Madagascar Community-Based Integrated Health Program (MAHEFA)

Cooperative Agreement No. 687-A-00-11-00013-00

FINAL REPORT
May 23, 2011 to June 7, 2016

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Reporting Period: May 23, 2011 to June 7, 2016

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Acronyms and Abbreviations

AOR  Agreement Officer Representative
ACT  Artemisinin-Based Combination Therapy
ANC  Antenatal Care
ARI  Acute Respiratory Infection
BCE  Behavior Change Empowerment
CA  Cooperative Agreement
CBIHP  Community-Based Integrated Health Program
CCDS  Commission communale pour le développement de la santé (Community Committee for Health Development)
CHV  Community Health Worker
CHX  Chlorhexidine 7.1%
c-IMCI  Community Integrated Management of Childhood Illnesses (PCIME-c Prise en charge intégrée des maladies de l’enfant – communautaire)
CLTS  Community-Led Total Sanitation
COSAN  Comité de santé (Health Committee)
CSB  Centre de santé de base (Basic Health Center)
CSC  Community Score Card
CU5  Children Under 5
CYP  Couple Years of Protection
DDS  Direction des districts sanitaires (Directorate of the Development of Sanitary Districts)
DPLMT  Direction de la Pharmacie, des Laboratoires et de la Médecine Traditionnelle (Directorate of the pharmacy, laboratories and traditional medicines)
DREAH  Direction régionale de l’Eau, Hygiène et Assainissement (Directorate of WASH)
DRSP  Direction régionale de la santé publique (Regional Public Health Directorate)
DQA  Data Quality Assessment
ETS  Emergency Transport System
FP  Family Planning
GOM  Government of Madagascar
HMIS  Health Management Information System
IEC  Information, Education, Communication
IFA  Iron Folic Acid
IGA  Income Generating Activity
IPM  Institut Pasteur de Madagascar (Madagascar Pasteur Institute)
IPTp  Intermittent Preventive Treatment in Pregnancy
IR  USAID Intermediate Result
JSI  JSI Research & Training Institute, Inc.
KMSm  Kaominina Mendrika Salama Miabo (Champion Communes)
LLITN  Long Lasting Insecticide Treated Nets
MAHEFA  MAlagasy HEniky ny FAhasalamana (MAdagascar HEalthy FAmily)
M&E  Monitoring and Evaluation
mHealth  Mobile Health
MNCH  Maternal, Newborn and Child Health
MOH  Ministry of Health
MOWSH  Ministry of Water Sanitation and Hygiene
MOYS  Ministry of Youth and Sports
MUAC  Mid-Upper Arm Circumference
NGO  Non-Governmental Organization
ODF  Open Defecation Free
ORS  Oral Rehydration Solution
PA  Point d’approvisionnement (Supply Point)
PAEAL  Programme d’alimentation en eau potable et d’assainissement en milieu rural (Water supply, sanitation and hygiene for rural areas project)
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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>PMI</td>
<td>President’s Malaria Initiative</td>
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<tr>
<td>PMP</td>
<td>Performance Monitoring Plan</td>
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<tr>
<td>PNSC</td>
<td>Politique Nationale de Santé Communautaire/National Community Health Policy</td>
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<tr>
<td>PPHP</td>
<td>Postpartum Hemorrhage Prevention</td>
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<tr>
<td>RDT</td>
<td>Rapid Diagnostic Test</td>
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<td>RH</td>
<td>Reproductive Health</td>
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<td>RMA</td>
<td>Rapport Mensuel d’Activité</td>
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<tr>
<td>RU</td>
<td>Regular User</td>
</tr>
<tr>
<td>SMS</td>
<td>Short Text Messaging</td>
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<tr>
<td>SP</td>
<td>Sulfadoxine-pyrimethamine</td>
</tr>
<tr>
<td>SDSP</td>
<td>Service de district de la santé publique (Public District Health Service)</td>
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<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
</tr>
<tr>
<td>STTA</td>
<td>Short-Term Technical Assistance</td>
</tr>
<tr>
<td>TA</td>
<td>Technicien accompagnateur (Technical Assistant)</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
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<tr>
<td>WUHSA</td>
<td>Water Users Hygiene &amp; Sanitation Association</td>
</tr>
<tr>
<td>YPE</td>
<td>Youth Peer Educator</td>
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</tbody>
</table>
Table of Contents

EXECUTIVE SUMMARY ........................................................................................................................................................ 1

1. INTRODUCTION ........................................................................................................................................................... 6

2. MAHEFA’S CONTRIBUTIONS TO COMMUNITY HEALTH IN MADAGASCAR......................................................... 7
   2.1. Produce Evidence that CHVs Can Provide Integrated Health Services ................................................................. 7
   2.2. Integration of Public Health Officials into Service Delivery at the Community Level ......................................... 7
   2.3. Use Findings from MAHEFA Regions to Advocate for Community Health at National Level ................... 8
   2.4. Introduce High Impact Interventions that Adopted by MOH on National Scale ............................................ 8

3. PROGRAM ACHIEVEMENTS BY INTERMEDIATE RESULTS ..................................................................................... 9
   3.1. Increase Demand for High Quality Health Services and Products (IR 1) ............................................................ 9
   3.2. Increase the Availability of High-Impact Health Services and Products (IR 2) ...................................................... 18
   3.3. Improve the Quality of Care Delivered by Community-Based Health Practitioners (IR 3) ......................... 35
   3.4. Cross-Cutting: Monitoring & Evaluation and Knowledge Management, USAID Compliance, and Gender (IR 4) .................................................................................................................................................. 44
   3.5. Administrative and Financial Activities Including Grants and Partnerships .................................................... 54

4. CONCLUDING A PROGRAM AND PROMOTING A VISION ...................................................................................... 68
   4.1 Concluding a Program ............................................................................................................................................ 68
   4.2 Promoting a Vision .................................................................................................................................................. 69

Annexes (in separate document)

Annex 1. Major Events During the Life of the Program
Annex 2. Performance Monitoring Plan (PMP)
Annex 3. Success Stories
Annex 4. Technical Briefs
Annex 5. List of NGO Grantees
List of Tables

Table 1 - People Reached with Key Health Messages Delivered by CHVs by Year ..................................................... 12
Table 2 - Summary of Annual Health Days and National Health Campaigns with CHV Participation .................... 13
Table 3 - Non-CHVs Community Actors and their BCE Activities ........................................................................... 14
Table 4 - Functional Radio Listening Groups at the End of the MAHEFA Program .................................................... 15
Table 5 - Progress in Service Utilization at the Community Level in MAHEFA ........................................................... 19
Table 6 - CHVs Training by Technical Themes by Year ................................................................................................. 22
Table 7 - Training for Community Actors to Ensure Access to WASH and Health Products ................................. 22
Table 8 - Types of Emergency Transports in the MAHEFA program by Regions ...................................................... 26
Table 9 - Wells and Kiosks in MAHEFA Regions ........................................................................................................ 27
Table 10 - Results for Selected Malaria Indicators for MAHEFA Regions (2012-2016) ................................................ 31
Table 11 - Referral Cases from CHVs to CSBs, Hospitals, or Mobile Clinics (2014* to 2016) ............................... 32
Table 12 - Progress in CHV’s Service Quality in the MAHEFA Program ............................................................... 36
Table 13 - Progress on KMSm indicators between Cycle 1 and 4 ............................................................................. 43
Table 14 - Survey and Research Studies Conducted by the Program ....................................................................... 47
Table 15 - Program Internal Review Workshops Organized by MAHEFA ................................................................. 48
Table 16 - Dissemination Workshops Organized by MAHEFA .................................................................................. 50
Table 17 - Meetings and Technical Working Groups Attended by MAHEFA Staff ...................................................... 51
Table 18 - Modifications of the Program’s Cooperative Agreement (CA). ................................................................. 55
Table 19 - Movement of Staff and Interns in the MAHEFA Program (2011-2016) ....................................................... 57
Table 20 - International Travel for MAHEFA staff (2011-2016) ................................................................................. 58
Table 21 - Program Cumulative Expenditures as of June 7, 2016 ............................................................................ 60
Table 22 - Cost Share Collected in the Program (2012-2015) .................................................................................. 62
Table 23 - NGO grantees in the MAHEFA Program (2012-2016) .............................................................................. 65
Table 24 - MAHEFA Partners and Their Contributions ............................................................................................. 67

List of Figures

Figure 1 - BCE Channels and their Reach in the MAHEFA Program (N= 2,824,944) ................................................................. 11
Figure 2 – Counseling at CHV Health Huts by Types of Clients by Year (2012-2016) ......................................................... 13
Figure 3 - Improved Latrines Built in the MAHEFA Program (Cumulative) ................................................................. 16
Figure 4 - Simple Latrines Built in the MAHEFA Program (Cumulative) ........................................................................ 16
Figure 5 - Number of Communities with Certified ODF in the MAHEFA Program .......................................................... 17
Figure 6 - Progress of Health Services and Products in MAHEFA ................................................................................ 19
Figure 7 - MOH Officials Who Received TOT and Provided Training to CHVs (n=937) ..................................................... 21
Figure 8 - Stock-out Reported by CHVs for Child Health Tracer Products by Year ............................................................... 24
Figure 9 - Stock-out Reported for Family Planning Tracer Products by Year ................................................................. 24
Figure 10 - Health insurance scheme or Mutuelle in MAHEFA Program by Regions ....................................................... 25
Figure 11 - Distribution and Use of CHX in Two Districts in MAHEFA program (n=840) ...................................................... 28
Figure 12 - Distribution and Use of Misoprostol in Vohemar District, SAVA Region (n=420) ............................................. 28
Figure 13 - Results of MUAC Measurement in the MAHEFA program by Year .............................................................. 29
Figure 14 - Cases of CU5 Treated for Pneumonia by CHVs in the MAHEFA program by Year ...................................... 30
Figure 15 – Cases of CU5 Treated for Diarrhea by CHVs in the MAHEFA program by Year ........................................ 30
Figure 16 – CU5 Having Received ACT Treatment from CHVs in the MAHEFA program Year ....................................... 31
Figure 17 - Regular FP Users in the Program by Year* and by Age Group .................................................................. 33
Figure 18 - New FP Users in the Program by Year* and by Age Group ......................................................................... 33
Figure 19 – Evolution of CYP Achievements in MAHEFA Areas by Year ........................................................................ 33
Figure 20 – Youth Referred by Youth Peer Educators for FP services with CHVs ............................................................ 34
Figure 21 – CHV Attendance Rates for Monthly Meetings (2013*-2016) .......................................................................... 37
Figure 22 – Supervision Visits to CHVs by Year* ............................................................................................................. 37
Figure 23 – CHVs Receiving Supervision Visits, Comparison FY2015 and FY2016 (n=6,052) ............................................ 38
Figure 24 – Community Actions as a Result of the CSC Approach (N = 1,880) ................................................................. 41
Figure 25 – Satisfaction Rate (%) Among Users for Two Obligatory CSC Indicators (n=47,896) ........................................ 41

* Denotes a year when data is not fully available
List of Text Boxes

Box 1 – MAHEFA’s Contributions to Three USAID/Madagascar Intermediate Results ........................................... 1
Box 2 – MAHEFA’s Overarching Strategies ........................................................................................................... 7
Box 3 – Five Stages of Community-led Total Sanitation (CLTS)* ........................................................................ 15
Box 4 – CHVs in the MAHEFA Regions .............................................................................................................. 18
Box 5 – How MAHEFA’s Mutuelle Works ........................................................................................................ 25
Box 6 - Steps in Establishing Community-Based ETS .................................................................................... 26
Box 7 – New Method of Growth Monitoring ................................................................................................... 29
Box 8 – MAHEFA Introduced Timer for Use by CHVs for the First Time in Madagascar ................................ 30
Box 9 – Referrals ofCU5 for Vaccination ........................................................................................................ 31
Box 10 – CCDS Members Trained to Conduct KMSm Activities ....................................................................... 42
Box 11 – How MAHEFA adapted its operation system to changes .................................................................... 54
Executive Summary

Madagascar Community-Based Integrated Health Program (CBIHP), locally known as MAHEFA, was a five-year (2011-2016), USAID-funded community health program that took place across six remote regions in north and north-west Madagascar (Menabe, SAVA, DIANA, Sofia, Melaky, and Boeny). The program was implemented by JSI Research & Training Institute, Inc. (JSI), with sub-recipients Transaid and The Manoff Group, and was carried out in close collaboration with the Ministry of Public Health, the Ministry of Water, Sanitation and Hygiene, and the Ministry of Youth and Sport. Over the course of the program, a total of 6,052 community health volunteers (CHVs) were trained, equipped, and supervised to provide basic health services in the areas of maternal, newborn, and child health; family planning and reproductive health (FP/RH), including sexually transmitted infections (STIs); water, sanitation, and hygiene (WASH); nutrition; and malaria treatment and prevention at the community level.

MAHEFA’s main channel for service delivery at the community level was CHVs. The CHVs were selected by their own communities, supervised by heads of basic health centers, and provided services based on their scope of work as outlined in the National Community Health Policy. Their work and the work of other community actors involved with the MAHEFA program was entirely on a voluntary basis. Through the life of the program, MAHEFA trained 6,052 CHVs in integrated health areas. The clinical supervision for CHVs was provided by 695 heads or deputy heads of basic health centers, or Centres de Santé de Base (CSB). By the end of the program implementation, CHVs provided a package of services in all of the program’s 3,023 fokontany, which increased access to basic health services for 3,403,547 million people.

The Government of Madagascar (GOM) changed hands late in the program in January 2014. This was accompanied by significant changes in the program implementation and strategies, particularly the integrating community health program activities in the public health system, which required rapid adaptation by MAHEFA. Thus the story of MAHEFA unfolds in three phases:

- The original program scope and activities (2011-2013);
- The integration of community health program into the public health system (2014-2015);
- A final push for quality and sustainability (2016).

MAHEFA’s five-year overall objective, as presented below, never changed.

To increase the use of proven, community-based interventions (MNCH, FP (RH) including the prevention of (STIs), WASH, the prevention and treatment of malaria, and nutrition) and essential products among underserved populations in six northern and western regions of Madagascar.

Box 1 – MAHEFA’s Contributions to Three USAID/Madagascar Intermediate Results

MAHEFA contributed to the following USAID intermediate results (IR):

- IR 1: Increase demand for high-quality health services and products
- IR 2: Increase availability of high-impact services and products
- IR 3: Improve the quality of care delivered by community-based health practitioners

The successes of MAHEFA are nothing short of groundbreaking. In a relatively short amount of time, the program had achieved the followings:

1. Developed a foundation for quality community health care and quality improvement among clients, providers, and the Madagascar government. The provision of effective integrated community health services coupled with successful demand creation activities especially at the community level, contributed to a more informed client-base, who now actively seek out health care at the CHVs and CSBs offering MNCH services. Equally important is the Madagascar government’s
Beginning of the recognition the contribution of the community health’s role in achieving the GOM’s health goals. Prior to the MAHEFA program, none of the district- or commune-level health officials in MAHEFA program areas had received training on community health or on how to train CHVs. Through these close working relationships, MAHEFA staff provided on-the-job coaching to GOM officials in program planning, review, data analysis and data use, and, most importantly, in technical supervision and support to community health volunteers. Additionally, MAHEFA trained and assisted a total of 3,053 COSAN members and other community leaders to mobilize and monitor community health activities on a regular basis.

2. **Demonstrated the power of trained community health volunteers in reducing maternal, newborn and child deaths.** As the first community health program to follow the GOM’s PNSC Operational Guidelines, MAHEFA’s positive results, including achievements in several MOH health objectives, such as FP, MNCH and WASH, clearly demonstrated the potential the PNSC has to improve health. MAHEFA regularly shared updates and findings at both regional and national levels as part its contributions to advocacy for community health in Madagascar. Key health indicators tracked through a variety of sources provide evidence that there was consistent progress in the major health indicators in the program regions during the program life.

Highlights of the program achievements presented by the intermediate results are presented below:

**IR 1 highlights: Increased demand for products and services**

The most significant of MAHEFA’s achievements in IR1 is the fact that community-identified and program trained change agents have been assuming their responsibility for behavior change activities thus reaching many members in their community on a regular basis. At the end of the program, there were 217,751 community actors who were trained and provided with education materials and tools and who regularly conducted BCE activities in their own communities. Equipped with BCE knowledge and materials, these actors can continue their BCE activities even without external support.

A summary of main results of the program’s BCE activities, as reported in the USAID mid-term evaluation or Outcome Monitoring Survey (OMS) of 2014\(^1\) are presented below. Since the MAHEFA program was the first integrated community health program of its scale in the six program regions, and was the only one operating in these areas at the time, the accessibility of key health messages among the program target populations can largely be attributed to the BCE activities of the MAHEFA program.

- 58.2% of parents and caretakers in program areas received key messages on maternal and child health (MCH) including topics such as nutrition, malaria, ANC visits, assisted birth (23.2% from CHVs, not including other non-CHV community actors, and 35% from radio broadcasts);
- 60.7% of parents and caretakers in program areas received key messages on malaria (24.3% from CHVs, not including other non-CHV community actors, and 36.4% from radio broadcasts); and
- 87.7% of women of reproductive age (WRA) in program areas received key messages on family planning (51.5% from CHVs, not including non-CHV community actors, and 36.2% from radio broadcasts).

The above achievements in reaching people with key messages have contributed to specific changes in certain practices and behaviors as shown below.

- The proportion of women seen for an antenatal care (ANC) visit at least four times during their pregnancy has significantly increased, from 33.2% in 2012 to 67.3% in 2014. The percentage of births attended by skilled health providers has also increased, from 49.9% to 77.7% respectively. Thus, by the

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\(^1\) The most recent Outcome Monitoring Survey (OMS) was conducted by USAID in 2014.
program midpoint, these achievements already surpassed the end-of-program targets of 42% (four ANC visits) and 59% (assisted delivery).

- According to the 2014 OMS, 93.8% of parents and caretakers know about the use of Long-Lasting Insecticide-Treated Nets (LLITN) for malaria prevention. Among pregnant women, 90% know about the importance of obtaining intermittent preventive treatment in pregnancy (IPTp) for malaria at local health facilities (centre de santé de base, CSB).
- In 2014, the OMS results showed that the percentage of children under six months of age exclusively breastfed in the past 24 hours was 95.9% (page 29), compared with the national rate of 51% in the 2008 DHS.
- The results of the baseline survey and the OMS show that the percentage of WRA who were exposed to family planning messages also increased from 12.9% in 2012 to 80.3% in 2014 respectively. This progress has contributed to an increase in the contraceptive prevalence rate (CPR) from 26.9% in 2012 to 41.3% in 2014. In addition, the percentage of mothers of children aged 12 months or less who stated their desire to wait at least two years to have another child increased from 70% in 2012 to 86% in 2014.
- There was a significant increase in the percentage of households having access to improved drinking water sources, from 46.8% in 2012 to 65.2% in 2014. The progress was more significant (p=0.002) among households with a woman as the head of the household.
- The proportion of households with access to improved latrines more than tripled in two years, from 3.1% in 2012, to 9.8% in 2014.

**IR 2 highlights: Increased availability of products and services**

Prior to the MAHEFA program, there were no CHVs in the six MAHEFA program regions who were trained and supported to provide integrated health services. CHVs in MAHEFA program areas were selected by their fokontany based on the pre-established criteria in the PNSC. There were a total of 6,052 CHVs (60% male and 40% female) in MAHEFA’s six regions. When the program started in FY2011, 0% of the total fokontany in the program’s six regions had access to integrated services at the community level, but by the end of FY2014, 82% did, and 100% of fokontany had integrated services by the end of the program in FY2016.

To enable CHVs to provide quality services, MAHEFA and the Population Services International (PSI)/Integrated Social Marketing (ISM) program worked together to set up 281 local supply points in target communes of the six regions to ensure that CHVs had regular access to the health commodities needed to provide integrated health services. As a result, CHVs in MAHEFA areas were able to resupply certain health products at the Supply Point (Point d’approvisionnement, PA) in addition to getting health products from the existing public sector supply source, namely the CSBs. There was some overlap between products supplied by the PA and by the CSBs, but the PAs largely provided social marketing products while the CSBs provided public sector products.

In addition to the services provided by CHVs, MAHEFA implemented activities to increase access to health services, namely the community-managed mutuelle de santé and the emergency transport system (ETS). Over the course of the MAHEFA program, mutuelles were established in 33 communes, 12% of all MAHEFA communes. Eleven of these communes had ETS activities linked to their mutuelle activities, and a total of 964 people who needed to be transported to the CSB for health issues used the ETS over the life of the program.

The availability of services and products shown above has resulted in an increase in service and product utilization. Table 1 (on page 12) shows a significant increase in service utilization from the beginning of MAHEFA until the mid-term period. An endline survey had not been conducted for MAHEFA by the time

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2 Idem.
of this report, but many of the end-of-program targets had already been surpassed by the mid-term period or were on-track to be achieved by the end of program.

CHV’s services by technical areas

Maternal, newborn and child health (MNCH)
- Almost half a million pregnant women (478,439) were referred by CHVs for antenatal and delivery services at CSB. Out of this number, 89,226 were referred back from CSB for follow-up care at the community level by CHVs.
- Over two million CU5 or 2,518,528 were referred for services including immunization at the CSBs by CHVs. Out of the CU5 referred, more than half a million or 715,691 were referred back from CSB to CHVs for community-level follow up care.
- 1,695,320 CU5 were referred for vaccination at CSB. This represents 67% of all CUs referred by CHVs.
- 230,215 cases (47% or 107,215 girls) received treatment for pneumonia; and
- 257,106 cases (47% or 101,072 girls) with diarrhea and no dehydration received Viasur, Oral Rehydration Solution (ORS), and/or zinc.

Malaria
- 475,429 CU5 with fever were tested by RDT by CHVs, out of which half (51% or 241,138) were tested positive for malaria. Out of the CU5 tested positive, 17,284 cases with danger signs were referred by CHV for further treatment at the health facility or Centre de santé de Base (CSB); and
- 257,106 cases of CU5 with fever treated by CHV within 24 hours after the appearance of fever

Nutrition
- By the end of the program in FY2016, CHVs monitor growth among children under 5 (CU5) was done through routine weight and MUAC measurement. CHVs provided counseling to parents on good nutrition practices during the routine weighing sessions and to every parent who brought in a sick child;
- Number of CU5 whose MUAC was measured by CHVs increased significantly - from 1,151 in FY2011 to 2,343,546 in FY2015; and
- Over the course of the program, a total of 1,950,804 children were weighed at a CHV’s health hut, out of which 56% (1,090,063) were children under two years old.

