



**A Family Planning Pilot Project for the Villages of Ifaty and  
Tsiminoe, Southwest Madagascar**



**June 2011 – June 2012**

**Salama Soa Pilot Project**  
**End-of-Year Report**  
**Year 1 (June 2011 – June 2012)**

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November 2012

**Acknowledgements**

ReefDoctor would like to thank Population Matters for their continued financial support of the Salama Soa Project. In addition, we would like to thank Marie Claude Ramahantenaharsoa, representative of the *Ministere de la Sante Publique*, and the Community Health Agents that have played an integral role in the project. We would also like to thank Dr. Vik Mohan for his guidance and expertise throughout the course of this project.

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## **I. General Introduction**

ReefDoctor is a non-profit, marine conservation organization located on the southern shore of the Bay of Ranobe near the village of Ifaty, southwest Madagascar. Our mission is to promote sustainable exploitation of marine resources through marine research, conservation, and education/outreach programs. In order to achieve our mission, sustainable fisheries in the Bay of Ranobe, the issues surrounding the principle causes of overfishing must be addressed, namely unsustainably high levels of fishing pressure resulting from uncontrolled population growth. Consequently, the traditional approaches employed by ReefDoctor to address marine conservation issues have now been broadened to include a family planning component.

The present end-of-year report describes the progress made during the first year of the Salama Soa Family Planning pilot project, in which reliable family planning counseling and services were provided to the villages of Ifaty (population *ca.* 4000) and Tsivinoe (population *ca.* 2000), southwest Madagascar. The main objectives for this pilot project, *Salama Soa* (Good Health in Malagasy), is to assess the responsiveness/ interest of the population to various forms of contraception and to gain an understanding of the reasons for which contraception may not be regularly used (*e.g.* lack of education, misinformation, or lack of access). Lessons learned from the Salama Soa Project (SSP) would then be used to seek further funding opportunities, allowing for the expansion of a reproductive health program throughout the thirteen villages of the Bay of Ranobe.

## **II. YEAR 1, PHASE 1 (JUNE 2011 – JANUARY 2012)**

### **1. Methodology: Phase I**

#### *Focus Groups and Surveys*

In June 2011, the project began with a series of focus groups that included discussions and question-and-answer periods, ending with a brief initial survey. The survey was designed to gauge the communities' reactions to contraception-use and their current levels of implementation. During the course of the focus groups, we identified three women in both of the villages of Ifaty and Tsivinoe that were trained as Community Health Agents (CHAs) some years before as part of a previous family planning project. These six CHAs were then invited to take part in the current project, received some re-education and re-training (three 3-hour sessions per CHA), and since, have become an integral part of the *Salama Soa* project. Given their local ties, the CHAs were used extensively in conducting our preliminary

surveys, and also, in our second more extensive sociological survey. Both surveys were conducted in both of our target villages, with respondents being selected on a haphazard basis.

As a result of the focus group discussions, and conclusions drawn from the preliminary surveys, it was clear that a need existed for: a) the reliable distribution of contraception products for those currently using contraception but have difficulty acquiring the medication regularly, and b) a significant amount of education/outreach to those not currently using contraception, particularly adolescents (See Appendix I figures A1-A4 for selected results of the preliminary survey).



#### *Education and Outreach*

Given the numerous village myths surrounding the subject of contraception-use (e.g. causes sterility, results in birth defects, etc.), an outreach session was conducted in both of the villages before starting with the distribution of products. Outreach sessions covered the basic contraception topics: anatomy and reproduction, contraception methods, and the advantages/disadvantages of each method. Each session ended with a question-and-answer period to address any particular concerns, or myths. Overall, 90 people attended the sessions in the two villages, with 70 people attending in Ifaty and 20 in Tsivinoe.

#### *Distribution and Counseling: Salama Soa Opening*

After establishing the clear need for reliable access to contraceptive products, and the strong desire expressed by the community, we began the administrative process of attaining the proper authorizations for providing this public health service. Despite positive verbal feed-back from the national department of public health (*Ministère de la Sante Publique*), obtaining a written authorization took much longer than anticipated, resulting in the postponement of our provisional start date. During this waiting period, we were able to

source all of our medical supplies and begin developing promotional materials. After a couple of months, we were able to inform the public of the opening date (October 17, 2011) and location of the Salama Soa Family Planning Clinic.

