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# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 13-Feb-2017 | Report No: PIDISDSC20698



**BASIC INFORMATION**

**A. Basic Project Data**

Country Madagascar	Project ID P160848	Parent Project ID (if any)	Project Name Madagascar:An Integrated Approach to Improving Nutrition Outcomes (P160848)
Region AFRICA	Estimated Appraisal Date Jul 03, 2017	Estimated Board Date Sep 28, 2017	Practice Area (Lead) Health, Nutrition & Population
Lending Instrument Investment Project Financing	Borrower(s) National Nutrition Office	Implementing Agency National Community Nutrition Program Management Unit,Ministry of Health,Unité de Coordination des Projets (UCP) - Ministry of Public Health	

**Proposed Development Objective(s)**

Increase utilization of an evidence-based package of maternal and child health and nutrition interventions and improve key nutrition behaviors that are known to reduce stunting in targeted regions

**Financing (in USD Million)**

Financing Source	Amount
Free-standing Cofinancing Trust Fund	10.00
International Development Association (IDA)	40.00
<b>Total Project Cost</b>	<b>40.00</b>

Environmental Assessment Category

B-Partial Assessment

Concept Review Decision

Track II-The review did authorize the preparation to continue

**Note to Task Teams:** End of system generated content, document is editable from here.



Other Decision (as needed)

## B. Introduction and Context

### Country Context

- 1. Madagascar, an island nation of approximately 24 million people, has significant human development and economic development challenges despite unmatched biodiversity and natural resources.** With strategic investments in human capital and more effective management of its wealth of natural resources, there is great potential for long term growth. But, the country is plagued with cyclical fragility and suffers from very poor governance. Over the last 15 years, there have been two political crises each lasting five years; additionally, increasing severe climate related natural disasters have left over five million people in drought and flood prone areas with rates of food insecurity as high as 80 percent in the most impacted areas of the country. As a result, periods of growth have repeatedly been interrupted by instability that has decimated social sector outcomes, deterred investors, depressed tourism, destabilized foreign aid, and deepened poverty. Rapid population growth has also been an important driver of fragility. The population doubled between 1990 and 2013, with half of this increase taking place since 2003. Between now and 2030, the latest UN projections suggest that the population of Madagascar will increase by approximately 50 percent to 36 million people, while the population aged 15-24 will increase by about 2 million. The anticipated increase would make the population share of children under 15 one of the highest globally. This is significant as households with a higher level of dependents under age 15 are more vulnerable to the risk of poverty.
- 2. Today, Madagascar is one of the poorest countries in the world with 77.8 percent of its mostly rural population living in absolute poverty.**<sup>1</sup> Estimates show that, Madagascar had a lower per capita income in 2010 than in 1960. The country ranks 154 (out of 188) in the 2014 Human Development Index (HDI). Development indicators for rural areas lag behind those for urban areas: incomes are lower, infant mortality rates are higher, life expectancy is shorter, illiteracy is more widespread, malnutrition is more prevalent, and greater proportions of people lack access to clean water and proper sanitation conditions. A strikingly high proportion of the population (close to 60 percent) is estimated to be extremely poor based on the minimum food intake methodology. This means that close to 13 million Malagasy people live on resources that do not allow them to afford 2,100 calories a day, therefore they do not have access to enough daily food to sustain themselves and their families.
- 3. The end of the most recent political crisis (2009-2014) has paved the way for the country to address some of sources of fragility.** The priority areas for reform and investments identified by the new government are to: (i) improve governance and restore the rule of law (including national reconciliation,

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<sup>1</sup> The poverty rate for 2015, living on US\$ 1.90 (2011 PPP), see Macro Poverty Outlook for Madagascar April 2016, The World Bank.



security reforms, and accountability reforms); (ii) address the high rate of poverty across the country and promote social cohesion (including through decentralization and increased basic services); and (iii) bolster the private sector and attract investors as a way to generate growth and employment. To help reach its objectives, the Government held its first donor's conference in Paris, France in December 2016. The World Bank Group pledged US\$ 1.3 billion over the next three years to support Madagascar's development agenda; this funding will help the Government pursue the necessary reforms to boost the economy and expand access to basic services and markets, putting the country on the right track for inclusive and sustainable growth.