Family Planning and Reproductive Health
- There was significant progress in CYP achievements in the MAHEFA program (120,995 in FY2015 compared with 40,120 in FY2012);
- At the end of the program, CHVs were servicing 204,622 FP regular users, out of which 47% or 96,397 are women between 15 to 24 years old; and
- The number of new users recruited by CHVs increased over the course of the program. Over MAHEFA’s five-year program period, CHVs recruited a total of 55,866 new users, representing 27% of all FP regular users for the period.

Water, Sanitation and Hygiene
- 413 wells and water kiosks were built or rehabilitated by MAHEFA benefiting 103,250 people (250 people per well per the estimation guide by the Ministry of water, Sanitation and hygiene for this type of well);
- At the end of the program, there were 52,878 improved or hygienic latrines built in the program regions, providing access to hygienic latrines for 243,239 people; and
- Out of the 472 villages that were certified ODF by the Regional Directorate for Water, Hygiene and sanitation (Direction régionale de l’Eau, de l’Assainissement et de l’Hygiène, DREAH), 217 of them received a permanent certification, meaning that they maintained their ODF status for at least three months after certification, based on a minimum of two evaluations by the DREAH.
IR 3 highlights: Improved quality of care by CHWs

- MAHEFA trained 937 staff from the MOH in community health and CHVs’ integrated health services (20 from the national level, 75 from the regional level, 146 from the district and 696 from the commune levels).
- Almost all CHVs (99.7%) received refresher training led by MOH staff.
- At the end of the program, MAHEFA conducted a total of 56,849 supervision visits to CHVs. The number of supervision visits conducted during the last two years of the program implementation is 45,899, of those 6,424 or 14 % were classified as technical supervision and combined with outreach activities of CSB.
- By the end of the program, each of the 279 communes in the program six regions had succeeded in completing at least three KMSm cycles, meaning they achieved their health goal set in each cycle. Almost half of the communes (131 or 47%) had gone further and completed their fourth KMSm cycle and received four certificates (one for each of their completed cycles).
- By the end of the program, there were 2,679 (89% of all fokontany) permanent health huts or toby built by the community as a work site for the CHVs. Among the 2,679 toby built by the community, 2,591 (97%) were equipped with basic furniture such as a table, chair, closed closet, visitors’ bench or chairs, and a curtain as a divider for the consultation room.

Cross-Cutting highlights

- MAHEFA M&E staff contributed to the integration of data from CHV monthly reports into the GOM’s health information system (HIS) by participating in the development of the new monthly report or Rapport Mensuelle d’activité, RMA, and integrated health record book which were approved by the GOM for use by the CHVs throughout Madagascar.
- The percentage of monthly reports submitted on time by CHVs and validated by CSB heads increased from an average of 66% before August 2013, to 80% and higher after October 2013. For the last month of activities, 97% of CHVs submitted their RMAs and 93% submitted c-IMCI reports on time.
- 87 internal data quality assessment (DQA) sessions were conducted in the six regions (32 by MAHEFA’s central M&E team, 55 by the MAHEFA regional teams and NGO’s M&E teams). A summary of DQA’s findings, recommendations, and next steps to improve data quality has been compiled and shared with all regional offices and NGOs.
- 15 survey and research studies were conducted during the program period.
- A total of 2,003 program implementing stakeholders (public sector, NGOs and MAHEFA staff) had participated in the quarterly and six-month internal program review workshops.
- Almost 1,500 or 1,389 people had participated in the MAHEFA-organized dissemination workshops both at the national and regional levels.

MAHEFA’s most important achievement in the areas of administration, finance and partnerships was setting up strong operating and management systems that resulted in strategic partnerships. This enabled MAHEFA to successfully evolve with the major changes that occurred throughout the life of the program. The overall Program was implemented in accordance with the terms of the Cooperative Agreement and its modifications that were duly respected and monitored by JSI.

The progress made under the MAHEFA Program can be sustained through community action and advocacy to strengthen, sustain and ensure the quality of the community health system. While the community structures gained the capacity such as competencies and tools to manage the community health activities, many continue to need support to effectively fulfill their roles, as well as identifying ways to leveraging and mobilizing resources from local stakeholders, including the private sector, to achieve their health goals.
1. Introduction

The United States Agency for International Development (USAID) awarded the five-year Cooperative Agreement (CA No. 687-A-00-11-00013-00) for the Community-Based Integrated Health Program (CBIHP) to JSI Research & Training Institute, Inc. (JSI) on May 23, 2011. JSI collaborated with two international partners, The Manoff Group and Transaid, and fifteen Malagasy non-governmental organizations (NGOs) for the implementation of CBIHP. The program was referred to locally as “Malagasy HEnyk ny FAhasalamana” (MAHEFA), or “Malagasy HEalthy FAmilies”. This Final Report covers the entire program period from May 22, 2011 through June 7, 2016. MAHEFA strengthened access to and use of maternal, neonatal and child health (MNCH) and family planning (FP) services and related products and improved water, sanitation and hygiene (WASH) in 24 difficult and underserved districts. These districts are in the six regions of Boeny, DIANA, Melaky, Menabe, SAVA, and Sofia. MAHEFA’s five-year overall objective was:

To increase the use of proven, community-based interventions (MNCH, FP/Reproductive Health (RH) including the prevention of sexually transmitted infections (STIs), WASH, the prevention and treatment of malaria, and nutrition) and essential products among underserved populations in six northern and western regions of Madagascar.

MAHEFA contributed to the following USAID intermediate results (IR):

IR 1: Increase demand for high-quality health services and products
IR 2: Increase availability of high-impact services and products
IR 3: Improve the quality of care delivered by community-based health practitioners

Though MAHEFA’s regions and districts had had little or no outside support for community health, within six months of approval of its first work plan, MAHEFA had launched activities in all regions. Significant lessons were learned in the first year, especially the need to plan for near-cessation of activities and travel during the rainy season in many districts, and the long lead-time required for many local partner NGOs to recruit and train staff for service in remote areas.

Over the course of its five years of implementation, two events had a substantial impact on the program. These events were: 1) Mid-Program Work Plan Revision and Change of Geographic Scope in FY2013 and 2) the lifting of United States Government (USG) sanctions in FY2014.

1. Work Plan Revision: The MAHEFA program team was asked to revise its scope of work, including a change in geographical coverage. This revision slowed down program activities as the process to prepare and seek USAID approval for the new Work Plan took approximately five months, from January to May 2013. Reasons for the reduction of geographic scope included: an acknowledgement that MAHEFA’s approved roll-out schedule for remote regions and plan to cover 100% of fokontany (cluster of villages) in MAHEFA districts required additional resources; prior work by a different donor was not completed and MAHEFA was required to do additional training and procurement to fill the gaps, leading to additional expense and slowed results; and a USAID decision to consolidate work in fewer remote regions.

2. Lifting of USG Sanctions: The official re-engagement of the US government with the Government of Madagascar (GOM) in May 2014 enabled MAHEFA to accelerate the program’s progress towards sustainable results. While it took several months for MAHEFA to update its Work Plan again and seek approval for changes to reflect both GOM and USAID requests, MAHEFA quickly began working with GOM at all levels from national to commune. This re-engagement was a critical improvement in the MAHEFA operating environment and has contributed to the continuation of program activities by GOM beyond the life of the MAHEFA program.
Operationally, MAHEFA exemplified flexibility and commitment to program results in a changing context per its mandate as a learning program, focusing on lessons learned each quarter and year and adjusting work plans and approaches accordingly.

2. MAHEFA’s Contributions to Community Health in Madagascar

MAHEFA developed its overarching strategies, presented in Box 2, in line with the National Community Health Policy or *Politique Nationale de Santé Communautaire* (PNSC), which had been put in effect by the GOM in 2009. The PNSC Operational Guidelines were developed and finalized in 2011. As one of the main community health programs in Madagascar at the time, MAHEFA was the first to use the PNSC Operational Guidelines for program implementation. In addition, MAHEFA simultaneously developed and used innovative approaches for improving community health, many of which were approaches that were new to Madagascar.

<table>
<thead>
<tr>
<th>Box 2 – MAHEFA’s Overarching Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Set priorities using evidence-based public health interventions and improve service delivery efficiency.</td>
</tr>
<tr>
<td>2. Apply the principles of the PNSC and support its scale-up, applying lessons from other successful community health volunteer (CHV) programs.</td>
</tr>
<tr>
<td>3. Promote capacity building at the core of every activity.</td>
</tr>
<tr>
<td>4. Support community ownership and test innovations to create a sustainable, enabling environment for public health improvements at the community level.</td>
</tr>
<tr>
<td>5. Mainstream gender, address gender bias, and reorient community norms and practices related to MNCH, family planning and water/sanitation that inhibit healthy behaviors and curtail the involvement of either men or women in community health activities.</td>
</tr>
</tbody>
</table>

This section presents five approaches used by MAHEFA that have contributed to significant achievements in promoting and implementing community health activities. These approaches have the potential to be successfully replicated by other community health programs in Madagascar.

2.1. Produce Evidence that CHVs Can Provide Integrated Health Services

MAHEFA’s main channel for service delivery at the community level was CHVs. MAHEFA trained 6,052 CHVs in integrated health areas. The clinical supervision for CHVs was provided by 695 heads or deputy heads of basic health centers, or *Centres de Santé de Base* (CSB).

Other key actors in the community health system as laid out in the PNSC include local coordination structures at the county (or “commune”) and fokontany levels, namely the Commune Commission for Health Development or Commission Communal pour le Développement Sanitaire (CCDS), and Health Committees or *Comités de Santé* (COSAN), respectively. Over the five years of its implementation, MAHEFA supported the establishment of these CCDS in all 279 of its communes, and COSANs in all 3,023 of its fokontany. MAHEFA trained 2,030 CCDS members and 3,053 COSAN members to manage and support CHVs and mobilize their communities for improved community health. By the end of MAHEFA, all CHVs provided quality services on a regular basis with ongoing support and supervision from CSB heads and from COSAN and CCDS structures.

2.2. Integrate Public Health Officials into Service Delivery at the Community Level.

By the end of the program, MAHEFA had provided training of trainers to 952 staff from the Ministry of Health (MOH) in integrated health areas (20 staff at the ministry level, 90 at regional, 146 at district and 696 at commune levels). With this training, MOH officials were better prepared to take on their
responsible as described in the PNSC, including: a) developing training and materials for CHVs on technical themes, b) conducting training and supervision for CHVs, c) organizing joint workshops on community health topics; and d) monitoring program activities through joint field visits and reviewing pilot activities.

Prior to the MAHEFA program, none of the district- or commune-level health officials in MAHEFA program areas had received training on community health or on how to train CHVs. Similarly, MAHEFA was the first program to invite GOM officials to participate in its program planning, including mid-year and end-year reviews, and in on-site monitoring of activities. Through these close working relationships, MAHEFA staff provided on-the-job coaching to GOM officials in program planning, review, data analysis and data use, and, most importantly, in technical supervision and support to community health volunteers.

2.3. Use Findings from MAHEFA Regions to Advocate for Community Health at National Level

As the first community health program to follow the GOM’s PNSC Operational Guidelines, MAHEFA’s positive results, including achievements in several MOH health objectives, such as FP, MNCH and WASH, clearly demonstrated the potential the PNSC has to improve health. MAHEFA regularly shared updates and findings at both regional and national levels as part its contributions to advocacy for community health in Madagascar.

At the regional level, MAHEFA’s regional teams were asked to submit their work plans and annual reports to the Regional Health Office or Direction Régionale de Santé Public (DRSP). Program information was thereby integrated directly in the GOM’s work plan and annual report. Additionally, MAHEFA’s regional teams organized two-day quarterly workshops with GOM officials and NGO partners to discuss program planning and review activities and results. As discussed above, these workshops served as a capacity-building tool for regional GOM officials, who then were able to integrate information into their advocacy efforts at national-level workshops and meetings.

In addition to the internal sharing of program results by GOM officials from the regional level, MAHEFA advocated for community health at the national level by sharing program results through the following channels: a) annual MAHEFA dissemination workshops; b) the first workshop on community health in Madagascar, jointly organized by MAHEFA and the MOH; c) MOH’s semi-annual health sector review d) MOWSH’s semi-annual WASH sector review; and e) health day celebrations organized by GOM and/or other development partners. During these events, the MAHEFA team made presentations or shared program results, always with the goal of advocating for community health.

2.4. Introduce High Impact Interventions that Adopted by MOH on National Scale

During its five years of implementation, MAHEFA succeeded in introducing many innovations to Madagascar, several of which have been adopted by GOM and scaled up throughout the country. Some of these innovations are presented briefly below. More details on MAHEFA’s innovations will be presented later in this report.

a) Community-based prevention of newborn cord infection using Chlorhexidine 7.1% (CHX). The CHX initiative began by a learning trip to the JSI-managed community health program in Nepal which had succeeded in assisting the Government of Nepal in scaling up CHX use in rural communities. After the visit, the national Technical Working Group (TWG) on Chlorhexidine and Misoprostol in Madagascar was created and oversaw the field pilot of CHX activities in MAHEFA’s Menabe region. The TWG played

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3 These are only MAHEFA program related activities. The list does not include the health activities organized by MOH, MOWSH and other partners in which MAHEFA staff participated. These activities are presented under the cross-cutting section of this report.
an important role in using the results from MAHEFA’s pilot project to successfully adopt and scale-up CHX use as a viable community health activity to reduce newborn cord infection.

b) Community-based prevention of post-partum hemorrhage using Misoprostol. Also through the TWG, a pilot activity to prevent post-partum hemorrhage at the community level was carried out in MAHEFA’s SAVA region. Similar to CHX, the MOH had begun its approval process and the community-based CHX use is now scaled up nation-wide.

c) Community-managed activities aiming to increase access to health care. For the first time in Madagascar, MAHEFA put in place community-health financing schemes or mutuelle de santé and emergency transport systems (ETS). These two activities were introduced together in selected sites to eliminate geographical and financial barriers that often prevent people from accessing health care. The model is being reviewed by MOH as a viable model which could contribute to the GOM’s current effort in establishing universal health coverage in Madagascar.

In this Final Report, the achievements of the MAHEFA program are presented in accordance with the three IRs. A list of challenges and corrective measures encountered by the program is presented in Annex 1 and a detailed activity table is included in Annex 2.

In addition, MAHEFA produced a series of fifteen MAHEFA technical briefs that share and highlight selected strategic approaches, innovations, results, and lessons learned from the program. Technical brief topics include Behavior Change Empowerment, Community Radio Listening Groups, Community Score Card Approach, Chlorhexidine 7.1% Misoprostol, Champion Communes Approach, Community Health Volunteer Mobility, Emergency Transport Systems, Malaria, Community Health Volunteer Motivation, Family Planning & Youth, WASH, eBox, Community Health Financing Scheme, Information Systems for Community Health and NGO Capacity Building. These Technical Briefs can be accessed via Annex 8 for more detailed information on how each approach was implemented.

3. Program Achievements by Intermediate results

3.1. Increase Demand for High Quality Health Services and Products (IR 1)

MAHEFA created the Behavior Change Empowerment (BCE) Approach which is entirely based on local solutions to local problems in behavior change for health and water, sanitation, and hygiene (WASH). This approach focus on ways to overcome major barriers and highlight local motivators to behavior change, while taking into consideration regional, ethnic, and gender-based differences. The principle idea is that when key community leaders, religious leaders, women’s groups, youth groups, and especially mothers or fathers (peers) conduct behavior change activities, this has a snowball effect by gathering more behavior change adherents.

To inform the content of its BCE strategy, MAHEFA conducted six interconnected formative studies at program start-up. The studies consisted of two researches (Barrier Analysis and Trials of Improved Practices (TIPs)) and studies (Ethnographic and Gender Analysis) and reviews (Annotated bibliography and Inventory of existing Information, Education and Communication (IEC) materials). Using the results of these formative studies, MAHEFA developed strategies to boost sustainable demand for health services and products which included the BCE approach and raising awareness of the links between good WASH practices and improved health.

This section of the report presents the program achievements in increasing demand for high quality health services and products during the five years of program implementation. Achievements in increasing demand are separated into the following four sub-sections:

3.1.1. Introduction: Changes over the Years and Overall Results of IR1;
3.1.2. Creating Health Demand through Diverse BCE Channels;
3.1.3. Results of MAHEFA’s BCE Efforts on Water, Sanitation and Hygiene (WASH); and
3.1.4. Lessons Learned and Recommendations for IR1.
3.1.1. Introduction: Changes over the Years and Overall Results of IR1

The most significant of MAHEFA’s achievements in IR1 is the fact that community-identified and program trained change agents have been assuming their responsibility for behavior change activities thus reaching many members in their community on a regular basis. At the end of the program, there were 217,751 community actors who were trained and provided with education materials and tools and who regularly conducted BCE activities in their own communities. Equipped with BCE knowledge and materials, these actors can continue their BCE activities even without external support.

Two key surveys showed the effectiveness of the program’s BCE activities in relation to key health indicators in the program’s six regions: the program baseline survey in 2012, and the outcome monitoring survey in 2014. As the endline survey was not available at the time of this report, information presented here was collected from existing MAHEFA data at the end of the program. While BCE activities were not the only factors contributing to overall program achievements, they have contributed to encouraging communities to adopt good health practices, including early care-seeking behaviors.

A summary of main results of the program’s BCE activities, as reported in the USAID mid-term evaluation or Outcome Monitoring Survey (OMS) of 2014\(^4\) are presented below:

- 58.2% of parents and caretakers in program areas received key messages on maternal and child health (MCH) including topics such as nutrition, malaria, ANC visits, assisted birth (23.2% from CHVs, not including other non-CHV community actors, and 35% from radio broadcasts);
- 60.7% of parents and caretakers in program areas received key messages on malaria (24.3% from CHVs, not including other non-CHV community actors, and 36.4% from radio broadcasts); and
- 87.7% of women of reproductive age (WRA) in program areas received key messages on family planning (51.5% from CHVs, not including non-CHV community actors, and 36.2% from radio broadcasts).

The above achievements in reaching people with key messages have contributed to specific changes in certain practices and behaviors as shown below.

- The proportion of women seen for an antenatal care (ANC) visit at least four times during their pregnancy has significantly increased, from 33.2% in 2012 to 67.3% in 2014. The percentage of births attended by skilled health providers has also increased, from 49.9% to 77.7% respectively. Thus, by the program midpoint, these achievements already surpassed the end-of-program targets of 42% (four ANC visits) and 59% (assisted delivery).
- According to the 2014 OMS, 93.8% of parents and caretakers know about the use of Long-Lasting Insecticide-Treated Nets (LLITN) for malaria prevention. Among pregnant women, 90% know about the importance of obtaining intermittent preventive treatment in pregnancy (IPTp) for malaria at local health facilities (centre de santé de base, CSB).
- In 2014, the OMS results showed that the percentage of children under six months of age exclusively breastfed in the past 24 hours was 95.9% (page 29), compared with the national rate of 51% in the 2008 DHS.
- The results of the baseline survey and the OMS show that the percentage of WRA who were exposed to family planning messages also increased from 12.9% in 2012 to 80.3% in 2014 respectively. This progress has contributed to an increase in the contraceptive prevalence rate (CPR) from 26.9% in 2012 to 41.3% in 2014. In addition, the percentage of mothers of children aged 12 months or less who stated their desire to wait at least two years to have another child increased from 70% in 2012 to 86% in 2014\(^5\).

\(^4\) The most recent Outcome Monitoring Survey (OMS) was conducted by USAID in 2014.
\(^5\) Idem.
- There was a significant increase in the percentage of households having access to improved drinking water sources, from 46.8% in 2012 to 65.2% in 2014. The progress was more significant (p=0.002) among households with a woman as the head of the household.
- The proportion of households with access to improved latrines more than tripled in two years, from 3.1% in 2012, to 9.8% in 2014.

Since the MAHEFA program was the first integrated community health program of its scale in the six program regions, and was the only one operating in these areas at the time, the accessibility of key health messages among the program target populations can largely be attributed to the BCE activities of the MAHEFA program.

3.1.2. Creating Health Demands through Diverse BCE Channels

Using results from the formative studies mentioned above, as well as baseline data on health areas that needed the most improvement, MAHEFA developed 22 key health messages. These messages were adapted for use in interpersonal communication or mass media campaigns. Figure 1 shows the reach of each communication channel over the life of the program. The same people can be reached by different channels; therefore the total number of people reached by each channel should be considered separately and cannot be aggregated.

According to the figure, CHVs were the most efficient BCE channels, delivering key messages to 2,762,520 people\(^6\), 98% of the total target population in program regions. Other community actors were the second most important BCE channel and reached 1,797,583 people, 64% of the total target population in the program area. The mass media campaigns complemented these two channels and reached 17% of the total population, or 491,716 people. In addition to being the most important BCE channels, the 214,698 community actors (CHVs and others) are also the most sustainable channels since they can continue their BCE activities after the program.

![Figure 1- BCE Channels and their Reach in the MAHEFA Program (N= 2,824,944)](image)

The BCE activities carried out through these three channels resulted in a substantial increase in the number of people reached by the program with key health messages, with steady progress over time, as seen in Table 1. Between 2013, when MAHEFA’s BCE outreach activities started, and 2016, the end of the program, there was a significant increase in the number of people reached by BCE activities: a four-fold

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\(^6\) This is the maximum number of people reached. It is possible that each can be reached more than one time through different channels.
increase in people reached with FP messages, a 10-fold increase in those reached with child health messages, and an 11-fold increase for those reached with STI/HIV messages. As people may be reached multiple times with several key messages, it is not possible to add the total of people reached.

