

INTEGRATION FOR IMPROVED COMMUNITY HEALTH

Madagascar *BEST* Five-Year Action Plan

1. Country Context

Madagascar is one of the poorest countries in the world, with an average per capita income of only \$420 (2008) and with 68% of the population living below the poverty line of one dollar per day. The population of 19.5 million is growing at a rate of 3% and 16.7% are children under five years of age (World Bank, 2010)¹. There have been notable positive trends in health indicators over the last several years. According to the Demographic Health Survey (DHS), between 2003/4 and 2008/9 total fertility declined from 5.2 to 4.8 children per woman and use of modern contraception rose from 18% to 29%. Madagascar is on a path to achieve the fourth Millennium Development Goal (MDG) on child health, with under-five mortality dropping from 92/1000 to 72/1000 between 2003/4 and 2008/9 and doubling the percentage of fully immunized children (DHS). Infant mortality decreased from 59/1000 to 48/1000 over the same period (DHS). The country will achieve universal coverage of two long-lasting insecticide treated bed nets per household in the 91 target districts this year and has been on track to meet the fifth MDG on communicable diseases with relation to malaria and HIV/AIDS (but not TB). However, safe motherhood and nutrition indicators are still weak, with maternal mortality at 498/100,000, well above the MDG maternal health target of 149/100,000, and stunting among 50% of children under five (DHS, 2008/9). In addition, more than 60% of the population does not have access to safe drinking water or improved sanitation (DHS, 2008/9).

Providing access to quality health services is a challenge in Madagascar, where over 80% of the population lives in difficult-to-reach, rural locations and 60% of those needing care live more than five kilometers from the nearest health facility (World Bank, 2010). The national health system encompasses the public and private sector, non-governmental organizations (NGOs) and community-based actors. The public sector health delivery system accounts for more than 30% of first contact in urban areas and more than 70% in rural areas (World Bank, 2010). In the most remote areas, there is a strong tradition of deploying community health workers, seen by the Government of Madagascar (GOM) as one of the most important ways to reach its predominantly rural population. In both private and public basic health centers (1,139 nationally), paramedical staff provide education, prevention, diagnosis and treatment of simple conditions. Second level health centers and first level district hospitals (2,134 total) also provide labor and delivery services and are overseen by a physician. District hospitals (52) offer emergency surgery, comprehensive obstetrical care and laboratory, radiology and ultrasound services. There are 20 regional and four national referral hospitals. About 20% of all health care facilities in the country are privately owned. The majority of these are concentrated in urban areas. There are also 203 pharmacies, mostly in the capital, and 1,625 private drug retail locations distributed throughout the country (World Bank, 2010).

¹ World Bank. (June 2010) "Health, Nutrition, and Population Outcomes in Madagascar 2000-2009: a Country Status Report. "

While Madagascar has a higher density of physicians than many other African countries (2.91 per 10,000 population), there is a shortage of nurses and midwives, with a current ratio of 3.16 personnel per 10,000 population (World Bank, 2010). In addition, the unequal geographic distribution of health workers between the rural and urban areas leaves a significant percentage of facilities unable to provide the full range of basic services in rural areas. In addition, nearly 50% of public sector staff will retire in less than ten years (World Bank, 2010). Health sector financing has been marked by poor budget execution, insufficient allocations for non-salary recurrent budget and low use of the equity fund designed to improve access for the most vulnerable people.

Until early 2009, the GOM and its health sector partners were working together to address some of the most pressing priorities, guided by shared goals that are articulated in the Madagascar Action Plan 2007-2012 and the National Health Sector Development Plan (PDSSP) 2007-2011. There was a multi-donor effort to integrate vertical supply chains and improve commodity forecasting, ordering, and delivery. Budgetary allowances to the Ministry of Health (MOH) were increasing. The National Community Health Policy (NCHP) was developed to promote and coordinate community health activities. Safe motherhood was a top priority; delivery services, including cesarean sections, had just been made free of charge and a national program to expand access to emergency and basic obstetric and newborn care was planned for implementation. A discussion had begun on developing a national package of basic services. The GOM was funding its Expanded Program on Immunization (EPI) for vaccine purchases. Strong support for family planning from the very top leadership promoted innovative practices such as provision of the injectable contraceptive Depo-Provera by community health workers. Donor-government relations were productive and an International Health Partnership+ compact was being developed.

Madagascar is unique because it is one of the most biodiversity-rich locations on the planet: 98% of its mammals, 91% of its reptiles and 80% of its flowering plants are found nowhere else on earth (Freudenberger, 2010²). Since 1986, USAID has supported efforts to conserve and protect the country's unique flora and fauna. In 1993, a deliberate decision was made to carry out family planning interventions in these ecologically sensitive areas where USAID was supporting other integrated conservation and development programs. By the late 1990s, this targeted provision of family planning in biodiversity-rich areas was not a stand-alone program but was nested within broader health programs, and integration of health and environment interventions took place nationally and at the community level. Until the political tensions in 2009, this integrated approach was deeply woven into the fabric of both environment and health interventions in Madagascar.

In January 2009, political tensions erupted and led to a military-based extra-constitutional transfer of power and the subsequent establishment of an interim *de facto* government, not recognized by the international community. At that time, the US Government (USG) established of policy of restricting technical, material or financial support to the GOM, which included the suspension of USAID support to the public sector. Under the current restrictions,

² Freudenberger, Karen. (2010) "Paradise Lost? Lessons from 25 years of USAID Environment Programs in Madagascar."

USAID/Madagascar and its implementing partners may coordinate and share information with Ministry of Health (MOH) staff at the technical level. After consulting with USAID/Washington, USAID/Madagascar's BEST Action Plan was developed with the assumption that the current situation will continue. However, illustrative activities have been included which can be resumed once the restrictions on working with the GOM are lifted.

2. FP/MCH/N Goals and Objectives of USAID/Madagascar's Health Sector Strategy

USAID/Madagascar's current health strategy (2009-2013) was developed in 2007. The original strategy envisioned continuing to work with the public sector at the national level on training, policy, protocols, behavior change and health systems strengthening, while supporting service delivery and strengthening the referral system at all levels in the public, private and NGO sectors. Following the 2009 coup, the Mission reviewed the strategy and the Performance Management Plan and decided to maintain its goal and elements, while recognizing that USAID will only work through the private, non-governmental and community sectors until the political situation changes and restrictions are lifted. Indicators were also revised in line with the Foreign Assistance framework.

The overall goal of the strategy is to reduce maternal and child mortality. This will be achieved by realizing intermediate results to improve maternal health, child health and nutrition. In turn, these results will be achieved realizing the sub-results of increasing the use of services and products pertaining to each intermediate result and/or changing selected behaviors or practices linked to these intermediate results.

- IR1 - Increase the demand for health products and services
- IR2 - Increase the availability of health products and services
- IR3 - Improve the quality of services provided
- IR4 - Strengthen institutional capacity

The priority technical areas defined in the USAID/Madagascar Health Population and Nutrition (HPN) Strategy include:

- Integrated management of childhood illnesses (IMCI)
- Immunization
- Essential nutrition actions, improved nutrition practices and household food security
- Diarrheal disease control and improved household access to and use of potable water and sanitation
- Malaria prevention and home management of malaria
- Family planning and safe motherhood
- STI/HIV/AIDS prevention³

³ HIV prevalence in Madagascar is less than 1% in the general population. Accordingly, USAID/Madagascar's HIV/AIDS program (funded by both PEPFAR and GHCS) focuses on prevention for most-at-risk persons, including behavior change communication, male and female condom distribution, and diagnosis and treatment of sexually transmitted infections.

The strategy now also includes community management of pneumonia and diarrhea along with malaria.

National impact indicators for the 2011-2015 BEST Action Plan period are:

- Increase modern contraceptive prevalence rate from 29% to 34%
- Decrease under-five mortality from 72 per 1,000 live births to 47 per 1,000 live births

USAID/Madagascar is not proposing any maternal health impact indicators because the USG restrictions against working with the GOM extend to the public health system. Since USAID/Madagascar is unable to strengthen clinical care or health service delivery through government health centers, USAID/Madagascar does not think it can have an impact on maternal health on a national level. USAID/Madagascar is also not proposing a nutrition impact indicator because the Mission does not receive a large amount of nutrition funding (approximately \$400,000 a year) and does not get funding for agriculture or Feed the Future initiative to link with to support improved agricultural production. USAID/Madagascar does support, as described in more detail below, some limited maternal and nutrition interventions at the community level.

This strategy continues to provide an appropriate road map toward “*Investing in People*” by: promoting reproductive, maternal and child health and nutrition; reducing infectious diseases (including malaria and HIV/AIDS); promoting hygiene through education and water and sanitation infrastructure; strengthening local institutional and community capacity to develop and regulate norms, standards and protocols, and; promoting better coordination of donors and resources.

3. Relationship of USAID/Madagascar’s Proposed FP/MCH/Nutrition Investments to National Priorities and Plans

The current government has effectively abandoned the Madagascar Action Plan (2007-2012), but there has been no official change in the priorities and goals of the Plan de Développement Secteur Santé 2007-2011 (PDSS—Health Sector Development Plan). USAID/Madagascar’s investments in FP/MCH/N respond to the priorities in both plans. USAID was heavily involved, along with other donors, in shaping the plans and was fully engaged in the annual progress review process until 2009.

The main goal of the PDSS is:

- Reduce morbidity and mortality of the population

Intermediate objectives are:

- Strengthen the national health system
- Improve maternal and child survival (including through family planning)
- Strengthen the fight against illnesses emanating from environmental causes
- Increase health protection and the promotion of healthy behaviors

Under normalized political relations, the MOH and other sector partners, including donors, would now work together on a new Health Sector Development Plan. However, the MOH is

producing interim “roadmaps” for “the transition” and has decided not to develop a new sector plan at this point. WHO and the Agence Française de Développement are assisting the MOH to improve the interim planning process. USAID/Madagascar is not providing any assistance in developing or tracking the interim plans but has access to them through the health donor’s group. If a new PDSS is produced in an environment where the USG and other major donors are restricted from participating, USAID/Madagascar will need to review the priorities against current programming. However, most donors agree that top priorities are unlikely to change. There is broad national agreement on what Madagascar needs to focus on and significant buy-in, momentum and history behind current activities and policies. In April 2010, UNICEF, UNFPA, the World Bank, and USAID, the primary health sector donors to Madagascar, developed consensus around these top health priorities and summarized them in a Health Sector Policy note. The BEST Action Plan closely aligns with these priorities.

4. Barriers to achieving FP/MCH/Nutrition goals and successes upon which to build

Barriers

The most significant barrier to achieving national and USG goals in FP/MCH/N is the ongoing political crisis. USAID/Madagascar remains hopeful that the political crisis will be resolved and is poised to resume support to the public sector as quickly and efficiently as possible.

• Donor Support

After restrictions were placed on USG activities in 2009, USAID/Madagascar suspended 17 health projects, including all technical assistance to the MOH and all provision of commodities to the public sector (i.e. contraceptives, zinc, long-lasting insecticide-treated nets). As a result, the USG investment in community-based health interventions, including socially-marketed commodities delivered through a central commodity mechanism and support to private practitioners and social marketing has expanded beyond original plans. However, the complementary work to strengthen human resources, services and systems at all levels of public health sector facilities, and with the national MOH, is on hold.

The other major donor in the health sector, the World Bank, also suspended activities after the 2009 coup d’état and their funding for HIV/AIDS activities will end in 2012. Without either USG or World Bank funding supporting the public health sector, the system is deteriorating.

• GOM Funding

The Ministry of Health budget decreased 48% between 2009 and 2010. Analysis indicates that civil servant salaries have been preserved while operating budgets have been significantly reduced. UNICEF reports shortfalls in GOM funding for vaccines, logistics support for the cold chain and essential drugs. UNFPA has continued to provide contraceptives and some delivery kits for the public sector, but cannot make up for the shortfall due to the withdrawal of USAID- and World Bank-provided commodities. The lack of GOM funding for health services is a major concern considering the high dependence of the country’s population on government-supported health services. Eighty percent of Madagascar’s 3,347 medical facilities are public and the public sector health delivery system accounts for more than 70% of Malagasy’s first contact with health services in rural areas (World Bank, 2010).