### C. Sectoral and Institutional Context

#### 4. **Madagascar did not achieve any of its Millennium Development Goals (MDGs) by 2015.**

Madagascar's epidemiological profile remains comparable to many low-income countries with a high communicable disease burden. Almost 30 percent of all deaths in Madagascar are still attributable to preventable and infectious and parasitic diseases, with the burden of disease falling disproportionately on the poor. While there have been some gains in the reduction of overall child mortality prior to 2009 (from 92 per 1,000 live births in 2003-2004 to 72 per 1,000 live births in 2008-2009), the infant mortality rate has stagnated at the national level since 2008 (from 48 per 1,000 live births in 2008 to 42 per 1,000 live births in 2012). Maternal mortality ratios have increased over the last eight years from 469 per 100,000 live births in 2004 (DHS) to 478 per 100,000 live births in 2012 (MDG Survey, 2012-2013). The total fertility rate (TFR) has declined from an estimated 5.2 births per woman in 2004 (DHS, 2003-2004) to 5.0 births per woman in 2012 (MDG Survey, 2012-2013), but remains high among the poor. The TFR of women in the lowest wealth quintile is 2.5 times greater than women in the highest wealth quintile (MDG Survey, 2012-2013). In addition, the poorest regions carry the highest burden of neglected tropical diseases (NTDs) in the country.<sup>2</sup> Over the past decade, non-communicable diseases are increasing in the population, resulting in a dual burden of disease which is taxing a fragile health system.

### Nutrition: a National Emergency

#### 5. **Madagascar has the fourth highest chronic malnutrition rate in the world with forty-seven percent of all children 0-5 years of age stunted.**

Stunting is defined as height-for-age less than minus two z-scores below the median of the WHO child growth standards. In other words, when a child is compared to the average child in the same cohort, she/he is significantly shorter discounting the difference due to natural variations in height. The causes of malnutrition are multifactorial and the result of a combination of immediate, underlying and basic causes. At the immediate level, nutritional status is ultimately determined by the availability of nutrients to the body to meet its requirements as well as recurrent episodes of illnesses (for example, diarrhea). Underlying causes are related to maternal and child care practices, food security (access, availability and utilization of food), water and sanitation and personal hygiene. The basic

<sup>2</sup> NTDs (such as soil-transmitted helminthiasis, lymphatic filariasis, and schistosomiasis) are responsible for absenteeism from school, and as many poor households are malnourished, NTDs and other illnesses further impact the overall well-being of the child.



causes of undernutrition are rooted in institutional and economic issues such as poverty governance and stewardship capacities as well as natural calamities. Stunting rates range from 40% to 70%, with the highest rates in regions with greater food production (predominantly rice), further underscoring that addressing malnutrition in Madagascar means tackling issues beyond just caloric intake, e.g. behavior change to promote appropriate and diverse diets.

6. **Achieving sustainable outcomes is a challenge that will require addressing the critical determinants of nutrition that span multiple sectors.** A key first priority is improving actions that are in the purview of Madagascar’s health and nutrition sectors. Good indicators on maternal and child health and nutrition (MCHN) interventions and behaviors are an essential starting point that enables synergies with other sectors for improvements in nutritional outcomes, yet currently these indicators are very low in the country (Table 1).

**Table 1: key health/nutrition service and behavior indicators**

Indicators	%	Data source (most recent available)
<i>Child health and nutrition indicators</i>		
Child health monitoring (0 to 11 months and 1 to 5 years old)	52	Health Statistics Yearbook
Integrated management of child illness (IMCI)	34	IMCI Strategic Plan
Receipt of Vitamin A supplements in previous 6 months	43	INSTAT 2012-13
Exclusive breastfeeding (under 6 months)	42	INSTAT 2012-13
Consumption of iron-rich foods (6-23 months)	46	DHS 2009
Consumption of foods rich in Vitamin A (6-23 months)	43	INSTAT 2012-13
Vaccination (up to one year)	36	INSTAT 2012-13
Complementary food (LNS) for children*	Pilot	Mahay Pilot
Community based nutrition education	35	PNNC Data
<i>Maternal health and nutrition:</i>		
Antenatal care visit (at least one)	59	Health Statistics Yearbook
Antenatal care visit (at least four)	26	Health Statistics Yearbook
Took 90+ iron tablets during pregnancy	8	DHS 2009
Assisted delivery	26	Health Statistics Yearbook
Reproductive health and family planning	28	Health Statistics Yearbook
Assisted delivery	26	Health Statistics Yearbook
Balanced energy/protein supplementation for pregnant women*	Pilot	Mahay Pilot

\*The Mahay Pilot, a randomized control trial under PAUSENS, specifically uses lipid-based nutrient supplementation (LNS) formulated for pregnant women and children in Madagascar in one of the arms of the study.

7. **Malnutrition, and childhood stunting in particular, present a significant challenge to socio-economic growth in Madagascar.** Childhood stunting elevates the risk of child morbidity and mortality, with increased potential for intergenerational impact. In addition, stunting is associated with cognitive delays



and low educational attainment. Children who do not reach their full development potential at an early age are more likely to do poorly in school. For every 10 percent increase in stunting at national level, the proportion of children reaching the final grade of primary school drops by 7.9 percent thus decreasing lifelong income earning potential and labor force productivity. Malnutrition also increases the costs of health care, taxes social safety nets—largely borne by the public sector—and lowers the efficacy of investments in other social sector services. Globally, the costs of child undernutrition ranges from 4 percent to 11 percent of GDP. A recent UNICEF analysis suggests that Madagascar’s economy loses approximately \$740 million or 7% of GDP annually due to malnutrition (UNICEF, 2015).