Table 1 - People Reached with Key Health Messages Delivered by CHVs by Year

<table>
<thead>
<tr>
<th>Key messages</th>
<th>Participants in BCE activities in FY2013*</th>
<th>Participants in BCE activities in FY2014</th>
<th>Participants in BCE activities in FY2015</th>
<th>Participants in BCE activities in FY2016 (5 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child health (messages include malaria prevention)</td>
<td>99,312</td>
<td>308,995</td>
<td>925,528</td>
<td>1,019,922</td>
</tr>
<tr>
<td>Handwashing with soap</td>
<td>167,175</td>
<td>287,841</td>
<td>876,149</td>
<td>930,962</td>
</tr>
<tr>
<td>Use of latrines</td>
<td>167,175</td>
<td>294,530</td>
<td>819,180</td>
<td>873,926</td>
</tr>
<tr>
<td>Drinking water</td>
<td>167,175</td>
<td>285,524</td>
<td>782,519</td>
<td>868,477</td>
</tr>
<tr>
<td>Prenatal exams for pregnant women (messages include malaria prevention)</td>
<td>121,058</td>
<td>204,591</td>
<td>487,854</td>
<td>672,261</td>
</tr>
<tr>
<td>Nutrition for children under five</td>
<td>95,827</td>
<td>211,389</td>
<td>595,966</td>
<td>564,551</td>
</tr>
<tr>
<td>Family Planning</td>
<td>137,005</td>
<td>256,865</td>
<td>559,539</td>
<td>507,276</td>
</tr>
<tr>
<td>Nutrition for pregnant and lactating women and promotion of exclusive breastfeeding</td>
<td>83,538</td>
<td>258,312</td>
<td>403,116</td>
<td>416,036</td>
</tr>
<tr>
<td>STI and HIV</td>
<td>37,005</td>
<td>187,097</td>
<td>417,222</td>
<td>412,531</td>
</tr>
<tr>
<td>Newborn umbilical cord care (Chlorhexidine 7.1%, CHX)**</td>
<td>-</td>
<td>64,800</td>
<td>53,391</td>
<td>334,606</td>
</tr>
</tbody>
</table>

Notes
* The BCE activities were carried out at the community level in 2013 after the CHVs completed their BCE training
**Newborn umbilical cord care (CHX) activities were introduced in the program in FY2013 in one district, the community-level activities and expansion of pilot to one more district began in FY2014, and the scale-up in all 24 districts happened in FY2016.

1. Health Promotion Activities Conducted by Community Health Volunteers

Home Visits by CHVs. MAHEFA trained CHVs to conduct home visits to follow up clients after treatment and to disseminate key health messages to families. Using BCE tools and techniques, CHVs educated the families on the importance of ANC visits, newborn and child health including nutrition and vaccination, family planning and reproductive health (FP/RH), and WASH. During the last years of the program, in FY2015 and FY2016, when CHVs were at their highest capacity level, they conducted an average of seven home visits per month. Over the life of the program, CHVs counselled a total of 339,217 people during home visits.

Counseling at the CHV’s Health Hut or Toby. CHVs were trained to provide counseling as part of their service protocol. Depending on the nature of the consultation (children with fever, pregnant women, WRA, etc.), CHVs provided counseling on relevant key health messages. Similar to the home visits, counseling at the toby played an important role in relaying key messages to community members on a regular basis while building confidence and good relationships between CHVs and their clients. Figure 2 below shows the progression of people reached through CHV counseling by client type.
Using the Family Planning (FP) Invitation Card to Promote Family Planning Uptake. Beginning in FY2015, MAHEFA developed, distributed and trained CHVs to use FP invitation cards as a way of disseminating FP information to potential clients. CHVs distributed the invitation cards to their FP users and youth peer educators (YPEs) and encouraged them to share the cards with their peers. The card contains brief information on family planning and invites interested clients to seek more information directly from their CHVs. Since 2015, CHVs distributed a total of 238,390 FP invitation cards to their regular FP users and YPEs. This FP invitation card use, as well as other FP-focused BCE initiatives and an overall increase in CHV functionality to provide FP services, contributed to uptake of FP during the program (presented in more detail in IR2).

Using the Care Group approach (ménages parrains) to expand the BCE Reach. Starting in 2015, the MAHEFA program trained CHVs to use the care group, or ménages parrains, approach to expand good health behaviors in their communities. For a family to become a ménage parrain, they must have convinced at least three other households to adopt a good health practice. Families reached by the ménages parrains are then encouraged to become ménages parrains themselves and adopt three more families. By the end of the program in 2016, 201,707 ménages parrains assisted 605,121 households (1,210,242 people) to adopt good health practices.

High-Visibility Events. In close collaboration with the government offices at central, regional and district levels, CHVs conducted a variety of educational activities on an annual basis. The activities carried out by CHVs included: a) exhibit stands/booths to explain good health behaviors and perform their services, b) the organization of carnivals and cultural activities such as dance and sports events, and c) the organization of community collective actions such as village cleaning. As the program progressed, CHVs’ capacity to organize these events and reach more people increased. In 2015, a total of 530,485 people received key messages during the annual events presented in Table 2.

<table>
<thead>
<tr>
<th>Table 2 - Summary of Annual Health Days and National Health Campaigns with CHV Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Month</strong></td>
</tr>
<tr>
<td>March</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>April</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>August</td>
</tr>
</tbody>
</table>
In addition to the international health days listed above, all CHVs in MAHEFA program areas participated in the national polio campaigns. More information on the CHVs’ contributions to health campaigns is presented in IR 2.

### 2. BCE Activities Conducted by Community Actors (non-CHVs)

As reported above, MAHEFA assisted the community to identify 217,751 community actors (6,052 CHVs and 211,699 other community actors who are not CHVs) who were trained, equipped and supported by MAHEFA to conduct BCE activities on various health topics in their communities (Table 3). This section presents the work of the non CHVs community actors, who carry out the BCE activities leading to an increase in demand for high quality health services and products beyond MAHEFA. The reach of these actors was already presented in Figure 1 above.

**Table 3 - Non-CHVs Community Actors and their BCE Activities**

<table>
<thead>
<tr>
<th>BCE Community Actors</th>
<th>Number</th>
<th>BCE Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local health committees (COSAN)</td>
<td>3,053</td>
<td>Mobilize the community on all health issues.</td>
</tr>
<tr>
<td>Youth Peer Educators (YPEs)</td>
<td>614</td>
<td>Conduct education sessions for youth in family planning and reproductive health.</td>
</tr>
<tr>
<td>Radio Listening Group Facilitators</td>
<td>763</td>
<td>Conduct weekly sessions to listen to and discuss specially-produced radio programs on health topics</td>
</tr>
<tr>
<td>Care Group Households (Ménages parrains)</td>
<td>201,707</td>
<td>Already have good health practices and responsible for convincing at least three other households to do the same.</td>
</tr>
<tr>
<td>Members of the Water Users, Sanitation and Hygiene Associations (WUSHA)</td>
<td>3,580</td>
<td>Promote good WASH practices, including water treatment.</td>
</tr>
<tr>
<td>Local masons</td>
<td>532</td>
<td>Produce latrine concrete slabs (dalle sanplat, DSP) for sale at community level and promote latrine use.</td>
</tr>
<tr>
<td>Natural leaders</td>
<td>1,450</td>
<td>Mobilize the community to build and use latrines and promote village cleanliness.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>211,699</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 3. Mass Media Campaigns

To complement the BCE efforts of community actors, MAHEFA’s mass media approach included radio programs promoting good health practices that were broadcast across all program regions. MAHEFA’s mass media strategy involved three main activities: 1) radio broadcasts, 2) radio listening groups, and 3) community radio documentaries.

**Radio Broadcast.** Between 2013 and the end of the program, MAHEFA broadcasted 70 radio spots on MNCH, FP, WASH and gender, 10 radio dramas on maternal health, and 10 radio tales on child health via the 26 local radio stations in the six program regions. During the annual MNCH week and polio immunization campaigns, radio messages were intensified to provide a call to action and to reinforce community mobilization activities on these health issues. Furthermore, the airing of radio spots, dramas,
and tales generated community dialogue via collective listening and helped encourage people to take joint decisions to improve their health.

**Radio Listening Group (RLG).** Community members attended RLGs to listen to the radio broadcasts, discuss the health messages, and share their knowledge and experience to identify local solutions to address health issues and change community norms. The 26 local radio stations aired the broadcasts at least nine times per day, 20 days each month. At the end of the program, 361,352 participants in the program regions listened to and discussed the key health messages transmitted for these RLG sessions (Table 4).

### Table 4 - Functional Radio Listening Groups at the End of the MAHEFA Program

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total number of RLG</th>
<th>RLG participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boeny</td>
<td>75</td>
<td>52,513</td>
</tr>
<tr>
<td>2 DIANA</td>
<td>216</td>
<td>89,696</td>
</tr>
<tr>
<td>3 Melaky</td>
<td>71</td>
<td>29,750</td>
</tr>
<tr>
<td>4 Menabe</td>
<td>133</td>
<td>66,286</td>
</tr>
<tr>
<td>5 SAVA</td>
<td>199</td>
<td>18,674</td>
</tr>
<tr>
<td>6 Sofia</td>
<td>169</td>
<td>104,433</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>863</strong></td>
<td><strong>361,352</strong></td>
</tr>
</tbody>
</table>

**Community Radio Documentaries.** MAHEFA produced community radio and television documentaries in its six regions as a way to disseminate key health messages at the community level. The communities identified their good practices related to health activities and documented their experiences for dissemination via local radio or television. Over five years, 477,360 15-49 year olds living in MAHEFA regions were reached by the community radio documentaries.

### 3.1.3. Results of MAHEFA’s BCE Efforts on Water, Sanitation and Hygiene (WASH)

Safe and sufficient drinking water, along with adequate sanitation and hygiene, have implications across all health areas – from reducing child mortality to improving maternal health, combating infectious diseases, and ensuring environmental sustainability. MAHEFA used the BCE strategies reported above and, in particular, the community-led total sanitation (CLTS) approach of the Ministry of Water, Sanitation and Hygiene (MOWSH). The CLTS approach (Box 3) aims to trigger interest and commitment among local authorities and community members to end open defecation in a sustainable, community-owned, and cost-effective way.

### Box 3 – Five Stages of Community-led Total Sanitation (CLTS)*

1. Pre-triggering preparation work and announcement;
2. Triggering with CLTS techniques and developing an action plan for latrine construction;
3. Post-triggering and follow-up of latrine construction and usage;
4. Self-declaration of ODF when all households in a village are using latrines; and
5. Official ODF status after evaluation and certification by the Regional WASH Directorate that the village has been ODF for at least six months.

*Source: Ministry of Water, Sanitation and Hygiene.

By the end of the program, approximately 900,000 people were being reached quarterly with key WASH messages on drinking water treatment, handwashing with soap and use of latrines through several communication channels. Results of the water component will be presented under IR2.
Since 2015, the availability of the *dalle sanplat* (DSP) produced by the local mason in the program areas (total 17,494 DSP produced) also contributed to a substantial increase in the number of improved latrines built and utilized in the program areas (Figures 3 and 4). At the end of the program, there were 52,878 improved latrines built in the program regions, providing access to hygienic latrines for 243,239 people. The reason for a decrease in the number of simple latrines between FY2015 and FY2016 (from 69,965 to 49,006 respectively) is that many of the simple latrines constructed in FY2015 were transformed into improved latrines. At the beginning of the program, people started by constructing and using simple latrines, converting them to improved latrines over time as they became more comfortable with latrine use. Later in the program, families built and used improved latrines directly rather than building a simple latrine first. Additionally, four main reasons for a substantial increase in the number of improved latrines built towards the end of the program are:

1) More latrine slabs were produced locally as the program provided each local mason with one latrine mold (distributed at the end of FY2015 and early FY2016). Up until that time, each mold was shared by at least 5 masons who are not living in the same fokontany thus making it difficult for them to share;

2) People developed more understanding of the importance of latrines as more key health messages are delivered on a regular basis;

3) Increase in monitoring and support visits from the DREAH which encouraged more community leaders to follow up the latrine construction and use; and

4) Better reporting by community actors as the program trained and followed up more with the community actors.

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**Figure 3 - Improved Latrines Built in the MAHEFA Program (Cumulative)**

![Figure 3 - Improved Latrines Built in the MAHEFA Program (Cumulative)](image)

**Figure 4 - Simple Latrines Built in the MAHEFA Program (Cumulative)**

![Figure 4 - Simple Latrines Built in the MAHEFA Program (Cumulative)](image)
For the first three years of the program, MAHEFA was officially restricted by the US government from working with the Government of Madagascar, including MOWSH. The late involvement of the MOWSH resulted in delays in the evaluation and certification of ODF status in the program areas because only the government’s Regional Directions of Water, Sanitation and Hygiene (DREAH) could perform the evaluation and provide ODF certification. Despite this, there was progress in the number of MAHEFA communities that were ODF certified: cumulatively, ODF communities rose from 14 at the end of FY2013 to 472 at the end of the program (Figure 5). Out of the 472 villages that were certified ODF, 217 of them received a permanent certification, meaning that they maintained their ODF status for at least three months after certification, based on a minimum of two evaluations by the DREAH. MAHEFA and DREAH initiated a process for ODF permanent status which included providing a small monument indicating that the community achieved and maintains its permanent ODF status.

Figure 5 - Number of Communities with Certified ODF in the MAHEFA Program

The MAHEFA program’s sanitation and hygiene activities included the management of medical waste at the CHVs’ permanent health huts and at the CSBs. As a model to promote good sanitation and hygiene as well as to respect the Environmental Mitigation & Monitoring Plan (EMMP), MAHEFA assisted the CHVs and CSBs to build the waste disposal pits. By the end of the program, 89% of CHVs (5,386) worked out of a permanent health hut built by their community. All of the 2,679 health huts built were equipped with the waste disposal pit model according to the EMMP and were equipped with the illustrated EMMP job aid. In addition, the program used the MOH and USAID’s approved model for building disposal pits in all 481 CSBs in the program regions that did not yet have a waste disposal pit or incinerator.

3.1.4. Lessons Learned and Recommendations for IR1

MAHEFA’s BCE strategy created opportunities to improve health behaviors including care-seeking for underserved populations by not only introducing new communications activities, but also by engaging community actors. As greater numbers of BCE activities are conducted by the community actors, the impact of the BCE strategy will continue to increase. Some of the lessons learned from the program which may help improve the effectiveness of BCE activities for future replication are presented below.

1. Conduct formative research to ensure that BCE activities and messages developed are based on an understanding of local perspectives and culture.
2. Accelerate and sustain community behavior change through multiple communication channels. As reported above, key messages delivered through several channels multiple times have a greater impact on sustainable behavior change.
3. Provide BCE training, including how to use BCE tools, to all stakeholders including CSB personnel as early as possible in the program. This training will provide all stakeholders with the necessary knowledge and skills to use the tools so they can begin the BCE activities in their community.
4. Identify best practices among several BCE approaches to make sure that the community actors use the approaches that are the most effective, and not only implement the approaches they feel the most comfortable with.

5. Maximize existing community leadership roles by strengthening capacity to integrate BCE messages. The MAHEFA program trained and supported a variety of community actors to provide BCE messages based on their role (e.g., COSAN members trained on comprehensive health messages, WUHSA members and local masons trained on WASH and health messages), which expands the channels by which community members receive health messages, increases the number of people who are knowledgeable about health topics, and reinforces existing specialized roles held by COSAN members, WUHSA members, and others.

6. Increase community ownership through approaches that engage various types of community actors, including household members themselves. In addition to the community actors who play a specialized role, MAHEFA engaged household members themselves to be BCE leaders in their community through the ménages parrains approach. In this way, household members are motivated to adopt good health practices and to link with other households to do the same, highlighting their central role as drivers of behavior change rather than just recipients of BCE messages.

3.2. Increase the Availability of High-Impact Health Services and Products (IR 2)

In addition to the IR1 activities to promote the adoption of good health behaviors and increase demand for products and services, MAHEFA had focused on the availability of quality health services and products at the community level. This section of the report presents the achievements in increasing the availability of high quality health services and products during the five years of program implementation. Achievements in IR2 are separated into the following four sub-sections:

3.2.1. Introduction: Changes over the Years and Overall Results of IR2;
3.2.2. How MAHEFA Improved the Availability of Services and Products
3.2.3. Utilization of Community Health Services and Products; and
3.2.4. Summary Recommendations

3.2.1. Introduction: Changes over the Years and Overall Results of IR 2

Availability of Health Services and Products at the Community Level. Prior to the MAHEFA program, there were no CHVs in the six MAHEFA program regions who were trained and supported to provide integrated health services. CHVs in MAHEFA program areas were selected by their fokontany based on the pre-established criteria in the PNSC. There were a total of 6,052 CHVs (60% male and 40% female) in MAHEFA’s six regions (Box 4).

To enable CHVs to provide quality services, MAHEFA and the Population Services International (PSI)/Integrated Social Marketing (ISM) program worked together to set up 281 local supply points in target communes of the six regions to ensure that CHVs had regular access to the health commodities needed to provide integrated health services. As a result, CHVs in MAHEFA areas were able to resupply certain health products at the Supply Point (Point d’approvisionnement, PA) in addition to getting health products from the existing public sector supply source, namely the CSBs. There was some overlap between products supplied by the PA and by the CSBs, but the PAs largely provided social marketing products while the CSBs provided public sector products.

In addition to the services provided by CHVs, MAHEFA implemented activities to increase access to health services, namely the community-managed mutuelle de santé and the emergency transport system (ETS). Over the course of the MAHEFA program, mutuelles were established in 33 communes, 12% of all
MAHEFA communes. Eleven of these communes had ETS activities linked to their mutuelle activities, and a total of 964 people who needed to be transported to the CSB for health issues used the ETS over the life of the program. With regards to other health products, MAHEFA constructed or rehabilitated drinking water sources and trained 532 local masons to produce latrine slabs. A total of 413 wells and water kiosks were either constructed or rehabilitated in 413 fokontany in 65 communes benefitting 103,250 people. Additionally, MAHEFA-trained local masons produced a total of 17,494 latrine slabs during the life of the program. MAHEFA’s contributions resulted in an overall increased availability of integrated health services and health products during the five years of the program.

Figure 6 presents examples of the health services and products provided by the MAHEFA program. In FY2011, 0% of the total fokontany in the program’s six regions had integrated services provided by CHVs, but by the end of FY2014, 82% did, and 100% of fokontany had integrated services by the end of the program in FY2016.

Figure 6 - Progress of Health Services and Products in MAHEFA

Use of Health Services and Products at the Community Level. The availability of services and products shown above has resulted in an increase in service and product utilization. Table 5 below shows a significant increase in service utilization from the beginning of MAHEFA until the mid-term period. An endline survey had not been conducted for MAHEFA by the time of this report, but many of the end-of-program targets had already been surpassed by the mid-term period or were on-track to be achieved by the end of program.

Table 5 - Progress in Service Utilization at the Community Level in MAHEFA

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline 2012</th>
<th>Progress at mid program</th>
<th>Progress at EOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of women seen at ANC at least 4 times during their last pregnancy with a live birth</td>
<td>33%</td>
<td>38%</td>
<td>67%</td>
</tr>
<tr>
<td>Indicator</td>
<td>Baseline 2012</td>
<td>Progress at mid program</td>
<td>Progress at EOP</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midterm target</td>
<td>Midterm achieved (USAID’s 2014 OMS result)</td>
</tr>
<tr>
<td>Percentage of births attended by a doctor, nurse or trained midwife from USG-assisted facilities</td>
<td>50%</td>
<td>55%</td>
<td>78%</td>
</tr>
<tr>
<td>Percentage of women who received 2 tetanus toxoid shots (or equivalent) during their last pregnancy</td>
<td>41%</td>
<td>49%</td>
<td>68%</td>
</tr>
<tr>
<td>Family Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive prevalence rate (CPR) in USG-supported programs (modern methods)</td>
<td>26%</td>
<td>32%</td>
<td>41%</td>
</tr>
<tr>
<td>Percentage of mothers of children aged less than 12 months who stated a desire to wait at least 24 months to have another child or do not want to have another child</td>
<td>79%</td>
<td>83%</td>
<td>86%</td>
</tr>
<tr>
<td>Malaria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of children under 5 years old who slept under an LLITN the previous night</td>
<td>75%</td>
<td>83%</td>
<td>68%</td>
</tr>
<tr>
<td>Percentage of pregnant women who slept under an LLITN the previous night</td>
<td>78%</td>
<td>84%</td>
<td>53%</td>
</tr>
<tr>
<td>Percentage of women who received 2 or more doses of SP for IPTp for malaria during their last pregnancy in the last 2 years</td>
<td>14%</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Water and Sanitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of households with improved drinking water supply</td>
<td>46.8%</td>
<td>NA</td>
<td>65%</td>
</tr>
<tr>
<td>Percentage of households using an improved sanitation facility</td>
<td>3.1%</td>
<td>3.4%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of children ages 6-23 months fed according to a minimum standard of infant and young child feeding practices</td>
<td>0% (9%)</td>
<td>2% (11%)</td>
<td>58%</td>
</tr>
<tr>
<td>Percentage of infants aged less than 6 months who were exclusively breast-fed in past 24 hours</td>
<td>79%</td>
<td>82%</td>
<td>96%</td>
</tr>
</tbody>
</table>
End-of-program achievement results according to household survey are not available because the endline survey was not yet conducted at the time of this writing. The malaria indicators, as shown in the table above, indicate a decrease in the percentage of children and pregnant women sleeping under LLITN the previous night, from 75% in 2012 to 68% in 2014 for children under five years old and 78% in 2012 to 53% in 2014 for pregnant women. The only source of LLITN is through GOM's distribution accompanied by intensive campaigns which has typically been done every two years. The period before the distribution campaign is usually a period of low LLITN use for various reasons. Since the GOM LLITN distribution was done in 2015, the data captured in the 2014 midline survey reflects the period during which LLITN use is typically lower.

3.2.2. How MAHEFA Improved the Availability of Services and Products

The activities under this section are presented under the following categories and all have contributed to the availability of quality health services and products at the community level.

1. Technical Training for CHVs and other Community Actors;
2. Community Logistics: Health Commodities managed by CHVs;
3. Access to health care through Health financing scheme, mutuelle de santé and Emergency Transport Systems; and
4. WASH Products at the Community Level.

1. Technical Training for CHVs and other Community Actors

MAHEFA’s Approach for CHV training. Since MAHEFA was the first community health program to operationalize the PNSC, many of the training curricula and materials for CHVs did not exist at the start of the program. MAHEFA worked with the MOH to develop them. All training curricula were jointly developed and approved by the relevant technical divisions of the MOH including the Family Health Department (Direction de la Santé Familiale –DSFa), the Health Promotion Department (Direction de la Promotion de la Santé – DPS), the Training and Advancement Service (Service de Formation et de Perfectionnement –SFP).

Afterwards, the training was done using a cascade approach where all the trainings began with the training of trainers (TOT), who then trained CHVs at the district and commune levels, depending on the accessibility and availability of the trainers. Prior to 2014 when MAHEFA could not yet work with the GOM, the trainers were from the private sector (NGOs or free-lance trainers). Beginning in October 2014, MAHEFA was able to provide the orientation workshop and TOT to the MOH trainers at the regional, district and commune levels who, in turn, conducted training to the CHVs in their catchment areas. Since then, all CHV training in the MAHEFA program regions was conducted by the CSB heads.

