the country has a positive economic outlook with GDP growth expected to exceed 5 percent in the medium term. Despite this, nearly 75 percent of the population lives on less than US$1.90 a day (World Bank 2020a, World Bank 2020b).

Madagascar has recently recovered from a period of political crisis that began in 2009 after a coup d'état. Elections were held in 2014 and the final stage of re-establishing democratic institutions took place in 2016 when the Senate was installed (World Bank 2020a; USAID 2020). During the political crisis, technical and financial partners greatly reduced their support and Madagascar was unable to take full advantage of global platforms, such as Scaling Up Nutrition (SUN), further exacerbating its nutrition and food security situation (INSTAT 2013a).

Nutrition and Food Security Situation

The latest Integrated Food Security Phase Classification (IPC) analysis, released in April 2020, estimates that 554,000 people are projected to be in IPC Phase 3: "Crisis" and Phase 4: "Emergency" during the April–July 2020. However, the likely impacts of the COVID-19 pandemic were not included in the latest estimation, and, therefore, the food security situation is expected to be more severe. Rice and maize production have declined, with rice being the hardest hit; as of 2020, rice output had declined by 5 percent from the previous year but increased by 4 percent compared to the five-year average (FAO 2020). This is especially concerning because rice is the preferred staple of many Malagasy. Portions

of the southern regions of Atsimo Andrefana and Androy are currently most at risk, experiencing crisis levels of food insecurity. The southeastern regions of Vatovavy Fitovinany, Atsimo Atsinanana, and Anosy are currently experiencing stressed levels of food insecurity and are projected to remain so through mid-2018 (FEWS NET 2020).

Food insecurity and the spread of disease due to climate hazards, such as flooding, have contributed to high levels of malnutrition across the country. Wasting affects 6 percent of children under five. In several regions, this number exceeds the 10 percent threshold that is considered high by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF): Vatovavy Fitovinany (13 percent), Betsiboka (11 percent), and Menabe (11 percent) (INSTAT and UNICEF 2019; WHO and UNICEF 2017). Wasting levels peak among children 12–17 months (9 percent) (INSTAT and UNICEF 2019).

Cases of diarrhea, fever, and acute respiratory infections are highest among children 12–23 months. The prevalence of underweight in children under five years of age decreased to 26 percent in 2018, from 32 percent in 2012–2013. The rates of exclusive breastfeeding have also increased in recent years, from 42 percent in 2012–2013 to 51 percent in 2018 (INSTAT 2013b; INSTAT and UNICEF 2019). Additionally, childbearing begins early in Madagascar, which can have serious consequences in terms of nutritional status (INSTAT 2013c).

All but two of Madagascar's 22 regions have a very high prevalence of stunting (defined by WHO/UNICEF as ≥ 30 percent). Of these regions, those with the highest levels of stunting include Vakinankaratra (60 percent), Amoron'i Mania (55 percent), Haute Matsiatra (54 percent), and Bongolava (52 percent). Only Atsimo Atsinanana (20 percent) and Sofia (29 percent) are below the threshold, which is still categorized as high by WHO and UNICEF (INSTAT and UNICEF 2019; WHO and UNICEF 2017). The level of stunting peaks at 18–23 months (51 percent). According to maternal education and wealth levels, differences in stunting levels can be seen—39 percent of children whose mothers have secondary education or higher are stunted, while the rate rises to 45 percent among children whose mothers only had a primary school education. The prevalence of stunting among children whose mothers received no formal education is slightly lower than among those whose mothers attended primary school, at 39 percent. Additionally, the prevalence of stunting typically decreases as household wealth increases—36 percent of children in the highest wealth quintile are stunted and 41 percent of children in the lowest wealth quintile are stunted. Paradoxically, children in the second and middle quintiles have higher prevalence of stunting than those in the lowest (both 45 percent) (INSTAT and UNICEF 2019).

Madagascar Nutrition Data (ENSOMD 2012–2013; MICS 2018)		
Population 2018 (UNICEF 2019)	25.6 million	
Population under 5 years (0–59 months) 2018 (UNICEF 2019)	3.9 million	
	DHS 2011	DHS 2016
Prevalence of stunting among children under 5 years (0–59 months)	47%	42%
Prevalence of underweight among children under 5 years (0–59 months)	32%	26%
Prevalence of wasting among children under 5 years (0–59 months)	8%	6%
Prevalence of low birth weight (less than 2.5 kg) (of children whose birth weights are known)	11%	13%
Prevalence of children 0–5 months exclusively breastfed	42%	51%
Prevalence of early initiation of breastfeeding (i.e., put to the breast within one hour of birth)	66%	45%
Prevalence of children who receive a pre-lacteal feed	25%	NA
Prevalence of breastfed children 6–23 months receiving minimum acceptable diet	NA	27%
Coverage of iron for pregnant women (for at least 90 days)	7%	NA
Coverage of vitamin A supplements for children (6–59 months in the last 6 months)	43%	NA

NA: Not Available

Global and Regional Commitment to Nutrition and Agriculture

Madagascar has made the following global and regional commitments to nutrition and agriculture:

Year of Commitment	Name	Description
2012	Ending Preventable Child and Maternal Deaths: A Promise Renewed	Madagascar pledged to reduce under-5 mortality to 20 or fewer deaths per 1,000 live births by 2035 by reducing the leading preventable causes of child mortality, including undernutrition (UNICEF 2017).
2012	Scaling Up Nutrition (SUN) Movement	This global movement unites national leaders, civil society, bilateral and multilateral organizations, donors, businesses, and researchers in a collective effort to improve nutrition. Madagascar has a private sector platform (Anjaramasoandro), a researcher's platform (Mikasa), a United Nations and Donor platform, and a decentralized civil society network (HINA). There is also a champion's network, comprising artists and athletes and a pool of nutrition-aware journalists (SUN 2017).
2013	Comprehensive Africa Agriculture Development Programme (CAADP) Compact	This Africa-led program brings together governments and diverse stakeholders to reduce hunger and poverty and promote economic growth in African countries through agricultural development (New Partnership for Africa's Development 2009).