**8. The first 1,000 days which is conception to two years of age is a critical window to address stunting.**

There is strong global evidence showing that the “first 1000 days” of a child’s life is the most critical for addressing malnutrition; this is the segment of the life cycle when most physical growth, brain development, and human capital formation occurs. If a child does not receive proper nutrition during this critical period, irreversible damage occurs. In Madagascar, the period of intervention is even shorter for some children. On average, 40% of Malagasy children are stunted by the age of 12 months as opposed to 24 months in other countries. In addition, growth retardation starts during pregnancy; 25-30% of Malagasy children are born stunted. Thirty-six percent of women have their first pregnancy before the age of 18, and maternal malnutrition rates are high at 27%, underscoring the importance of focusing on a woman during pregnancy and improving access to reproductive health and nutrition services. Micronutrient deficiencies in Vitamin A, zinc, iron, and iodine are common with children often suffering from multiple micronutrient deficiencies. Micronutrient deficiency contributes to stunting and poor health and reduced development outcomes; this is of particular concern nationally as 50% of children aged 6-59 months and 35% of women of reproductive age are anemic and 52% of children have Vitamin A Deficiency.

**9. In addition to the burden of stunting described above, rates of acute malnutrition in Madagascar are high.**

Nationally, 8.2 percent of children 0-5 years are wasted (too thin for their height). This is in part linked to high household food insecurity in the “deep South”, where several years of cyclones, droughts, and flooding have decimated crops, reduced quality and quantity of food available to households, and resulted in emergency-level spikes in acute malnutrition. Moderately and severely wasted children have 3 and 9.4 times greater risk respectively of mortality compared to non-wasted children.<sup>3</sup> Unlike stunting, which is caused by chronic exposure to the nutritional stresses described above, wasting may be short term and reversible if a child is able to access sufficient dietary intake and avoid infectious disease (e.g. enteric disease, malaria, and respiratory infections). Repeated episodes of acute malnutrition also puts a child at risk for becoming stunted and is likely contributing to the stunting burden in Madagascar.

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<sup>3</sup> A key example is the “Strategie Avancee”, which equips trained facility staff to be able to bring critical services such as vaccinations and antenatal care into the community (through mobile cold chains etc.) up to 15 kilometers from the health facility is not adequately funded.



10. **Addressing chronic malnutrition is a relatively new priority for Madagascar.** Historically, Government only prioritized addressing the nutritional impacts of food insecurity. As such, for decades most efforts were focused on reducing acute malnutrition. This changed in 2012, largely based on the results of a long term multi-round impact evaluation of the country's community based nutrition efforts (led by the World Bank) and the emerging global evidence on chronic malnutrition and its long term development impact. Based on this evidence, the Government revised its National Nutrition Strategy (2012-2015) to prioritize the first 1,000 days of life. The country also signed on as a Scaling-up for Nutrition (SUN) country in 2012, this global initiative unites people—from civil society, the United Nations, donors, businesses and researchers—in a collective effort to improve nutrition. In addition, the Government took advantage of the preparation of the World Bank supported multisectoral Emergency Support to Critical Education, Health and Nutrition Services Project (P131945, PAUSENS 2013-2017) to finance a large scale impact evaluation on chronic malnutrition and early child stimulation as well as to test a suite of behavior change interventions to address stunting. Today, malnutrition is one of the topmost priorities for the Government of Madagascar and the motivation for approaching the World Bank for support of a proposed project focused on improving long term nutrition outcomes. The evidence is undeniable; unless Madagascar significantly improves the nutrition outcomes of their children under five years of age, the country will not be able to reach its full socio-economic potential for decades to come.
11. **The Bank has strong collaboration with key partners in the health and nutrition sectors.** This includes WHO, UNICEF, UNFPA, the World Food Programme (WFP), USAID, and GIZ as well as other organizations as part of local level partner groups. In health, most of the current collaboration is focused around the Universal Health Coverage Strategy. In nutrition, both UNICEF and the World Food Programme have done analytic work on nutrition, including chronic malnutrition, but investments have largely been focused on mitigating the impacts of moderate and severe acute malnutrition. While private sector collaboration in both health and nutrition is still nascent, with the support of the Bank the Government has used PAUSENS resources to contract Tajanaka Foods, (a subsidiary of GB Foods and a private sector partner under the SUN platform), employing farmers to locally produce the treatment for acute malnutrition with a small mark-up on the product as opposed to using international organizations such as UNICEF or WFP to import the product. Aside from PAUSENS and this new proposed IDA operation, there are currently no other major investments to address chronic malnutrition in the country.