Figure 7 shows the number of MOH officials at different levels who participated in the training activities of the MAHEFA program.

Figure 7 - MOH Officials Who Received TOT and Provided Training to CHVs (n=937)
CHV Training. In order to support CHVs in providing integrated health services, MAHEFA provided a series of trainings including supervised practical clinical training sessions to all CHVs as prerequisites to service provision. At the end of each training, CHVs received a start-up kit of supplies, tools and medicines so they were ready to provide services upon returning to their community. Each training was designed to provide CHVs with the overall knowledge, competence and skills related to the service and based on technical norms set up by the MOH. Table 6 presents the details of training received by CHVs in the MAHEFA program. In total, CHVs received seven trainings on health topics relevant to their services.

Table 6 - CHVs Training by Technical Themes by Year

<table>
<thead>
<tr>
<th>Training</th>
<th>Days of Training</th>
<th>Number of CHVs Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 2011</td>
<td>FY 2012</td>
</tr>
<tr>
<td>1. c-IMCI</td>
<td>Training: 6 days Practicum: 5 days In-service training: 2 days</td>
<td>137</td>
</tr>
<tr>
<td>2. Family planning 4 methods (training and practicum at CSB)</td>
<td>Training: 5 days Practicum: 5 days In-service training: 3 days</td>
<td>1,752</td>
</tr>
<tr>
<td>3. Injectable (DEPOCOM) and WASH I (training and practicum at CSB)</td>
<td>Training: 5 days Practicum: 5 days In-service training: 3 days</td>
<td>2,584</td>
</tr>
<tr>
<td>4. Nutrition and WASH 2</td>
<td>3 days</td>
<td>2,271</td>
</tr>
<tr>
<td>5. Behavior Change Empowerment</td>
<td>3 days</td>
<td>2,908</td>
</tr>
<tr>
<td>6. Refresher training on integrated health themes</td>
<td>3 days</td>
<td></td>
</tr>
<tr>
<td>7. Community-based interventions for CHX, Misoprostol, SAYANA Press*** (training and practicum at CSB)</td>
<td>Training: 3 days Practicum: 4 days In-service training: 2 days</td>
<td>5,912</td>
</tr>
</tbody>
</table>

Training of Other Community Actors. As reported in IRI, there were a total of 208,646 community actors who worked alongside the CHVs to promote good health practices in their community. In this section, only the community actors whose role was to insure access to health services and products are presented. These community actors received regular training and support to carry out their duties (Table 7).

Table 7 - Training for Community Actors to Ensure Access to WASH and Health Products

<table>
<thead>
<tr>
<th>Community actors</th>
<th>Health products assured</th>
<th>Training duration</th>
<th>Training received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Members of WUSHA</td>
<td>Wells and water kiosks</td>
<td>3 days</td>
<td>Management of wells (water testing, maintenance, functionality, and use) • Promotion of good WASH actions</td>
</tr>
</tbody>
</table>
2. Community Logistics: Health Commodities Managed by CHVs

During the life of the program, MAHEFA conducted the following key activities to ensure that health products and materials were available and used at the community level.

Health Commodities with CHVs. During the first three years of the program, MAHEFA worked closely with PSI to identify PAs and support their service to CHVs. Collaboration through FY2014 was focused primarily on the steady implementation of activities and availability of products through a functional supply chain. A joint plan to build the capacity of CHVs and PAs was developed to facilitate the implementation of the “zero stock-out” approach at the CHV level. As a result, CHVs submitted monthly analysis of their stock and re-provision needs at the monthly CSB meeting. MAHEFA regional and central teams communicated on a monthly basis with the PSI team to make sure that stock-outs were reported on time. In Boeny and Menabe regions, MAHEFA, PSI and HoverAid piloted the use of hovercraft to supply health commodities to the areas that had not been reached before. In FY2016, PSI introduced CHX and Sayana Press for use by CHVs as new social marketing health products.

Throughout the program period, MAHEFA staff actively participated in the quarterly coordination meetings organized jointly by the Direction of Pharmacy, Laboratories and Traditional Medicine (Direction de la Pharmacie, des Laboratoires et de la Médecine Traditionelle, DPLMT) and the USAID/DELIVER Project. Additionally, MAHEFA staff took an active role in participating in the malaria-specific quarterly coordination meetings among USAID partners, meeting with PSI, USAID/Mikolo, the President's Malaria Initiative (PMI), the MOH’s National Malaria Control Program (Direction de Lutte contre le Paludisme), and the Roll Back Malaria National Committee. These meetings were organized to discuss ways of assuring a functional national supply chain system and community logistics. When requested by MOH, MAHEFA had provided special assistance to ensure the delivery of certain health products during health emergency periods (Artemisinin-Based Combination, ACT and Rapid Diagnostic Test Therapy, RDT.

Materials and Tools for CHVs and Other Community Actors. In addition to the health commodities discussed above, MAHEFA developed, distributed and trained CHVs and other community actors to use job aids, IEC materials, work tools, record books and reporting forms. CHVs received these materials at the end of each training and again as needed. At the end of the program, MAHEFA replenished all the community actors with missing, updated or finished materials so that they had sufficient stock to continue their work after the program ended. All materials and tools used by CHVs and other community actors were provided to CSB heads and staff so they could support CHVs to use them correctly.

SMS Pilot for Commodity Management by CHVs. In 2013, MAHEFA began a pilot activity using mobile health (mHealth) technology in two districts (Mandritsara, Sofia and Ambanja, DIANA). The goal was to help CHVs improve their stock management and avoid stock-outs at the community level. The program was reviewed and in FY2015, the improved SMS activity was put in place. A team of 12 people received a training of trainers (TOT) including three people from the MOH, who later trained 390 participants at regional, district, commune, and fokontany levels (13 NGO/TAs, 1 medical inspector, 23 CSB heads, and 353 CHVs), and participants now use the system.
The activities above resulted in steady progress in CHVs’ capacity to manage their stock as reflected in a steady decline of stock-outs reported by CHVs (Figure 8 and Figure 9). In 2014, there was an unusually high level of stock outs, exceeding the acceptable level of 20%, for Zinc & ORS, Confiance (injectable FP) and Pneumostop reported by CHVs in the program regions. These stock-outs were linked to a nation-wide shortage of these products and were not due to poor management capacity on the part of the CHVs.

**Figure 8 - Stock-out Reported by CHVs for Child Health Tracer Products by Year**

![Figure 8](image)

**Figure 9 - Stock-out Reported for Family Planning Tracer Products by Year**

![Figure 9](image)

3. **Access to Health Care through Community-Based Health Insurance Scheme (mutuelles de santé) and Emergency Transport Systems**

CHVs provide basic health services and community members who need a higher level of care must go to a CSB or a hospital. MAHEFA added two community-level innovations to increase access to health services at CSBs and hospitals. These two innovations were: community health insurance mutual schemes (*mutuelle de santé*), and the community-managed emergency transport system (ETS).

Community-based health insurance scheme, *mutuelle de santé*. MAHEFA implemented the health insurance scheme or *mutuelle* to help community members afford care when they needed services beyond those offered by CHVs. The *mutuelle* approach that MAHEFA introduced in its regions built on previous *mutuelle* strategies used in Madagascar. In addition, MAHEFA integrated innovations into its *mutuelle* approach
including: 1) registration of the *mutuelle* groups as associations at the district level to formally establish them as an independent organization and contribute to sustainability; 2) linking the *mutuelles* with microfinance institutions (MFI); and 3) connecting *mutuelles* to other activities such as the ETS and social enterprise box (eBox). An explanation of how the *mutuelle* functions is presented in Box 5.

**Box 5 – How MAHEFA’s Mutuelle Works**

To register, members must pay a household registration fee of 3,000 - 5,000 MGA (approximately 1.00-1.50 USD) which covers expenses associated with registration and creating an insurance card. These registered members can then become paying members by paying monthly fees between 200-1,000 MGA (approximately 0.05-0.30 USD). The registration fees, monthly payments and timing are established by each Health Insurance Mutual *mutuelle* in a general assembly therefore the details vary according to the individual *mutuelle*. These monthly fees are paid for each individual in the household and can be paid each month or for several months at a time. After consistently paying the monthly fees for an initial start-up investment period (usually three or six months), paying members receive their membership card and can use it for consultations at the CSB without paying additional service fees. The CSB then submits receipts to and is reimbursed directly from the MFI. The CSB, MFI, and *mutuelle* management committee have regular coordination meetings to ensure the efficiency of these processes and the overall functionality of the *mutuelle*.

By the end of the MAHEFA program, *mutuelles* had been established in 33 communes or 12% of all communes in MAHEFA areas, involving 388 fokontany. Eleven of these communes had ETS activities linked to their *mutuelle* (Figure 10). A total of 236 management committee members and facilitators were trained. As of February 2016, the number of people eligible to access health care using a *mutuelle* represents 73% of the End-of-Program target (9,120 out of 12,500 people). The low achievement level could be due to the fact that the community-based *mutuelle* model requires time to achieve results.

**Figure 10 - Health insurance scheme or Mutuelle in MAHEFA Program by Regions**
Emergency transport system (ETS). MAHEFA’s ETS approach provided access to locally available, affordable, and appropriate transport during health emergencies. MAHEFA also established links between the ETS groups, and community-based health insurance schemes (*mutuelles*). Co-locating ETS and *mutuelles* in the same communities allowed the ETS to receive modest funding from the *mutuelle* to support repair and maintenance of transportation mechanisms. Steps in setting up the ETS are presented in Box 6.

**Box 6 - Steps in Establishing Community-Based ETS**

1. Conduct initial workshop to explain ETS in pre-selected *fokontany*.
2. Conduct a technical evaluation of the sites including potential ETS management and operations capacity.
3. Select sites and hold introduction session on community-based ETS activity.
4. Train ETS management committee members, supervisors and drivers.
5. Set cost and user fees. Guidelines on costing and potential ETS user fees were established so that communities can set their own prices based on demand, distances, and affordability.
6. Establish reporting systems. These included drivers’ logbooks that were aggregated by the community management committees and sent on to MAHEFA regional teams.

The ETS activities were implemented in 11 communes covering 132 *fokontany*. The information on types of ETS provided is presented in Table 8. Additionally, the program has trained 160 members of the ETS management committees and 454 supervisors and riders. During the life of the program, there were a total of 964 people who were transported by the ETS from their community to the government health facilities or CSBs. Children under five made up 66% of those who benefitted from the ETS.

**Table 8 - Types of Emergency Transports in the MAHEFA program by Regions**

<table>
<thead>
<tr>
<th>Types of ETS</th>
<th>DIANA</th>
<th>Melaky</th>
<th>Menabe</th>
<th>SAVA</th>
<th>Sofia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stretcher</td>
<td>31</td>
<td>12</td>
<td>10</td>
<td>19</td>
<td>21</td>
<td>93</td>
</tr>
<tr>
<td>2. Cycle rickshaw ambulance</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>3. Bicycle ambulance</td>
<td>15</td>
<td>5</td>
<td>7</td>
<td>23</td>
<td>50</td>
<td>98</td>
</tr>
<tr>
<td>4. Canoe ambulance</td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>5. Ox cart ambulance</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>14</td>
<td>24</td>
<td>26</td>
<td>44</td>
<td>158</td>
</tr>
</tbody>
</table>

4. **WASH products at the community level**

**Drinking Water Supply.** MAHEFA’s Cooperative Agreement (CA) required that all construction and rehabilitation carried out in the program get prior approval from USAID to make sure the requirements stated in the CA (budget amount, construction regulations, environmental requirements, etc.) are respected. Through partnerships with the Regional Directorate for Water, Sanitation, and Hygiene (DREAH) MAHEFA conducted the following activities:

1. **Identified sites for construction of wells and water kiosks.** MAHEFA’s water engineers and the technicians from DREAH made site visits to carry out final site evaluations, conduct an environmental review in line with USAID regulations, verify the donation of the land for well or kiosk construction, and discuss with the community leaders their roles and responsibilities in the construction and management of the wells or water kiosks.

2. **Selected and contracted with construction companies and engineering firms for supervision of the construction.** The DREAH in six regions approved all construction companies and engineering firms selected. Local communities provided unskilled labor and local materials and the regional water engineers from MAHEFA and DREAH provided the overall supervision of the overall water construction activity.

3. **Assisted communities establish the WUSHA using the MOWSH’s curriculum.** The MAHEFA Program provided technical assistance to each WUSHA for their registration at district level and training on how to: 1) manage water use; 2) maintain the functionality of the wells through regular maintenance
and repairs; and 3) promote key WASH messages in the community including moving the community towards, or maintaining, ODF status.

4. **Conducted water quality tests.** The water from all wells and kiosks funded under the program was analyzed on a yearly basis by Institut Pasteur de Madagascar (IPM). The results of the tests were shared with the community so they could take actions based on the IPM’s recommendations with guidance from the DREAH.

5. **Formalized the official transfer of management responsibilities to the commune.** At the end of the program, MAHEFA conducted a final transfer of management responsibilities for all wells and kiosks constructed under the program to the communes.

Table 9 shows the number of wells and water kiosks built or rehabilitated by MAHEFA. Using the official estimation by MOWSH for this type of well (250 people per well), 103,250 people benefit from the 413 water structures.

### Table 9 - Wells and Kiosks in MAHEFA Regions

<table>
<thead>
<tr>
<th>Regions</th>
<th>Wells and water kiosks constructed</th>
<th>Wells and water kiosks rehabilitated</th>
<th>Number of beneficiaries</th>
<th>Members of WUSHA trained and functional</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOENY</td>
<td>17</td>
<td>10</td>
<td>6,750</td>
<td>254</td>
</tr>
<tr>
<td>DIANA</td>
<td>108</td>
<td>17</td>
<td>31,250</td>
<td>951</td>
</tr>
<tr>
<td>MELAKY</td>
<td>11</td>
<td>15</td>
<td>6,500</td>
<td>262</td>
</tr>
<tr>
<td>MENABE</td>
<td>47</td>
<td>26</td>
<td>18,250</td>
<td>653</td>
</tr>
<tr>
<td>SAVA</td>
<td>30</td>
<td>13</td>
<td>10,750</td>
<td>443</td>
</tr>
<tr>
<td>SOFIA</td>
<td>98</td>
<td>21</td>
<td>29,750</td>
<td>1017</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>311</td>
<td>102</td>
<td><strong>103,250</strong></td>
<td><strong>3,580</strong></td>
</tr>
</tbody>
</table>

As a result of the 2015 water quality analysis, among the 269 wells analyzed in six regions (13 in Boeny, 84 in DIANA, 21 in Melaky, 39 in Menabe, 30 in SAVA and 82 in Sofia), 103 or 38% complied with the bacteriological quality requirements. However, Escherichia coli was found in 94% of the total samples, a result of the existence of recent pollution due to leaching of soils, runoff, waste water infiltration, animal rearing too close to the water point, and/or heavy rains or floods. In addition, 35 or 13% of the wells contained nitrates or nitrites, most likely due to the proximity to agriculture area, but none of them above 50 mg/l. Five wells, or 2% have to be monitored as they contained iron above 3mg/l. The DREAH has taken the leadership for corrective measures required per IPM’s recommendations, such as disinfection with chlorine, additional surveillance, educating the population on water treatment before consumption, and educating them that high nitrates/nitrites in water means that pregnant women and newborns cannot consume it.

**Production of latrine slabs.** Latrine slabs are important for the construction of improved latrines at the community level. At the end of the program, there were 532 local masons trained by MAHEFA to produce latrine slabs. The availability of this affordable product in the community, combined with increased promotional activities on latrine use, has encouraged more families to purchase latrine slabs to construct their own latrines. As reported under IR 1, during the MAHEFA implementation period there were 17,494 latrine slabs produced and sold in the MAHEFA regions, benefitting 5% (160,945) of the total population covered by MAHEFA. At the end of the program, each mason had one latrine mold provided by the program, which allows them to continue producing latrine slabs for their communities.

#### 3.2.3. Utilization of health services and products

During the life of the program, CHVs provided basic health services and counseling to women of reproductive age (WRA) and children under five (CUS) in their communities. Primary achievements by CHVs are presented by health areas below.
1. Maternal, newborn and child health (MNCH)

Combined Community-Based Prevention of Newborn Cord Infection and Post-Partum Hemorrhage Prevention. The combined introduction of Chlorhexidine 7.1% (CHX) for care of the newborn’s umbilical cord, and misoprostol to prevent postpartum hemorrhage (PPH) was a MAHEFA program innovation in Madagascar. The activity was piloted in two districts, Mahabo, Menabe region (11 communes starting in 2013) only for CHX activities and Vohémar, SAVA region (19 communes starting in 2014) for a combined CHX and misoprostol. Since the GOM’s health facilities or CSB use other drug to prevent PPH therefore CSB distributed only CHX to women at delivery. On the contrary, CHVs in the pilot districts distributed both CHX and Misoprostol to pregnant women for their delivery.

An assessment of the pilot CHX and Misoprostol activities conducted in November 2015 shows that 584 CHVs (306 from Vohémar district and 278 from Mahabo district) were trained, equipped and supervised to provide services in both care of the newborn’s umbilical cord, and prevention of postpartum hemorrhage. The achievements of their work in both areas are presented in Figure 11 and Figure 12). More information on the combined Community-Based Prevention of Newborn Cord Infection and Post-Partum Hemorrhage Prevention is presented in Annex 8: MAHEFA’s Technical Briefs.

Figure 11 - Distribution and Use of CHX in Two Districts in MAHEFA program (n=840)

Figure 12 - Distribution and Use of Misoprostol in Vohemar District, SAVA Region (n=420)
Additional findings of the assessment mentioned that 96% of pregnant women said that they are willing to recommend misoprostol to other women. 77% of women reported that they would like to continue receiving both CHX and misoprostol from a CHV, 39% from CSB staff and 8% of the pregnant women from a traditional birth attendant. Of the 5% or 27 women who did not use CHX for their newborn, the main reasons for non-uptake were due to customs and family pressure (52%), because they forgot (37%), or because they lost the product (11%).

In addition to the impact described above at district level, MAHEFA’s CHX and misoprostol innovations had national-level policy impact. MAHEFA played an active role in the CHX and Misoprostol Technical Working Group since its inception and worked in collaboration with the Direction de la Santé Familiale, the Maternal Child Survival Project (MCSP), and other partners to update training tools and develop the strategy document for scale-up. When the scale-up of CHX was approved by the MOH in September 2015, MAHEFA rolled out this new service in all of its six regions.

Nutrition: In addition to the key messages disseminated presented under IRI, MAHEFA CHVs implemented the following nutrition activities: 1) monitor growth of CU5 through routine weighing and MUAC measurements, and 2) distribute Vitamin A to CU5 during the MOH’s semi-annual MNCH week. Additionally, CHVs were trained to distribute and show parents how to use a child’s health card to monitor his/her overall health and weight for age (Box 7).

Figure 13 shows excellent progress in the number of MUAC measurements done by CHVs for CU5, from 1,151 per year in FY2011 to 2,343,546 measurements in FY2015. Similarly, the number of children with MUAC measurement over 125mm also reduced from year to year. Figure 13 also shows that among the children measured, there was a decline in the number of malnourished children (those with MUAC less than 125mm). These children then were referred to CSB for additional nutrition services. In addition to MUAC measurement, in FY2014 CHVs began to weigh all CU5 on a regular basis (e.g., not just children who were ill) to detect malnutrition and monitor growth. Over the course of the program, a total of 1,950,804 children were weighed at a CHV’s health hut, out of which 56% (1,090,063) were children under two years old. CHVs provided counseling to parents on good nutrition practices during the routine weighing sessions and to every parent who brought in a sick child.

Figure 13 - Results of MUAC Measurement in the MAHEFA program by Year

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**Box 7 – New Method of Growth Monitoring**

MAHEFA introduced, for the first time in Madagascar, the use of a disc or wheel to determine a child’s age (disque de calcul de l’âge) at the community level. CHVs were trained to use the disc to monitor a child’s growth. The disc helps both CHV and mothers make quick calculation so they know how the weight of a child will be at his/her age. The child below acceptable weight level is considered malnutrition and need help.
c-IMCI Services for Children under 5 (CU5). A significant part of a CHV’s mandate is to provide services to CU5 including diagnosis, treatment, counseling, and referral to CSBs as necessary. Key results in this area during the life of the program are presented below. These services were not available at the community level before the MAHEFA program.

**Pneumonia.** Figure 14 shows a significant increase in the number of cases of CU5 treated for pneumonia by CHVs compared to the program’s annual targets. Over the past three fiscal years, total numbers of cases of children treated for pneumonia rose from 17,228 (FY2013) to 48,077 (FY2014) to 113,607 (FY2015). For FY2012, CHVs in the MAHEFA areas were supposed to be all trained by the Global Fund’s NSA1 project. Unfortunately this didn’t happen therefore many CHVs were not trained to treat CU5 for pneumonia in FY2012. This explained why the number of CU5 treated was very much inferior to the FY2012 annual target. Figure 14 also shows that the number of CU5 who received pneumonia treatment also surpassed the annual target for every year from FY2013 on. Box 8 at right also showed that CHVs detected CU5 for respiratory danger signs associated with pneumonia and referred them to CSBs.

**Figure 14 Cases of CU5 Treated for Pneumonia by CHVs in the MAHEFA program by Year**

Diarrhea. Similarly to pneumonia treatment, as CHVs gained more experience they also gained the trust and confidence of the community. Figure 15 shows progress in the number of cases of CU5 treated for diarrhea, which jumped from 419 cases treated in FY2012 to 50,862 cases treated in five months of the program in FY2016. As in the case of pneumonia, except for the first year when most CHVs were not yet functional, the number of CU5 cases treated for diarrhea surpassed the annual target of that year.

**Figure 15 – Cases of CU5 Treated for Diarrhea by CHVs in the MAHEFA program by Year**
Malaria. Malaria is a serious health problem among pregnant women and CU5 in the program’s six regions. Figure 16 presents the increase in the number of malaria cases among CU5 who were treated by CHVs from year to year.

Figure 16 – CU5 Having Received ACT Treatment from CHVs in the MAHEFA program

![Figure 16](image)

Table 10 shows that CHVs play an important role in diagnosing and treating simple cases of malaria. Among a total of 475,429 CU5 with fever tested by RDT from CHVs, 51% (241,138 CU5) tested positive. Among the CU5 who tested positive for malaria, 17,284 of them (7%) were complicated cases and referred for treatment at the CSB. The table shows a higher number of CU5 treated (257,106) than RDT positive cases (241,138) because some CU5 whose test results were negative were treated with other drug (paracetamol), or who were not tested due to RDT stock out, also received ACT within 24 hours.