- **Instability**

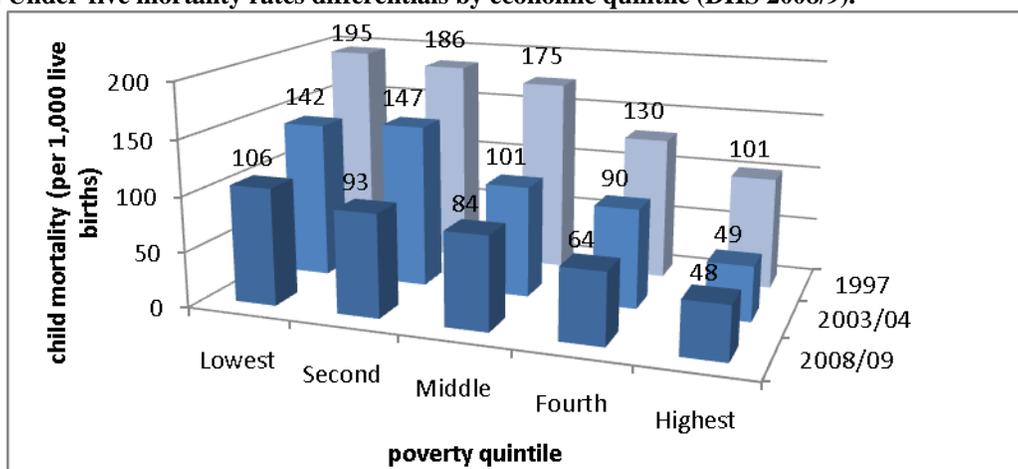
Should the political crisis persist, there is a threat of instability and insecurity that could disrupt the delivery of health services around the country. During the 2009 crisis, the most violent disturbances took place in urban areas, but a general sense of lawlessness led to an increase in crime in rural areas.

Other barriers, or challenges, are not specifically related to the political situation and are being addressed by USAID/Madagascar in current and future activities:

- **Access**

Reaching the most vulnerable rural population with health information and services remains a key challenge. Eighty percent of the population lives in rural, difficult-to-access locations and 60% of those needing care live more than five kilometers from the nearest health facility. One in ten rural people did not seek care when they were ill because of the long distance to a health center, and many communities are isolated for months at a time during the rainy season. In addition, nearly half of the rural population of Madagascar falls within the two poorest quintiles, which experience under-five mortality rates of over 90 per 1,000 live births (see Figure 1). USAID/Madagascar’s approach specifically addresses these access and equity challenges by focusing on delivering a wide range of health information and services through community-based approaches to the most underserved communities – those that live in fokontany (villages) further than five kilometers (one hour’s walk) from a health center. USAID/Madagascar’s coverage is explained in more detail in Section 5, “USAID/Madagascar’s Coverage”. Roughly, USAID/Madagascar plans to directly reach 50% of the population of Madagascar (9,725,182 people) with community-based health services.

Figure 1. Under-five mortality rates differentials by economic quintile (DHS 2008/9).



There are also financial barriers, which affect both rural and urban populations. A recent survey showed that almost 23% of people who were ill did not seek care because they could not afford it. Current community-based projects are introducing health “*mutuelles*”, village savings and loan groups, and other approaches to addressing these barriers. In addition, the new Integrated Community Health project will explore other pilot community-based financing schemes which can be scaled-up in the medium term.

- **Health Sector Policies and Protocols**

A number of key policies are needed to fully implement best practices, including: approval of community-based distribution of misoprostol; provision of vitamin A for post-partum women; de-worming for women as part of the package of semi-annual Mother/Child Health Week services; and provision of antibiotics for severe newborn infections. Although USAID/Madagascar cannot work directly with the GOM on policy change and reform due to the current USG restrictions, we will continue to advocate for these through the donor Maternal and Neonatal Health Working Group.

- **Food Insecurity**

USAID/Madagascar does not currently receive economic growth funding or agriculture funding outside of the Food for Peace program. It is challenging to fully implement nutrition interventions when quantity of food and quality of diet cannot be addressed. In the near term, USAID/Madagascar's response to this challenge has been to align Food for Peace and health activities as much as possible through coordinated planning and close grantee collaboration. In addition, a new population-health-environment activity will initiate family planning and water, sanitation, and hygiene (WASH) interventions in rural areas of high biodiversity, where agricultural activities are the primary form of livelihoods.

- **Health System Weaknesses**

As discussed above in the "Country Context" section and below in the "Key Health Systems Improvements Required" section, Madagascar faces many challenges in reaching its health goals. Key barriers include: an inadequate level of overall financing; low or unequal utilization of health services; unequal distribution of health personnel between urban and rural areas; disruptions in the availability of drug and medical supplies in health facilities, and; weaknesses in the internal administration of the health system. Due to the current USG restrictions, USAID/Madagascar is unable to provide assistance to improve these health system challenges.

Successes

Despite challenges, Madagascar has been a leader in many areas of primary health care, including: strong national support for family planning; community-based distribution of injectable contraceptives; innovative water and sanitation programs; and community-based diagnosis and treatment of malaria, pneumonia and diarrheal diseases. Additional examples of the USAID/ Madagascar program's successes and strengths include the following:

- **Positive "Political" Will and Momentum**

Despite the crisis, most of the technical leadership within the MOH remains in place and remains committed to ongoing interventions and programs. There have been no changes to national health priorities, strategies or plans, all of which are very much in line with BEST. National momentum on key programs, such as family planning, has been built in prior years and under prior government leadership and is not in danger of diminishing. At the same time, the donors remain mutually committed to key priorities: aggressively promoting critical maternal and child health interventions, including family planning; reinforcing nutrition programs targeting the most vulnerable groups; continuing to implement the National Community Health Policy;

strengthening budget efficiency; and extending initiatives to improve human resource management.

- **Community-Based Activities**

The National Community Health Policy, adopted in early 2009, was developed to encourage community involvement in health service delivery and harmonize existing programs and interventions at the community level. It recognizes that the country has been implementing such programs for more than a decade and reiterates the importance of reaching remote and vulnerable populations and the need for community health workers to supplement professional cadres of health personnel. USAID/Madagascar has been implementing community-based health prevention and curative projects for over ten years, and the “Champion Commune” model it developed is now a national approach. During FY 2010, USAID-funded community health partners diagnosed and treated 232,758 children under five: 57,547 were treated for simple malaria; 136,931 were treated for diarrhea; 35,128 were treated for pneumonia, and 3,152 were referred to a health facility.

- **The National Malaria Program and the President’s Malaria Initiative**

One area where donors and funds have actually increased is that of malaria programming. The Roll-Back Malaria (RBM) partnership is extremely active. USAID/Madagascar, through the President’s Malaria Initiative (PMI), works closely with WHO, UNICEF and other donors and coordinates with the national malaria program through the RBM partnership (coordination is permitted under the USG restrictions). There is also significant funding from the Global Fund to Fight AIDS, TB and Malaria. Malaria is endemic in 90% of Madagascar, however, the entire population is considered to be at-risk for the disease. Malaria cases and deaths reported through the national Health Management Information Systems (HMIS) system have shown decreasing trends in morbidity and mortality between 2003 and 2009. Overall, hospital deaths attributed to malaria decreased from 17% in 2003 to 6% in 2009 (SLP, April, 2010). In 2009, malaria was responsible for an estimated 4% of all reported outpatient visits, and 14% of all children under five years of age admitted to a hospital were diagnosed with severe malaria (INSTAT, 2010). In spite of this, malaria remains a leading cause of under-five mortality and, according to UNICEF, kills approximately 20,000 Malagasy children every year.

Madagascar is implementing a universal bed net coverage campaign in FY 2012, conducting indoor residual spraying in relevant areas each year and scaling-up community case management of malaria. USAID/Madagascar’s PMI and maternal and child health activities are fully integrated.

5. USAID/Madagascar’s Coverage

By the end of the BEST Action Plan, USAID/Madagascar plans to reach approximately 50% of the Madagascar population, or 9,725,182 people, with the health interventions discussed in Section 6. Coverage will be achieved primarily through USAID/Madagascar’s two major integrated community health projects, Santénet2, working in the east and the south in 800 of the country’s approximately 1600 communes, and a new Integrated Community Health Project, which has not been awarded but will hopefully start by July 2011, in an additional 250-300 communes in the north and west of Madagascar. While these two projects reach communities

through an integrated community health approach using community health workers, commodities are available nationwide through the PSI social marketing program. In summary, community-based services are available to more than half of the population focusing in rural areas, while PSI's socially marketed products are available nationwide.

Table 1 demonstrates USAID/Madagascar's current coverage and planned coverage by 2015 when interventions are scaled-up.

Table 1. USAID/Madagascar Coverage (2011-2015).

	Total Number of Communes Assisted	2011 Population Served	2015 Population Served	Total Population In USAID Supported Communes	% of Total Population directly reached by USAID
Santénét2	800	5,864,320	5,864,320	9,773,866	60%
New Integrated Community Health Project	342	0	3,860,862	4,894,119	70%
Total	1142	5,864,320	9,725,182	14,667,985	73% of Madagascar reached directly by USAID

Santénét2 operates in densely-populated rural communes located in the plateau and coastal regions in the east and south of Madagascar, where USAID/Madagascar has traditionally had a presence. The new Integrated Community Health Project expands USAID/Madagascar's reach to nine historically-underserved regions that have not previously been included in USAID/Madagascar's health program. These regions are less densely- populated, few donors and organizations work in them and communities are underserved. In addition, a larger portion of the population live in rural fokontany located more than five kilometers from a health center, which are often inaccessible for many months of the year during the rainy season.

6. Key interventions

USAID/Madagascar reviewed the "BEST Practices at Scale" list of FP/MCH/Nutrition interventions in comparison with country epidemiological data, national priorities and plans, and the current USAID program. The following set of focus interventions has been identified through internal consultation with USAID staff. USAID regularly consults the two USG agencies with a presence in FP/MCH/Nutrition in Madagascar: the Centers for Disease Control and Prevention (CDC), through the PMI Advisor in Madagascar, and the Peace Corps, which has a robust health volunteer program. The CDC PMI Advisor plays an integral role in developing, implementing, and monitoring the PMI malaria activities. USAID and Peace Corps frequently collaborate to strengthen connections between USAID's health program and Peace Corps volunteers. In addition to this ongoing USG coordination, the BEST Action Plan was developed in alignment with other donors' priorities for Madagascar's health sector, which are summarized

in key documents such as the UNICEF Priority Health Issues paper, the World Bank Country Status report, and the Health Sector Policy note co-authored by UNFPA, World Bank, UNICEF, and USAID in April 2010.

Family Planning

Rationale

Use of modern family planning (FP) methods has rapidly expanded in Madagascar. The 2008-2009 Demographic and Health Survey results show that since 1992 the modern contraceptive prevalence rate increased from 5% to 29%, total fertility rate decreased from 6.1 to 4.8, and unmet need decreased from 32.4 to 18.9. These successes are due in large part to the GOM's focus on and high-level policy commitment to health and population programs. The USG contributed significantly to these successes by procuring and distributing contraceptives for the both the public (prior to 2009) and private sector and supporting the expansion of a range of FP services throughout the country.

Despite these successes, Madagascar's population, estimated at 19.5 million, is still facing rapid population growth and is expected to reach 42.3 million by 2050. The population is very young, with 44% under 15 years of age (PRB, 2009). There are still urban (36%) and rural (28%) discrepancies in modern contraceptive prevalence (CPR) rates with wide regional variations (DHS 2008/9). For example, in Androy region, only 3% of women who are sexually active utilize a modern method of contraception. CPR also varies significantly across wealth quintiles. Only 17.6% of the poorest Malagasies use modern methods compared with 36.4% of the richest (DHS 2008/9). In addition, unmet need, at 19%, remains a serious constraint and the current contraceptive mix relies heavily on short-term methods, such as injectable contraceptives (18% of all sexually active women) and oral contraceptives (6%). Finally, STI rates are extremely high in Madagascar, especially in certain most-at-risk groups. Underscoring this is data from a sample of households surveyed in the 2003/04 DHS, which revealed a syphilis prevalence of 6.3% among adults 15-49. Syphilis rates are 8.2% among pregnant women, with wide regional differences (2003)⁴. These rates are among the highest in Africa (WHO, 2001)⁵. Main contributing factors are unfavorable sexual practices including young age at first sexual relations, high numbers of concurrent sexual partners, and low levels of condom use, as well as lack of awareness that STIs are a serious health problem.

To date, Madagascar's family planning efforts have depended heavily on financing from donors (UNFPA, USAID, and World Bank), which altogether accounted for 99% of spending for contraceptives from 2004 – 2008 (World Bank, 2010). In 2006, the Malagasy government allocated funds to purchase contraceptives for the first time, although, with the current political crisis, that funding is likely to cease. USAID and UNFPA continue to procure the large majority

⁴ Direction Générale de la Lutte contre le SIDA and Direction de la Surveillance Epidémiologique des IST et du VIH/SIDA. (2003). *Etude Combinée des Séroprévalences de l'infection à VIH et de la Syphilis chez les Femmes Enceintes*. Ministère de la Santé.

⁵ Syphilis prevalence rates (%) among pregnant women varied from 2.5 in Burkina Faso, 6.7 in Central African Republic, 8.4 in South Africa, and 17.4 in Cameroon. Source: WHO 2001. *Global Prevalence and Incidence of Selected Curable Sexually Transmitted Infections. Overview and Estimates*. Geneva: World Health Organization.