National Nutrition Policies/Legislation, Strategies and Initiatives

Madagascar's commitment to improving nutrition is outlined in the following documents, which align with the government's National Development Plan (NDP) 2015–2019:

- National Food and Nutrition Plan 2017–2021 (PNAN III)
- National Plan for Investment in Agriculture, Livestock and Fisheries 2016–2020 (PNIAEP)
- Malagasy Government's Universal Health Coverage Strategy (2015)
- Government council meeting minutes October 7th, November 18th 2021 for the emergency in the south
- Health Sector Development Plan 2020–2024

The Government of Madagascar is finalizing an implementation plan, budget, and monitoring and evaluation plan to accompany the recently approved PNAN III. The government is also finalizing a new 15-year National Nutrition Policy. In In 2004/2005, the government institutionalized Madagascar's National Community Nutrition Program (*Programme National de Nutrition Communautaire* [PNNC]), which was scaled up to all districts. Program services are contracted to local nongovernmental organizations that report to regional units of the National Nutrition Office. Community nutrition workers (*agent communautaire de la nutrition [ACN])* provide the services, who are usually women elected by the communities. The program conducts monthly growth monitoring sessions, which pregnant and lactating women and children under five attend, during which behavior change messages are shared and cooking demonstrations are conducted (Fernald et al. 2016).

USAID Programs: Accelerating Progress in Nutrition

As of November 2020, the following USAID programs with a focus on nutrition were active in Madagascar:

Selected Projects and Programs Incorporating Nutrition in Madagascar		
Name	**Dates**	**Description**
Accessible Continuum of Care and Essential Services Sustained (ACCESS)	2018–2023	This program builds the capacity of the Ministry of Public Health (MOPH) actors at the district level and below in all districts in the implementation regions to design, develop, manage, deliver, monitor, and evaluate health services and programs in their catchment areas. Work at the national level focuses on informing policy, developing guidelines, as well as advocacy on key health service delivery issues. ACCESS improves the clinical skills of primary health care providers to deliver high-quality, accessible preventive and curative health services, and to reinforce the leadership and governance skills of regional and district level managers. To expand the reach of the public health system, the program improves the skills and motivation of community health volunteers (CHVs) to deliver quality health services and ensure they work under the supervision of their respective centre de santé de base (CSB). Finally, ACCESS promotes positive health behaviors, including care seeking behaviors in the target communities through a comprehensive and contextualized social and behavior change (SBC) approach and improve the capacity of the MOPH and local institutions to design, implement, monitor, and evaluate SBC activities.
BHA contribution to UNICEF	2021–2022	BHA is supporting UNICEF with procurement of ready-to-use therapeutic food for the treatment of severely acutely malnourished children, nutrition surveillance, and nutrition supply chain strengthening and integration.
BHA Contribution to the World Food Programme (WFP)	2021–2022	BHA is supporting WFP Strategic Outcome 1 (activities 1): "Crisis-affected women, men, boys and girls, in targeted areas are able to meet and recover their basic food and nutrition needs before, during and after crises." WFP will provide unconditional food distribution food to insecure households, preventive supplementary nutrition to pregnant and lactating women and children under five years of age, and treatment of moderate acute malnutrition for children under five.
Fiovana	2019–2024	FIOVANA is a BHA Resilience and Food Security Activity (RFSA) designed to achieve sustainable improvement of food and nutrition security and resilience of vulnerable populations in two regions of southeastern Madagascar: Vatovavy-Fitovinany and Atsimo-Atsinanana. FIOVANA plans to reach 71,467 households and 428,800 participants. The activity has three main objectives: (1) sustained improvement in health and nutritional status of women of reproductive age, adolescent girls, and children under 5 years; (2) household incomes and production are sufficient to access food and non-food essentials and build savings; and (3) enhanced social and ecological risk management.

Maharo	2019–2024	This BHA RFSA prevents and reduces acute food insecurity among the most vulnerable people, households, and communities in the Androy and Atsimo Andrefana regions. Maharo intends to reach 55,880 vulnerable households and 279,398 participants. The program has four main objectives: (1) communities and the most vulnerable households and individuals are supported by inclusive and effective social services and safety nets; (2) the nutritional status of pregnant and lactating women, adolescents (particularly girls), and children under five improves; (3) extremely poor and vulnerable households and women, youth, and people with disabilities within those households have more resilient livelihoods; and (4) vulnerable households, communities, and institutions have improved resilience to disasters, shocks, and climate-related stresses.
Supporting Health Outcomes through Private Sectors (SHOPS) Plus Activity	2017–2021	SHOPS Plus focuses on expanding access to and use of priority family planning and reproductive health products. It includes four main program components: (1) assess the family planning commodities and services market; (2) collaborate with private companies to expand corporate social responsibility initiatives for health; (3) increase provider access to finance through partnerships with local financial institutions; and (4) strengthen government systems, particularly the commodities, logistics, and supply system (SHOPS Plus 2017). SHOPS Plus is working with the Ministry of Health, National Nutrition Office, and MIKOLO project to distribute Zazatomady, a micronutrient powder product, through communities, a network of private clinics, and pharmaceutical channels.
USAID Community Capacity for Health Program (Mahefa Miaraka)	2016–2021	This program increases access to and use of key health services, including maternal, neonatal, and child health; family planning and reproductive health; malaria prevention and treatment; water, sanitation, and hygiene; and nutrition.

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