Table 10 - Results for Selected Malaria Indicators for MAHEFA Regions (2012-2016)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Boeny</th>
<th>Melaky</th>
<th>Menabe</th>
<th>SAVA</th>
<th>DIANA</th>
<th>Sofia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU5 with fever tested by RDT by the CHV</td>
<td>28,357</td>
<td>82,155</td>
<td>134,723</td>
<td>29,472</td>
<td>35,275</td>
<td>165,447</td>
<td>475,429</td>
</tr>
<tr>
<td>CU5 with fever who tested positive on RDT at CHV level</td>
<td>17,047</td>
<td>53,745</td>
<td>65,517</td>
<td>9,929</td>
<td>7,901</td>
<td>86,999</td>
<td>241,138</td>
</tr>
<tr>
<td>CU5 with fever treated by CHV within 24 hours after the appearance of fever</td>
<td>22,195</td>
<td>53,243</td>
<td>60,499</td>
<td>12,473</td>
<td>14,167</td>
<td>94,529</td>
<td>257,106</td>
</tr>
<tr>
<td>CU5 testing positive on RDT with danger signs referred to the CSB</td>
<td>662</td>
<td>2,529</td>
<td>4,714</td>
<td>1,148</td>
<td>1,312</td>
<td>6,919</td>
<td>17,284</td>
</tr>
</tbody>
</table>

Referral Services for Pregnant/Lactating Women and Children under 5. One of the CHVs’ main services was to provide counseling and referral services for pregnant women to the CSB for ANC visits, follow-up, and delivery. These CSB visits were opportunities for the women to receive malaria prevention therapy, including SP and LLITNs, iron folic acid (IFA), and tetanus vaccinations. CHVs also referred CU5 for danger signs, vaccination and treatment of malnutrition, among other services available at CSBs. Table 11 shows the number of individuals referred and the types of referrals by CHVs during FY2014, FY2015 and FY2016. Box 9 at left shows number of CU5 referred for vaccination by CHVs.

Box 9 – Referrals of CU5 for Vaccination

During the five years of MAHEFA, CHVs referred 1,695,320 CU5 for vaccination at CSB. This represents 67% of all CU5 referrals.

The table shows a substantial increase in the number of referrals and counter-referrals between the CHVs and the CSBs since 2014 when MAHEFA could work officially with GOM (from 148,314 in FY2014, to 217,811 in FY2015, to 112,314 women for five months in FY2016). The number of counter referral cases from CSB to CHVs also increased substantially from 7% of women referred in FY2014 to 32% in FY2016. A similar trend is observed among CU5 cases referred from CHVs to CSBs (from 480,487 cases of referral in
FY2014 to 1,019,214 for five months in FY2016) and the counter-referral rate increased from 3% in FY2014 to 40% in FY2016.

Table 11 - Referral Cases from CHVs to CSBs, Hospitals, or Mobile Clinics (2014* to 2016)

<table>
<thead>
<tr>
<th>Referral services by CHVs</th>
<th>Type of service</th>
<th>Number of pregnant women referred in FY2014</th>
<th>Number of pregnant women referred in FY2015</th>
<th>Number of pregnant women referred in FY2016 (five months)</th>
<th>Total FY2014 to FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>First prenatal consultation including tetanus vaccination, iron folic acid (IFA), intermittent preventive treatment in pregnancy (IPTp), and LLITN</td>
<td>Malaria, maternal and neonatal care</td>
<td>69,269</td>
<td>88,907</td>
<td>47,347</td>
<td>205,523</td>
</tr>
<tr>
<td>Pregnant women for their fourth antenatal care visit</td>
<td>Malaria, maternal and neonatal care,</td>
<td>52,162</td>
<td>89,132</td>
<td>44,580</td>
<td>185,874</td>
</tr>
<tr>
<td>Pregnant women for delivery</td>
<td>Maternal and neonatal care, assisted delivery</td>
<td>24,457</td>
<td>38,301</td>
<td>19,406</td>
<td>82,164</td>
</tr>
<tr>
<td>Long-acting contraception</td>
<td>Family Planning</td>
<td>2,426</td>
<td>1,471</td>
<td>981</td>
<td>4,878</td>
</tr>
<tr>
<td><strong>Sub-total : Number of pregnant women referred to CSBs</strong></td>
<td></td>
<td>148,314</td>
<td>217,811</td>
<td>112,314</td>
<td>478,439</td>
</tr>
<tr>
<td>Pregnant women with confirmed counter-referral from CSB back to CHVs</td>
<td></td>
<td>10,428</td>
<td>43,163</td>
<td>35,635</td>
<td>89,226</td>
</tr>
<tr>
<td>Referral services by CHVs</td>
<td>Types of service</td>
<td>Number of CUS referred in FY2014</td>
<td>Number of CUS referred in FY2015</td>
<td>Number of CUS referred in FY2016</td>
<td>Total FY2014 to FY2016</td>
</tr>
<tr>
<td>Cases of CUS referred for vaccination</td>
<td>Child care</td>
<td>234,804</td>
<td>679,832</td>
<td>780,684</td>
<td>1,695,320</td>
</tr>
<tr>
<td>Cases of CUS referred for Vitamin A</td>
<td>Child care</td>
<td>222,944</td>
<td>262,695</td>
<td>195,650</td>
<td>681,289</td>
</tr>
<tr>
<td>Cases of sick CUS with danger signs (neonates, malaria, Acute Respiratory Infection (ARI), and diarrhea)</td>
<td>Malaria, treatment of complicated cases, water treatment</td>
<td>15,369</td>
<td>24,963</td>
<td>13,943</td>
<td>54,275</td>
</tr>
<tr>
<td>Cases of CUS with low weight and/or MUAC &lt;125mm</td>
<td>Nutrition, Child care</td>
<td>7,370</td>
<td>51,337</td>
<td>28,937</td>
<td>87,644</td>
</tr>
<tr>
<td><strong>Sub-total : Number of cases of CUS referred to CSBs</strong></td>
<td></td>
<td>480,487</td>
<td>1,018,827</td>
<td>1,019,214</td>
<td>2,518,528</td>
</tr>
<tr>
<td>Children with confirmed counter-referral from CSB back to CHVs</td>
<td></td>
<td>15,311</td>
<td>295,836</td>
<td>404,544</td>
<td>715,691</td>
</tr>
</tbody>
</table>

*Note: MAHEFA began working officially with GOM in FY2014 therefore the program’s efforts to improve the referral and counter-referral system was effective from early FY2015 onwards.

Family Planning and Reproductive Health

In addition to the increase in functional CHVs that provide FP services, CHVs gained more experience and confidence from community members, and use of their FP services accelerated as a result, as seen in Figure

32
17. The FP services offered by CHVs greatly increased the number of regular FP users (RU) each year especially since FY2014 when 97% of the CHVs began to provide the full range of community-level FP services with the addition of Depo-Provera. At the end of FY2016, CHVs were servicing 204,622 FP regular users, a substantial increase from FY2013 when they had 24,970 as FP regular users.

**Figure 17 - Regular FP Users in the Program by Year* and by Age Group**

*Note: CHVs began providing FP services in FY2012, with full package of community-level FP services available in FY2014.

Similarly, the number of new users recruited by CHVs increased over the course of the program. The number of new users was highest in the three last years, and the achievements of FY2016 in 5 months exceeded those accomplished in 12 months of FY2013. Over MAHEFA’s five-year program period, CHVs recruited a total of 55,866 new users, representing 27% of all FP regular users for the period.

**Figure 18 - New FP Users in the Program by Year* and by Age Group**

**Figure 19 – Evolution of CYP Achievements in MAHEFA Areas by Year**
Figure 19 shows significant progress in CYP achievements in the MAHEFA program over the years. The CYP achievements for five months in FY2016 is almost equal to that of the whole year of FY2014 (63,387 compared with 69,207). Since FY2013, CYP achievements continually surpassed annual targets due to three main reasons:

1. Annual targets were set too low as they were set before CHVs were fully functional.
2. Contraceptive prevalence rate increased at higher rate than expected (27% in FY2012 to 41% in FY2014 compared to the expected target of 32% in mid-term of the program\(^7\)).
3. The preference for injectable as an FP method continued to increase from year to year, resulting in 73% of the FY2015 CYP and 76% of the FY2016 CYP coming from injectable methods, while they accounted for 0% in FY2012, 27% for FY2013, and 57% for FY2014.

Family planning (FP) and reproductive health (RH) services for youth (via the mentoring approach CHV/YPE). In FY2012, the MAHEFA program conducted a baseline survey which revealed that 64% of young women aged 15-24 years have given birth and 46% have done so before the age of 19 years. MAHEFA used a mentoring approach between CHVs and YPEs in selected areas to increase access to and utilization of FP services among young people in the capital communes of each district. The YPEs in the MAHEFA program were trained, equipped and mentored by CHVs to perform the following activities: 1) convey key health messages via SMS and face-to-face counseling and group sessions; 2) provide resources to youth to get more information on FP/RH topics via the GreenLine live chat by SMS; 3) refer youth to CHVs and CSBs for FP/RH services; and 4) expand the number of youth clients reached through SMS messages and other communication approaches.

MAHEFA observed substantial increases in the number of youth referred (from 972 in 2014 to 8,152 in 2015). Figure 20 shows a tremendous potential for increasing utilization among youth using the YPE approach. Additionally, since the beginning of the SMS activity in September 2014, YPEs received and sent 166,190 SMS messages to their peers on family planning, reproductive health, early marriage, gender-based violence, early pregnancy, good citizenship behaviors, and economic advancement through education. In addition to referring their peers for FP services, YPEs also referred them for information and counseling through a live chat line called GreenLine 511.

**Figure 20 – Youth Referred by Youth Peer Educators for FP services with CHVs**

<table>
<thead>
<tr>
<th>Year</th>
<th>Youth Referred for FP services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-Dec 2014</td>
<td>972</td>
</tr>
<tr>
<td>Jan-Dec 2015</td>
<td>8,152</td>
</tr>
<tr>
<td>Jan-Feb 2016</td>
<td>1,475</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,599</strong></td>
</tr>
</tbody>
</table>

### 3.2.4. Summary Recommendations

The MAHEFA Program provided training, supplies and supervision to over 6,000 CHVs to ensure they followed MOH protocols for counseling, referrals, treatment, and demand generation in FP, MNCH, WASH and nutrition. As demonstrated by the large numbers of women and CUS who received services

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\(^7\) From 2014 USAID’s OMS report.
from CHVs they have assumed a crucial role in providing integrated health services to address important community health needs, particularly in remote and hard-to-reach areas. The work of CHVs can be effective and provide positive impact on community health when CHVs are included in and recognized by the larger public health system and the community. CHVs need technical training, supplies and tools as well as regular technical supervision by MOH personnel from the CSB. It is equally important to support CHVs with health products to avoid stock outs.

At the national level, more advocacies are needed to encourage the effective adoption, support and promotion of the role of the CHV in community health. As described earlier, the sanctions by the USG against the Government of Madagascar (GOM) prevented MAHEFA from working officially with the GOM from the beginning of the program in 2011 until May 2014. This caused great difficulty and delay in the CHVs' training programs in the MAHEFA program because the CHVs pre-service trainings on c-IMCI and family planning’s injectable method included practicum and certification by the CSB chiefs. In some regions, the CSB leaders were not officially involved in the program activities therefore they did not want to allow CHVs to conduct their practicium at their CSBs which meant that CHVs could not provide injectable and c-IMCI services.

3.3. Improve the Quality of Care Delivered by Community-Based Health Practitioners (IR 3)

The activities under IR 3 were key elements of MAHEFA’s comprehensive approach to ensuring quality of services provided by CHVs. These activities included routine supportive supervision, the champion commune (Kaominina Mendrika Salama Miabo, KMSm) approach, the use of the Community Score Card (CSC), and interventions to increase CHV motivation. This section of the report presents how the program improves the quality of community-level health services during the five years of program implementation. Achievements in IR3 are separated into the following sub-sections:

3.3.1. Introduction: Changes over the Years and Overall Results of IR3;
3.3.2. Assurance of Service Quality Through Technical support and Supervision of CHVs;
3.3.3. Motivation of Community Actors;
3.3.4. Improving CHV Service Quality Using Community Feedback;
3.3.5. Using The KMSm Approach to Manage Community Health; and
3.3.6. Summary Recommendations

3.3.1. Changes over the Years and Overall Results of IR3

Each of the 6,052 community health volunteers (CHVs) in the MAHEFA program were selected by their communities. After being selected, the program trained, equipped and supervised CHVs to provide high quality promotion, prevention, treatment and referral services in integrated health areas. By the end of the program implementation, CHVs provided a package of services in all of the program’s 3,023 fokontany, which increased access to basic health services for 3,403,547 million people, as indicated by increased utilization rates, as already presented under IR2. Additionally, as reported under IRs 1 and 2, MAHEFA assisted a total of 3,053 COSAN members and other community actors to implement community health mobilization activities on a regular basis.

MAHEFA introduced the KMSm approach, a cyclical approach whereby communities themselves regularly determine health objectives, plan activities, and monitor achievements, in its regions and all 279 MAHEFA communes were oriented, trained and coached on its application. By the end of the program, each of the communes had succeeded in completing at least three KMSm cycles, meaning they achieved their objectives set in each cycle. Once the objectives had been reached, the commune was certified as a champion commune. By the end of the program, almost half of the communes in the MAHEFA program area (131 or 47%) had completed their fourth KMSm cycle and received four certificates (one for each of their completed cycles). The other 148 communes completed three KMSm cycles.
Over the course of the program, MAHEFA trained 937 staff from the MOH in community health and CHVs’ integrated health services. These staff included representatives from the national (20), regional (75), district (146), and commune levels (696) and ultimately, community health activities were integrated in the regional, district and communal health plans. MOH officials at all levels assumed their role as technical trainers and supervisors to make sure that CHVs in their catchment areas provided quality services based on national norms. Almost all CHVs (99.7%) who participated in refresher training participated in a training led by MOH staff.” Additionally, CSB heads from 481 CSBs in the program area conducted 5,800 onsite technical supervision visits of CHVs. These examples of MOH participation and commitment in program activities, including by officials at regional, district and commune levels, was particularly remarkable considering that there had been no integrated community health activities prior to MAHEFA and that before the sanctions were lifted in 2014, there was no official collaboration between MAHEFA and the GOM.

As explained in IR 2, all CHVs in the MAHEFA program received extensive training, necessary tools and health supplies, and were regularly supervised to ensure quality health service delivery. Table 1 includes a snapshot of findings of key quality indicators from the mid-term survey. It should be noted that there are no baseline figures to compare these findings to, since at the time of the baseline survey, there were no CHVs providing integrated health services in MAHEFA areas.

### Table 12 - Progress in CHV’s Service Quality in the MAHEFA Program

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>2014 Mid-term survey (OMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of CHVs receiving a passing score on a regular knowledge assessment</td>
<td>85%</td>
</tr>
<tr>
<td>% of CHVs achieving minimum quality score for community case management</td>
<td>79%</td>
</tr>
<tr>
<td>% of CHVs with increased saving</td>
<td>51%</td>
</tr>
<tr>
<td>% of CHVs receiving technical supervision in the last 2 months</td>
<td>50%</td>
</tr>
<tr>
<td>% of CHVs practicing adequate disposal of hazard materials and equipment</td>
<td>36%</td>
</tr>
</tbody>
</table>

### 3.3.2. Service Quality Assurance Through Technical Support and Supervision of CHVs

#### 1. Technical Support to and Supervision of CHVs

Community health volunteers were selected by their communities and trained by the MAHEFA program to provide integrated health services for the first time. In order to provide CHVs with continued technical support and supervision, the MAHEFA program implemented activities to make sure that CHVs’ service quality was in line with national norms and that their services were integrated in the public health system through the following activities.

**CHV Monthly Meetings.** Monthly meetings at the CSB were an excellent forum for reporting and providing technical updates for CHVs. Before FY2014, monthly meetings were conducted directly by the program to provide CHVs with technical support and collect their monthly activity reports. After 2014, the CHV meetings were conducted by CSB heads and took place at the CSB. Figure 21 shows that the CHV attendance rate at the monthly meetings was high in general, and increased over time as CHVs developed closer relationships with CSB heads, became more familiar with the approach and saw how these meetings helped them with their work.
Supervision Visits for CHVs. Throughout the program, CHVs received technical supervision visits from GOM, MAHEFA and/or NGO technical staff. Since 2014, CSB heads, and medical inspectors from district, regional and central MOH offices began to carry out CHV technical supervision visits on a monthly basis. Starting in FY2015, MAHEFA supported CSB heads to combine these visits with the CSB’s own outreach activities (stratégie avancée) for providing routine immunization to children and ANC for pregnant women in the same community. At the end of the program, MAHEFA conducted a total of 56,849 supervision visits to CHVs. The number of supervision visits conducted during the last two years of the program implementation is 45,899 of those 6,424 or 14%) were classified as technical supervision and combined with outreach activities of CSB.

CHVs received an additional type of supervision visit focused on non-clinical areas (50,425 or 89% of total supervisions), including the management of tools and health huts, service pricing, and hours of service. These visits were conducted by the NGO field staff or Technicien Accompagnateur (TA) to provide overall support and coaching sessions on a one-on-one basis. Figure 22 shows both types of supervision visits conducted in the program areas while Figure 23 presents the number of times CHVs received the technical supervisions visits.

**Figure 22 – Supervision Visits to CHVs by Year**

- **Number of Supervision conducted by GOM**
- **Number of Supervision conducted by MAHEFA and NGO**

*Note: GOM began to officially in the program in FY2015.*
Hand-Over of Responsibility to MOH. One of MAHEFA’s sustainability strategies focused on transferring responsibilities to local GOM structures, in particular the MOH. By mid-2014, MAHEFA was able to work with the GOM and quickly put into place the following activities to ensure MOH engagement and ownership as well as technical support from GOM in continuing community health activities beyond the life of the program. This transfer was done through the following activities:

1. Participating in MOH Technical Working Groups. All the tools and curricula produced by the MAHEFA program after May 2014 (when sanctions were lifted) were developed by working groups designated and led by the MOH. The working groups included key technical stakeholders relevant to the specific technical area (e.g., CHX, misoprostol, or Sayana Press).

2. Involvement of MOH officials at all levels in the program planning and periodic reviews. GOM officials from national, regional and district levels participated in program work planning, monitoring and review exercises starting in 2014.

3. Program activities were integrated as part of the MOH regional health plan. For example, all health activities at the community level performed by CHVs were included in district and regional annual plans.

4. Training and technical supervisions were conducted by CSB heads. MAHEFA provided training, tools and assistance for CSB heads so they could assume their role as trainers and supervisors of CHVs.

5. Joint health activities between CSBs and CHVs. CSBs and CHVs worked together on the organization of activities during health campaigns (e.g., polio), immunization outreach activities, national/international health days, and effective referral and counter-referral systems between CHVs and CSBs.

6. Regional workshops to officially transfer responsibilities to DRSP and DREAH. For these workshops, MAHEFA prepared a brief document presenting the main achievements of the program and highlighting the role of the community actors (CHV and non-CHVs) who carry out routine services and health activities. Each district developed an action plan to continue community health activities initiated during the MAHEFA program.

The program’s achievements of the above-mentioned activities are already reported under IRs 1 and 2.
3.3.3. Motivation of Community Actors

The MAHEFA program used a combination of four approaches to maintain and increase CHV motivation: 1) strengthening the links between CHVs and the public health system, 2) promoting acceptance of CHVs by the community, 3) use of multiple diverse incentives for CHVs, and 4) monitoring and identifying the factors behind CHV turnover.

1. Strengthening Links between CHVs and the Public Health System.

Informal interviews with CHVs in the MAHEFA program regions showed that the highest source of motivation was being a part of the formal public health system. As reported above, CHVs in the MAHEFA areas developed close relationships with CSB heads through the supervision visits and the monthly meetings. Increased participation in these two activities, along with the increase in referrals and counter-referrals between CHVs and CSB, demonstrates the close link between the two groups.

2. Promoting Acceptance of CHVs by the Community.

Although the CHVs were selected by members of their own communities, it took time for the community to accept them in their new role. The MAHEFA program carried out the following activities to promote the importance of the CHV role in the community: 1) provided the necessary training, launch kit and supervision to CHVs; 2) used the Champion Commune (KMSm) approach and the Community Score Card (CSC) approach to strengthen the relationship between CHVs and community members; and 3) encouraged the community to build health huts and equip them with basic furniture, e.g., chairs, table, board, shelf, waiting bench and latrine.

3. Use of Multiple Diverse Incentives for CHVs.

The incentives for increasing CHV motivation are described below. Note the first four incentives were program-wide, while the remaining three were supplemental activities made available to CHVs in selected areas.

a) Administered CHV launch kits, which included medicines, health supplies, and health products to all 6,052 CHVs after their pre-service training. This allowed them to have their own revolving drug fund.

b) Organized exchange visits for high-performing CHVs to visit and mentor low-performing CHVs in other districts. A total of 1,717 CHVs (28%) participated in the exchange visits and the workshops outside of their communities. The visits and the participation in the workshop were generally viewed as prestigious opportunities since only high-performing CHVs were selected to participate in these activities.

c) Invited high-performing CHVs to attend and share their testimony at regional- and national-level workshops organized by GOM and development partners.

d) Showcased CHV work during the health days organized by local government at the commune, district and regional levels.

e) Starting in 2012, MAHEFA provided bicycles to 1,020 CHVs in 220 communes (17% of CHVs in 79% of all program communes). All CHVs who received bicycles also received training in safe riding, management, maintenance, and repair of their bicycles. The bicycle was used to increase CHV mobility for their monthly re-supply of health products, attendance at the monthly meeting at the CSB, routine home visits, and outreach activities.

f) Provided income generation opportunities via sale of WASH products for 399 CHVs.

g) Provided e-box activity, a micro-enterprise cooperative for bicycle sale and repair shops, to 97 CHVs. Four eBox cooperatives were set up in MAHEFA program areas: two in Sofia in FY2014, and two in Menabe in FY2015. Members of the cooperatives were community actors (CHVs, COSAN, and members of the management committee for the mutuelle de santé and ETS). During the life of the
program, the four eBox cooperatives received containers with a total of 2,562 bicycles and had sold 2,095, or 82% of the total bicycles received.