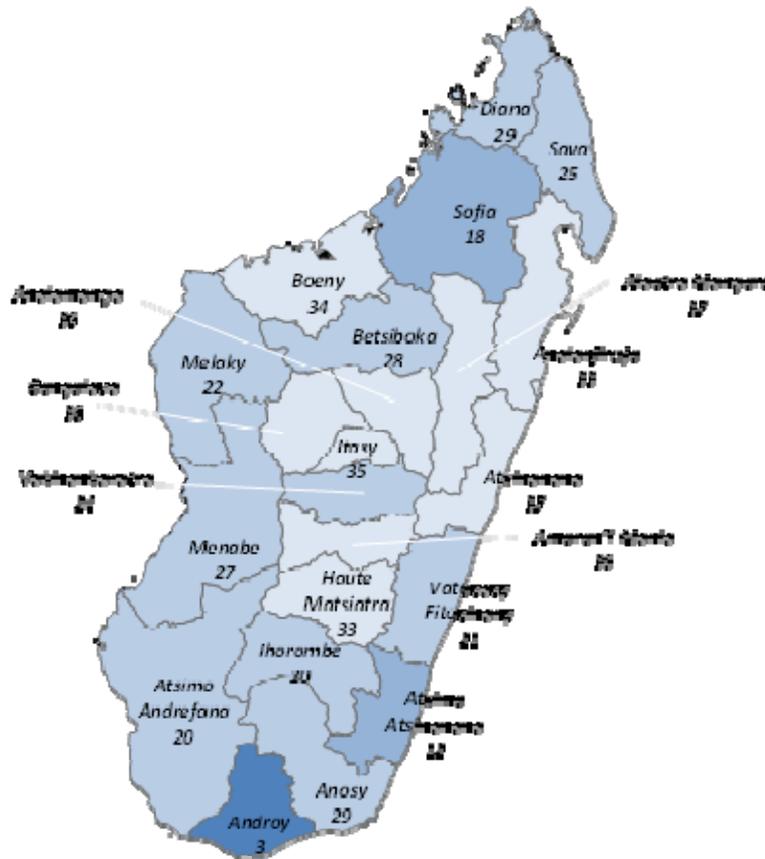
of Madagascar's contraceptives, with USAID's contribution only supplied to the private sector through PSI's social marketing program due to the USG restrictions.

Based on the above analysis, USAID/Madagascar's strategy for family planning is to continue focusing on: expanding access to quality services for rural and underserved communities; increase investments in behavior change communication; improve access to quality private sector service provision; add a new focus on youth and post-partum women, and; expand the contraceptive method mix, especially by expanding access to long-acting and permanent methods (LA/PMs).

Focus on rural and underserved communities

In the *near term*, USAID/Madagascar will continue to focus on increasing demand, availability, and quality of a wide range of family planning services in Madagascar's rural communes through its three major community-based health projects- Santénet2, PSI's social marketing project, and the new Integrated Community Health Project that will reach additional underserved communities located in the western and northern regions of Madagascar. These projects reach communities in the regions of Madagascar with the lowest CPR (see Figure 2), such as Androy, and target hard to reach underserved communities living farther than five kilometers from a health center. Other programs target ecologically significant areas of high biodiversity near national parks, where access to all services is limited due to the remote nature of these areas.

Figure 2. Use of modern contraceptive methods by region by currently married women. Madagascar = 29% (DHS 2008).



In the *medium term*, particular focus will be paid to post-partum women with unmet need for birth spacing and post-abortion care. Abortion rates are estimated at 1 per 10 live births, and abortion complications are a major contributor to maternal deaths (World Bank, 2010). In addition, preventing adolescent pregnancies will be an increased focus, as adolescents are particularly at-risk for maternal and neonatal mortality.

Continued investment in behavior change communications

Knowledge remains a barrier to contraceptive use in Madagascar, especially misconceptions about family planning methods, as well as prevailing social norms that favor large family size. As a case in point, the mean ideal number of children has only decreased slightly from 5.5 in 1992 to 4.7 in 2008/9 (DHS). Close birth spacing is also an issue, as nearly one in four births (23%) occurred less than 24 months from the preceding one, with the problem being more acute in rural areas. Great strides have been made in increasing knowledge about family planning: only five years ago the second most important reason for not using contraceptives was knowledge-related (10% did not know of a method and 5% did not know of a source), while in 2008 this proportion decreased to 5% (DHS). However, myths and misconceptions about contraceptives still prevail. When asked about the main reason for not intending to use any modern contraceptive method, almost a third of female non-users (31%) had concerns about the safety of the contraceptive methods with 18% fearing side effects, 19% reporting health concerns, and 1% citing inconvenience (DHS, 2008/9).

All USAID/ Madagascar's *near term* activities at the community level emphasize behavior change communication (BCC) that addresses the above misconceptions and social norms. Particular emphasis is placed on promoting appropriate birth spacing, increasing use of the Lactational Amenorrhea Method (LAM) and promoting long-acting and permanent methods. In the *medium term*, BCC activities will work towards changing social norms by working with community leaders on gender, power, and sexual health, and with youth leaders to promote reproductive health.

Expanding contraceptive method mix, with a focus on LA/PMs

As Figure 3 illustrates, the current contraceptive mix relies heavily on short-term methods. Between 2003 and 2008, due in large part to a USAID/Madagascar initiative to expand community-based distribution of injectables, the prevalence of injectable contraceptives increased considerably. Oral contraceptives have increased only slightly, while long-acting methods use are gaining in popularity but are not common. For example, while female sterilization has decreased in urban areas but doubled in rural areas, only 1.1% of women overall use it (DHS). Implant methods were recently introduced but their availability beyond hospitals needs to be scaled up. Condom use is very low, even in rural areas.

In the *near term*, USAID Madagascar will continue to scale-up the community-based distribution of oral contraceptives, injectable contraceptives, condoms and cycle beads (to support the Standard Days Method). Socially-marketed emergency contraceptives will be added to the method mix as soon as they are available through the USAID Central Contraceptives Procurement (CCP) system. All family planning commodities are available through PSI's social marketing program, which collaborates with USAID-trained and supported community health workers to distribute the products in over 800 communes. These community health workers (CHWs) also promote LAM and the Standard Days Method. A subset of Mother and Child Health CHWs provide a special focus on family planning for post-partum women. Program activities reinforce quality of community-based FP services by using a Quality Index tool to assess and improve CHW services. In order to expand use of long-acting and permanent methods, USAID is scaling-up community access to quality long-acting and permanent methods through private sector clinic and community-based services with a focus on outreach through mobile clinics in six regions and franchising, including the introduction of a voucher system, in ten regions.

Figure 3. Contraceptives use by method in Madagascar (1992-2008/9) (DHS, Macro International Inc.).

Contraceptive method												
	Any method	Any modern method	Pill	IUD	Injections	Diaphragm/foam/jectally	Condom	Female sterilization	Male sterilization	Implants	LAM	Any traditional method
Total												
2008-09	39.9	29.2	6	0.4	17.9	-	1.1	1.1	0.1	1.5	1	10.5
2003-04	27.1	18.3	3.4	0.6	10.2	-	1	1.1	0	0.3	1.6	8.7
1997	19.4	9.7	2.4	0.5	4.7	0.1	0.7	1	0	0.4	-	9.5
1992	16.7	5.1	1.4	0.5	1.6	0.1	0.5	0.9	0	-	-	11.1
Rural												
2008-09	37.2	28	5.7	0.3	17.9	-	0.6	1	0.1	1.4	0.9	9

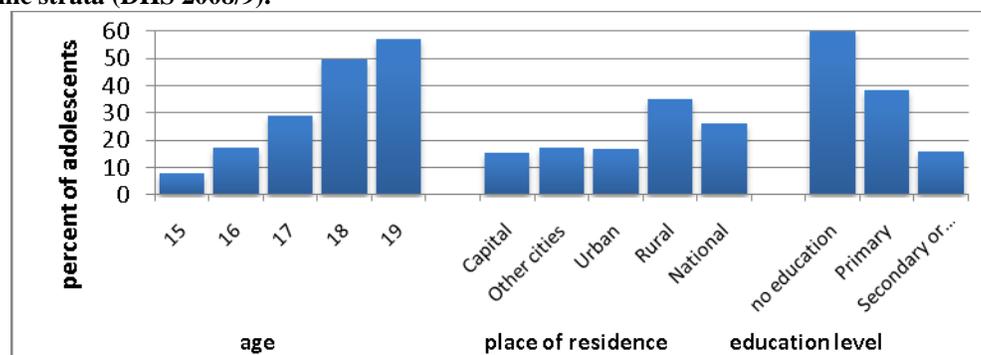
2003-04	23.1	15.9	2.6	0.6	9.7	-	0.5	0.8	0	0.2	1.4	7.1
1997	14.3	7.1	2.2	0.3	3.4	0	0.4	0.5	0	0.2	-	7.2
1992	11.9	2.9	0.8	0.2	1.4	0	0.1	0.4	0	-	-	8.6
Urban												
2008-09	54.3	35.6	7.8	0.9	18.1	-	3.3	1.6	0.2	2.3	1.4	18.5
2003-04	40.9	26.5	6.2	0.9	11.9	-	2.7	1.9	0.1	0.6	2.2	14.2
1997	34.5	17.6	3.2	1.3	8.3	0.1	1.5	2.4	0.1	0.8	-	16.5
1992	39.7	15.8	4.4	2.1	2.6	0.4	2.6	3.6	0.1	-	-	22.8

In the *medium term*, USAID/Madagascar will continue to scale-up all activities and expand them to all USAID-supported communes.

Focus on adolescent reproductive health

Adolescents begin their reproductive life very early, and adolescent pregnancy is a serious problem in Madagascar. Most adolescent reproductive health indicators have stagnated or deteriorated between 1992 and 2008. Median age at first marriage has stayed approximately the same from 18.2 in 1992 to 18.9 in 2008/9 (DHS). In 2008/9 more than a quarter of teenagers between 15-19 years old had at least one child, and 5% did so at 15 years of age or younger. The percentages of teenagers who have begun childbearing actually increased from 29% in 1992 to 31.7% in 2008/9. Large differences are observed across place of residence and education level of girls (see Figure 4). Finally, in 2008/9, 44% of respondents ages 15-19 spaced their births only 7-23 months apart as opposed to 50% in 2003 (DHS 2008/9).

Figure 4. Percentage of adolescents aged 15-19 who are pregnant or already have a baby, across social-demographic strata (DHS 2008/9).



The prevalence of condom use to prevent unplanned pregnancies and STIs, while improving, is very low and depends greatly on education and place of residence (see Figure 5). Uneducated rural girls are the most-at-risk for unplanned pregnancies. This data indicates a need to target youth for family planning services and focus BCC on encouraging condom use for dual protection, delaying early marriage and sexual debut, and healthy birth spacing.

Figure 5. Prevalence of at-risk sexual behaviors of youth (*Enquête de Surveillance Comportementale 2006 and 2008*).

	Boys		Girls	
	2006	2008	2006	2008
Percentage who are sexually active	73	74.7	67	69.3
Percentage who had the first intercourse at 15 years old or younger	32.8	29.0	39.3	37.5

Percentage who know where to purchase a condom, close to their home, or place of work	n/a	56.6	n/a	51.1
Percentage of those who are sexually active who used a condom during the last sexual intercourse	16.0	21.3	16.0	22.0

In the *near term*, USAID continues to target youth for family planning and STI prevention information and services. USAID is piloting and scaling-up adolescent reproductive health activities through its community health programs. These include working with networks of youth leaders to advocate for adolescent reproductive health, training youth peer educators, including youth scout groups, and using the Red Card, a BCC tool that focuses on delay of sexual debut among adolescent girls. PSI's social marketing program has also developed a network of youth-friendly *Top Réseau* clinics, which provide family planning and STI prevention services specifically targeting youth, primarily in urban areas.

In the *medium term*, USAID/Madagascar plans to scale-up all near-term adolescent reproductive health activities as well as expand access to private sector FP services that are youth-friendly in rural areas.

Expanding private sector family planning and reproductive health services

As Figure 6 demonstrates, the public sector is the primary source for the most common contraceptive methods, especially pills and injectable contraceptives, and the long-acting methods of sterilization and implants. Interestingly, condoms and IUDs are most often supplied through private medical clinics. The private sector provides a relatively small portion of health services, mostly in urban or peri-urban areas. Those in need of medical attention will primarily seek treatment at public health centers (66%), before private health clinics (20%) or traditional healers (15%)⁶.

Figure 6. Source of supply for modern contraceptive methods (DHS 2008/9).