### **Institutional Set-Up**

12. **Health and nutrition are two separate sectors in Madagascar.** The Ministry of Health sits directly under the President's Office and is led by the Minister of Health who is appointed by Presidential decree. The health system has three tiers of management: central, regional and district. Health services can be accessed at four different levels: primary care facilities (Centre de Santé de Base: CSB) 1 and 2; district referral hospitals (Centre Hospitalier de référence de District: CHR); regional referral hospitals (Centre Hospitalier de référence Régionale: CHRR); and university hospitals (Centres Hospitaliers Universitaires: CHU) including specialized centers. Each health district typically contains 10 to 25 primary care facilities and a hospital.



The number of community health workers (CHW) is estimated at 38,000 nationwide (two CHWs per fokontany (village) regardless of the size of the village) and they report directly to health centers. In 2005, as a way to prioritize the nutrition agenda in the country, the Government created the National Nutrition Office (ONN). The ONN is directly attached to the Prime Minister's Office and headed by a National Coordinator which is not a ministerial position but the equivalent to a General Director within a Ministry. This creates a unique challenge especially when coordinating with other Ministers. Given the hierarchy, the National Coordinator can neither formally mobilize the Ministers nor sit on the council of the government or Ministers. The ONN has administrative and financial autonomy, and is tasked with the coordination and the implementation of the National Nutrition Policy and Strategy, as well as the monitoring and evaluation, and the research and development related to the policy and strategy. Regional Nutrition Offices (ORNs) ensure the multisectoral coordination of nutrition interventions. The ONN oversees three operational programs: (i) Nutritional Security Prevention (NPS) Program; (ii) National Community Nutrition Program (PNNC); and (iii) Global Fund Management Unit for Tuberculosis.

13. **The Government's flagship community nutrition program, the PNNC, started as a small effort in the 1990s to protect the population from the negative impacts of periods of food insecurity but has gradually evolved to a nationwide program over time.** With this program, Madagascar is a regional pioneer for institutionalizing community nutrition, an experience that was launched almost 30 years ago. No other country in Africa has kept community nutrition programs running for this long, this is due to a number of key policy decisions, among them, the creation of the ONN under the Prime Minister's Office. Today, through a network of about 7,000 rural sites, each run by one community nutrition agent (CNA) who is selected by her community, the PNNC now reaches over 2.1 million poor mothers and children under five years of age with community-based nutrition prevention and treatment services. The main activities of the CNA include nutrition education and counseling and growth monitoring activities with household follow-up of children that are "at risk" as well as referral to the facility for severe cases. The CNAs report to the regional nutrition officers and receive supervision and monitoring support from locally contracted NGOs. With the crisis in the south of the country, CNAs are also undertaking monitoring activities to identify the acutely malnourished and providing community-based treatment for moderate malnutrition. In addition, under the recently approved World Bank integrated nutrition/social protection emergency IDA financing, unconditional cash transfers are distributed to families at the community nutrition sites. The CNAs also serve as interlocutors at community level for a number of Government and partner initiatives in health, agriculture and education. More information on this program can be found in Annex 1.
14. A rich body of analytic work and operational experience in Madagascar indicates that the low utilization of maternal, child, health and nutrition (MCHN) interventions, one of the predominant factors to improving nutrition outcomes, is due to some key systemic bottlenecks:
  - **Coverage of health and nutrition services is limited and marked by substantial inequities, particularly for health.** With approximately 3 qualified health care personnel per 10,000 inhabitants (0.95 doctor, 1.19 nurses and 0.66 midwife), Madagascar is far from the 'high' WHO standard of 22.3 health care personnel per 10,000 inhabitants (HRH census, 2011). Additionally, the limited human



resources are distributed in a highly inequitable manner. The results of the PER are stark; MoH wage expenditures on personnel in health facilities benefit the richest quintile 3.6 times more than the poorest quintile, and at least twice as much as households in any other quintile.<sup>4</sup> The National Community Nutrition Program (PNNC), while very pro-poor, only reaches 35% of its target population nationally given limited resources to implement the program.