Since October 2011, the SSP has been providing a steady supply of counseling and contraceptive products to the communities of Ifaty and Tsivinoe, including two types of contraceptive pill (Microgynon and Ovrette) and a 3-month injection (Depo-Provera). As all contraceptive products have been provided free of charge by the national department of public health, only a nominal fee of 100 Ariary (< 0.10 USD) is charged to clients per visit, regardless of contraceptive product used. For example, a woman requesting a one-month supply of contraceptive pills pays the same as a women that received a three-month injection. To date, condoms have not been distributed by the SSP, due to a lack of government supplies. However, it has since become the policy of the SSP not to provide condoms, at this time, given the local custom of using condoms to waterproof electronics for nighttime fishing. Thus, throughout the course of the Salama Soa pilot project, we will be focusing our efforts on empowering women to manage their reproductive status. In future phases of the SSP, we hope to address more thoroughly issues of sexual health and contraception options for men.

## 2. Demographics: Phase I

Table 1. Unique users per month per village

Village	October	November	December	January	Total
Ifaty	12	25	1	11	49
Tsivinoe	4	6	1	0	11
Other	0	1	1	0	1
<i>Grand Total</i>	<i>16</i>	<i>31</i>	<i>3</i>	<i>11</i>	<i>61</i>

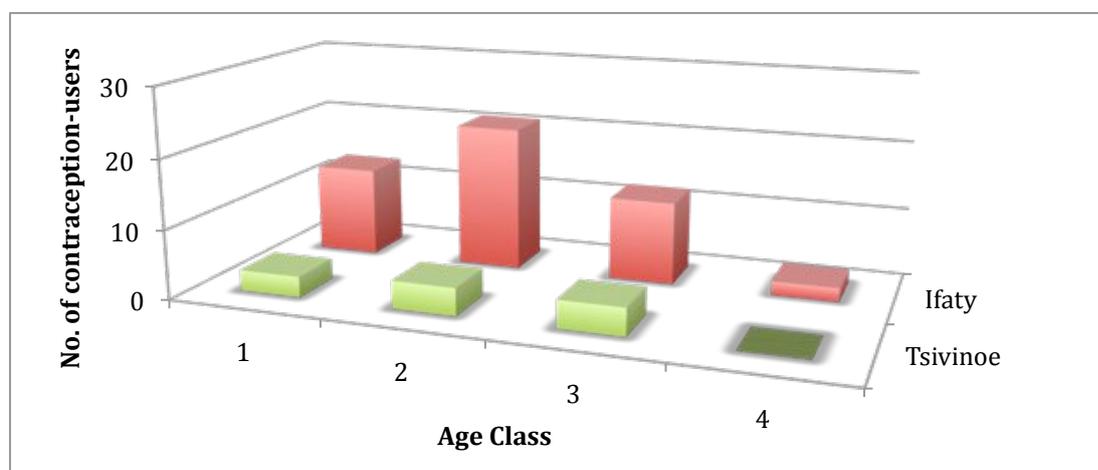


Figure 1. Number of contraceptive-users by age class and village; Age classes are composed of age groups <20, 20-29, 30-39, and 40-49 classed as 1, 2, 3, 4, respectively

### 3. Contraception-use: Phase I

Table 2. Monthly distribution of contraceptive products by product type

Month	Contraception-use			Total
	Microgynon	Ovrette	Depo-Provera	
October	25	2	6	33
November	44	0	17	61
December	9	0	0	9
January	36	0	21	57
<b>Total</b>	<b>114</b>	<b>2</b>	<b>44</b>	<b>160</b>

### 4. Project Expenses and Couple-Years Protection (CYP): Phase I

Table 3. Phase I expenses by category

Phase I: Project expenses (June 2011 - January 2012)		
	MGA (Ariary)	Pounds Sterling
<b>Initial award</b>	<b>12,537,759.36</b>	<b>£4,000.00</b>
Salaries/ per diems	4,000,000.00	£1,275.92
Missions	200,000.00	£63.80
Materials	740,000.00	£236.04
Communication & Printing	120,000.00	£38.28
<i>Total expenses</i>	<i>5,060,000.00</i>	<i>1,614.04</i>
<b>Remaining Funds</b>	<b>7,477,759.36</b>	<b>£2,385.96</b>

\*Currency conversion rate: 1.00 Pound Sterling = 3135.00 Malagasy Ariary (MGA)

Table 4. Calculation of CYP using the MSI conversion factors

Method	Units	Conversion Factor <sup>1</sup>	CYP	Cost (£) / CYP***
Pills-1 month supply, free	116	0.0142	1.647	979.84
Pills-1 month supply, paid	116	0.0714	8.282	194.87
Injection (3mo)	44	0.25	11.000	146.73
		<b>Total CYP1*</b>	<b>12.647</b>	116.39
		<b>Total CYP2*</b>	<b>19.282</b>	76.34

1. Marie Stopes International (MSI) conversion factors used for calculations

\* Total CYP1 was calculated using the conversion factor for free contraceptive pills