4. Monitoring and Identifying Factors Affecting CHV Turnover.

While the above-mentioned approaches contributed to increased CHV motivation, MAHEFA also attempted to monitor and identify the factors which seemed to contribute to a high CHV turnover rate. Throughout the five years of the MAHEFA program, the CHV turnover rate was 8.7 percent. A higher percentage of male CHVs left the program than women (63% for men compared with 37% for women). The turnover rate is considered low for CHV programs which typically report between 5 percent and 77%\(^8\). Based on MAHEFA’s findings through exit interviews/anecdotal reports from regional staff, the factors affecting high CHV turnover included: moving to a different community, starting a family, death, and aging.

3.3.4. Improving CHV Service Quality Using Community Feedback

One of the approaches to improve CHVs’ service quality in the MAHEFA program areas is the community score card (CSC). This was the first time the CSC approach was used among CHVs in Madagascar. MAHEFA began its pilot in 2013 by using focus group discussions to gather information on CHV health service performance. In 2015, MAHEFA introduced individual interviews in addition to focus group discussions. This technique provided similar information and was less expensive because interviews were conducted at the same time as routine supportive supervision visits. By the end of the program, MAHEFA decided that using both CSC methodologies was the best and most effective approach to improving community health service quality. At the end of the MAHEFA program, among the total of 1,880 fokontany conducted a CSC focus group session, 1,866 fokontany conducted a CSC focus group session once, 290 fokontany carried out sessions twice, and 39 fokontany carried out sessions three times or more. Additionally, 8,170 CSC individual interviews were conducted in 2,828 fokontany. The CSC focus group methodology helped CHVs and community members understand the importance of their mutually-beneficial relationship and encouraged the community to fulfil its responsibility to the CHVs in order to continue to receive CHV services.

One example of the result of the CSC approach is the achievement in encouraging the community to build a work place, toby or health huts, for CHVs to work at and provide services from on a regular basis. By the end of the program, there were 2,679 (89% of all fokontany) permanent health huts or toby built by the community as a work site for the CHVs. Among the 2,679 toby built by the community, 2,591 (97%) were equipped with basic furniture such as a table, chair, closed closet, visitors’ bench or chairs, and a curtain as a divider for the consultation room. Other community actions related to the construction and maintenance of the tobys are shown in Figure 24.

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\(^8\) Lay health worker attrition: important but often ignored, Lungiswa Nkonki a, Julie Cliff b & David Sanders. Bulletin of the World Health Organization, Volume 89, Number 12, December 2011, 919-923
Figures 25 and 26 represent results from the CSC activities related to the level of user satisfaction. According to a pre-established system of scoring satisfaction with CHV service delivery (above 80% = strongly satisfied), Figure 25 shows that community members were strongly satisfied with the quality of CHV education sessions and the quality of care and counseling they received from CHVs. Similarly, Figure 26 shows a high level of satisfaction in all chosen CSC Indicators.

**Figure 25 – Satisfaction Rate (%) Among Users for Two Obligatory CSC Indicators (n=47,896)**

**Figure 26 – Satisfaction Rate (%) Among Users for 9 Elective CSC Indicators (n=47,896)**
3.3.5. Using The KMSm Approach to Manage Community Health

Since the mid-1990’s, the Kaominina Mendrika Salama (KMS) approach has been used to address a variety of public health challenges in Madagascar. The approach encourages community members to create goals for improved community health, identify activities that contribute to these goals, track progress, and support all local actors to work together to achieve these goals. MAHEFA modified the existing KMS approach to create Kaominina Mendrika Salama miabo (KMSm) or Champion Communes Reaching Higher. MAHEFA’s KMSm approach involved continuous cycles of four steps each. When all four steps were completed, one KMSm cycle was completed and another cycle began. With each new cycle, the community’s health targets and objectives were established based on achievements of the previous cycle.

By the end of MAHEFA, all 279 MAHEFA communes had completed their third KMSm cycle, which meant that all communes in the program areas had achieved at least 80% of their health targets. Out of all the communes in the MAHEFA program, 47% (131) completed their 4th KMSm cycle (exceeding the expected objective of 51 communes), meaning that they achieved 85% of their health targets. More information is presented in Figure 27.

Figure 27 – KMSm Achievements in the MAHEFA Program

To increase participation and commitment of communes in KMSm activities, MAHEFA developed a KMSm facilitation manual in Malagasy and trained CCDS members on how to conduct KMSm activities (Box 10), which motivated them to accelerate the achievements of the current cycle to pass to the next one.

Table 13 presents health progress as evidenced by selected KMSm health indicators. While progress is found in all indicators in the table below, the two largest increases in health achievements between the two KMSm cycles are in the number of improved latrines built (nine times) and in the number of CU2 weighed by CHV (7.8 times). As reported under IR1, these activities are among the top three promotion activities the CHVs involved targeted population, along with the program implementation as part of child health (top one) and latrine use (top 3).
Table 13 - Progress on KMSm indicators between Cycle 1 and 4

<table>
<thead>
<tr>
<th>Selected KMSm indicators</th>
<th>Average achievement in cycle #1</th>
<th>Average achievement in cycle #4</th>
<th>Rate increase from cycle #1 to #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of improved latrines built</td>
<td>3,488</td>
<td>31,659</td>
<td>9.1</td>
</tr>
<tr>
<td>Children under two years (CU2) who were weighed every month by CHV</td>
<td>7,749</td>
<td>60,421</td>
<td>7.8</td>
</tr>
<tr>
<td>Pregnant women who went for ANC #4 at CSB</td>
<td>12,085</td>
<td>29,568</td>
<td>2.4</td>
</tr>
<tr>
<td>New users of family planning</td>
<td>33,086</td>
<td>54,939</td>
<td>1.7</td>
</tr>
</tbody>
</table>

3.3.6. Summary Recommendations of IR3

1. Recognize Progress to Promote Community Ownership and Sustainability. The MAHEFA program’s approach to generating health service demand and increasing quality of services at the community level focused on building leadership and strengthening various community mobilization structures (CHVs, youth leaders, fokontany and commune COSANs, CCDS, local NGOs, local authorities, natural leaders, etc.) which had an impact on the promotion of behavior change related to health and hygiene practices including care seeking. Recognition of the progress made by these community mobilization structures towards improved health and further strengthening of skills needed to implement their roles is key to the sustainability of MAHEFA’s impact and the longevity of investments in their training and support.

2. Share Program Responsibilities with GOM from the Start of the Program. Program activities should be integrated as part of the GOM work plan at the regional level. For example, all health activities at the community level carried out by CHVs were put in the Direction Régionale de Santé Publique’s annual plan. GOM officials from the national, regional and district levels should participate in program planning, monitoring and reviews. The program should train and support CSB heads to effectively assume their role as CHV trainer, supervisor and technical mentor.

3. Train and Support Members of the CCDS to Carry Out KMSm Activities. At the beginning of the program, KMSm activities were conducted by the NGOs. Transferring these activities to members of the CCDS was important since the PNSC cites KMSm as the primary approach to help communities manage their own health activities. Each commune should integrate its KMSm plan into its health development plan, which will encourage commitment and ownership. KMSm action plans can be used as an important tool to advance commune health development plans.

4. Train and Coach COSAN Members and CHVs on the CSC Approach. These health actors can then use the CSC approach to build positive dialogue and communication channels between the community members who are users of CHV services, and the service providers or CHVs. One of the most important aspects of the CSC process is that the communities develop an action plan to improve poor performing health indicators. CHVs and COSAN members must commit to developing the action plan and reporting progress on activities to the CCDS at the commune level.

5. Communicate Transparent CHV Motivation Plans. Plan most or all motivation activities at the beginning of any program and clearly explain the plan to all stakeholders including the CHVs themselves. Advanced planning and transparency will contribute to effective integration of motivation efforts into program activities and reduce confusion and jealousy among CHVs or other community members, and may also help CHVs retain their posts longer.
3.4. Cross-Cutting: Monitoring & Evaluation and Knowledge Management, USAID Compliance, and Gender (IR 4)

This section of the report presents the achievements in the following areas during the life of the program.

3.4.1. Introduction: Changes over the Years;
3.4.2. Data Quality and Reporting over the LOP;
3.4.3. Integration of MAHEFA Data into the MOH’s Routine Health Information System;
3.4.4. Data Use: Knowledge Management and Dissemination;
3.4.5. USAID Compliance (FP, EMMP and Gender); and
3.4.6. Lessons Learned and Recommendations.

3.4.1. Introduction: Changes over the Years

With the introduction of the integrated community health activities in six program regions, MAHEFA set up a Monitoring and Evaluation system to measure, analyze and report program progress and achievements so that all stakeholders could access information and use the results and lessons learned. As part of its activities, MAHEFA also took into account to integrate gender and FP and environmental compliance in its core activities. Efforts and changes brought by the program to make its M&E system functional are presented below.

Internal Data System. For the first three years of the program, MAHEFA's routine data system was paper-based and fed into Excel spreadsheets. Given that the community actors and most of the NGO staff had little experience with health reporting, MAHEFA’s efforts at that time were mainly focused on training the NGO staff and CHVs in the overall M&E system and quality routine data collection in particular. When NGO staff and CHVs had gained more experience, MAHEFA introduced our computerized data system, called SIG (Système Informatisé de Gestion), in FY2014. The SIG had an increased reporting rate, improved data quality, and increased processing speed which all facilitated data analysis and use. The second biggest change introduced in the MAHEFA program to improve data quality was a use of USAID’s Data Quality Assessment (DQA) framework. In FY2014, MAHEFA adapted USAID’s DQA framework to be used internally and regularly with CHVs, NGOs and within MAHEFA’s regional offices. Following the DQA sessions, identification of areas for improvement, immediate corrections, and planning for remedial actions and improvements were possible for the program. DQA use contributed also in a timely reporting which reaches a high reporting rate: 97% of the CHVs had their monthly activity report or Rapport Mensuel d’Activité, RMA submitted and validated on time (respectively 93% for c-IMCI reports).

Integration of Program Data in the MOH’s Health Information System. According to the PNSC, CHVs should submit two reports to CSBs on a monthly basis, namely the Monthly Report Form or RMA and the c-IMCI reports. While the c-IMCI report was developed by the MOH, the RMA was developed by the program since the MOH did not yet have the RMA for CHVs use. In other words, the MOH’s data collection system only started at the CSB level and CHV’s report was not part of the routine HMIS. As a result of this, CSB collected CHVs’ reports but had no way to integrate them into the GOM’s routine health information system. In FY2014, the MOH began to address this by developing a standardized CHV RMA and integrated community health records book that are fully in-line with the CSB monthly report form. The newly developed RMA was modified from the one used in the MAHEFA program and MAHEFA staff took an active role throughout the design process that lasted almost one year. More information on the development of CHV’s monthly reports and integrated community health records book is presented later in this section. At the end of the program, MAHEFA printed and distributed the new RMA and integrated health records book to all CHVs and CSB in its six regions.

Knowledge Dissemination. MAHEFA introduced innovative approaches for dissemination in Madagascar. Through regular dissemination channels including program bi-monthly highlights submitted to USAID, program information sheets (one pager, fact sheets), CHV newsletters, monthly regional coordination
meetings, annual national and regional dissemination workshops level, and MOH workshops and health day celebrations, the MAHEFA team used new and creative methods of communications. These dissemination events not only were successful in sharing information, lessons learned and good practices on technical themes related to community health, they also were good methods to share creative ways to disseminate information. MAHEFA shared its successful experience in both the technical content and through the creative processes of dissemination.

**USAID compliance.** During the life of the program, specific activities were conducted (Training, supervision, development of tools, dissemination…) to ensure that family planning compliance as well as environmental compliance was respected at all levels. Regarding the branding and marking, all materials developed in the program were branded with the approved logos and other communications requirements. In addition, MAHEFA involved in building disposal pits at CSB for used materials such as syringes at CHVs and facility, as well as at CHV’s health huts.

**Gender.** Gender approaches were integrated into routine activities and programming and MAHEFA contributed in the creation of the Gender Working Group, the organization and celebration of the women international day, as well as the development of national gender and development action plan beginning in July 2015, with the leadership of the Ministry of Population, social protection and women promotion and in collaboration with UNFPA. Additionally, MAHEFA conducted a series of qualitative review of gender barriers for health services uptake such as Family Planning. As result, the program developed a gender booklet (“Hita sy re”) that addressed desired behavior change that are gender friendly for CHV use in gender promotion activities.

### 3.4.2. Data Quality and Reporting over the LOP

1. **MAHEFA’s Data Management System**

**Data System.** MAHEFA’s M&E approach was designed to rely on existing data tools where possible, while working towards a strengthened, streamlined and collaborative system with the GOM and other stakeholders for consolidating program data for performance at the commune level. The program’s M&E system was designed to measure the program indicators and is made up of both routine monitoring data and survey/assessment results, using a variety of sources of information to monitor and evaluate progress. In an integrated community health program that involves community actors with low educational levels and/or little experience with health reporting, paper-based tools and simple excel spreadsheets were used to allow program grantees to get familiar with the process and to manage the system. Data flow followed the administrative levels: central, regional, district, commune and fokontany levels. Data from the community actors through their monthly reports were aggregated at commune levels and at district levels using Excel. Aggregated data were submitted to the next level.

**Computerized Data System.** MAHEFA began using the computerized data system or SIG (Système Informatisé de Gestion) in 2014. The computerization has improved the data processing speed and allowed more time for checking the reliability and consistency of transmitted information. It also helped to facilitate data analysis, allowing this information to be used more consistently and regularly.

2. **Capacity Building for M&E staff**

MAHEFA had made efforts to improve and refine its M&E system throughout the program life; updates were provided to all M&E staff via refresher training. A series of trainings including annual refresher training were conducted for the M&E staff of the MAHEFA program and the NGO partners to reinforce M&E skills and learn new practices and procedures. Additionally, MAHEFA’s M&E team from Antananarivo followed up with and provided on-site training/coaching to the M&E regional staff on a monthly basis. Data submitted by the regional teams were analyzed and detailed feedback for each regional team was communicated. Support systems were reinforced during field visits and supervisory visits at the regional level. This close interaction between central and regional teams allowed for reinforcement of priorities, shared problem-
solving, addressing specific gaps, and sharing tips or good practices to improve performance. This type of regular coaching was also conducted by regional M&E staff for NGO M&E staff.

3. **Internal Data Quality Review and Improvement**

Starting in FY2014, MAHEFA conducted internal data quality assessments (DQA) to ensure and maintain its data quality. Following USAID's DQA framework, each internal DQA session was conducted using five quality criteria: validity, reliability, accuracy, timeliness, and integrity. Each DQA session included three levels: the MAHEFA regional office, the NGO district office, and the CHVs' sites. Since 2014, a total of 87 internal DQA sessions were conducted in the six regions (32 by MAHEFA’s central M&E team, 55 by the MAHEFA regional teams and NGO's M&E teams). A summary of DQA’s findings, recommendations, and next steps to improve data quality has been compiled and shared with all regional offices and NGOs.

Regarding the results of conducting these DQA, some differences in data quality were noted before and after the DQA sessions (Figure 28). An example was found in the FP user counting. Most CHVs had a difficulty recording correctly the FP users. After the program began conducting internal routine DQA, we started to observe that many CHVs reported correctly the FP users. While DQA may not be the only factor contributing to this change, it definitely has made a difference in the quality of the CHV’s report in this area. Additionally, as result on the timeliness part of DQA sessions along with the other criteria, the percentage of monthly reports submitted on time by CHVs and validated by CSB heads increased from an average of 66% before August 2013, to 80% and higher after October 2013. For the last month of activities, 97% of CHVs submitted their RMAs and 93% submitted c-IMCI reports on time.

![Figure 28- CHVs’ Improved Counting of FP Users in the MAHEFA Regions](image)

3.4.3. **Integration of MAHEFA Data into the MOH’s Routine Health Information System**

1. **Community Health Data**

When MAHEFA started in 2011, c-IMCI report was the only report required by MOH. However, CHVs in the MAHEFA areas provided more services than c-IMCI therefore the MAHEFA team and MOH developed jointly the additional CHV’s monthly report and register book for use by CHVs in Madagascar for other areas not covered by c-IMCI. Therefore, during the life of the program, CHVs submit two monthly reports to CSB heads: the monthly activity report or RMA (*Rapport Mensuel d'Activités*) and the c-IMCI report. CSB heads, in their turn, integrate the CHV’s reports and submit as part of the overall community health data to the SDSP. Because the c-IMCI report is already part of the MOH information system, the CSB heads incorporate the CHV’s data in their own report to be submitted to SDSP. Unfortunately, the CHV’s RMA
was not part of the MOH’s Routine Health Information System therefore CSB heads did not have a system in place to integrate CHV’s data into their own report to the district level. After the restriction was lifted which allowed MAHEFA to work with GOM, MAHEFA supported the MOH efforts in integrating the community health into the national health information management system (HMIS) as described in the following.

2. Coordination at the National Level for Health Information System

In 2014, MOH started to see the importance of including CHV’s data into its overall health information management system. MAHEFA had been among a few organizations to work with the MOH/HSSD (Service de Statistiques Sanitaires et Démographiques) to develop the community monthly activity report with accompanying integrated record book (Rapport Mensuel d’Activité, RMA and Registre Intégré) since mid-2014 for the RMA and 2015 for the integrated record book. This initiative aimed at integrating community data into the MOH’s health information system (HIS). After the MOH approval, MAHEFA printed the two documents and distributed to CHVs and their CSB supervisors in its six regions in February 2016. At the end of the program in February 2016, all CSB heads in the MAHEFA areas agreed to provide training to the CHVs so they can begin using the new RMA and integrated record book.

3.4.4. Data Use: Knowledge Management and Dissemination

1. MAHEFA’s Surveys and Research Studies

In order to implement properly its strategies to better meet its objectives, MAHEFA used existing evidence and complemented needed information for decision making, strategy development and programming, by conducting research studies at the beginning of the program and before each new intervention (innovation). In addition, to determine the relevance and achievement of objectives, efficiency, effectiveness, impact, and sustainability of the program, some of these research studies were used as baseline and other assessments were conducted during the last year of the program. It should be noted that per USAID policy, a mid-term evaluation for MAHEFA was conducted by external research agencies. An external endline survey had not yet been conducted by USAID by the close-out of MAHEFA. Table 14 shows studies and reviews conducted during the program period.

Table 14 - Survey and Research Studies Conducted by the Program

<table>
<thead>
<tr>
<th>Titles</th>
<th>Month/ Year</th>
<th>Technical areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review of the contribution of the behavior change empowerment strategy in adopting good health practices by households in the program intervention areas</td>
<td>April 2016</td>
<td>Behavior Change</td>
</tr>
<tr>
<td>2. Review of the Emergency Transport Scheme and Community Health Volunteer mobility initiatives in Madagascar, under the MAHEFA program</td>
<td></td>
<td>Access to care through emergency transport CHV’s mobility as factor to increase their performance</td>
</tr>
<tr>
<td>3. Review of the Community Score Card individual interview and consolidation with the Community Score Card focus group review</td>
<td></td>
<td>CHV quality service improvement using the Community Score Card approach</td>
</tr>
<tr>
<td>4. Evaluation of the coverage and use of Chlorhexidine and Misoprostol in Vohémar and Mahabo</td>
<td></td>
<td>Care of the newborn’s umbilical cord and prevention of postpartum hemorrhage</td>
</tr>
</tbody>
</table>

Though full integration to the MOH’s Routine Health Information System did not happen, MAHEFA shared, on a regular basis, the CHV's data with the MOH at all levels.
<table>
<thead>
<tr>
<th>Titles</th>
<th>Month/Year</th>
<th>Technical areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Inventory of water infrastructures</td>
<td>March 2016</td>
<td>Geocoding of constructed and rehabilitated water infrastructures</td>
</tr>
<tr>
<td>6. Review of the Community Score Card individual process</td>
<td>September 2015</td>
<td>Community Score Card</td>
</tr>
<tr>
<td>8. Improving Community Logistics: Results from Use of Hovercraft to Improve the Distribution of Health Commodities in Boeny Region, Madagascar</td>
<td>August 2013</td>
<td>Transportation and logistics using Hovercraft</td>
</tr>
<tr>
<td>11. Gender Analysis Report</td>
<td>December 2012</td>
<td>Gender</td>
</tr>
<tr>
<td>12. Study of logistics and transportation needs</td>
<td>October 2012</td>
<td>Transportation and logistics</td>
</tr>
<tr>
<td>13. Synthetic report in behavior change empowerment study</td>
<td>September 2012</td>
<td>Behavior Change Empowerment</td>
</tr>
</tbody>
</table>

2. **Internal Program Reviews**

As described above, MAHEFA data was available on a monthly basis at each level. At CHV level, data was used to follow individual performance and exchanged experience during the monthly meeting. At the commune level, to ensure achievement of the commune objectives, data was used during quarterly reviews. At district level, data was also used for the NGO monthly meeting to monitor each commune and define priorities for the NGO to achieve targets for the district. At regional level, review of the program progress against the set targets was conducted based on the last quarter data available during quarterly review workshops bringing all implementing actors together, including GOM, NGOs, and the MAHEFA team. Using the data, new targets for the next quarter were set and an action plan to address problem areas was elaborated upon. During the life of the program, each year over 600 people participated in the two-day review workshops (4 workshops per region per year). Additionally, MAHEFA organized the six-month review that focused on progress against annual targets including preparing a joint work plan for the following six months. This review workshop brought together MAHEFA senior staff from the central and regional levels, regional health directors from all regions, and representatives from the ministries and USAID. At the national level, the annual program start-up and review workshops for MAHEFA staff and NGO grantees were held, and achievements of the previous year were discussed as well as the other objectives (Table 15).

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Venue</th>
<th>Participants</th>
<th>Number of participants</th>
<th>Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2016</td>
<td>Each of the six regions</td>
<td>Technical staff</td>
<td>37</td>
<td>Compilation of data since the beginning of the program</td>
</tr>
<tr>
<td>October</td>
<td>Each of the six</td>
<td>NGO grantees,</td>
<td>1,073</td>
<td>FY2016 start-up: discuss achievements of the</td>
</tr>
</tbody>
</table>

Table 15 - Program Internal Review Workshops Organized by MAHEFA
3. **External Mid-term Program Review**

**Mid-term qualitative evaluation.** From May to August 2014, FHI360 undertook a qualitative mid-term evaluation of the program to produce a strategic review of project performance to date. When results were shared in December 2014, MAHEFA identified and addressed those that required action. Actions were taken to address WASH practices, family planning including condom integration, community ownership and involvement in emergency transport, and *mutuelle de santé*. In addition, MAHEFA is reinforcing support for NGO capacity building, engagement of GOM officials at all levels in CHV supervision, data quality and best practice sharing among regions.