- **On the demand side, beneficiaries face a number of financial, geographic and cultural obstacles to accessing services.** The absence of prepayment mechanisms in Madagascar, combined with a cost recovery system that does not have formal fees but requires patients to pay for some services and materials, makes public health care expensive for the poor and limits their ability to seek care. Notably, the Government has implemented a very successful fee exemption scheme which has increased utilization and improved governance (Box 3) and will also start piloting a community based health insurance model in the next year. Additionally, greater than 65 percent of the population live further than five kilometers (more than one hour's walk) from a functioning basic health facility. Yet, mandated facility based outreach programs that have proven effective are not adequately funded by the Ministry of Health. Finally, behavior-change is central to the uptake of MCHN interventions yet barriers to accessing these services persist, including a) lack of access to information/education; b) strong cultural belief systems around health and food choice; c) lack of beneficiary-centric messaging; and d) inability to move from awareness to utilization because of financial and cultural constraints.
- **Delivery of health and nutrition services is fragmented.** Primary care services and community health/nutrition services exist but despite the fundamental links between health and nutrition outcomes, there is no formalized coordinated model of delivering primary care and community-based nutrition and health services to the population. The fragmentation begins at the central health level between the Ministry of Health and the National Nutrition Office and extends to the community level. While there are some mandates for inter-sectoral coordination between the two entities,; in practice, there is very little coordination Overall, there is no joint vision between the sectors for improving maternal and child health and nutrition outcomes that can guide a unified approach to service delivery.. These issues are also mirrored at the lower levels of the system. For example, despite the complementarity between the activities of community nutrition agents (CNAs) and community health workers (CHWs), there is no established collaboration mechanism in place for service provision, supervision, data collection, reporting and management. Coordination between community health/nutrition services and primary care services is not standardized and referral systems are weak at best. While this is a major gap, especially when considering joint delivery of an integrated MCHN package through the health and nutrition sectors, this also presents a huge opportunity to improve impact by reorienting and coordinating existing systems.
- **Management and supervision functions are weak.** As noted in the PER and SDI, effective management and supervision are critical functions, particularly at regional and district levels, for

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<sup>4</sup> Non-wage recurrent expenditure shares by type of residence show that 13 percent to semi-rural or peri-urban areas, and less than 5 percent to the rural communes. Considering that approximately two-thirds of the population live in rural areas, this represents a highly unequal distribution of expenditure shares



improving quality of services. There are three main challenges to strengthening these functions: a) appropriate selection as well as the quality and modality of training staff; b) highly centralized budgets with very little autonomy on spending at lower levels; and c) domestic budgets, which primarily finance staff salaries, allocate limited resources for operational activities. At the central level, in addition to weak management function, there are capacity constraints with regards to budgeting/planning, as well as analysis and evidence-based decision making.

- **Quality of front line primary care workers is low.** As highlighted in the Service Delivery Indicator Survey<sup>5</sup> for Health (SDI, 2016), skills of health workers at primary care level is worrisome. None of the clinicians interviewed correctly diagnosed all five tracer conditions.<sup>6</sup> In addition, only 30% of facility workers<sup>7</sup> adhered to clinical guidelines overall and only 21.9 percent of providers adhered to clinical guidelines for managing maternal and neonatal complications. With regards to CHWs, there isn't a clear understanding at the MOH of how many are actually operational and the types of services they are delivering/should be delivering. In addition, there is a lack of good quality and standardized training. While the CNAs have more defined roles and responsibilities, their quality varies greatly and there are differences in how they are incentivized across the PNNC, depending on the funding source. One of the key findings of the 12-year multi-round impact evaluation of Madagascar's National Community Program<sup>8</sup> indicated that key dimensions of CNA quality (selection, training, motivation, and capacity/workload) directly impacted longer term nutritional outcomes of their clients. In all cases, evidence indicates that frontline workers (primary care and community level) could be much more efficient and effective in their job performance.
- **There is still room for improvement with regards to availability of basic inputs and infrastructure.** The SDI indicates that only 48 percent of priority drugs were available in Malagasy facilities with urban facilities having a slightly higher availability of priority drugs (50.5 percent) compared to rural facilities (47.1 percent). Only 53.4 percent of vaccines were available in health facilities and 62 percent<sup>9</sup> of health facilities in Madagascar met the minimum medical equipment requirements. This number is even lower for maternal health services as most facilities do not have basic emergency obstetric care equipment at primary care level; only 17.7 percent of all facilities (mostly district level hospitals) offer these services.<sup>10</sup>

## Financing

<sup>5</sup> The Service Delivery Indicators (SDI) provides a set of key indicators serving as a benchmark for service delivery performance in the health and education sectors in Sub-Saharan Africa. The overarching objective of the SDI is to ascertain the quality of service delivery in primary education and basic health services.

<sup>6</sup> Tracer conditions are well defined illnesses that are fairly easy to diagnose and common at primary care level. In the SDI survey these are: (malaria with anemia, diarrhea with severe dehydration, pneumonia, pulmonary tuberculosis and diabetes). Only about 0.5 percent diagnosed four cases correctly, 12.3 percent diagnosed 3 cases correctly and one third (34.8 percent) got at most 2 cases correct.

<sup>7</sup> Only 22.7 doctors and 21.5 of nurses adhered to guidelines.

<sup>8</sup> Galasso and Weber, 2016

<sup>9</sup> Private facilities had better availability of equipment (83.2 percent) compared to public facilities (56.4 percent). CSB2 typically had the best availability of equipment (70.3 percent), while First level public hospitals had the lowest (7.4 percent).