\*\* Total CYP2 was calculated using the conversion factor for paid contraceptive pills

\*\*\* Phase I total expenses (£1614.00) used for the calculation of costs per unit

Table 5. Demographic, health and environmental impacts<sup>1</sup> of the Salama Soa Project

Indicators	CYP1*	CYP2*	Cost / unit**
No. pregnancies averted	7.2278	11.0198	£176.90
No. births averted	4.9384	7.5293	£258.91
No. of infant mortalities averted	0.3457	0.5270	£3,698.73
No. of under-five mortalities averted	0.5521	0.8418	£2,315.83
No. of maternal mortalities averted	0.0252	0.0384	£50,777.20
No. of abortions averted	1.7917	2.7317	£713.63
No. of unsafe abortions averted	1.7917	2.7317	£713.63
Total cost savings (GBP)	665.2039	1014.1951	£1.92
Ecological footprint prevented (global hectares per person)	5.4323	8.2823	£235.37
Carbon footprint prevented (global hectares per person)	0.1975	0.3012	£6,472.72

1. Corby N, Boler T and Hovig D. *The MSI Impact Calculator: methodology and assumptions*. London: Marie Stopes International, 2009.

\* Impact calculated using MSI country-specific (Madagascar) conversion factors<sup>1</sup> multiplied by CYP1 and CYP2

\*\* Cost/unit calculated by dividing expenses-to-date (£1614.00) by the average of the impact based on CYP1 and CYP2

### **III. YEAR 1, PHASE II (FEBRUARY 2012 – JUNE 2012)**

#### **1. Introduction: Phase II**

Data and observations from the first four months of contraception distribution and counseling (Phase I: October—January) were evaluated at the end of January 2012.

Lessons learned from this evaluation were used to guide Phase II of the Salama Soa Project. Specifically, data on contraception-use indicated an unusually low percentage of participation by the women of Tsivinoe, and



and a relatively low participation by adolescent girls from both of the villages. Additionally, it was observed that the practice of fixing specific clinic days and hours was not well adapted to the needs of the local women, whom struggle on a daily basis managing their time between fetching water and fire wood, cooking, cleaning, child rearing, and income generation. The approach used in Phase II of the Salama Soa Project was adapted to address these weaknesses through further education and outreach and improving access to services.

During Phase II of the pilot project, the reliable distribution of contraceptive products proceeded as in Phase I, however, one of the two brands of contraceptive pills, Ovrette, was discontinued due to lack of supply. Nonetheless, the oral contraceptive, Microgynon, and the Depo-Provera injections were made readily available to the public throughout the year, despite a two-month rupture in government stocks. Fees that had been previously collected from the public were used to purchase a sufficient supply of Microgynon and Depo-Provera, providing a reliable supply to the community during this period of government shortage. In anticipation of the next shortage, fees were increased from 100 to 200 MGA for a one-month supply of oral contraceptives, and from 100 to 200 MGA for the three-month injection. The price incentive currently favoring the three-month injection may be used in the future as a tool to favor further this form of contraception.



## 2. Methodology: Phase II

### *Improving Access and Services*

In an effort to provide a service that is adapted to the needs of the local women, the location of the Salama Soa clinic was moved from the state-owned, village medical clinic to the ReefDoctor office, allowing for much more flexibility in staffing and servicing of the community (See photo, top-right). The Salama Soa clinic is now open 6-7 days per week in the morning and evening. In an effort to improve the services provided and build capacity amongst project staff, the Salama Soa project leader, Christina Tsima, and the community health agents participated in a three-day, family planning workshop held in the regional capital, Tulear, in March 2012 (See photo, bottom-right).



### *Education and Outreach*

Throughout the months of April and May 2012, outreach and awareness-raising campaigns were conducted, covering topics of safe sex and teenage pregnancy. Phase-II outreach programs were more targeted towards adolescents, given the high-risk nature of this sector of the population (See photo, bottom-right).



The Phase-II awareness-raising campaign concluded with a village theater production. The theater production, whose theme was based on the life of a poor farmer that couldn't afford to feed all of his children, was designed and directed by a local director and educator from the Malagasy Department of Education. The theater production was well received by the community, with 150 – 200 people in attendance at each showing in Tsivinoe and Ifaty. Village theater productions are often used in international development as a means of effectively communicating a message in locally relevant terms. Given the success of the Phase II theater production, and the effectiveness of this tool in communicating messages to the community, the Salama Soa Project plans on sponsoring an annual theater campaign in current and future years of the project (See photos, below).