DHS Year	Pill	IUD	Injectio ns	Condom	Female sterilization	Male sterilization	Implants	Total
Other private								
2008-09	13.3	1.4	1.5	64.5	0	0	0.3	6.8
2003-04	9.3	0	0.1	76.8	0	0	0	8.9
1997	5.7	2	6	34.4	0	0	0	7.6
1992	0	0	0	13.2	0	0	-	1.8
Private medical								
2008-09	29.1	67.4	15.4	24.7	18.8	18.8	17	19.7
2003-04	33.8	66	31.8	9.8	31.3	28.9	73	32.3
1997	43.9	54.4	38	45.7	16.4	100	36.9	39.2
1992	69.8	75.2	65.2	57.5	15.8	100	-	58.1
Public								
2008-09	57.2	31.2	82.6	4.8	79.6	81.2	82.1	72.8
2003-04	56.5	34	67.7	2.3	66.9	71.1	27	57.5
1997	48.7	43.5	55.9	18.6	77.8	0	63.1	S
1992	30.2	24.8	34.8	19.4	84.2	0	-	38.8

⁶ Institut National de la Statistique (2010), *Enquête Périodique Auprès des Ménages* (National Household Survey).

The private sector offers an opportunity to expand family planning services, particularly long-acting and permanent methods. USAID/Madagascar, in the *near term*, has started a project (discussed above) to expand private sector provision of LA/PMs in rural areas through the expansion of mobile LA/PM clinics in six new regions, expanding the network of *Blue Star* private providers offering a full range of family planning methods in ten regions, and introducing a pilot program to test the use of vouchers for LA/PM services. Due to the USG restrictions on working with and through the GOM, all USAID commodities must be provided through the private sector and are currently provided through PSI's social marketing program to NGO-supported CHWs delivering services at the community level, through private providers and clinics, and through pharmacies and other retail outlets. Finally, PSI's *Top Réseau* clinics provide reproductive health services for youth and adults.

In the *medium term*, USAID/Madagascar will scale-up the availability of private sector FP services, including services for youth, and expand the method mix offered through the private sector by adding LA/PMs on a larger scale. In addition, all activities will reinforce the quality of private sector FP services.

Additional medium term interventions, if USG restrictions are lifted

If restrictions against working with the government are lifted during this period, priority interventions are as follows:

- Integrate family planning in public sector post-partum and post-abortion care services
- Scale-up availability of long-acting and permanent FP methods in the public sector
- Provide contraceptives for the public sector
- Strengthen pre- and in-service training of providers in long-acting and permanent methods
- Improve contraceptive security in public sector planning and budget
- Scale-up national promotion of birth spacing

Maternal and Child Health

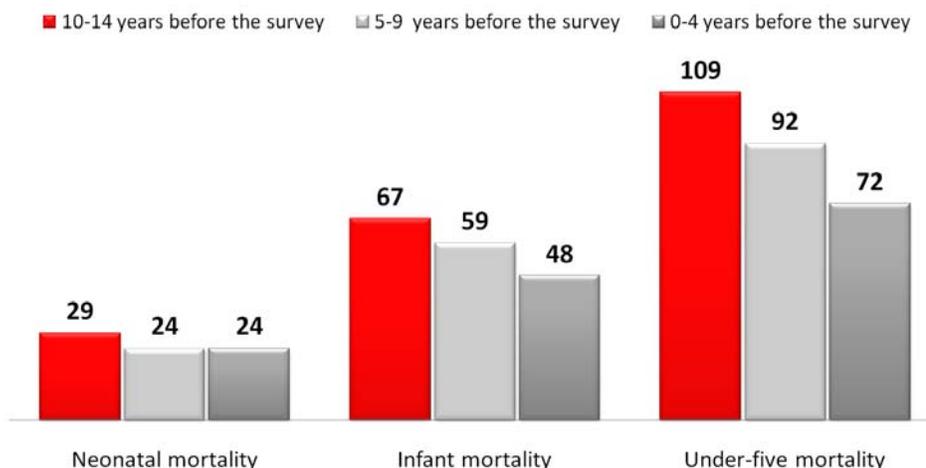
Rationale

Madagascar has seen dramatic improvements in infant and under-five mortality. Under-five mortality decreased from 92 per 1,000 live births to 72 per 1,000 live births, and infant mortality decreased from 59 per 1,000 live births to 48 per 1,000 live births (DHS 2003/4, 2008/9).

Large geographical (urban/rural) and income differences exist in child health outcomes (see Figure 7). A multivariate analysis of three successive DHS surveys indicate that child survival is linked with the education of the mother, access to better sanitation and clean water, and multiple births (World Bank, 2010). Relatively low coverage of immunization (62% complete coverage children 12-23 months) and exclusive breastfeeding (51% children less than six months) and high stunting (50% of children under five) and anemia rates (50% children under five) indicate that there are still important areas to address in child health. In addition, 14% of all children under five years of age admitted to a hospital in 2009 were diagnosed with severe malaria

(INSTAT, 2010), which is a leading cause of under-five mortality and, according to UNICEF, kills approximately 20,000 Malagasy children every year.

Figure 7. Trends in childhood mortality rates (DHS).



The maternal mortality rate has stagnated over the last decade, increasing slightly from 469 per 100,000 in 2003-2004 to 498 per 100,000 in 2008-2009 (DHS). The high maternal mortality rate in Madagascar is attributed to: inadequate access to skilled staff at delivery; poor quality of antenatal care; lack of emergency obstetric care services; inadequate post-natal follow-up; lack of confidence and belief in the importance and use of health services, and; a persistently high unmet need for contraception (World Bank, 2010).

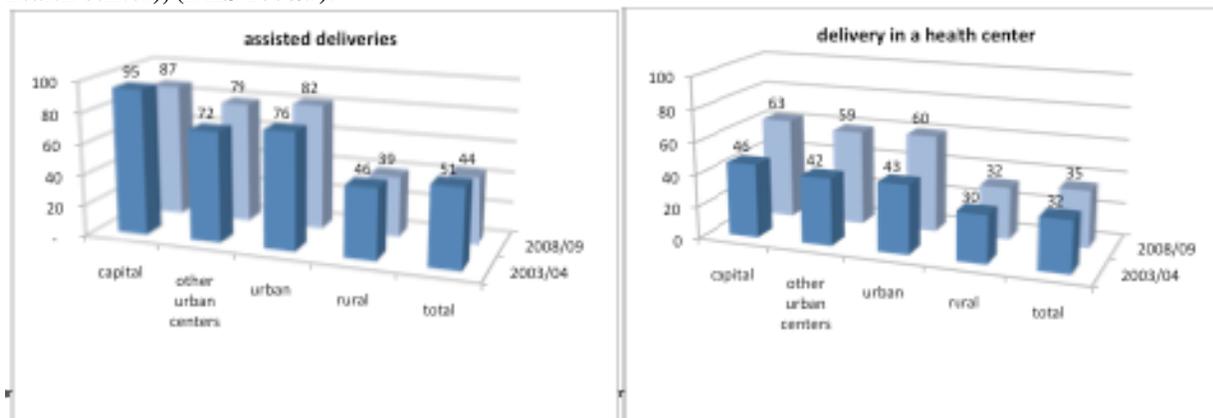
USAID/Madagascar’s current maternal and child health strategy, which is part of the overarching integrated community health program that includes family planning and nutrition, emphasizes scaling-up the integration of maternal, neonatal and child health services at the community level. This is done through the cadre of CHWs who, among other activities such as community-based distribution of family planning (including depo provera) and promotion of WASH messages, encourage pregnancy spacing, provide long-lasting insecticide-treated mosquito nets in malaria endemic areas, provide intermittent presumptive treatment for malaria, and diagnose and treat malaria, pneumonia and diarrhea. In addition, the USAID-supported malaria indoor residual spraying program is aimed at providing protection for pregnant women and children under five in its target areas.

Maternal & Neonatal Health

Medically trained assistance during delivery improves the health outcomes of the mother, by preventing or treating postpartum hemorrhage, pre-eclampsia, and other maternal complications, and that of the newborn in the immediate postnatal period. Yet assisted deliveries in Madagascar decreased from 51% to 44% in the past five years, especially in rural areas, and a smaller percentage of women sought medically trained assistance during childbirth (Figure 8). This decrease is attributable to poorer coverage in rural areas (37% of rural women give birth assisted

by a medical professional), income (22% of the poorest mothers were assisted by a medical professional, as compared to 90% of those better-off), and the level of education of the mother, with only 23% of mothers with no education seeking professional assistance during childbirth (versus 42% of those with a primary education).

Figure 8. Assistance at delivery (% women with medically trained assistance at birth and % delivered in a health center), (DHS 2008/9).



Referrals and emergency services are also generally difficult for women to access, particularly in rural areas. In addition to physical inaccessibility, the costs associated with the visit (direct costs, medicines, transportation and lodging of family members) constitute a barrier to access. Finally, as stated previously in the family planning section, inadequate birth spacing is also a problem since a child born within 24 months of its predecessor is 1.85 times more likely to die (World Bank, 2010).

Based on these results, USAID/Madagascar stepped up its activities in maternal and neonatal health. In the past year, USAID partners conducted an assessment of the current maternal and neonatal health situation in the country and a quality of care study of maternal and neonatal health care services. In the *near term*, these studies will inform the development of tools and approaches for improving maternal and neonatal care, especially during the intrapartum and immediate newborn periods. Partners are working with the national midwifery and pediatric associations to strengthen the skills and knowledge of their members in emergency obstetric and essential newborn care. Community health workers are being trained on post-partum care, recognition of obstetric danger signs, and essential newborn care and will be sharing that knowledge with communities through their ongoing outreach and BCC activities. Community health workers are also expanding the delivery of quality focused antenatal care by distributing iron/folic acid, and preventive treatment for malaria. Pilot programs are being introduced on newborn resuscitation at the community level and improved community transport systems for births and obstetric complications.

In the *medium term*, USAID/Madagascar will distribute vitamin A for post-partum women through community health workers. Although USAID/Madagascar cannot advocate directly with the Ministry of Health for policy change, USAID/Madagascar will advocate through the donor Neonatal Health Working Group for the introduction and piloting of specific maternal and neonatal interventions such as community-based distribution of misoprostol, community-based

distribution of chlorhexidine, and the provision of antibiotics for severe newborn infections. If and when these become accepted as national policy, USAID/Madagascar will pilot and scale-up these interventions within the existing community health projects. Finally, innovative financing schemes such as health *mutuelles* will be strengthened or piloted to address the cost issues associated with assisted deliveries, as well as other clinical services.

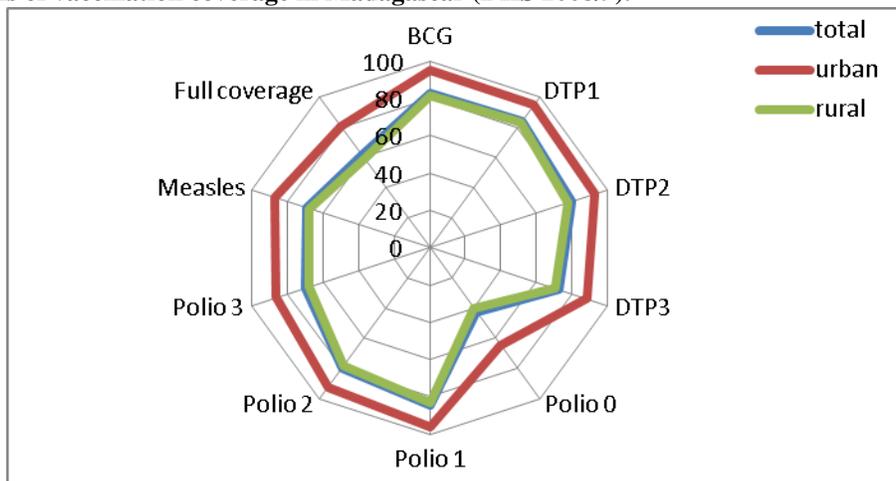
When USAID/Madagascar can work with the government, USAID will scale-up quality basic and emergency obstetric and neonatal care in public sector facilities.

Child Health

Health-seeking behavior for preventive child health services is improving. Complete immunization coverage stands at 62% (DHS 2008/9) and there are still large differences in coverage across regions, place of residence and income groups (Figure 9).

Fewer mothers sought treatment when children showed symptoms of acute respiratory infection (ARI); only 42% of children under five with a cough and breathing difficulties were brought into a health center in 2008 compared to 48% in 2003. At-home behaviors conducive to better child health are not improving. Most women breastfeed their infants, however only half are exclusively breastfeeding in the first six months and the trend has stagnated in the past ten years. Knowledge and utilization of at-home treatment of diarrhea with oral rehydration salts (ORS) is very low. The prevalence of diarrhea is low and decreasing (18% in 2003/4 and 8% in 2008/9), mostly among children aged 6-23 months, but with wide geographic variations. Madagascar was one of the first countries in the world to introduce zinc to complement ORS as treatment of diarrhea and USAID/Madagascar will continue to promote this combined ORS/Zinc treatment through its community health and social marketing programs.

Figure 9. Levels of vaccination coverage in Madagascar (DHS 2008/9).



At the same time, good progress has been made on preventing and treating malaria, due in large part to USAID’s Presidential Malaria Initiative, which started in Madagascar in 2008, and the Global Fund. Utilization coverage of insecticide-treated nets (ITN) by children under five has

increased three-fold during the past four years to 45.8%. Figure 10 summarizes other gains made in malaria.