<sup>10</sup> 55.5 percent of facilities had access to toilets, 71.7 percent had access to clean water and 50.1 percent had access to electricity. Only 28.4 percent of the health facilities had access to all three types of basic infrastructure. There was a large difference, however, between the private sector (78.4 percent) and the public sector (15.2 percent).



15. **Despite the evidence of social sector outcomes as determinants of a countries' long term economic development, health and nutrition are not well prioritized in the budget.** As noted in the PER (2015), Madagascar spends less on health than most other low income countries in Sub-Saharan Africa (SSA). Since 1995, the percentage of Total Health Expenditure in GDP has remained around 4-5 percent with a slight downward trend in recent years, falling to 3 percent in 2014.<sup>11</sup> In real terms, per capita expenditure has remained at around US\$20 since 1995. This is far below the SSA average of US\$84. Similar to other low income countries in SSA, the General Government Health Expenditure (GGHE) as a share of General Government Expenditure was estimated at 10.2 percent in 2014. But, GGHE as a share of GDP at 1.5 percent in 2014 is relatively low<sup>12</sup> compared with other LICs. Only 20 percent of the health sector budget is financed by domestic Government resources with the bulk of it used to pay salaries. Given the low government expenditure on health, households are the primary funders of the health sector; in 2014, it was estimated that 41.4 percent of the Total Health Expenditure was from household Out-of-Pocket expenditures.<sup>13</sup> With regards to the nutrition sector, tracking budget allocation and expenditure is challenging because nutrition interventions are provided through multiple sectors and channels. However, the National Nutrition Office (ONN) budget can serve as a very useful proxy for the trends and the magnitude of nutrition-specific expenditures. Over the past several years, starting during the crisis, there have been severe cuts to the ONN budget with the envelope declining from US\$4,622,000 in 2013 to US\$1,700,000 in 2016. As with health, most of the domestic resource envelope is allocated to central-level salaries and has resulted in limited resources for operational activities as well as a reduction in the working hours of regional staff, posing challenges to fulfilling the ONN's multi-sector coordination program management mandate.

### Defining a Minimum Comprehensive Package

16. **Significant reductions in stunting can be achieved if an integrated package of evidenced-based direct nutrition and nutrition-sensitive MCHN interventions are delivered at scale through a coordinated primary care and community services platform.**<sup>14</sup> This package should be utilized by a target population of pregnant women and children during the critical first 1,000 days and through five years of age. While there are some MCHN interventions being delivered in the country, there is no defined integrated national minimum package of MCHN interventions focused on stunting (to which pregnant women, infants and children are entitled) being delivered in a coordinated manner between the health and nutrition sectors.

17. **A key outcome of the Bank's identification mission (Oct/Nov 2016) was agreement by the Government of Madagascar on a minimum package of MCHN services prioritizing the first 1,000**

<sup>11</sup> WHO Global Health Expenditure database

<sup>12</sup> Estimates on GGHE from WHO Global Health Expenditure database

<sup>13</sup> *ibid*

<sup>14</sup> Bhutta, Z.A., et al. (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *Lancet*, **382**(9890): p. 452-77.



**days (Table 2).** Importantly, the ONN has also agreed to include this package in the forthcoming National Nutrition Strategy as the national minimum package to contribute to improvements in chronic malnutrition outcomes. Global evidence has shown that when these ten direct-nutrition interventions (Table 2 - direct nutrition interventions) are all delivered at scale, stunting rates can be reduced by 15-20%. Evidence also shows that when a strong health sector response ensures maternal and child health interventions (MCH) are utilized through primary care and community level services, further reductions in stunting can be achieved. MCH interventions also provide essential delivery platforms for some of the direct nutrition interventions.<sup>15</sup> As such, a set of key nutrition-sensitive MCH interventions comprise the second set of interventions included in the minimum package (Table 2- nine-nutrition-sensitive health MCH interventions). Given the multidimensional nature of nutrition and health, defining a package to improve health and nutrition outcomes rather than promoting ad-hoc utilization of interventions is more effective because the package is designed to provide a **continuum of services** during different periods of pregnancy, early on after childbirth and a child’s early life.<sup>16</sup>

**Table 2: MCHN Minimum Package for Madagascar**

Direct Nutrition Interventions (Lancet)	Nutrition-Sensitive MCH Interventions
<ul style="list-style-type: none"> <li>• Breastfeeding promotion and complementary feed education</li> <li>• Micronutrient supplementation in pregnancy</li> <li>• Balanced energy-protein supplementation for pregnant women</li> <li>• Vitamin A supplementation</li> <li>• Therapeutic zinc with ORS for the treatment of severe diarrhea</li> <li>• Severe acute malnutrition (SAM) treatment</li> <li>• Public provision of complementary foods for children</li> <li>• Management of Moderate Acute Malnutrition</li> <li>• <b>Salt iodization (education/information)</b></li> <li>• <b>Fortification of staples (education/information)</b></li> </ul>	<ol style="list-style-type: none"> <li>1) Antenatal care</li> <li>2) Assisted delivery</li> <li>3) Postnatal care</li> <li>4) Vaccination</li> <li>5) Child health monitoring</li> <li>6) Integrated management of child illness (IMCI)*</li> <li>7) Reproductive health and family planning</li> <li>8) Hygiene education</li> <li>9) Capacity strengthening for the community outreach services</li> </ol>

\*IMCI is an integrated approach to child health that focuses on the well-being of the whole child. IMCI aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and health facilities.