Theater group (left) and audience (right) in the village of Tsivinoe



Theater group (left) and audience (right) in the village of Ifaty

## 2. Demographics: Phase II

Table 6. Contraception-users per month per village

Village	February	March	April	May	June	Total
Ifaty	14	1	22	23	9	69
Tsivinoe	0	0	3	0	0	3
Other	0	0	0	0	0	0
<i>Grand Total</i>	<i>14</i>	<i>1</i>	<i>25</i>	<i>23</i>	<i>9</i>	<i>72</i>

Table 7. Contraception-users per age class per village

Village	Age Classes				Total
	1	2	3	4	
Ifaty	12	34	18	3	67
Tsivinoe	1	0	1	1	3
<i>Grand Total</i>	<i>14</i>	<i>36</i>	<i>22</i>	<i>8</i>	<i>70</i>

Age classes are composed of age groups <20, 20-29, 30-39, and 40-49 classed as 1, 2, 3, 4, respectively.

## 3. Contraception-use: Phase II

Table 8. Monthly distribution of contraceptive products by product type

Month	Microgynon	Ovrette	Depo-Provera	Total
February	40	0	6	46
March	10	0	12	22
April	25	0	43	68
May	36	0	10	46
June	6	0	12	18
<i>Grand Total</i>	<i>117</i>	<i>0</i>	<i>83</i>	<i>200</i>

#### 4. Project Expenses and Couple-Years Protection (CYP): Phase II

Table 9. Phase II expenses by category

Phase II: Project expenses (February 2012 - June 2012)		
	MGA (Ariary)	Pounds Sterling
<b>Phase II</b>	<b>7,477,759.36</b>	<b>£2,385.25</b>
Salaries / per diems	5,000,000.00	£1,594.90
Missions	500,000.00	£159.49
Materials	850,000.00	£271.13
Communication & Printing	250,000.00	£79.74
Theatre Production	877,759.36	£279.99
<i>Total expenses</i>	<i>7,477,759.36</i>	<i>£2,385.25</i>
<b>Remaining Funds</b>	<b>0.00</b>	<b>£0.00</b>

\* Currency conversion rate: 1.00 Pound Sterling = 3135.00 Malagasy Ariary (MGA)

Table 10. Calculation of CYP using the MSI conversion factors

Method	Units	Conversion Factor <sup>1</sup>	CYP	Cost (£) / CYP***
Pills-1 month supply, free	117	0.0142	1.661	1,435.687
Pills-1 month supply, paid	117	0.0714	8.354	285.529
Injection (3mo)	83	0.25	20.750	114.952
		<b>Total CYP1*</b>	<b>22.411</b>	106.430
		<b>Total CYP2**</b>	<b>29.104</b>	81.957

1. Marie Stopes International (MSI) conversion factors used for calculations

\* Total CYP1 was calculated using the conversion factor for free contraceptive pills

\*\* Total CYP2 was calculated using the conversion factor for paid contraceptive pills

\*\*\* Phase II total expenses (£2,385.00) used for the calculation of costs per unit

Table 11. Demographic, health and environmental impacts<sup>1</sup> of the Salama Soa Project

Indicators	CYP1	CYP2	Cost / unit
No. pregnancies averted	12.8080	16.6326	£162.02
No. births averted	8.7511	11.3643	£237.13
No. of infant mortalities averted	0.6126	0.7955	£3,387.63
No. of under-five mortalities averted	0.9784	1.2705	£2,121.04
No. of maternal mortalities averted	0.0446	0.0579	£46,506.29
No. of abortions averted	3.1750	4.1230	£653.60
No. of unsafe abortions averted	3.1750	4.1230	£653.60
Total cost savings (GBP)	1178.7709	1530.7706	£1.76
Ecological footprint prevented (global hectares per person)	9.6262	12.5008	£215.57
Carbon footprint prevented (global hectares per person)	0.3500	0.4546	£5,928.29