Figure 10. Malaria Indicators 2004-2008 (National Malaria Control Program, Roll Back Malaria, Malaria National Level Report, 2008; ¹ DHS 2008/9; ² Data for 2006-2008 from Malaria and children: Progress in intervention coverage, Summary update 2009, UNICEF).

Indicator	2004	2005	2006	2007	2008	Eastern/ Southern Africa ²
Percentage of households owning at least 1 bed net	-	-	-	-	62 ¹	48
Percentage of households owning at least 1 ITN	21.9	25	45.1	59.2	67.2 57 ¹	39
Percentage of children under 5 years of age who slept under a bed net the previous night before the survey	-	-	-	-	49.4 ¹	31
Percentage of children under 5 years of age who slept under an ITN the previous night before the survey	15.9	21	37.5	60.2	65.5 45.8 ¹	26
Percentage of pregnant women who slept under an ITN the previous night before the survey	11.9	22	32	54.9	63.7 46 ¹	32
Proportion of person per net	5.71	-	5.41	-	-	-
Percentage of children under 5 yrs with fever that received efficacious anti-malarial medicine the same/next day	6.4	10	18.1	-	-	16
Percentage of children under 5 yrs with fever that received any anti-malarial medicine the same/next day	64.6	60	52.1	-	8.1 ¹	-
Proportion of women who received 2 or more doses of IPTp during their last pregnancy in the last 2 years ¹	-	-	-	-	6.4 ¹	-
Proportion of targeted houses sprayed with a residual insecticide in the last 12 months	-	9.4	10.1	9.8	52.2	-

In the *near term*, USAID/Madagascar will continue to educate communities on essential maternal and child health behaviors and expand integrated maternal and child health services through community health workers. These include the distribution of zinc and ORS, pneumonia treatment, malaria diagnosis and treatment, long-lasting insecticide-treated bed nets, and home point-of-use (POU) water treatment. Community health workers will also facilitate immunization coverage at the community level and support national semi-annual Mother/Child Health Weeks. At the same time, USAID/Madagascar will expand quality Integrated Management of Child Illnesses (IMCI) services through private providers. To specifically address diarrheal disease, particularly in rural areas where access to improved water and sanitation is low, USAID/Madagascar is focusing on expanding the availability and use of safe drinking water, safe feces disposal, and hygiene through community-led total sanitation, WASH messaging, water and sanitation infrastructure, and sanitation marketing approaches. USAID/Madagascar is also developing innovative public-private partnerships to subsidize access to safe water and to provide water and sanitation products.

In the *medium term* USAID/Madagascar will continue all near-term interventions and explore intersectoral interventions to mitigate poor indoor air quality through stove and fuel improvements.

If restrictions against working with the government are lifted during this period, USAID/Madagascar's priority MCH interventions are as follows:

- Advocate directly with and provide technical assistance to MOH for policy changes noted above
- Strengthen pre- and in-service training of midwives and other health workers in basic and emergency obstetric and neonatal care
- Strengthen pre- and in-service training of health workers in child health and IMCI
- Improve referral systems for obstetric, neonatal and child health services
- Re-start safe drinking water and hygiene activities with public health clinics and schools
- Support the national immunization program
- Strengthen work with local authorities on drinking water and sanitation management
- Provide funding and technical assistance at the national level to semi-annual Mother/Child Health Weeks

Nutrition

Rationale

The nutrition situation of Malagasy children has not improved, and Madagascar has persistently high rates of chronic malnutrition. Madagascar is one of the 20 countries in the world with the highest burden of under-nutrition (Lancet, 2008)⁷. Recent data shows that stunting levels among children under five are higher only in Afghanistan and Yemen (UNICEF, 2009)⁸. In Madagascar, 50.1% of under-five year-olds suffer from stunted growth (Figure 11). By the age of 24-35 months, an age after which stunting is difficult to reverse, more than half of children are nutritionally at risk, with half of these being severely stunted.

Figure 11. Trends in malnutrition rates for children under five⁹, 1997-2009 (UNICEF 2009).

	1997/98		2003/04		2008/09 ¹⁰	2003-2008
	<i>EA</i> ¹¹	<i>DHS</i>	<i>EA</i>	<i>DHS</i>	<i>DHS</i>	<i>Sub-Saharan Africa</i>
	Apr-June	Sept-Dec	Apr-July	Nov-Mar	Nov-Aug	
Moderate Stunting (height-for-age)	47	48.3	47.5	47.7	50.1	42*
Moderate Wasting (weight-for-height)	8.3	7.4	5.4	12.8	n/a	10*
Moderate Underweight (weight-for-age)	42.7	40	34.3	41.9	n/a	15

*Statistics for Sub-Saharan Africa for stunting and wasting represent moderate and severe cases. Source: UNICEF. (2009). *The State of the World's Children*.

⁷ Lancet Nutrition Series 2008

⁸ State of the World's Children 2010

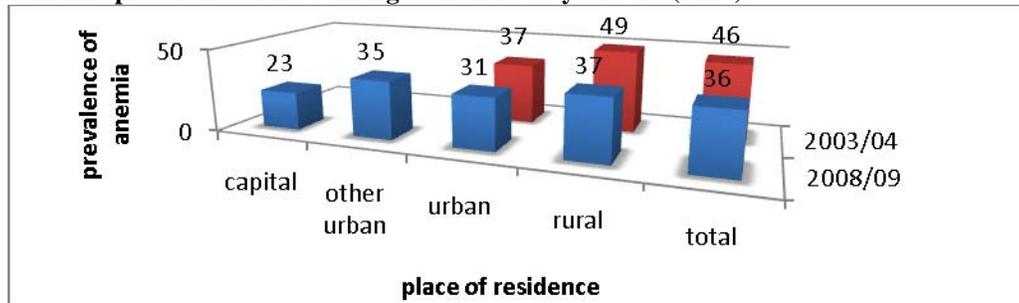
⁹ Moderate stunting is indicated by z-score H/A <-2SD, moderate wasting by z-score W/H <-2SD, and moderate underweight by z-score W/A <-2SD.

¹⁰ 2008/09 DHS results are based on the comparison with the results from the WHO Multicenter Growth Reference Study Group, 2006, and therefore may not be directly comparable to earlier studies which were based on the references of the NCHS/CDC. Also, no results are available for wasting and underweight from the 2008/09 survey.

¹¹ The 1997 survey covers 108/111 districts. The districts comprising the capital (Antananarivo) and two other districts (Kandreho and Benenitra) not surveyed during the 1997 were subsequently added in 2004, to achieve national coverage.

The prevalence of anemia, an underlying cause of chronic ill health, is very high among women and children although is decreasing for women in rural areas (Figure 12). Anemia affects 35.3% of women of child-bearing age and one out of every two children between 6 and 59 months¹².

Figure 12. Anemia prevalence trends among women 15-49 years old (DHS).



Most women breastfeed their infants; however, only half of all infants are exclusively breastfed in their first six months of life and the trend has stagnated over the past ten years. The 2004 anthropometric survey indicated that community characteristics have a significant effect on malnutrition; children living in rural areas have, on average, higher malnutrition rates than those in urban centers, illustrating that access to safe water, electricity, health and transportation infrastructure significantly diminishes the prevalence of underweight children. Seasonal patterns also deeply impact the nutritional status of at-risk groups, especially in the chronically food insecure areas in the south and south-east of Madagascar.

Punctuated by repeated peaks of acute malnutrition, Madagascar’s nutritional situation is critical, especially in the country’s most vulnerable regions where weather shocks and seasonal patterns such as drought and cyclones adversely impact households. Global acute malnutrition among children under five varies from 10% to 20%¹³ during the lean season in the country’s most vulnerable regions in the south and south-east. Those children suffering from severe acute malnutrition are eight times more likely to die than their well-nourished counterparts¹⁴.

USAID/Madagascar’s nutrition interventions are conducted primarily in conjunction with mother and child health activities as part of the community-based package of health services with a focus on essential nutrition actions, including exclusive breastfeeding until six months of age, feeding of sick children, complementary feeding, maternal and pregnant women’s nutrition, vitamin A distribution, and growth monitoring and promotion. In 2010, CHWs weighed 1.9 million children and referred 6% with severe and 20% with moderate malnutrition to public sector nutrition rehabilitation centers. The program also contributed to achieving a 79% vitamin A coverage rate among children 12-23 months and exclusive breastfeeding coverage of 69% for infants zero to six months in USAID focus zones.

¹² EDS IV 2008-2009

¹³ SMART surveys (Standardized Monitoring and Assessment of Relief and Transition) 2005-2010

¹⁴ Pelletier DL, Frongillo EA, Schroeder DG, JP Habicht. The effects of malnutrition on child mortality in developing countries. *Bulletin of the World Health Organization*. 1995; 73(4):443–448.

At the same time, USAID/Madagascar's Food for Peace program, SALOHI, is working to reduce food insecurity in 98,500 of the most vulnerable households in the south and east of Madagascar by improving the nutritional status of children under five, improving livelihoods, and increasing community resilience to shocks and natural disasters. Specific activities include child growth monitoring, referrals of moderate to severely malnourished children to public sector health centers and hospitals, essential nutrition actions, rehabilitation of moderately malnourished children through community gardens and the provision of CSB (Corn Soya Blend) and vegetable oil, support to pregnant and lactating women, integrated management of childhood illnesses, and behavior change communications.

Reaching women, as caregivers and in pregnancy and lactation, is a priority because the level of knowledge about child nutrition and care is dismally low in Madagascar. Twenty percent of mothers are not aware of any signs of malnutrition and 80% can only identify one or two symptoms out of the nine most commonly observed symptoms (World Bank, 2010)¹⁵. As stated above, exclusive breastfeeding of infants under 6 months is low (51%) and has stagnated over the past ten years (48% in 1997). Given the very poor nutritional status of pregnant women in Madagascar, which in turn leads to low birth weight and poor nutritional status of infants, promoting exclusive breastfeeding is an important behavioral change intervention that could have a positive effect on the intergenerational cycle of malnutrition.

In the *near term*, USAID/Madagascar will scale-up BCC by community health workers aimed at women and children during the window of opportunity (from conception to 24 months of age). Messages will promote exclusive and continued breastfeeding, appropriate weaning practices and foods, growth monitoring and promotion, detection and referral for acute malnutrition, dietary quality and diversity for pregnant women and children, and feeding practices during childhood illnesses. Community health workers will also expand anemia-reduction packages for pregnant women and children through community health workers—providing iron/folic acid and preventive treatment for malaria for women and de-worming and improved feeding practices for children. They will continue to deliver vitamin A supplementation for children aged 6-59 months semi-annually and support de-worming of children through semi-annual Mother/Child Health weeks.

With USAID/Madagascar's integrated community health approach, activities strengthen linkages between nutrition, family planning (Lactational Amenorrhea Method), child health (breast feeding, diarrhea prevention and treatment, birth spacing), water and sanitation (illness prevention), and malaria (anemia prevention) interventions. In addition, USAID/Madagascar continues to build synergies between its community health programs and Food for Peace programs, especially by connecting CHWs to agriculture programs and agriculture extension agents.

In the *medium term*, USAID/Madagascar will continue all near-term interventions at greater scale and strengthen essential nutrition actions in private sector clinics. Due to budgetary constraints, USAID/Madagascar is not able to implement any additional nutrition activities

¹⁵ World Bank calculations using 2007 Anthropometrics and Child Development Survey.

beyond those that are being implemented in the near term through the new Integrated Community Health Project.

If restrictions against working with the government are lifted during this period, USAID/Madagascar's priority Nutrition interventions are as follows:

- Advocate for de-worming for adults as part of standard package of services for semi-annual Mother/Child Health Weeks
- Strengthen referral systems for acute malnutrition

7. FP/MCH/N Outcome Targets

USAID/Madagascar's community health activities will reach 1000 – 1100 out of 1600 communes or approximately 50% of the population of the country. Socially-marketed products distributed by PSI have a nationwide reach through its national distribution channels. Please see attached tables for details (Appendix A).

8. Key Health Systems Improvements Required for Both Near and Longer Term Scale-Up

Due to the USG restrictions on working with the Malagasy government, USAID is currently not able to work on health systems improvements other than strengthening the private sector and community-level services. USAID/Madagascar's approach focuses primarily on strengthening community-level service delivery through community health workers. Current USAID/Madagascar-supported projects, spanning 2008-2013, will train over 10,000 CHWs and work in close to 800 communes (out of 1600 nationally). Planned new projects (2011-2016) will expand to an additional 250 – 300 new communes and train an anticipated 5000 additional CHWs.

USAID/Madagascar is also improving private sector services by working through professional associations for doctors, nurses, and midwives to strengthen their technical skills and by expanding private sector service delivery through clinics and mobile outreach. Current plans include expanding PSI's *Top Réseau* network from 140 to 200 clinics and expanding the services offered to include an integrated package of FP and MCH services. In addition, USAID/Madagascar is increasing availability of LA/PMs by expanding outreach through mobile clinics in six regions of Madagascar and franchising, including introducing vouchers, in ten regions.