<sup>15</sup> For example, during ante-natal care, a pregnant woman can receive micronutrient supplementation.

<sup>16</sup> Defining and increasing utilization of a comprehensive package, rather than ad-hoc utilization of a subset of interventions, is critical because a comprehensive package consists of a continuum of services delivered during different time periods pregnancy and of a child’s early life. The direct-nutrition interventions in the package are designed to respond to changing nutritional needs and prevent different deficits as the child ages. Nutrition-sensitive health interventions help assure that the impact of nutrition interventions is not negated by poor birth outcomes or recurrent illness in early childhood. It is this synergistic character of the package that maximizes the impact of the interventions on mother and child’s nutritional status and her health and physical and cognitive development.



## D. Relationship to CPF

18. The Government of Madagascar has successfully drafted a National Development Plan (PND) 2015 -2019 for a “Modern and Prosperous Nation”; this plan provides the anchor from which to revitalize the national public health and nutrition programs. The PND establishes ambitious objectives for economic growth along with a range of significant human, social and environmental improvements and recognizes that achieving these objectives will require adequate human capital. Within this context, the proposed operation will directly contribute to three strategic objectives of the PND: (i) governance, rule of law, security, decentralization, democracy, national strategy; (ii) adequate human capital for the development process; and (iii) promotion of natural capital and greater resilience to disaster-related risks. The proposed Project will be a key element of the forthcoming Country Partnership Framework (CPF) which supports the vision of the PND. Specifically, the project is linked to Focus Area I under the CPF: Increasing Resilience and Sustainability, and under that it will be a core contribution to achieving “Objective 1: Strengthened human development with a focus on early years.” As demonstrated in the Systematic Country Diagnostic (SCD), aiming for higher human capital and enhancing effective decentralization for better local service delivery will contribute to the Bank’s twin goals by having a greater impact on poverty reduction and contributing to shared prosperity by removing key constraints identified in the SCD and strengthening systems for better human development results. As such, the proposed operation, with its focus on removing key bottlenecks for improving utilization of a package of services that contributes to better nutrition and health outcomes is a key pillar for improving human capital and supports the objectives of the CPF.
19. Madagascar is a priority country under the World Bank’s “Investing in Early Years” agenda and the proposed operation is also a key contribution to this initiative. This Agenda, to which Madagascar’s Minister of Finance committed during the 2016 Annual Meetings, is focused on significantly increasing investments that support interventions from pregnancy to six years of age, given the importance of good early child development outcomes on longer term development and productivity of the workforce. The Bank has committed to contributing to a measurable increase in funding by 2020 in this key area. The Project will also be a contribution to key sectoral strategies and initiatives including: a) the National Universal Health Coverage Strategy; b) the National Health Strategy; and c) the National Maternal Mortality Action Plan. In addition, the Project will be fully aligned with the new National Nutrition Strategy (2016-2020) which has provided a timely platform to revitalize national public nutrition services and an opportunity for the World Bank to partner with the Government of Madagascar in addressing the crisis of malnutrition through a unified vision.<sup>17</sup>

## I. PROPOSED PDO/RESULTS

### A. Proposed Development Objective(s)

<sup>17</sup> In addition, the Government has officially renewed its commitment to addressing malnutrition by joining the Scaling Up Nutrition (SUN) movement in 2012 and developing a multi-sectorial National Nutrition Action Plan II (2012–2015).



Increase utilization of an evidence-based package of maternal and child health and nutrition interventions and improve key nutrition behaviors that are known to reduce stunting in targeted regions.<sup>18</sup>

**Note to Task Teams:** The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

## B. Key Results

The key result (outcome) indicators will include:

- Number/percentage of pregnant women receiving micronutrient supplementation
- Percentage of children 0-6 months who are exclusively breastfed
- Number/percentage of children between the ages of 0 and 24 months who are monitored by community nutrition agents
- Number/percentage of birth (deliveries) attended by skilled health personnel
- Number/percentage of children between the age of 6 and 59 months receiving Vitamin A supplementation
- Number/percentage of children fully immunized— under 12 months (against DTCPHepHib3)

Most data will be collected using routine health/nutrition HMIS. A baseline and end-line population survey will be undertaken and will provide information on the breastfeeding indicator. For other indicators, the population survey will be triangulated with project data.