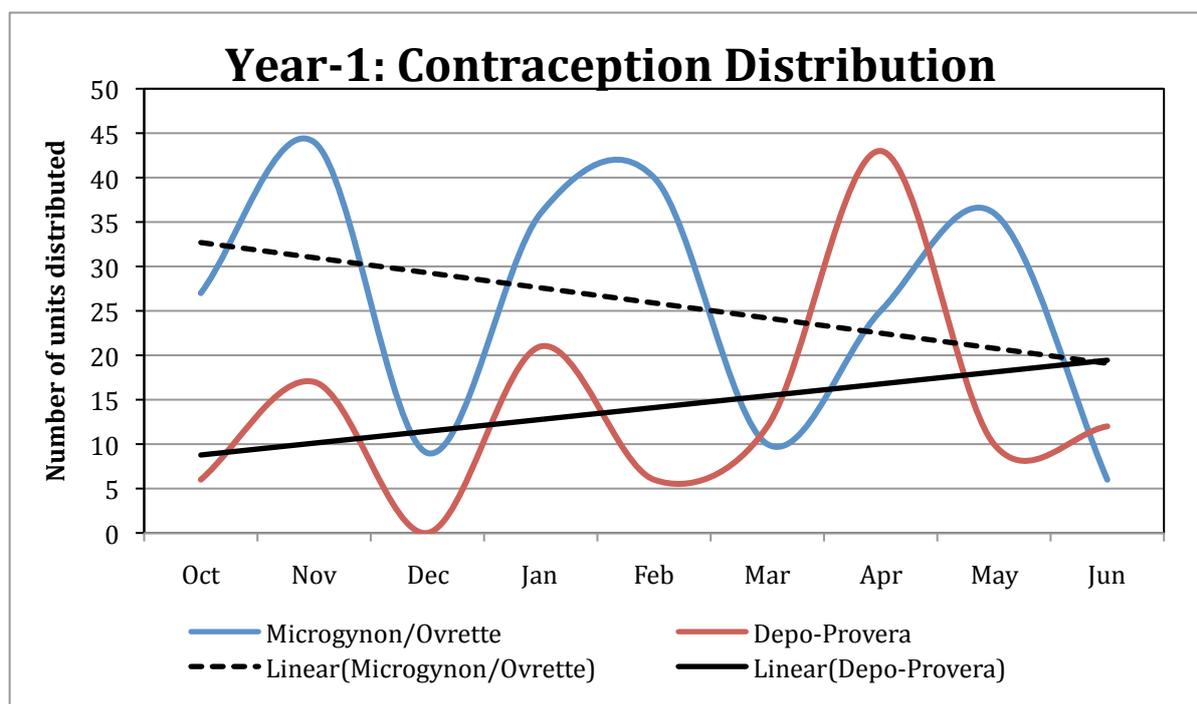
1. Corby N, Boler T and Hovig D. *The MSI Impact Calculator: methodology and assumptions*.

London: Marie Stopes International, 2009.

\* Impact calculated using MSI country-specific (Madagascar) conversion factors<sup>1</sup> multiplied by CYP1 and CYP2

\*\* Cost/unit calculated by dividing expenses-to-date (£2,385.00) by the average of the impact based on CYP1 and CYP2

#### IV. Year-1 Summary



**Figure 2.** Number of units of oral contraceptives (Microgynon/Ovrette; 1 unit = 1-month protection) and contraceptive injections (Depo-Provera; 1 unit = 3-month protection); linearized relationship of Microgynon/Ovrette distribution ( $y = -1.70x + 34.39$ ) and Depo-Provera distribution ( $y = 1.33x + 7.44$ )

*Table 12. Calculation of CYP using the MSI conversion factors*

Method	Units	Conversion Factor <sup>1</sup>	CYP	Cost (£) / CYP***
Pills-1 month supply, free	233	0.0142	3.309	1,208.971
Pills-1 month supply, paid	233	0.0714	16.636	240.440
Injection (3mo)	127	0.25	31.750	125.984
		<b>Total CYP1*</b>	<b>35.059</b>	114.095
		<b>Total CYP2**</b>	<b>48.386</b>	82.668

1. Marie Stopes International (MSI) conversion factors used for calculations

\* Total CYP1 was calculated using the conversion factor for free contraceptive pills

\*\* Total CYP2 was calculated using the conversion factor for paid contraceptive pills

\*\*\* Year-1 total expenses (£4,000.00) used for the calculation of costs per unit

Table 13. Demographic, health and environmental impacts<sup>1</sup> of the Salama Soa Project

Indicators	CYP1	CYP2	Cost / unit
No. pregnancies averted	20.0357	27.6524	£167.76
No. births averted	13.6895	18.8936	£245.53
No. of infant mortalities averted	0.9583	1.3225	£3,507.55
No. of under-five mortalities averted	1.5305	2.1123	£2,196.12
No. of maternal mortalities averted	0.0698	0.0963	£48,152.57
No. of abortions averted	4.9666	6.8547	£676.74
No. of unsafe abortions averted	4.9666	6.8547	£676.74
Total cost savings (GBP)	1843.9748	2544.9656	-
Ecological footprint prevented (global hectares per person)	15.0585	20.7830	£223.20
Carbon footprint prevented (global hectares per person)	0.5476	0.7557	£6,138.15

1. Corby N, Boler T and Hovig D. *The MSI Impact Calculator: methodology and assumptions*. London: Marie Stopes International, 2009.