Near Term

- **Service Delivery:** scale-up integrated interventions at community level; scale-up community mobilization and BCC for all services; expand availability of private sector integrated and family planning services; expand Community-led Quality Management and other quality improvement initiatives.

- **Human Resources:** build capacity of community health workers; build capacity of midwives and pediatricians through their professional associations; build capacity of private sector providers; build capacity of commercial retailers of social marketing and water and sanitation products.
- **Governance/Leadership:** expand and reinforce participatory community involvement approaches (mobilizing communities to become change agents by developing ownership of their own health, advocating for better integrated health services taking on the responsibility for assessing their needs, defining goals and actions, and monitoring implementation); expand and reinforce development and implementation of Community Water and Sanitation Business Plans; build capacity of local organizations to implement participatory community programs and provide community health services.
- **Financing:** develop and scale-up local insurance schemes (*mutuelles*) and village savings and loan groups; develop micro-financing mechanisms for consumers and suppliers of water and sanitation products and services; pilot a voucher scheme for long-acting and permanent family planning methods.
- **Medical Products:** scale-up socially marketed pneumonia treatment for the private sector and community health workers; expand availability of zinc/ORS socially marketed treatment for the private sector and community health workers; scale-up malaria testing with Rapid Diagnostic Tests (RDTs) and treatment by community health workers; strengthen the supply system to community health workers for generic and socially marketed products.
- **Information & Management Systems:** build effective regular supervision and monitoring at the community level; improve quality and use of Community Health Management Information System data; scale-up use of SMS technology for CHW program data collection.
- **Communication/Demand Creation:** implement BCC campaigns and socially marketed products that promote family planning, maternal and neonatal health, child health and healthy nutrition behaviors.

Medium Term

Activities noted above in the community and private sector will continue to expand. If restrictions against working with the government are lifted during this period, USAID/Madagascar's priority health systems strengthening interventions are as follows:

- **Service Delivery:** strengthen referral networks between community and clinic services; increase access to quality emergency obstetric care and neonatal services.
- **Human Resources:** integrate and strengthen teaching skills and materials in priority health areas in pre-service training; build capacity of facility-based health workers in priority areas.
- **Governance/Leadership:** support implementation and scale-up of the National Community Health Policy; strengthen national capacity for health sector planning; advocate for any necessary changes to health policies under new governments and national plans.
- **Financing:** explore performance-based financing approaches.
- **Medical Products:** provide contraceptives, zinc, ACTs, LLINs, and RDTs for the public sector; create/strengthen an integrated supply chain for the health sector; increase capacity for public sector drug procurement and forecasting; facilitate increased contraceptive security with government funds.

- **Information & Management Systems:** strengthen data quality and use in the national Health Management Information System (HMIS); link the Community Health Management Information System to the national HMIS; explore opportunities for additional use of cell phone and internet technology.
- **Communication/Demand Creation:** build national-level capacity to design, develop and deliver BCC campaigns.

9. Principal Delivery Approaches to be Supported in FP/MCH/N Programming

- **Community-level service delivery through community health workers:** current USAID/Madagascar-supported projects are training over 10,000 CHWs to work in 800 communes (out of 1600 nationally). Planned new projects will expand to new areas and additional CHWs.
- **Private sector service delivery through clinics and mobile outreach:** current plans include expanding from 140 to 200 clinics offering integrated services by the end of FY 2011 through one partner and from 104 to 154 social franchises offering full FP services.
- **Community mobilization and behavior change communication and social marketing:** USAID/Madagascar's approach to community health starts with community mobilization to help communities define their needs, plan activities and determine resources needed, and builds local capacity to maintain achievements at sufficient scale to have impact. This approach is being scaled-up to 800 communes in Santénet2 and will also be implemented in the communes under the new Integrated Community Health Program. All program activities to increase access to products and services are supported with behavior change communication through a variety of channels, including print, radio, one-to-one education and counseling, mass media, mobile video units; and drama. Social marketing supports both access to products and behavior change and PSI's activities will continue through retail sales outlets nationwide, networks of clinics and private providers, and community health workers.

When restrictions are lifted, add:

- Public sector facility service delivery
- Nationally coordinated delivery of BCC through routine activities and campaigns
- Strengthen referral systems for acute malnutrition

10. Existing areas of integration in the country's MCH/FP/N program

Madagascar was working on integration of service delivery at the lower facility level before the 2009 political crisis. USAID, along with other donors, were supporting training and other interventions in this area. Health partners, including USAID, had been helping the MOH implement the National Integrated Health Commodity Distribution Program since 2008. The National Community Health Policy mandates integrating and standardizing the work of different community health agents. While donor support for these efforts has been greatly reduced, USAID's current program includes strong integration components:

- Community-Based Service Delivery:** Integrated health care services are provided through community health workers in 639 communes in the east, central and south of the country. In FY 2011, this will expand to 800 communes covering approximately 50% of the estimated national population of 19.5 million. Also in mid-FY 2011, a new project will start working in approximately 300 underserved communes in the west and north. CHWs conduct BCC for all health interventions (including FP/MCH/N), provide family planning methods (oral contraceptives, condoms, cycle beads and Depo Provera), conduct growth monitoring and promotion and nutrition education on breastfeeding and weaning, distribute home water treatment products and zinc/ORS for diarrhea treatment, diagnose (with rapid diagnostic tests) and treat malaria, and diagnose (clinically) and treat pneumonia. New activities will build capacity in integrated maternal, child and newborn health, including scaling up distribution of iron/folic acid and Intermittent Preventive Treatment (IPTp) of malaria for pregnant women. Outreach services for long-acting and permanent family planning methods are also being coordinated and supported by CHWs.
- Private Sector Service Delivery:** A USAID-supported network of private clinics is currently repositioning itself to expand services from those primarily aimed at youth, family planning (FP) and reproductive health and will now offer an integrated basic package of health services that will include FP, STI management, voluntary HIV counseling and testing, cervical cancer screening (and possibly treatment, or at the very minimum referral for treatment), post-abortion counseling, and malaria and pneumonia treatment. Eventually the package will also include diarrheal disease management and syphilis screening. In FY 2011, USAID will expand access to private sector long-acting and permanent family planning methods through mobile clinics and franchised services, including through introducing a voucher program.
- Community Health System Strengthening:** The program supports integrated, supportive supervision of community health workers, community health worker training, the development and expansion of a community health information system, community supply chain strengthening and BCC using funds from all health areas.
- Community Mobilization and Communication:** Organizing civil authorities to identify and take responsibility for health improvements provides a sound platform for successful community-based health interventions. Behavior change communication uses print materials, local radio spots, outreach through religious institutions, and peer counseling that integrate health messages covering FP, MCH, nutrition, water/sanitation, malaria and HIV prevention.
- Water, Sanitation and Health:** The program integrates activities that provide access to improved drinking water and sanitation sources, social marketing of household water treatment products, messaging to promote the importance of clean water and hygiene in protecting health, and diagnosis and treatment of diarrhea. One of the criteria for targeting water activities is high incidence of diarrhea.

- **Nutrition, Family Planning and Malaria Treatment:** Using community health workers as a platform for education and service delivery also allows for linkages between promotion of the Lactational Amenorrhea Method of family planning, promotion of exclusive breastfeeding for the first six months, and reduction of anemia in pregnant women through both distribution of iron and folic acid, and prevention and treatment of malaria.

11. Most Important Opportunities for Additional “Smart” Integration

USAID/Madagascar’s priority opportunities for “smart” integration include:

Near term

- **Continued support:** for refinement of integrated approaches for community-level FP, MNCH and nutrition activities
- **Food for Peace Linkages:** USAID will strengthen the coordination of health sector MNH/FP/Nutrition/malaria and water and sanitation activities with the Food for Peace program, which includes nutrition for children under five and pregnant women, crop diversification and livelihood activities. Madagascar receives approximately \$17 million/year from FFP.

Medium and Long Term

- **Linking Water, Sanitation and Other Health Programs:** For historic contracting and funding reasons, USAID/Madagascar has two “stand-alone” water and sanitation projects funded with Development Assistance monies. Their target areas overlap to some degree with existing integrated health programs, but not fully. When these stand-alone projects end in 2013, USAID will look at designing follow-on activities to either roll into new integrated community health projects or be situated in the same geographic areas as integrated health programs and be mandated to work together.
- **Cross-Sectoral Programming:** USAID/Madagascar has a history of promoting integration and coordination in all sectors. If restrictions are lifted and environment, education, and democracy and governance activities are re-started, USAID/Madagascar will design programs to ensure maximum integration with ongoing health and Food for Peace programs.
- **Family Planning and Environment:** Madagascar is a country rich in unique biodiversity. Recognizing this, the Mission has had a long history of integrated population and environment programming, in particular providing family planning and other health services specifically to communities living in rural and remote ecologically sensitive areas. New activities in FY 2011 will start delivering family planning and water and sanitation services to these underserved communities living in and around biodiversity rich national parks in the

northeast and southwest of the country. If restrictions are lifted, and Mission environmental activities are re-started, the HPN program will work together with the environmental program to design integrated USAID-funded population-health-environment activities.

12. Opportunities For Collaboration/Leverage with Other USG and Development Partner Health Sector Investments and with Other Sectors

USAID is the primary USG development partner in Madagascar and in the health sector. Peace Corps has a health program and USAID collaborates to assist in training and supporting volunteers by supporting projects through the Special Project Assistance program. The Centers for Disease Control and Prevention is a partner in the President's Malaria Initiative and also provides some support on Avian Influenza.

The USG is the largest donor in the health sector. With the withdrawal or reduction in funding from a number of donors following the political crisis, rough estimates suggest that the USG, with \$64 million in FY 2010 funds, is providing more than double that of all other active donors combined. Aside from funding, the USG has a comparative advantage in providing technical and material assistance through staff and projects. Other key partners include: the World Bank (WB); the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM); the United Nations System including United Nations Children's Fund (UNICEF), the World Health Organization (WHO), and the United Nations Populations Fund (UNFPA); the African Development Bank (ADB); the French Development Agency (AFD); the German international development organization (GIZ); and the Japanese International Cooperative Agency (JICA). The WHO and AFD support health system strengthening, health system financing, integrated diseases surveillance, research, and pharmaceutical and health policy development at the regional, district and primary health center levels. Almost all resources from active donors have been reoriented from the central to the district level as a result of restrictions which prevent most from providing direct technical or financial assistance to the current GOM.

- **MCH, FP, and Nutrition:** UNICEF and WHO are key partners for immunization, nutrition, hygiene and sanitation, and integrated management of childhood illnesses (IMCI). UNICEF supports nutrition sentinel sites and WHO focuses on district level health system support, infectious diseases, and neglected tropical diseases. National immunization coverage is at risk due to a lack of donor and GOM funds to address the deteriorating cold chain. UNFPA provides assistance to the GOM in support of reproductive health and family planning and activities include family planning service delivery, contraceptive and reproductive health product security, and adolescent reproductive health services. In addition, UNFPA also provides support to maternal health activities and purchases some delivery kits for the public sector. USAID and WB were poised to fulfill the remaining national need for public sector contraceptives and delivery kits prior to the suspension; frequent significant stock outs of these items are expected over the next few years. JICA also strengthens MCH services. USAID also collaborates with the World Food Program (WFP), the UN Food and Agriculture Organization (FAO), and UNICEF in nutrition and food security.
- **Malaria:** The Roll Back Malaria (RBM) partnership facilitates donor synergy and cost effectiveness to support the National Malaria Control Program. The USG liaises with the

RBM, other donors, and non-governmental organizations to ensure coordination of efforts. The GFATM and USG/PMI are the largest contributors to malaria activities. In addition, the United Nations Agencies (WHO and UNICEF), International Red Cross, and JICA have committed substantial resources to ensure rapid scale up of malaria control interventions.

- **Water Supply and Sanitation:** Madagascar is among the first three countries that are benefiting from the Global Sanitation Fund (GSF) generated by the Water Supply and Sanitation Collaborative Council (WSSCC). The total financing is \$5 million dollars over five years. The program implemented by Medical Care Development International, will cover eight large regional projects and 50 small sub-regional projects. Other key partners in water and sanitation include Water Aid and UNICEF. The Diorano-Wash partnership brings different departments (health, environment, water) and NGOs together to coordinate quality water, sanitation and hygiene-related activities and approaches.

13. Resource Plan

USAID/Madagascar is assuming a straight-lined budget until FY 2015 from the FY 2011 CBJ Request. A number of projects end in FY 2013, which is also the end of the Health, Population and Nutrition Office's current strategy. A new strategy and procurements will be developed during FY 2012-2013.