**Midterm quantitative evaluation.** The Outcome Monitoring Survey (OMS), a population-based survey, was conducted in September and October 2014 in MAHEFA regions. After receiving the results in May 2015, MAHEFA identified actions that should be considered with regard to the OMS findings. Overall, this survey showed positive results in the trends of outcome indicators (e.g., modern contraceptive prevalence rate increased from 26% in 2012 to 41% in 2014). The main areas of improvement addressed during FY2015 were DTP3 vaccination, household level water treatment, open defecation, treatment of diarrhea and fever by CHVs, use of LLITN, supervision of CHVs, and medical waste disposal at community sites.

4. **Program Dissemination**

Throughout the program life, MAHEFA had put emphasis on sharing good practices related to community health both inside and outside of Madagascar. Additionally, MAHEFA technical team had contributed to a development of many important MOH documents namely PNSC implementation guide, *Manuel des indicateurs de santé, Plan de Développement du Secteur Santé (PDSS), Politique Nationale de Santé (PNS)*. Furthermore, MAHEFA had used different ways to share program success and good practices such as 1) program bi-monthly highlights, 2) program information sheets (one pager, fact sheets), 3) CHV newsletter, 4) monthly regional coordination meetings 5) exhibition during high visibility events and 6) program-organized dissemination workshop.
Program bi-monthly highlights. MAHEFA produced the bi-monthly update highlighting the program’s practices. The highlights are prepared and shared among MAHEFA’s regional offices and NGO partners, which boosts motivation among staff.

Program information sheets. Key points of the program were presented in the format of factsheets. MAHEFA produced program one-pager and annually factsheets.

CHV Newsletter/Zara ny Efa. In an effort to continue to engage and support CHVs, MAHEFA disseminated good practices via the quarterly newsletter “Zara ny Efa” for CHVs, and other community actors. The program had received positive feedback, especially from the CHVs, who say they enjoy reading and learning from the newsletter. During the program, MAHEFA published 8 editions of the newsletter and distributed 75,500 copies to an average of 9,000 people (6,052 CHV, 2172 other community members, 377 GOM, 339 NGO staff and 60 partners).

Monthly regional coordination meetings. These meetings aimed not only for reviews as described above but also for conducting ‘knowledge sharing and exchange’ sessions and information is shared with NGOs.

Exhibition during High Visibility Events. As already described under IR1, a variety of educational and high visibility activities were conducted. These events were also an opportunity to share data on the achievements of the program related to the theme of the event.

MAHEFA Dissemination Workshops. In later program years (since FY2013), MAHEFA organized the program annual dissemination to share best practices and motivate community actors in Antananarivo and in the six regions. The annual dissemination workshop aimed to:

1. Present the importance of PNSC and its impact on beneficiaries at the community level;
2. Present the results that have been successful at the community level and highlight the lessons learned;
3. Present community engagement approaches and implementation strategies; and
4. Share experiences between partners.

MAHEFA’s End of Program Conference. The EOP conference was a great venue to share technical learning generated form the MAHEFA program. Approximately 164 partners from the counterpart ministries, in particular, the Ministry of Health, international organizations, national NGOs, MAHEFA, and other health projects in Madagascar.

<p>| Table 16 - Dissemination Workshops Organized by MAHEFA |</p>
<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Venue</th>
<th>Title</th>
<th>Participants</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2016</td>
<td>Antananarivo</td>
<td>End-of-the-Program conference</td>
<td>GOM, technical and financial partners, NGOs</td>
<td>164</td>
</tr>
<tr>
<td>February 2016</td>
<td>Antananarivo</td>
<td>Contribution of community health interventions to maternal and neonatal child mortality reduction</td>
<td>GOM, technical and financial partners, NGOs</td>
<td>277</td>
</tr>
<tr>
<td>September 2015</td>
<td>Antananarivo</td>
<td>Community health is everyone’s business. “La santé communautaire est l’affaire de tous”</td>
<td>GOM, technical and financial partners, NGOs</td>
<td>128</td>
</tr>
<tr>
<td>September 2015</td>
<td>Boeny</td>
<td>Regional dissemination workshop: WASH</td>
<td>GOM, technical and financial partners, NGOs</td>
<td>38</td>
</tr>
<tr>
<td>September 2015</td>
<td>DIANA</td>
<td>Regional dissemination workshop: Mother and Child health</td>
<td>GOM, technical and financial partners, NGOs</td>
<td>200</td>
</tr>
<tr>
<td>September 2015</td>
<td>Melaky</td>
<td>Regional dissemination workshop: Public and Private Partnership</td>
<td>GOM, technical and financial partners, NGOs</td>
<td>114</td>
</tr>
</tbody>
</table>
Working group meetings and conferences. The MAHEFA team had played an active role and participated in multiple technical working groups and coordination meetings at regional, national and international levels (Table 17).

Table 17 - Meetings and Technical Working Groups Attended by MAHEFA Staff

<table>
<thead>
<tr>
<th>Meetings, Working Groups, Workshops, etc.</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series of meetings called by MOH to prepare for important health events namely polio campaign, MNCH week, international health day celebrations, etc.</td>
<td>As needed</td>
</tr>
<tr>
<td>Series of meetings led by GOM (MOH, MOW, MOJS and MoP) on technical issues related to community health</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>International level</strong></td>
<td></td>
</tr>
<tr>
<td>Chlorhexidine working group</td>
<td>Monthly</td>
</tr>
<tr>
<td><strong>National level</strong></td>
<td></td>
</tr>
<tr>
<td>Initiative H4+ Support to countries for the accelerated implementation of reproductive health, maternal and neonatal care services</td>
<td>Monthly</td>
</tr>
<tr>
<td>PMI BC working group</td>
<td>Monthly</td>
</tr>
<tr>
<td>CHX and PPHP Technical Working Group meeting</td>
<td>Monthly</td>
</tr>
<tr>
<td>Gender Working Group</td>
<td>Monthly</td>
</tr>
<tr>
<td>FP technical working group</td>
<td>Monthly</td>
</tr>
<tr>
<td>PMI Partners Coordination Meeting</td>
<td></td>
</tr>
<tr>
<td>Nutrition Task Force</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Community logistics working group</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Immunization coordination meeting (Gavi RSS, CCIA/CSSS)</td>
<td>As needed</td>
</tr>
<tr>
<td>Meetings of RH partners to prepare the roadmap document and Plan de Développement de Secteur Santé (PDSS)</td>
<td>October and November 2014</td>
</tr>
<tr>
<td>MOH’s national coordination and official reception of the roadmap document</td>
<td>December 2014</td>
</tr>
</tbody>
</table>

More information on the international conferences attended by MAHEFA staff is presented in the Administrative section of this report.
3.4.5. **USAID Compliance (FP, EMMP, Branding & Marking, and Gender)**

1. **Family planning compliance**

MAHEFA respected the FP compliance and made sure that all program participants were trained and respect family planning compliance, following the legal and policy requirements governing the USG assistance for family planning activities. MAHEFA FP senior staff conducted an annual training and on-line training on family planning compliance. For example, in FY2015, a total of 7,979 people received information on FP compliance in FY2015 (1,021 GOM officials, 336 NGO staff, 68 MAHEFA staff, 626 YPEs, and 5,928 CHVs). For wider dissemination of information and documentation on FP compliance, the printed version of the document "Guidelines for compliance with USAID requirements for voluntary family planning and prohibitions on activities relating to abortion" was published and distributed as a reference document to 32 GOM offices (24 SDSPs, 6 DRSPs, 1 MOH and 1 MOYS), 15 NGO offices and 7 MAHEFA regional and central offices.

Throughout the program life, site supervision of CHVs included the visual checking and observation of the FP compliance namely the offering of a variety of FP methods to all clients, display of the Tiahrt Clients rights, and other posters to inform people (see photo on right).

2. **Environmental Monitoring and Mitigation Reporting**

As required in its Cooperative Agreement (CA), MAHEFA developed and submitted the program’s EMMP to USAID every fiscal year. At the beginning of the Water small scale-infrastructures building, MAHEFA submitted 6 Environmental Review Forms for each intervention region. An ERF was also established for rehabilitation in concerned regions. The program conducted two annual water quality analyses since FY2014. In terms of medical hazardous disposal, MAHEFA built 442 disposal pits at CSB confirming with MOH and WHO norms and representing 92% of total functional public facilities. We provided 2,679 CHV’s permanent health huts or 89% of whole *fokontany* with secured disposal pits (fenced and covered). After USAID’s approval, MAHEFA submitted on a regular basis the EEM report (EMMR). Through routine supervisions and annual training, MAHEFA reinforced compliance at all levels to ensure that the program respected the environmental mitigation plan (EMMR is presented in Annex 6).

3. **Branding & Marking**

During the program, MAHEFA respected the USAID’s approved branding & marking plan. All materials developed in the program were branded with the approved logos and other communications requirements.

4. **Gender**

MAHEFA team had played a key role in creating a functional Gender Working Group. In collaboration with the public sector partners (MOH, MOYS, and MOP), UN organizations (UNFPA, UNDP), and international and national NGOs (Blue Ventures, ASOS), the group had regular meeting and organized events aiming towards accomplishing its mission: to reduce gender inequities at the community level via increased integration of high quality gender approaches in development programming through the continuous sharing of best practices, tools, and IEC materials. Additionally, MAHEFA staff played major roles in developing the agenda and providing concrete recommendations for advancing the gender and development platform through development of the new national gender and development action plan (*Plan d’Action National Genre et Développement*) that is ongoing at the end of MAHEFA.

At the regional level, MAHEFA teams conducted an orientation on how to integrate gender approaches into routine activities and programming as part of the program annual orientation and training. Regional and district level management teams, as well as TAs, were trained in incorporating gender approaches into their programming; supporting CHVs and YPEs to use the gender-awareness materials (counseling cards...
and theatrical skits booklet, Guide and Solutions; see IRI for description of these materials); and conducting gender analyses with their work teams. At the community level, the skits in the *Hita sy re* booklet helped the CHVs to promote related gender behavior change towards health services uptake among the community. With regard to the CHVs, 60% of them were male and 40% female, and for the YPEs, they were selected to be male and female in the same *fokontany* they were assigned to work.
3.4.6. Lessons Learned and Recommendations

1. For a strong and well-functioning M&E system, all needed information as well as all useful research studies should be defined before implementation of the program activities and computerization should be done from the beginning. In addition, reinforcement or establishment of the importance of M&E system within the program’s culture is necessary.

2. Ensuring high quality of community-level health data is possible. In a setting where CHVs had low education levels and were engaged to start integrated community health activities for the first time in their communities, MAHEFA was able to ensure acceptable, and even high, levels of data quality. Ongoing efforts for community-level M&E and DQA should continue, while new and emerging approaches should be identified and implemented by future community health projects.

3. An effort to implement a knowledge management system to facilitate both strong internal communications as well as external communications with the program’s many stakeholders should be maintained throughout the life of the program.

4. Including family planning compliance monitoring in routine program monitoring and supervision is ideal, cost-effective, and reinforces the role of all program managers in family planning compliance.

3.5. Administrative and Financial Activities Including Grants and Partnerships

3.5.1. Introduction: Changes over the Years

MAHEFA’s most important achievement in the areas of administration, finance and partnerships was setting up strong operating and management systems that resulted in strategic partnerships. This enabled MAHEFA to successfully evolve with the major changes that occurred throughout the life of the program. Three specific changes that had major impacts on the program’s operating system were: 1) context of the MAHEFA regions, 2) sanctions on the GOM and 3) remedial changes in the program’s scope of work.

Context of the MAHEFA regions. As the majority of all program activities were conducted in the regions, having an effective region-based operation system is crucial. MAHEFA was the first large-scale program in the six regions therefore the program team faced a number of major operational challenges, such as unavailability of local resources and structures including human resources, basic service institutions such as banks, transport, office equipment and supplies. By the end of the program, all of the six regional offices had efficient operation systems.

Sanction of GOM. The first three years of the USAID-supported MAHEFA program (May 2011 to May 2014) took place during the restricted period. The operations system and partnership system then focused mainly on the private sector and there were no program activities that involved the GOM at both national and local levels. Therefore, MAHEFA first established the operation system that catered heavily to private consultants and NGO grantees. The complications of not being able to engage officially with GOM included: delays in the procurement of program equipment and vehicles; difficulty in planning and tracking budget due to many changes in co-branding and marking; challenges in complying with USAID’s restriction on VAT payments; unclear guidance regarding GOM’s per diem rate; and low capacity of GOM to adhere to USAID financial rules and regulations (Box 11).

**Box 11 – How MAHEFA adapted its operation system to changes**

1. JSI’s Field Operations Manual was revised to include the orientation and training of NGO staff and GOM counterparts in the new operations system to make sure all understand and respect the administrative and financial procedures required by the program, including the USAID-instructed per diem policy. The staff at the MAHEFA’s central office mentored the regional MAHEFA and NGO teams, and ensured that program activities were implemented in accordance with national policies and guidelines of the GOM, USAID, and JSI administrative; financial procedures were implemented accordingly.
2. There has been continuous communication and close mentorship between admin/finance staff at the central and regional offices via skype to exchange in-field experiences, good practices, and challenges in the implementation of the procedures.
Remedial Plan. As stated in the introduction, MAHEFA was asked to revise its scope of work including the program’s geographical coverage. The revision lasted from January 2013 to May 2013. Changes in the program scope affected the financial and administrative systems, therefore changing the program’s operations system. Since 2015, MAHEFA has adapted its operation system and concentrated its efforts and resources on improving operations and identifying efficient approaches to engage with the GOM at the regional, district, municipal and fokontany levels. This shift affected both the programmatic and operation systems as the MAHEFA team needed to adjust its operation system to phase out the role of NGO grantees in the program and, at the same time, integrate the GOM officials in all program activities. MAHEFA modified its operations system, trained its team on the adjustments, and informed, trained and assisted both NGO grantees and GOM counterparts on the revised focus with its revised procedures and approaches.

The overall Program was implemented in accordance with the terms of the Cooperative Agreement and its modifications as shown in the table below that were duly respected and monitored by JSI.

<table>
<thead>
<tr>
<th>Mod #</th>
<th>Date</th>
<th>Purpose of the Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>March 05, 2012</td>
<td>Increase of the Obligated amount for $4,350,000</td>
</tr>
<tr>
<td>2</td>
<td>Sept. 26, 2012</td>
<td>Increase of the Obligated amount for $3,800,000</td>
</tr>
<tr>
<td>3</td>
<td>Nov. 19, 2012</td>
<td>Correct the Recipient’s name in USAID Global Acquisition and Assistance System, from John Snow Inc. DUNS # 091500090 to JSI Research &amp; Training Institute, Inc. DUNS # 145729117</td>
</tr>
</tbody>
</table>
| 4     | March 25, 2013 | 1. Add “Quarterly Performance Report” to the “Program Reporting system” submission requirement  
2. Add language prohibiting co-branding with the country government  
3. Remove the special provisions included in the new Standard Provisions  
| 5     | Aug. 08, 2013 | 1. Revise the Program Description to reflect the reduction of Geographic areas coverage and add the construction activities  
2. Update the M&E Plan  
3. Revise the budget as a result of the above changes  
4. Provide Incremental Funding in the amount of $299,596  
5. Add special Provision and modify the substantial involvement provision regarding construction activities  
6. Insert the list of approved International Travel  
7. Incorporate the revised “Branding Strategy and Marking Plan (BS/MP)” |
| 6     | Sept. 17, 2013 | Cancel the changes made by Modification #5 with the exception of incremental funding in the amount of $299,596 |
| 7     | Sept. 29, 2013 | Increase of the Obligated Amount for $5,000,000                                              |
| 8     | Oct. 28, 2013 | 1. Revise the Program Description to reflect the reduction of Geographic areas coverage and add the construction activities  
2. Revise the award budget  
3. Revise the Performance Monitoring and Evaluation Plan  
4. Add a special Provision and modify the substantial involvement provision  
5. Incorporate the list of approved International Travel  
7. Incorporate the revised BS/MP |
<p>| 9     | March 03, 2013 | 1. Provide Incremental Funding in the amount of $2,903,718                                   |</p>
<table>
<thead>
<tr>
<th>Mod #</th>
<th>Date</th>
<th>Purpose of the Modification</th>
</tr>
</thead>
</table>
| 10    | Sept. 23, 2014 | 1. Provide Incremental Funding in the amount of $2,531,223  
|       |             | 2. Revise the list of wells construction locations in the standard Provision M.22  
|       |             | 3. Revise the BS/MP  
|       |             | 4. Include “USAID implementing Partner Notices (IPN) Portal for Assistance (July 2014)”  
|       |             | 5. Change the contact information for submission of the tax reports in the Standard Provision RAA12 |
| 11    | Dec. 12, 2014 | 1. Revise the participant training information requirements in Section A.5  
|       |             | 2. Update the list of approved International Travel in Section A.20  
| 12    | Feb. 13, 2015 | Provide Incremental Funding in the amount of $6,531,048 |
| 13    | Dec. 15, 2015 | 1. Provide Incremental Funding in the amount of $542,524  
|       |             | 2. Update the construction list under Standard Provision M.22 by including waste disposal pits construction |
| 14    | Missing     | This number was skipped. |
| 15    | May 03, 2016 | Provide budget realignment |
| 16    | May 18, 2016 | Extend the period of performance of the Cooperative Agreement from May 22, 2016 to June 07, 2016 at no additional cost |

### 3.5.2. Achievements in the Administrative, Financial and Partnership Activities

In this section of the report, MAHEFA presents the program achievements in the administrative, financial and partnership activities listed below.

1. Administrative Systems;
2. Financial Summary;
3. NGO Grants Management; and
4. Partnerships Summary.

#### 1. Administrative Systems

**a. Program management structure**

The management and administrative structures of MAHEFA reflected the importance of field operations to program success. Under the supervision of the central office in Antananarivo, MAHEFA implemented a decentralized management system in all six regions to promote ownership and efficiency in program implementation. The team based in the central office provided support and supervision to the teams in the six regional offices in Boeny, DIANA, Melaky, Menabe, SAVA and Sofia. Regional finance and administrative officers were trained, equipped and supervised to keep resources available in the right place at the right time and make certain that technical and program staff could implement work plans efficiently.
b. **Resource management**

**Procurement.** In line with MAHEFA’s Operations Manual and to ensure best value for money, the project conducted competitive procurement processes for its purchases. The Procurement Manager and Procurement Assistant were in charge of handling all of the project’s purchases. To safeguard the integrity of all procurement procedures and promote free open competition, MAHEFA staff were required to sign the JSI’s Code of Ethics and take annual ethics trainings. Additionally, MAHEFA and NGO grantee staff received annual Fraud Detection and Recognition trainings. Debarment checks, also known as Visual Compliance checks were always processed for the selected vendor prior to making any award of a purchase order or contract. As mentioned above, the restrictions from working with the GOM affected the program’s procurement. It caused delays in the production of materials because of complications in obtaining GOM’s approval on products and the use of GOM logos.

**Inventory.** In line with MAHEFA’s Operations Manual, the project implemented strict Asset Management systems to account and safeguard all assets procured by the project. All project assets were registered, tagged, and put on the inventory lists. Annually, the asset inventory was checked against the lists and updated.

**Information Technology (IT).** MAHEFA provided computers, printers and related equipment for use by employees while accomplishing project work. The program’s Operations Manual had provided clear policies and procedures on IT and computer use. All program staff was provided with Skype and internet with a MAHEFA.mg identification email for electronic communication. The high quality of internet in all offices allowed the IT Team to support remote users in all regional offices. A data server was set up, regularly maintained and automatically backed up on a daily basis in the central office of Antananarivo so that all sensitive data were stored with protected access. Regional offices used their dedicated external hard disk drives for regular manual data back-up. A “tracker” shared folder was set up for HR, Procurement, Grants and Wash Units for easy communication and data sharing. The IT team regularly maintained and updated all computers in both the central and regional offices.

c. **Human resources**

**Staff team in Madagascar.** Throughout its program life, MAHEFA maintained adequate human resources for programmatic and operational activities. Staff movement during the program is presented in the table below. The movements were to respond to program needs and departures of some staff. With the exception of the last year of the program, staff turnover rate maintained low throughout the five years of the program (Table 19).

### Table 19 - Movement of Staff and Interns in the MAHEFA Program (2011-2016)

<table>
<thead>
<tr>
<th>Staff by types of function</th>
<th>FY2011 (4 months)</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016 (8 month)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
<td>In</td>
<td>Out</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Administration and finance</td>
<td>6</td>
<td>-</td>
<td>17</td>
<td>1</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Programmatic</td>
<td>3</td>
<td>-</td>
<td>11</td>
<td>1</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>1</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Interns in Madagascar (national and international)</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
<td>-</td>
<td>33</td>
<td>2</td>
<td>29</td>
<td>5</td>
</tr>
</tbody>
</table>
Short-term technical assistance. To complement and assure good performance and program quality, MAHEFA received regular short-term technical assistance (STTA) in the following areas:

1. Overall program management
2. Operations (administrative and financial systems including close-out processing)
3. Communications/dissemination
4. Behavior change empowerment
5. Community logistics
6. M&E and technical quality
7. SMS work
8. Emergency transport system and CHVs’ mobility
9. MNCH including CHX
10. Capacity Building
11. Overall program monitoring

Internal capacity building. MAHEFA prioritized internal capacity development in a variety of areas, both at the technical and management/operational levels. Activities included structured capacity building activities (i.e. English classes, thematic trainings) along with individual mentoring and training including workshops, monthly meetings and weekly check-ins. The skills and knowledge of MAHEFA staff were improved through training sessions and internal sharing on various topics including international travel to enrich the knowledge of staff. During the program, MAHEFA staff members participated in a number of international trips (Table 20).

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Purpose of trips</th>
<th>Number of staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>USA</td>
<td>Staff orientation at JSI/Boston office</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ghana</td>
<td>Monitoring and Evaluation conference</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Senegal</td>
<td>Family planning conference</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>Andry M&amp;E and GIS for health</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ethiopia</td>
<td>BCE</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Nepal</td>
<td>CHX</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
<td>Echa, Herilala et Lova Avotra</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>Ethiopia</td>
<td>Monitoring and Evaluation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>USA</td>
<td>Staff orientation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mozambique</td>
<td>Prevention of newborn cord care infection and postpartum hemorrhage (JSI own fund)</td>
<td>2</td>
</tr>
<tr>
<td>2015</td>
<td>Malawi</td>
<td>Africa Regional Meeting on Digital Health for Overcoming to ending Preventable Child and Maternal Death and achieving universal health coverage</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>Mexico</td>
<td>Global Maternal and Newborn Health conference in Mexico City</td>
<td>2</td>
</tr>
<tr>
<td>2015</td>
<td>USA</td>
<td>National Conference on Health Communication, Marketing, and Media in Atlanta, Georgia</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>Chicago</td>
<td>American Public health Association conference</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>USA</td>
<td>Finances and Admin training</td>
<td>1</td>
</tr>
<tr>
<td>2016</td>
<td>Indonesia</td>
<td>International Conference on Family Planning</td>
<td>2</td>
</tr>
</tbody>
</table>
2. Financial Summary

Cost Containment and Cost Savings

MAHEFA used all available means to provide good value and quality services to the beneficiaries of the program. Therefore, cost-containment was a regular function of MAHEFA planning and implementation, and was monitored closely using internal budget tracking mechanisms.