\* Impact calculated using MSI country-specific (Madagascar) conversion factors<sup>1</sup> multiplied by CYP1 and CYP2

\*\* Cost/unit calculated by dividing Year-1 expenses (£4,000.00) by the average of the impact based on CYP1 and CYP2

## V. Discussion

In June 2011, Phase-I of the Salama Soa pilot project began with the simple objectives of: 1) assessing the interest of the local population in managing the size of their families, 2) understanding the reasons for which contraception may not be regularly used, and 3) providing a reliable supply and a reliable point of distribution for those interested in using some form of contraception product. Focus groups and surveys conducted in the early months of the project clearly established an interest by the community to have greater access to family planning services, with over 60% of respondents using, or have used contraception products in the past, and 20% interested in starting (Appendix, Figure A4). In Madagascar, state-owned village clinics are known for high staff turnover rates, resulting in frequent and prolonged periods of clinic closures. From the outset, it was known by ReefDoctor staff that the principle impediment to maintaining and/or increasing regular contraception-use in our area was the irregularity of access to these products due to the frequent closures of the Ifaty clinic. Secondly, surveys and observation revealed a number of myths and misinformation circulating in the villages regarding contraception-use, which were addressed in the education and outreach campaigns of Phase-II.

Since October 2011, the Salama Soa project has provided a reliable source of family planning counseling and products for the villages of Tsivinoe and Ifaty of southwest

Madagascar. During Phase-I of the project, 160 units of contraceptive products (Table 2) were distributed, resulting in a CYP = 12.6 - 19.3 (Table 4). During Phase-II of the project, 200 units of contraceptive products were distributed (Table 8), resulting in a CYP = 22.4 – 29.1 (Table 10). When standardized for the number of months of distribution (Phase-I CYP = 19.3 / 4 months = 4.82; Phase-II CYP = 29.1 / 5 months = 5.82), the increase in CYP from Phase-I to Phase-II may be attributable to the education and outreach programs that were conducted during the latter phase of this pilot project. In particular, the village theater production that took place in April resulted in a significant increase in people seeking the Depo-Provera injections (See Figure 2). Furthermore, it is worth noting the trends depicted in Figure 2, illustrating a declining interest in oral contraceptive and an increasing interest in the injectable form of contraceptive. Although the slope ( $m$ ) of the declining linear trend in the use of oral contraceptives is steeper than the increasing use of injections, where  $m = -1.70$  versus  $m = 1.33$ , respectively, these results are interpreted by project staff as positive, given the greater efficiency of the injectable form of contraceptive.

In summary, the Salama Soa pilot project has been a success, meeting all the objectives set forth from beginning, and having distributed 360 units of contraceptive products (CYP = 48.39; Table 12) during the first year of operation. As a result of this project, 27.65 pregnancies have been averted that would have resulted in 18.89 births (Table 13) in these two small villages alone. However, a lot remains to be done in the Bay of Ranobe region, with 11 other villages still in need of reliable family planning services.

Today, we are six months into the second year of the Salama Soa Project, with the Project continuing to provide family planning services to the local communities. Current efforts are focused on collecting geo-referenced data of the regional health infrastructure and human resources in order to create a Geographic Information System database, which will allow for the identification of the next village to be added to the project. In addition to enlarging our project zone, in the latter half of year-2, we will be introducing a new pricing scheme to further incentivize the use of the Depo-Provera injection in the hopes of increasing the overall efficiency of the project.