When restrictions against working with the GOM are lifted, USAID/Madagascar will bring in other partners, including DELIVER (supply chain and logistics strengthening) and other health systems strengthening technical assistance. Some existing partners will expand their work, notably MCHIP, which is supporting safe motherhood. Allocations among partners will be adjusted to reflect the addition of public sector support activities.

14. Monitoring, Evaluation, Research and Innovation

Ongoing monitoring and evaluation includes the annual Performance Plan and Report process at the Mission level and monitoring and evaluation activities within individual projects, including baseline, mid-term and final evaluations. USAID/Madagascar has conducted annual outcome monitoring surveys of project activities using Lot Quality Assurance Sampling methodology but plans to review this approach this year¹⁶.

The latest Demographic and Health Survey (DHS) was in 2008/9 and serves as a baseline for many of the indicators being tracked by the Mission. The next DHS should take place in 2014. Population Services International undertakes Tracking Results Continuously (TRaC) surveys regularly that provide information to many of HPN's partners. For example, during FY 2011 they will conduct a TRaC study among women of reproductive age for family planning and diarrheal disease-related behaviors and drivers of desired behavior. In addition, annual operations research is planned by different partners on different community-based intervention topics. Some examples from FY 2011 work plans include looking at the use of rapid diagnostic

¹⁶ This is now also contingent on the outcome of USAID's current investigation of the Academy for Educational Development, the lead for the FANTA II project, which has been carrying out the survey.

tests by CHWs, community mobilization for obstetric and neonatal emergencies, and field testing a new appropriate technology point-of-use drinking water filter.

Under the PMI program, a Malaria Indicator Survey will take place in FY 2011. It will determine malaria prevalence in children, anemia in children under five, use of insecticide-treated nets by children and pregnant women, fever prevalence and treatment, coverage of preventive malaria treatment for pregnant women and coverage of indoor residual spraying. In addition, the PMI Impact Evaluation, being conducted over the next year, will look at the reduction in malaria-related mortality in children under five.

USAID/Madagascar is also in the process of designing an assessment of community-based interventions to gather both qualitative and quantitative information on the effectiveness of the community-based implementation strategy in order to better understand its impact on improving access to health information and services. A baseline is planned for mid-2011 with a follow-up survey in 2013.

15. What is different? What hard choices were made?

Madagascar's national needs and priorities and USAID/Madagascar's current projects fit very well with the best practices of the BEST initiative. The biggest change to USAID/Madagascar's program under BEST is that, until restrictions are lifted, all resources will be focused on the community level and administered through the private sector.

On one hand, this provides an opportunity to continue to expand geographically and programmatically in some areas. For example, the new Integrated Community Health project will work with rural and remote communities in the west and north of the country, areas not traditionally touched by USAID-funded projects. In addition, this year USAID/Madagascar is expanding private sector partnerships as part of a strategy to increase the private sector share of health service provision in rural areas, where the majority of services have been offered through the public sector. One new partner will deliver long-acting and permanent family planning methods through franchise members and mobile outreach, while another partner will continue to add new private clinic partners to provide integrated MCH and FP services.

On the other hand, the restrictions necessitate leaving out important interventions such as: pre- and in-service training of clinicians; support for appropriate supervision of community health workers by government health centers; supply chain and logistics system strengthening; developing and reinforcing national policies and standards, and; institutional capacity building. . When the Mission is able to work with the public sector again, USAID will need to make hard choices to prioritize among new and ongoing activities and to find a balance between supporting key community interventions and tackling the most urgent public health sector and larger health systems priorities.

APPENDIX A

Madagascar BEST Action Plan Results Framework Table: Overall Table

	Staff
FTE(s) PRH	2.1
FTE(s) MCH	7.2
FTE(s) Nutrition	0.45

USAID/ Madagascar BEST Program	
Goals/Objective	Goal: Reduce Maternal and Child Mortality Objective: Use of Selected Health Services and Products Increased and Practices Improved
Cross-Cutting Information	
Key Areas of Integration	<p>USAID/Madagascar’s existing areas of integration include:</p> <ul style="list-style-type: none"> ➤ <u>Community-Based Service Delivery</u> – Integrated health care services are provided through community health workers (CHWs) in 639 communes in the east, central and south of the country. In FY 2011, this will expand to 800 communes covering approximately 50% of the estimated national population of 19.5 million. Also in FY 2011, a new project will start working in underserved regions in the west and north covering 250 – 300 additional communes. CHWs conduct Behavior Change Communication (BCC) for all health interventions (including FP/MCH/N); provide family planning (FP) methods (oral contraceptives, condoms, cycle beads and Depo Provera); conduct growth monitoring and promotion and nutrition education on breastfeeding and weaning; distribute home water treatment products and zinc/oral rehydration salts (ORS) for diarrhea treatment; diagnose (with rapid diagnostic tests (RDTs)) and treat malaria; and diagnose (clinically) and treat pneumonia. New activities will build capacity in integrated maternal, child and newborn health, including scaling-up distribution of iron/folic acid (IFA) and Intermittent Preventive Treatment (IPTp) of malaria for pregnant women. Outreach services for long-acting and permanent family planning methods are also being coordinated and supported by CHWs. ➤ <u>Private Sector Service Delivery</u> – A USAID-supported network of private clinics is currently repositioning itself to expand services from those primarily aimed at youth, FP and reproductive health and will now offer an integrated basic package of health services that will include FP, STI management, Voluntary HIV Counseling and Testing, detection of cervical cancer (and possibly treatment or, at the very minimum, referral for treatment), post-abortion counseling, and malaria and pneumonia treatment. Eventually the package will also include diarrheal disease management and syphilis screening. In FY 11, USAID will expand access to private sector long-acting and permanent FP methods through mobile clinics and franchised

services, including introducing a voucher program.

- Community Health System Strengthening – The program supports integrated supportive supervision of CHWs, CHW training, the development and expansion of a community health information system (cHMIS), community supply chain strengthening and BCC using funds from all health areas.
- Community Mobilization and Communication – Organizing civil authorities to identify and take responsibility for health improvements provides a sound platform for successful community-based health interventions. BCC uses print materials, local radio spots, outreach through religious institutions, and peer counseling that integrate health messages covering FP, MCH, nutrition, water/sanitation, malaria and HIV prevention.
- Water, Sanitation and Health – The program integrates activities that provide access to improved drinking water and sanitation sources, social marketing of household water treatment products, messaging to promote the importance of clean water and hygiene in protecting health, and diagnosis and treatment of diarrhea. One of the criteria for targeting water activities is high incidence of diarrhea.
- Nutrition, Family Planning and Malaria Treatment – Using community health workers as a platform for education and service delivery also allows for linkages between promotion of the Lactational Amenorrhea Method (LAM) of family planning, promotion of exclusive breastfeeding for the first six months, and reduction of anemia in pregnant women through both distribution of IFA and prevention and treatment of malaria.

USAID/Madagascar’s priority opportunities for “smart” integration include:

Near term

- Continued Support – USAID will continue support for the refinement of integrated approaches for community-level FP, MNCH and nutrition activities.
- Food for Peace Linkages – USAID will strengthen the coordination of health sector MNH/FP/Nutrition/malaria and water and sanitation activities with the Food for Peace program, which includes nutrition for children under five and pregnant women, crop diversification and livelihood activities.

Medium and Long Term

- Linking Water, Sanitation and Other Health Programs – For historic contracting and funding reasons, USAID/Madagascar has two “stand-alone” water and sanitation projects funded with Development Assistance monies. Their target areas overlap to some degree with existing integrated health programs, but not fully. When these stand-alone projects end in 2013, USAID will look at designing follow-on activities to either roll into new integrated community health projects or be situated in the same geographic areas as integrated health programs and be mandated to work together.
- Cross-sectoral Programming – USAID/Madagascar has a history of promoting integration and

<p>Key Development Partners</p>	<p>coordination in all sectors. If restrictions are lifted and environment, education, and democracy and governance activities re-started, USAID/Madagascar will design programs to ensure maximum integration with ongoing health and Food for Peace programs.</p> <p>➤ <u>Family Planning and Environment</u> – Madagascar is a country rich in unique biodiversity. Recognizing this, the Mission has had a long history of integrated population and environment programming, in particular providing FP and other health services specifically to communities living in rural and remote ecologically sensitive areas. In the near term, USAID/Madagascar will seek to provide FP and water and sanitation services through environmental NGOs to remote and underserved communities living in and around national parks. If restrictions are lifted, and Mission environmental activities are re-started, the HPN program will work together with the environmental program to design integrated USAID-funded activities.</p> <ul style="list-style-type: none"> • UNICEF: Support for neonatal health, diarrhea prevention/treatment, malaria prevention/treatment, nutrition, immunization, Vitamin A, iron/folic acid, and water/sanitation • UNFPA: Support for public sector FP commodities, emergency obstetric care training and supplies • WFP: Support for food security programs, including nutrition and MCH activities • World Bank: Ongoing nutrition and HIV/AIDS activities for next 12 months; \$85 million 4-year sector support project when restrictions lifted • Global Fund to Fight AIDS, TB and Malaria: country grants in all three areas, National Strategy Application grant for malaria which includes working with CHWs nationwide 	
<p>Health Systems Strategy</p>		
<p>Principal Interventions</p>	<p style="text-align: center;">Near term (2011-12):</p> <p>Service Delivery</p> <ul style="list-style-type: none"> • Scale-up integrated interventions at community level • Scale-up community mobilization and BCC for all services • Expand availability of private sector integrated and FP services • Expand Community-led Quality Management and other quality improvement initiatives <p>Human Resources</p> <ul style="list-style-type: none"> • Build capacity of community health workers (CHWs) • Build capacity of midwives and pediatricians through their professional associations • Build capacity of private sector providers • Build capacity of commercial retailers of social marketing and water and sanitation products 	<p style="text-align: center;">Medium term (2013-15):</p> <p>Health systems support will remain focused at the community level and in the private sector and will continue to scale-up the principal interventions listed to the left.</p> <p>If restrictions against working with the government are lifted during this period, USAID/Madagascar’s priority health systems strengthening interventions are as follows:</p> <p>Service Delivery</p> <ul style="list-style-type: none"> • Strengthen referral networks between community and facility services • Increase access to quality emergency obstetric care and neonatal services

	<p>Governance/Leadership</p> <ul style="list-style-type: none"> • Expand and reinforce the participatory community involvement approaches (mobilizing communities to become change agents by developing ownership of their own health, advocating for better health services and taking on the responsibility for assessing their needs, and defining actions and monitoring implementation) • Expand and reinforce development and implementation of Community Water and Sanitation Business Plans • Build capacity of local organizations to implement participatory community programs and provide community health services <p>Financing</p> <ul style="list-style-type: none"> • Develop and scale-up local insurance schemes (<i>mutuelles</i>) and village savings and loan groups • Develop micro-financing mechanisms for consumers and suppliers of water and sanitation products and services • Pilot a voucher scheme for long-acting and permanent FP services <p>Medical Products</p> <ul style="list-style-type: none"> • Scale-up socially-marketed pneumonia treatment for private sector and CHWs • Expand availability of zinc/ORs socially-marketed treatment for private sector and CHWs • Scale-up malaria diagnosis using RDTs and treatment by CHWs • Strengthen the supply system to CHWs for generic and socially marketed products <p>Information & Management Systems</p> <ul style="list-style-type: none"> • Build effective regular supervision and monitoring at the community level • Improve quality and use of Community Health Management Information System data • Scale-up use of SMS technology for CHW program data collection 	<p>Human Resources</p> <ul style="list-style-type: none"> • Integrate and strengthen teaching skills and materials in priority health areas in pre-service training • Build capacity of facility-based health workers in priority areas <p>Governance/Leadership</p> <ul style="list-style-type: none"> • Support implementation and scale up of the National Community Health Policy • Strengthen national capacity for health sector planning • Advocate for any necessary changes to health policies under new governments and national plans <p>Financing</p> <ul style="list-style-type: none"> • Explore performance-based financing approaches <p>Medical Products</p> <ul style="list-style-type: none"> • Provide contraceptives, zinc, long-lasting insecticide-treated nets (LLINs), and rapid diagnostic tests (RDTs) for the public sector • Create/strengthen an integrated supply chain for the health sector • Increase capacity for public sector drug procurement and forecasting • Facilitate increased contraceptive security with government funds <p>Information & Management Systems</p> <ul style="list-style-type: none"> • Strengthen data quality and use in the national Health Management Information System (HMIS) • Link the Community Health Management Information System to the national HMIS • Explore opportunities for additional use of cell phone and internet technology <p>Communication/Demand Creation</p> <ul style="list-style-type: none"> • Build national-level capacity to design and deliver BCC campaigns
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	Communication/Demand Creation <ul style="list-style-type: none"> Implement BCC campaigns and socially market products that promote family planning, maternal and neonatal health, child health and healthy nutrition behaviors 					
Resource Plan:						
Investment Areas	Planned FY 2011 Funding (Thousands)			Planned Total FY 2011-2015 Funding (Thousands)		
	FP	MCH	Nutrition	FP	MCH	Nutrition
Integrated Community-Based Services (PMI=\$4,855/yr + HIV/AIDS=\$633/yr+ DA water=\$1,300/yr)	\$4,825	\$4,759	\$400	\$24,125	\$23,795	\$2,000
Private Sector Services (PMI=\$1,300/yr + HIV/AIDS=\$1,300/yr)	\$3,690	\$1,800		\$18,450	\$9,000	
Maternal/Neonatal/ Child Health (PMI=\$300/yr)	\$150	\$1275		\$750	\$6375	
Environmental Health (water, sanitation, hygiene, population-environment) (DA Water=\$3,550/yr)	\$300	\$270		\$1800	\$1,350	
Family Planning Commodities	\$4,500			\$22,500		
Research and Monitoring/Evaluation (PMI=\$200)	\$150	\$150		\$650	\$650	