Throughout its five years, MAHEFA identified and used a variety of methods to limit or reduce costs to the US Government for this program. This was in addition to following procurement and competition regulations and requirements. MAHEFA staff provided an excellent example to NGO and private sector partner groups in how to best utilize available resources. The following measures were undertaken to improve cost control and financial performance:

1. Requiring signed agreement with pre-approved or short-listed vendor supplier in areas including, but not limited to hotels, car hires, office supplies and equipment, etc. These agreements allowed the project to reduce costs and promote efficiency.
2. Instituting Public Private Partnership agreements to promote sustainability and raise additional resources (e.g. financial and human).
3. Cost sharing with local partners, CBOs, and NGOs when and wherever possible.
4. Limiting staff to one outstanding allowance at a time and reducing the advance reconciliation period to promote timely recording of costs and expenses;
5. Emphasizing the careful review of the NGO grantees’ activities;
6. Encouraging better financial monitoring of NGOs at both the regional and central levels;
7. Where appropriate, practicing the use of motorcycles for monitoring activities instead of cars; and
8. Providing on-site support and coaching to regional teams for the monthly financial activities and reporting.

d. Financial reviews

Annual internal financial reviews. JSI/Boston’s finance team conducted annual internal financial and admin reviews of the MAHEFA operations systems. The goal of these reviews was to detect any weaknesses and strengthen project operations. Recommendations from the reviews provided a clear roadmap for MAHEFA to make improvements. MAHEFA’s finance team in Antananarivo benefited from the capacity building and, in turn, conducted internal reviews for the MAHEFA regional offices on a regular basis.

USAID financial review. In October 2014, the Controller’s Office of USAID/Madagascar conducted a financial review of the MAHEFA program. The review focused on key areas identified by USAID and audited the program’s internal control, the accounting system, and compliance. Following the six recommendations from the review team, MAHEFA made the following corrections:

1. Reduce the amount of miscalculation in the cost share from Salama (in SF425 and detailed later in this report);
2. Modify the “accruals report and projections” in December 2014;
3. Include regular accounting accruals and exclude cash advances to subs when reporting line 10e on the SF-425 in June 2015; and
4. Limit sub-grantee obligations to include only reasonable closing costs and three months of projected expenses in the June 2015 SF-425 report.

The USAID financial review provided an opportunity for MAHEFA to receive high quality feedback on its financial system, the quality of processes, compliance and internal controls.
e. Summary of Financial Progress

As presented in Table 21 below, by the end of the program, MAHEFA had spent 100% or $34,999,935 of its budget (see Graph 21.1: Budget Ceiling vs Total Actual Expenses) and collected a cost-share amount of $3,090,122.

**Table 21 - Program Cumulative Expenditures as of June 7, 2016**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Costs</td>
<td>270,772</td>
<td>1,052,069</td>
<td>1,662,505</td>
<td>1,843,312</td>
<td>1,547,352</td>
<td>1,412,667</td>
<td>7,788,677</td>
</tr>
<tr>
<td>Sub Awards</td>
<td>98,520</td>
<td>673,201</td>
<td>781,995</td>
<td>1,004,036</td>
<td>863,429</td>
<td>463,629</td>
<td>3,884,811</td>
</tr>
<tr>
<td>Program Costs</td>
<td>1,408</td>
<td>1,834,085</td>
<td>5,421,369</td>
<td>4,060,854</td>
<td>4,791,449</td>
<td>2,770,535</td>
<td>18,879,701</td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>61,177</td>
<td>55,921</td>
<td>1,345,697</td>
<td>331,606</td>
<td>383,918</td>
<td>2,178,318</td>
</tr>
<tr>
<td>Procurement</td>
<td>40,612</td>
<td>428,429</td>
<td>198,040</td>
<td>103,600</td>
<td>105,818</td>
<td>76,709</td>
<td>953,208</td>
</tr>
<tr>
<td>Total Direct Costs</td>
<td>411,313</td>
<td>4,048,961</td>
<td>8,119,829</td>
<td>8,357,499</td>
<td>7,639,654</td>
<td>5,107,459</td>
<td>33,684,716</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>91,976</td>
<td>218,596</td>
<td>322,107</td>
<td>243,661</td>
<td>217,506</td>
<td>221,373</td>
<td>1,315,219</td>
</tr>
<tr>
<td>USAID Contribution</td>
<td>503,289</td>
<td>4,267,557</td>
<td>8,441,936</td>
<td>8,601,160</td>
<td>7,857,160</td>
<td>5,328,832</td>
<td>34,999,935</td>
</tr>
<tr>
<td>Cost Share</td>
<td>0</td>
<td>32,324</td>
<td>453,688</td>
<td>304,3202</td>
<td>- 460,936</td>
<td>21,844</td>
<td>3,090,122</td>
</tr>
<tr>
<td>Total Program Amount</td>
<td>503,289</td>
<td>4,299,880</td>
<td>8,895,625</td>
<td>11,644,362</td>
<td>7,396,224</td>
<td>5,350,676</td>
<td>38,090,057</td>
</tr>
</tbody>
</table>

**Graph 21.1: Budget Ceiling vs Total Actual Expenses**

![Graph 21.1](image-url)
Despite unprecedented devaluation of the MGA, the project was able to maintain a high burn rate throughout the life of project (see Graph: 21.2 Annual Burn Rate and Graph: 21.3 Annual Program Expenses by Fiscal Year). This was possible due to strong financial systems. The project developed internal tools to monitor, assess, and adapt activities which ensured strategic programmatic implementation.

At the beginning of the program, the exchange rate was $1 USD: 1,958 MGA but at the end of the project the exchange rate was $1 USD: 3,149 MGA. It reached a high of $1 USD: 3,273 MGA in November 2015 (see Graph 21.4 Exchange Rate over LOP).
In reviewing the financial trends and consulting internal program tools used to monitor the volatility of the exchange rate, it appears that high devaluation of the MGA since early Q2 of FY2014 had an unprecedented impact on MAHEFA’s budget. However, the program worked hard to keep a high burn rate and support a large volume of fiscally responsible spending through its final days in June 2016.

f. Cost Share

As shown in Table 22, MAHEFA collected a total of $3,090,121 over the course of five years and the program met the required cost share amount.

Table 22 - Cost Share Collected in the Program (2012-2016)

<table>
<thead>
<tr>
<th>Sources</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>Total USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adventist World Radio (AWR)</td>
<td>$46,944</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$46,944</td>
</tr>
<tr>
<td>2. AIM - Association Coopération Madagascar</td>
<td>$363,252</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$363,252</td>
</tr>
<tr>
<td>3. Blue Ventures Conservation</td>
<td>$22,834</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$22,834</td>
</tr>
<tr>
<td>4. Carlton College</td>
<td>$9,302</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$9,302</td>
</tr>
<tr>
<td>5. Community actors contributing to program</td>
<td></td>
<td>$18,479</td>
<td>$2,230</td>
<td></td>
<td></td>
<td>$20,709</td>
</tr>
<tr>
<td>6. Exxon Mobil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td>7. Foundation Telma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td>8. HoverAID</td>
<td></td>
<td></td>
<td>$204</td>
<td></td>
<td></td>
<td>$204</td>
</tr>
<tr>
<td>9. Louvain</td>
<td></td>
<td>$30,884</td>
<td>$25,000</td>
<td></td>
<td></td>
<td>$55,884</td>
</tr>
<tr>
<td>10. Madagascar Oil</td>
<td></td>
<td></td>
<td>$5,379</td>
<td></td>
<td></td>
<td>$5,379</td>
</tr>
<tr>
<td>11. NGO Grantees</td>
<td></td>
<td>$152,172</td>
<td>$476</td>
<td></td>
<td></td>
<td>$152,648</td>
</tr>
<tr>
<td>12. Programme D’alimentation en Eau Potable Et Assainissement en Milieu Rural PAEAR –DIANA</td>
<td>$1,224,067</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,224,067</td>
</tr>
<tr>
<td>13. Programme D’alimentation en Eau Potable Et Assainissement en Milieu Rural PAEAR –SAVA</td>
<td></td>
<td></td>
<td></td>
<td>$150,277</td>
<td></td>
<td>$150,277</td>
</tr>
</tbody>
</table>
Details of the Cost Share

1. **Adventist World Radio (AWR):** Radio Rurales made a donation of 128 solar radios to community listeners’ groups. The community listeners’ groups have a weekly group discussion on a health topic based on messages broadcasted by local radio. The funding for these activities comes from Global Funds.

2. **Association Coopération Madagascar (AIM):** Supply of bicycles, malaria treatment kits, and health hut furniture for CHVs. This funding came from the Global Fund’s NSA1 project.

3. **Blue Ventures Conservation:** Contribution to identify additional CHVs in two communes (Belo sur Mer and Bemanonga) in FP and community health education (commodities and supervision). The funding for these activities came from Blue Ventures London.

4. **Carlton College:** Contribution of scholarship to its student, Brianna Engelson, to assist MAHEFA in the preparation of the NEPAL’s study tour report and success stories.

5. **Community Actors:** Contribution of their time to attend trainings and group monitoring meetings ("suivis groupés").

6. **Exxon Mobil:** Providing financial support to MAHEFA for the malaria prevention activities in the Boeny region.

7. **HoverAID:** Providing underserved population with essential commodities through the use of a hovercraft in the regions of Melaky, Boeny, Menabe, and SAVA (Vohémar). The funding for these activities comes from Global Funds.

8. **Louvain:** Contribution to the strengthening of community health activities at the village level in five communes in Belo sur Tsiribihina district. Activities included capacity building of public health workers, community actors, and SARAGNA, an NGO. The funding for these activities came from the Belgian Government.

9. **Madagascar Oil:** Contribution to integrated community health activities for childhood protection in Adkondromena commune.

10. **NGO Grantees:** All NGO grantees’ contributions are through the time allocated by community actors, including Natural Leaders, community facilitators, COSAN, and YPEs, to attend trainings and monthly meetings organized by NGO partners.

11. **Packard Foundation:** Donation for associated travel cost for the Directorate of the Development of Sanitary Districts (DDS) officer to travel to Nepal to study. Additionally, contribution of purchasing of CHX gel for the public health center in MAHEFA’s pilot district of Mahabo.

12. **Programme D'alimentation en Eau Potable Et Assainissement en Milieu Rural (PAEAR) in SAVA and DIANA Regions:** Construction and rehabilitation of water and sanitation infrastructure.

13. **Planet Finance:** Implementation of health mutuelles in the commune of Ambanja and training of CHVs in the principles of mutuelles.
14. **SALAMA**: Contribution to the organization of Community Integrated Management of Child Illness (c-IMCI) training and supply of management tools for CHVs. This funding came from the Global Fund’s NSA1 project.

15. **TELMA Foundation**: Dissemination of reproductive health information for youth and reporting of YPE activities.

16. **Transaid**: Contribution in the emergency transportation area and IGA activities. These contributions collected by Transaid include: two container loads of secondhand bicycles for use by CHVs; shipping the containers from the UK to Madagascar; a three-week placement at MAHEFA for an MPH student; a workshop on Intermediate Modes of Transport; emergency transport services via hovercraft; and time to train CHVs on a variety of activities.

17. **Communities beneficiaries of wells and kiosks**: Contributions from well beneficiaries include donations of land, materials, and transportation services, as well as volunteer time for site cleaning and preparation.

3. **NGO Grants Management**

MAHEFA was implemented in part with the support of various local partners and NGOs. There were 19 NGO grantees at the beginning of the program. This number fell to 18 in program year three, and 15 in program years four and five (Table 23). MAHEFA, in addition to providing funds to the NGOs, provided a lot of capacity building to the selected NGOs. A dedicated team, the Grants Team, worked intensively with organizations to provide them with the necessary knowledge, skills and tools to address the needs of their communities.
Table 23 - NGO grantees in the MAHEFA Program (2012-2016),

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BOENY</td>
<td>1. AJPP 2. ZETRA</td>
<td>1. AJPP</td>
<td>1. AJPP</td>
<td>1. AJPP</td>
<td>1. AJPP</td>
</tr>
<tr>
<td>DIANA</td>
<td>1. FTMM 2. SAF FJKM</td>
<td>1. FTMM</td>
<td>1. FTMM</td>
<td>1. AJPP</td>
<td>1. ASOS 2. FTMM</td>
</tr>
<tr>
<td>MELAKY</td>
<td>1. SAGE 2. ZETRA</td>
<td>1. SAGE</td>
<td>1. SAGE</td>
<td>No NGO</td>
<td>No NGO</td>
</tr>
<tr>
<td>SOFIA</td>
<td>1. SAGE 2. ZETRA</td>
<td>1. SAGE</td>
<td>1. SAGE</td>
<td>No NGO</td>
<td>No NGO</td>
</tr>
</tbody>
</table>

14 NGOs 19 NGOs 18 NGOs 15 NGOs 15 NGOs

Note:
*There were no NGO grantees in the first fiscal year and the last fiscal year was only for 3 months (Q1)
**NGO full names are presented in Annex 9

At the end of the MAHEFA program, 19 NGOs had received capacity building training for excellence for one year, 18 received training for two years, and 15 received training for three years. MAHEFA's approach to capacity building for excellence helped NGOs identify operational, financial, and technical areas that needed to be addressed for improved competency and implementation of program activities. Figure 29 shows trends in quality for these three areas from FY 2015 to FY 2016. Across all areas, respect for standards or checklists (developed under activities three and four, above) increased over time.
Figure 29- NGO Grantees Performance in Three MAHEFA Quality Areas (Comparison FY2014 and FY2015)

Figure 30 represents results from the analysis of average burn rates of NGOs between FY 2012 – FY 2016. Over time, capacity building trainings, tools, and mentoring from MAHEFA program staff led to NGOs becoming more accountable for financial management. These improved practices reflect clear and effective communication between MAHEFA program staff and NGO staff, and adherence to suggested financial forecasting improved NGO’s operational efficiency. By the end of the FY 2016 MAHEFA noticed that NGOs had smaller gaps between budget and expenditures and were able to plan monthly projections and request funds more accurately. Proper planning and budgeting indicate an understanding of programmatic strategy and costs associated with achieving specific outcomes and objectives. Accuracy in budgeting reflects budget accountability and a well-functioning operational system.

Figure 30- NGO Annual Burn Rate (Comparison FY2012 and FY2016)

The increased in budget-expenditure gaps in 2015 reflects a period of new changes under the MAHEFA program as NGOs started working with the GOM. When reengagement with the GOM occurred, budgeting practices were unclear as NGOs were not sure what costs they were responsible for and what costs the GOM would absorb. It took several months for the GOM and NGOs to come to a mutual understanding of financial commitments and how they should budget for different activities. Once clear roles and liabilities were established, budgeting and expense trends increased again, demonstrated in FY16 results.
By focusing on three main areas that have a direct impact on NGOs’ performance, namely technical practices, data quality techniques and operational practices, MAHEFA’s approach of using simple tools, good communication and regular joint program reviews resulted in NGOs’ improvement within a short period of time, as shown in the figures above. Improvement in NGOs’ ability to project and track financial expenditures (monitored through the absorption rate) was simple but effective and could lead to more efficiency in both programmatic and data quality areas.

4. Partnerships Summary

MAHEFA had an on-going memorandum of understanding (MOU) with private sector organizations to solicit their engagement in community health activities. Table 24 shows the contributions and added value from the partners in the program progress.

Table 24 - MAHEFA Partners and Their Contributions

<table>
<thead>
<tr>
<th>Partners</th>
<th>Activities</th>
<th>Contribution/value added by the activities’ implementation</th>
</tr>
</thead>
</table>
| 1. Ah-Toy Vanilla Enterprise      | Complemented MAHEFA’s reproductive health program for youths and provided health discussion sessions for workers in the vanilla processing plant in Vohémar district (Vohémar commune), SAVA region | • Increased reproductive health demand and services for targeted youth in SAVA region  
• Contributed to JSI’s cost-share requirements for the MAHEFA program in FY2015                                          |
| 2. Blue Ventures                  | Provided integrated family planning and environmental conservation services in Belo sur Mer and Bemanonga communes in Menabe region                                                                              | • Increased availability and better access to FP services and health around protected zones in Belo sur Mer and Bemanonga  
• Contributed to JSI’s cost-share requirements for the MAHEFA program in FY2015                                               |
| 3. HoverAID                       | Extended health services and products to areas that are not reachable by other means of transportation. Coordinated CHV services for intensive health care delivery in Boeny and Menabe regions, which uses a mobile team of doctors and surgeons to provide surgeries and other health treatment | • Increased the availability of health services and products to very remote areas that are not reachable by other means of transportation  
• Improved MAHEFA and NGO mobility to hard-to-reach areas during the rainy season                                               |
| 4. Louvain Development            | Increased access to community health services and products in the most underserved commune in the district of Belo sur Tsiribihina in Menabe region                                                        | • Complemented integrated community health works in Belo sur Tsiribihina district  
• Contributed to JSI’s cost-share requirements for the MAHEFA program in FY2015                                               |
| 5. Marie Stopes Madagascar (MSM)  | Provided long-term family planning methods through mobile clinics                                                                                                                                       | • Increased the availability of other family planning methods for regular and new FP users                                |
| 6. Planet Finance                 | Established community health insurance groups (“mutuelles de santé”) in Ambanja district (Ambanja commune), DIANA region                                                                                   | • Increased the number of people benefiting from “mutuelle de santé” services in Ambanja district (Ambanja commune), DIANA region  
• Contributed to JSI’s cost-share requirements for the MAHEFA program in FY2015                                               |
<p>| 7. Peace Corps                    | Complemented MAHEFA staff’s efforts at                                                                                                                                                                  | • Provided additional resources and expertise                                                                          |</p>
<table>
<thead>
<tr>
<th>Partners</th>
<th>Activities</th>
<th>Contribution/value added by the activities’ implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. PSI/ISM project</td>
<td>Supplied health products at the community level</td>
<td>• Made available health products based on CHV needs and reduced health product stock-out</td>
</tr>
</tbody>
</table>
| 9. Telma          | Supported the SMS component of the youth program. It continues to jointly support the purchase of phone credit to ensure SMS use by the YPEs. | • Increased the availability of reproductive health services for youth  
• Contributed to JSI’s cost-share requirements for the MAHEFA program in FY2015 |
| 10. Madagascar Oil| Provided MNCH services to communities in the district of Miandrivazo (Ankondromena commune), Menabe region | • Increased the availability of CHV services to mothers and children under 5 in the Akondromena commune (Menabe region)  
• Contributed to JSI’s cost-share requirements for the MAHEFA program in FY2015 |
| 11. ExxonMobil     | Developed IEC materials (VDO and brochure) for malaria prevention and organized awareness sessions at CSB also for malaria prevention in Boeny region | • More up-to-date and locally appropriate IEC materials  
• More awareness on malaria prevention among community members |

3.5.3. Summary Recommendations

Decentralized management approach with good support from JSI Home Office allowed the project to build and maintain sound financial, admin, and operational systems. This model allowed the project to empower staff, increase ownership, and promote efficiency in the program implementation.

Clear policies and procedures adapted to local realities were also instrumental in promoting a culture of compliance in the project. Additionally, MAHEFA’s successful implementation can be attributed to regular capacity building and on-going training provided to staff. This allowed the project to bridge the gaps in knowledge and experience and increase staff productivity.

Simple and effective internal control tools were other determining factors for the project. Weaknesses, vulnerability, and non-efficiencies were easily detected and addressed.

4. Concluding a Program and Promoting a Vision

4.1 Concluding a Program

From 2011-2016, the USAID/Madagascar’s MAHEFA program expanded basic, life-saving services to Madagascar’s rural and remote villages. The program trained, equipped and supervised a cadre of 6,052 CHVs and reinforced the capacity of the GOM’s community health local structure to fulfill its role of providing supervision, management, training, data collection and reporting, and health commodities support to CHVs to ensure the continuation of service delivery for life-saving maternal and child health, nutrition, family planning, and malaria services. As per the Politique Nationale de Sante Communautaire, a Madagascar CHVs work under the auspices of the CSB and receive supportive supervision by CSB staff. Today, following the lifting of restrictions in 2014, the CHVs in the MAHEFA program regions reintegrated into the public health system and deliver the following community-based life-saving services to approximately 3.4 million people living in the program’s six regions:
• Provision of integrated maternal and family planning services - birth spacing and couples counseling, referral of pregnant women to primary health facilities to promote uptake of antenatal care, and social-marketing of short-acting family planning methods;
• Promotion of preventative child health practices - use of LLITN, improved hygiene and sanitation, home point-of-use water treatment, and Growth Monitoring Promotion;
• Promotion of essential nutrition actions - sensitization on iron folate, exclusive breast feeding, complementary feeding, micronutrient supplementation, iodized salt, vitamin A, food diversification, and control and treatment of malaria and helminthic infections to prevent anemia;
• Immunization demand generation and health campaign support, identification and referral of unvaccinated children, technical assistance for health center staff for vaccination planning, logistics support, and support for fixed-site posts;
• Early recognition, prompt diagnosis and treatment of simple pneumonia, diarrhea, and malaria; and
• Referral of severe cases for children under five and pregnant women to the CSB.

The program’s achievements through the work of the CHVs above have contributed to USAID/Madagascar’s commitment to supporting the Madagascar government and its people to reach its targets in several commitments namely: the National Health Sector Development Plan or Plan de Développement du Secteur Santé (PDSS) 2015-2019, the Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA), the Family Planning 2020 (FP2020), and the National Water and Sanitation Strategy for 2014-2018.

4.2 Promoting a Vision

The progress made under the MAHEFA Program can be sustained through community action and advocacy efforts to strengthen, sustain and ensure the quality of the community health system. While the program helped local entities increase their capacity to manage community health activities, many groups will continue to need support in adapting techniques to mobilize resources from local stakeholders and engage the private sector actors to achieve their health goals.
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