## VI. Appendix I: Preliminary Survey Results

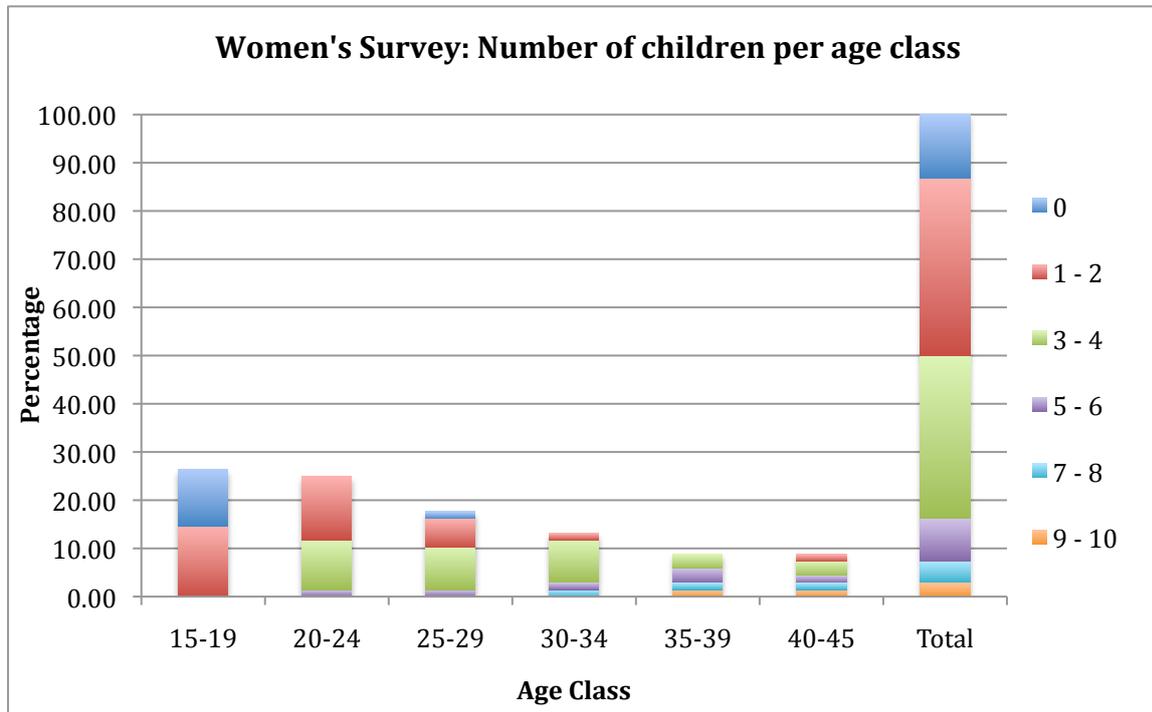


Figure A1.

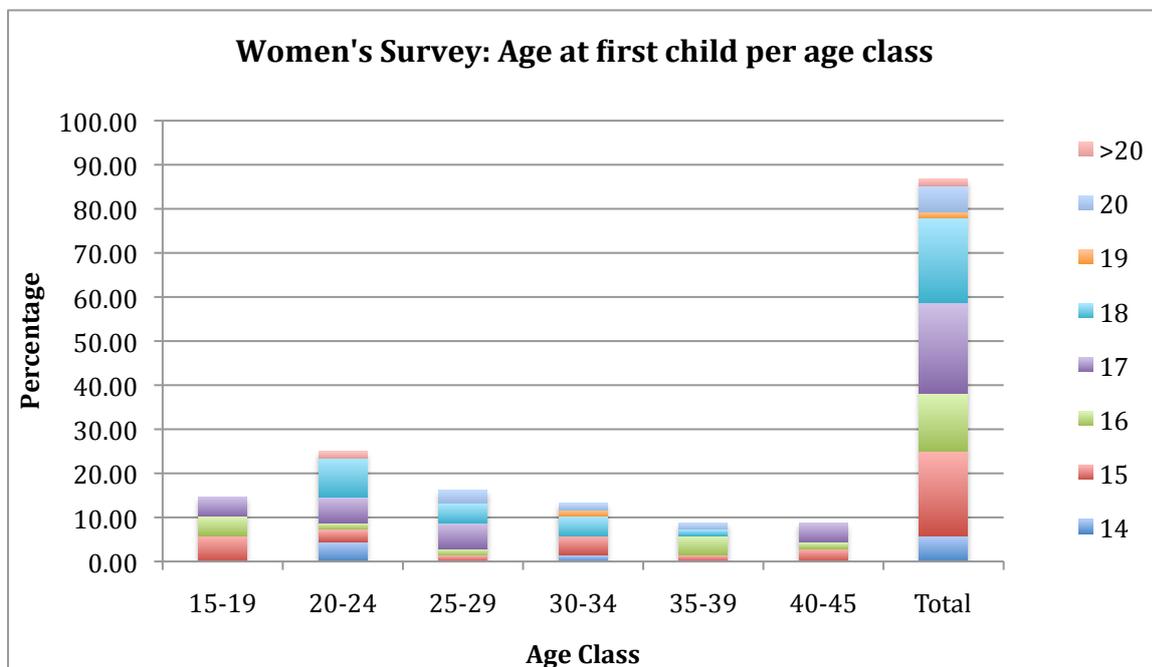


Figure A2.