At the intermediate level, a subset of indicators will be focused on various quality measures of the MCHN interventions being tracked at PDO level.

End targets for PDO indicators will be set with an appropriate level of ambition taking into account introduction of some novel service delivery mechanisms under the proposed operation, low levels of service delivery in the country and the absorptive capacities of the MOH and ONN.

## C. Concept Description

This operation is a contribution to the first phase of the Government's longer term vision in achieving greater human capital. In this context, this project will aim to increase the utilization of a defined minimum package of maternal and child health/nutrition services and improve key nutrition behaviors known to reduce stunting by addressing a focused set of bottlenecks as previously described. Necessarily, the proposed operation will focus on improving coordination between the nutrition and health sectors to jointly deliver the package. The project will also provide the necessary analytic and technical assistance support to inform the Government on the more complex and longer term institutional, financing, and policy reforms required to achieve and sustain results over time.

**Note to Task Teams:** The following sections are system generated and can only be edited online in the Portal.

<sup>18</sup> a) Utilization : proportion of women and children receiving interventions; b) Priority for the first 1000 days, from conception to the 2nd years of the children (impact group to age 5); c) Based on scientific evidence



**SAFEGUARDS**

**A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

At the National level, the project will target the health facilities. As the Project intervention will increase quality of health services and population access to the health in general; delivery of essential package like immunizations, vitamin supplementation to both pregnant women and children with procurement and delivery of relevant health commodities (drugs); delivery of essential package of equipment to health facilities to improve the service to a minimum acceptable standard; and support to community nutrition activities to the existing health facilities. No negative environmental impacts will be provided by the proposed project. But the improvement of access and utilization of health services, could increase the medical waste production in the different types of health facilities which could adversely affect the environment and local population if not managed and eliminated appropriately. Social risks are limited. No civil works will be scheduled in the project design. The project is not expected to have long term significant negative social or environmental impacts and is classified as Category B.

**B. Borrower’s Institutional Capacity for Safeguard Policies**

The Ministry of Health has good experience in implementing the Medical Waste Management Plan supported under the health component of the Emergency Support to Critical Education, Health and Nutrition Services Project (PAUSENS, P131045). In the health sector, there is an operational, coordinating unit (SAGS), that is in charge of the supervision and monitoring of the implementation of the National Medical Waste Management Policy.

**C. Environmental and Social Safeguards Specialists on the Team**

Paul-Jean Feno, Peter F. B. A. Lafere

**D. Policies that might apply**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	As the project intervention will increase quality of health services and population access to the health in general; delivery of essential package like immunizations, vitamin supplementation to both pregnant women and children with procurement and delivery of relevant health commodities (drugs); delivery of essential package of equipment to health facilities to improve the service to a minimum acceptable standard; and support to community nutrition activities to the existing health facilities. In view of the above, no negative environmental impacts will be provided by the proposed project. But, it is expected that improvements in access and utilization of health services, the production of both medical and pharmaceutical waste in the targeted health facilities



		which may adversely affect the environment and the local population if not managed and eliminated appropriately. The Borrower should update the current Medical Waste Management Plan (MWMP) including the expired pharmaceutical products for Bank's review and approval before the appraisal of the Project.
Natural Habitats OP/BP 4.04	No	OP 4.04 is not triggered on this project because the activities are focused with existing health centers to improve quality of health services and population access to the health in general.
Forests OP/BP 4.36	No	The project will not be concerned with the management of forests.
Pest Management OP 4.09	No	The project will not be concerned with the purchase pests and pesticides. The project has developed a Medical Waste Management Plan in compliance with OP 4.01.
Physical Cultural Resources OP/BP 4.11	No	The project focuses on existing health centers to improve quality of health services and population access to the health in general. No environmental risks are foreseen on Physical Cultural Resources.
Indigenous Peoples OP/BP 4.10	No	There are no indigenous peoples as defined by the policy present in the project area.
Involuntary Resettlement OP/BP 4.12	No	The project will not involve any activities that would result in land acquisition, physical displacement, economic displacement or any other form of involuntary resettlement as defined by the policy.
Safety of Dams OP/BP 4.37	No	The policy is not triggered since project will not invest in dams nor will any project activities rely on the operations of existing dams.
Projects on International Waterways OP/BP 7.50	No	The policy is not triggered since project activities will not affect any known International Waterways.
Projects in Disputed Areas OP/BP 7.60	No	The policy is not triggered since project activities will not affect any known disputed areas.

**E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

Jun 30, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The updated Medical Waste Management Plan should be prepared by the Borrower. It will be submitted for Bank's review and approval before Decision meeting.



## CONTACT POINT

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**APPROVAL**

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**Approved By**

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Practice Manager/Manager:	Magnus Lindelow	16-Feb-2017
Country Director:	Cristina Isabel Panasco Santos	20-Feb-2017

**Note to Task Teams:** End of system generated content, document is editable from here.