BEST Action Plan Results Framework Table — Family Planning

USAID/ MADAGASCAR BEST Program: Family Planning			
Goal	Reduce Maternal and Child Mortality		
Targets & Indicator for Key Objectives	Indicators Modern Contraceptive Prevalence Rate	Impact Targets-2015 and baseline 29%—Baseline 2008/9 DHS 34%—2015 Target	
National Priority(ies)	Priorities 1. Increase Modern Contraceptive Prevalence Rate from 18% (2003/4) to 30% (2011) 2. Decrease Total Fertility Rate from 5.4 (2005) to 3 (2012) Note: 2008/9 DHS is 4.8. 3. Meet unmet need for FP, especially in rural areas. No target established. 2008/9 DHS is 14.6%	Plans Plan de Développement Secteur Santé 2007-2011 (PDSS) PDSS/Madagascar Action Plan PDSS	
Strategy			
Principal Interventions	Near term (2011-12): <ul style="list-style-type: none">• Scale-up community- based distribution of oral contraceptives, injectables, condoms and cycle beads. Promote Lactational Amenorrhea Method (LAM) and Standard Days Method.• Reinforce quality of community-based FP services• Scale-up community-based postpartum FP services• Scale-up private sector FP services, including services for youth• Introduce socially-marketed emergency	Medium term (2013-15): <p>FP support will remain focused on the community level and private sector and will continue to scale-up the principal interventions listed to the left.</p> <ul style="list-style-type: none">• Scale-up FP services in ecologically sensitive areas <p>If restrictions against working with the government are lifted during this period, USAID/Madagascar’s priority family planning interventions are as follows:</p>	2010 Baseline/ 2015 Outcome Targets <ul style="list-style-type: none">• Couple years of protection in USAID-supported programs*: 2010—756,178 2015—1 million• Number of people trained in FP/RH with USAID funds: 2010—9,662 2015—10,500

* This measure includes all women of reproductive age reached through USAID FP activities.

contraception (in 2012, as soon as it is available)

- Reinforce quality of private sector FP services
- Scale-up community access to quality long-acting and permanent methods through private-sector clinic and community-based services (outreach, franchising — including vouchers)
- Scale-up work with youth leaders promoting reproductive health
- Scale-up work with community leaders on gender, power and sexual health
- Conduct BCC with emphasis on birth spacing, LAM and long-acting and permanent methods
- Provide FP services in Madagascar’s ecologically sensitive areas

- Integrate FP services in public sector post-partum and post-abortion care services
- Scale-up availability of long-acting and permanent FP methods in the public sector
- Provide contraceptives for the public sector
- Strengthen pre- and in-service training of providers in long-acting and permanent methods
- Improve contraceptive security in public sector planning and budget
- Scale-up national promotion of birth spacing, and availability of long-acting and permanent methods

Delivery Approaches

Near term (2011-12):

- Community-level service delivery through CHWs
- Private sector service delivery through clinics and mobile outreach
- Community mobilization, BCC and social marketing

Medium term (2013-15):

Continuation of near-term delivery approaches unless restrictions lifted. If so, add:

- Public sector facility service delivery
- Nationally coordinated delivery of BCC through routine activities and campaigns

BEST Action Plan Results Framework Table — MCH

USAID/ MADAGASCAR BEST Program: Maternal & Child Health			
Goal	Reduce Maternal and Child Mortality		
Targets & Indicator for Key Objectives	Indicators	Impact Targets-2015 and baseline	
	Percentage of children under five years old with diarrhea treated with Oral Rehydration Therapy (ORT)	17%—baseline 2008/9 DHS 40%—TARGET 2015	
	Percentage of children under five with a fever who were brought to a health facility or health care provider for treatment.	41%—baseline 2008/9 DHS 65%—target 2015	
National Priority(ies)	Priorities	Plans	
	1. Reduce the Maternal Mortality Rate from 469/100,000 (2003/4) to 156/100,000 by 2011. Note: 2008/9 DHS is 498/100,000.	Plan de Développement Secteur Santé 2007-2011 (PDSS) —Madagascar Action Plan targeted 273 by 2012 —MDG target is 149 by 2015 —MDG target is 47 by 2015	
	2. Reduce the Under-Five Mortality Rate from 94/1,000 to 73/1,000 by 2011. Note: 2008/9 DHS is 72/1,000.		
Strategy			
Principal Interventions	Near term (2011-12):	Medium term (2013-15):	2010 Baseline/ 2015 Outcome Targets
	Integrated		
	<ul style="list-style-type: none"> • Scale-up integration of maternal, neonatal and child health services through CHWs • Encourage pregnancy spacing • Provide long-lasting insecticide-treated 	<p>MCH support will remain focused on the community level and private sector and will continue to scale-up the principal interventions listed to the left.</p> <ul style="list-style-type: none"> • Advocate for new policies through donor 	<p>Number of liters of drinking water disinfected with USAID-supported point-of-use treatment products</p> <p>2010—2.6 million liters 2015—4 million liters</p>

mosquito nets in malaria endemic areas and undertake indoor-residual spraying for malaria in areas with seasonal transmission—particularly to provide protection to pregnant women and children under 5

Maternal & Neonatal Health

- Strengthen skills and knowledge of midwives and pediatricians in emergency obstetric and essential newborn care through their professional associations
- Train CHWs on postpartum care, recognition of obstetric emergency signs, and essential newborn care
- Expand education on postpartum care, recognition of obstetric emergency signs, and essential newborn care through CHWs
- Expand delivery of quality focused antenatal care through CHWs, including distribution of iron/folic acid, and preventive treatment for malaria
- Pilot newborn resuscitation at community level
- Improve community transport systems for births and obstetric complications

Child Health

- Facilitate immunization coverage at community level
- Expand integrated services and distribution of zinc and ORS, pneumonia treatment, malaria diagnosis (with RDTs) and treatment,

Maternal and Neonatal Health Working Group:

- Vitamin A for pregnant women
- Community-based distribution of misoprostol — implement on a pilot basis if possible
- Community-based distribution of chlorhexidine — implement on a pilot basis if possible
- Provision of antibiotics for severe newborn infection —implement on a pilot basis if possible

If restrictions against working with the government are lifted during this period, USAID/Madagascar's priority MCH interventions are as follows:

- Advocate directly with and provide technical assistance to MOH for policy changes noted above
- Scale-up quality basic and emergency obstetric and neonatal care in public sector facilities
- Strengthen pre- and in-service training of midwives and other health workers in basic and emergency obstetric and neonatal care
- Strengthen pre- and in-service training of health workers in child health and IMCI
- Improve referral systems for obstetric, neonatal and child health services
- Re-start safe drinking water and hygiene activities with public health clinics and schools
- Support revitalization of the national routine immunization program including working

Number of cases of child diarrhea treated in USAID-assisted programs
2010—136,931
2015—550,000

Number of cases of child pneumonia treated with antibiotics by trained facility or community health workers in USAID-supported programs
2010—35,128
2015—80,000

Number of people trained in maternal/newborn health through USAID-supported programs
2010—4,469
2015—6,500

Number of newborns receiving essential newborn care through USAID-supported programs
2010—160,000
2015—175,000

Number of people covered by USAID-supported health financing arrangements
2010—52,340
2015—600,000

	<p>long-lasting insecticide-treated bednets, and home water treatment solution by CHWs</p> <ul style="list-style-type: none"> • Socially market zinc and ORS, pneumonia treatment, and home water treatment solution • Expand availability and use of safe drinking water, safe feces disposal and hygiene (community-led total sanitation program) in the community • Explore intersectoral interventions to mitigate poor indoor air quality through stove and fuel improvements • Develop innovative public-private partnerships to subsidize access to safe water and to provide water and sanitation products • Expand quality IMCI services care through private providers • Support national semi-annual Mother/Child Health Weeks 	<p>with GAVI on rotavirus and pneumococcal vaccines</p> <ul style="list-style-type: none"> • Strengthen work with local authorities on drinking water and sanitation management • Provide funding and technical assistance at the national level to semi-annual Mother/Child Health Weeks 	<p>Number of people in target areas with improved access to sanitation facilities as a result of USAID assistance 2010—64,065 2015—16,500</p> <p>Number of people in target areas with improved access to drinking water supply as a result of USAID assistance 2010—41,630 2015—20,000 (not cumulative)</p> <p>Number of functional (trained, equipped & supervised) community health workers 2010—9,372 2015—12,000</p>
<p>Delivery Approaches</p>	<p>Near term (2011-12):</p> <ul style="list-style-type: none"> • Community-level service delivery through community health workers • Private sector service delivery through clinics and mobile outreach • Community mobilization, BCC and social marketing 	<p>Medium term (2013-15):</p> <p>Continuation of near-term delivery approaches unless restrictions lifted. If so, add:</p> <ul style="list-style-type: none"> • Public sector facility service delivery • Nationally coordinated delivery of BCC through routine activities and campaigns 	

BEST Action Plan Results Framework Table — NUT

USAID/ MADAGASCAR BEST Program: Nutrition			
Goal	Reduce Maternal and Child Mortality		
Targets & Indicator for Key Objectives	Indicators Stunting in children under age five years.	Impact Targets-2015 and baseline 50%—Baseline (2008/9 DHS) 40%—target 2015	
National Priority(ies)	Priorities I. Percentage of malnutrition reduced in children under five years from 42% (2003/4 DHS) to 28% (2012). Note: 2008/9 DHS is 50%.	Plans Plan de Développement Secteur Santé 2007-2011 (PDSS) /Madagascar Action Plan	
Strategy			
Principal Interventions	Near term (2011-12): <ul style="list-style-type: none"> • Scale-up BCC by CHWs aimed at women and children during the window of opportunity (from conception to 24 months), including: <ul style="list-style-type: none"> ○ Exclusive and continued breastfeeding ○ Appropriate weaning practices and foods ○ Detection and referral for acute malnutrition ○ Dietary quality and diversity for pregnant women and children ○ Feeding practices during childhood 	Medium term (2013-15): <p>Nutrition support will remain focused on the community level and private sector and will continue to scale-up the principal interventions listed to the left.</p> <ul style="list-style-type: none"> • Strengthen essential nutrition actions in private sector clinics <p>If restrictions against working with the government are lifted during this period, USAID/Madagascar’s priority Nutrition interventions are as follows:</p>	2010 Baseline/ 2015 Outcome Targets <p>Children 6-59 months receiving Vitamin A dose in last six months 2003/4 DHS—76.2% 2015 Target—86%</p> <p>Percentage of children under six months exclusively breastfed 2008/9—50.9% 2015 Target—61%</p>

	<p>illnesses</p> <ul style="list-style-type: none"> • Expand anemia-reduction packages for pregnant women and children through CHWs: iron/folic acid and preventive treatment for malaria for women, and de-worming and improved feeding practices for children • Deliver vitamin A supplementation for children aged 6-59 months semi-annually • Support de-worming of children through semi-annual Mother/Child Health weeks • Strengthen linkages between health programs and health/nutrition/agriculture activities under Food for Peace including connecting CHWs to agriculture programs and agriculture extension agents • Strengthen linkages between nutrition, FP (Lactational Amenorrhea Method), child health (breast feeding, diarrhea prevention and treatment, birth spacing), water and sanitation (illness prevention), and malaria (anemia prevention) activities. 	<ul style="list-style-type: none"> • Advocate for de-worming for adults as part of standard package of services for semi-annual Mother/Child Health Weeks • Strengthen referral systems for acute malnutrition 	<p>Number of people trained in child health and nutrition through USAID-supported health area programs</p> <p>2010—9,180 2015—13,000</p>
<p>Delivery Approaches</p>	<p>Near term (2011-12):</p> <ul style="list-style-type: none"> • Community-level service delivery through CHWs, including water committee members and Food for Peace agriculture extension workers • Private sector service delivery through clinics and mobile outreach • Community mobilization and BCC and social marketing 	<p>Medium term (2013-15):</p> <p>Continuation of near-term delivery approaches unless restrictions lifted. If so, add:</p> <ul style="list-style-type: none"> • Public sector facility service delivery • Nationally coordinated delivery of BCC through routine activities and campaigns 	