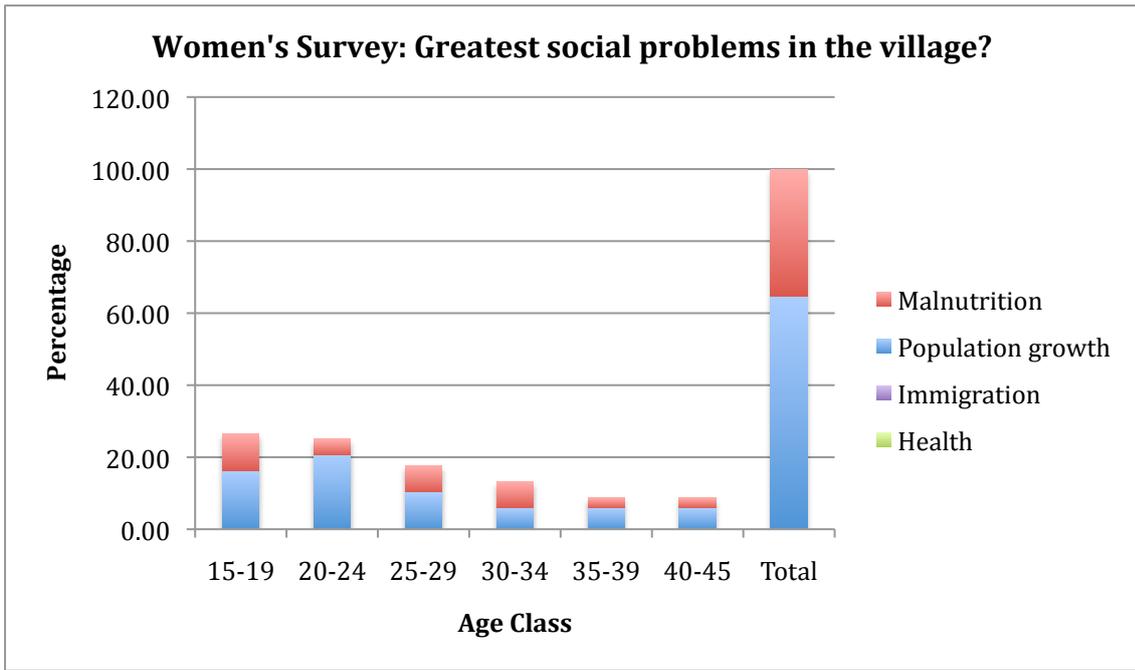


Figure A3.

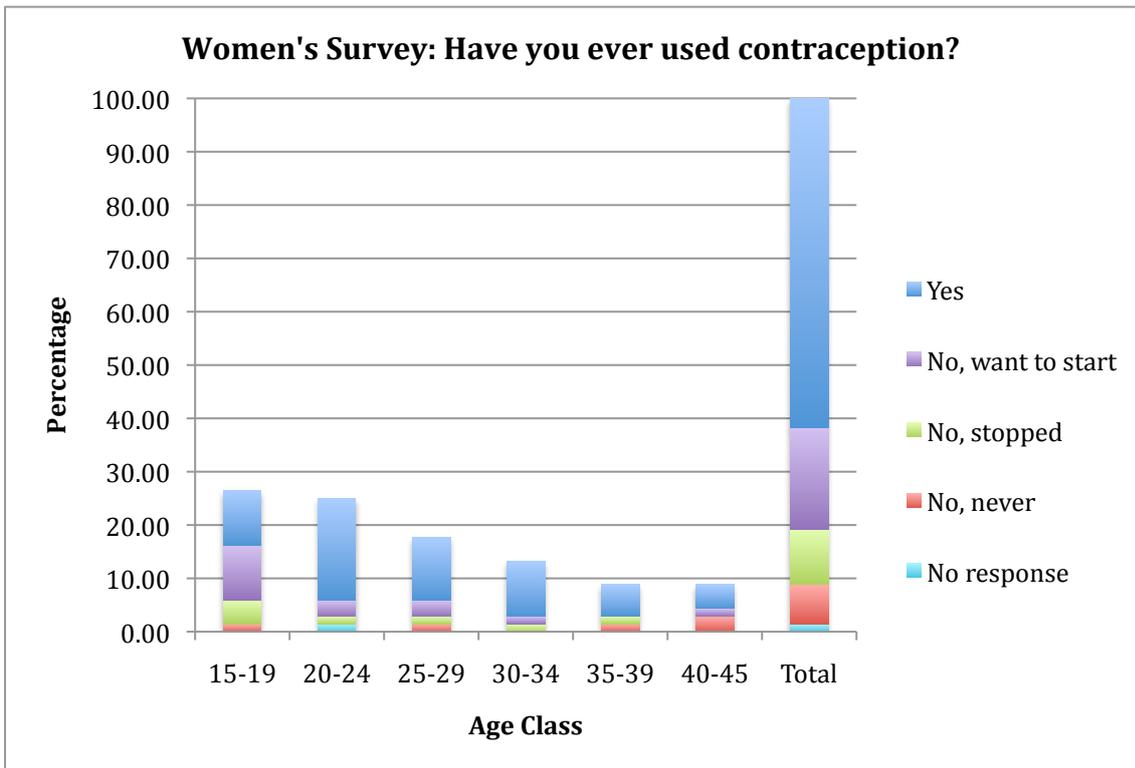


Figure A4.