

Scaling Up Population and Environment Approaches in Madagascar: A case study

Lynne Gaffikin



Scaling Up Population and Environment Approaches in Madagascar:

A Case Study

By Lynne Gaffikin¹

¹Lynne Gaffikin, DrPH, is the founder and President of Evaluation and Research Technologies for Health (EARTH) Inc, a private organization that offers public health/family planning expertise including to environment and wildlife conservation initiatives seeking to incorporate a human health dimension. Gaffikin undertook a fellowship in Madagascar between 2004 and 2006 to help strengthen linkages between population, health and the environment around biodiversity-rich areas in the country.



PUBLICATION CREDITS

FUNDING

This publication is made possible by the generous support of the American People through the United States Agency for International Development (USAID). The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

PHOTO CREDITS

Permission to use the photographs in this publication is gratefully acknowledged. Cover photos from top to bottom, left to right: Spiny Forest landscape, Madagascar © WWF/ Judy Oglethorpe; Children © WWF/ Cara Honzak; Brown lemur, Madagascar © WWF-Canon/ Russell A. Mittermeier; baobab on Avenue of the Baobabs in Morondava, western Madagascar © Lynne Gaffikin; Local People, Spiny Forest, Madagascar © WWF/ Judy Oglethorpe; Ox-cart, Spiny Forest, Madagascar © WWF/ Judy Oglethorpe

PROJECT MANAGER

Judy Oglethorpe, manager of WWF-US Population, Health, Gender and Environment Program

CITATION

Please cite this publication as Gaffikin, L. 2008. *Scaling up Population and Environment Approaches in Madagascar: A case study* Washington, DC: World Wildlife Fund and Evaluation and Research Technologies for Health (EARTH) Inc.

WWF-US

1250 24th Street, NW
Washington, DC 20037
USA

www.worldwildlife.org

email: peopleandconservation@wwfus.org

Evaluation and Research

Technologies for Health, Inc

15 Echo Lane
Woodside, CA 94062

earthlg@gmail.com

© 2008 World Wildlife Fund Inc. All rights reserved. Reproduction of this publication for educational and other noncommercial purposes is authorized without prior permission of the copyright holder. However, WWF does request advance written notification and appropriate acknowledgement. WWF does not require payment for the noncommercial use of this published work. Reproduction or other use of photographs and maps that appear in this publication is prohibited.

TABLE OF CONTENTS

Acknowledgments	5
Acronyms and Abbreviations	6
Executive Summary	9
Introduction	11
1. Rational for Linkages: Madagascar Context	15
2. How Scale Up is Happening	17
3. Main Actors	32
4. Drivers of Scaling Up	34
5. Opportunities and Enabling Conditions	39
6. Constraints	42
7. Lessons Learned	46
8. Next Steps	52
Conclusion	57
Bibliography	58
Annex 1: Madagascar's Demographic Transition	64
Annex 2: Brief History of Family Planning in Madagascar	69
Annex 3: USAID's contribution to the population and environment sectors and linkages between the two	74
Annex 4: Madagascar Green Healthy Community Project	100
Map 1: Projected areas with FP support to surrounding communities: Stage 1	103
Map2: Systems of Protected areas of Madagascar: Stage 5	104

ACKNOWLEDGMENTS

Financial support for this case study was provided by World Wildlife Fund through a subcontract from USAID's Office of Population and Reproductive Health, Population Health and Environment Program. The author would like to thank Judy Oglethorpe, Cara Honzak, Michael Ross, Dana Bouchard, March Wood and Tessa Pechenik in particular from World Wildlife Fund for guidance and assistance on this document. Credit also goes to Aaron Coward and Aurelie Shapiro of WWF's Conservation Science Program for their assistance with mapping. A number of other individuals graciously offered to review all or sections of this case study for accuracy, current relevance and completeness or to provide additional background material. In this regard, I am particularly grateful to Roger Mark DeSouza, Kristen Patterson, Daniela Raik, Mark Freudenberger, Philippe LeMay, Eckhard Kleinau, Yvette Ribaira, Heather D'Agnes and Zoely Ramanase. I would also like to thank Tom Outlaw and Wendy Benazerga for the USAID fellowship in Madagascar that yielded insights into the unique history and opportunities in that country. Recognizing these contributions, the views expressed in this document remain those of the author who accepts full responsibility for any inconsistencies or inaccuracies.

ACRONYMS and ABBREVIATIONS

ADB	African Development Bank
ADRA	Adventist Development and Relief Agency
AED	Academy for Educational Development
ANGAP	National Association for the Management of Protected Areas
APHA	American Public Health Association
APPROPOP	Madagascar Population Support Project
ASOS	Action Socio-Sanitaire Organisation Secours
AVBC	Volunteer community agents
BASICS	Basics Support for Institutionalizing Child Survival
BCC	Behavior Change Communication
CAC	Centers of Support to Communes
CI	Conservation International
CMR	Child Mortality Rate
CPR	Contraceptive Prevalence Rate
CRS	Catholic Relief Services
CSB	Basic Health Centers
CYP	Couple Years of Protection
DAI	Development Alternatives Incorporated
DGEF	General Directorate of Water and Forests
DHFPS	District Health and Family Planning Services
DVD	Digital Versatile Disc/Digital Video Disc
DHS	Demographic Health Survey
ECHO	Environmental Change and Health Outcomes
EGAT	Economic Growth, Agriculture and Trade
EHP	Environmental Health Project
EMI	Extra Mile Initiative
Env/RD	Environment/Rural Development
ERI	Ecoregional Initiative
EU	European Union
FF	Flexible Funds
FISA	Fianakaviana Sambatra
FP	Family Planning
GCF	Global Conservation Fund
GHC	Global Health Council
GHFP	Global Health Fellows Program
GOM	Government of Madagascar
HCP	Health Communication Project
HIDN	Health, Infectious Diseases and Nutrition
HPN	Health, Population and Nutrition
ICDP	Integrated Conservation and Development Projects
IEC	Information, Education, Communication
INSTAT	Institut National de la Statistique
IPPF	International Planned Parenthood Federation
IRG	International Resources Group

IUCN	World Conservation Union
JSI	Jereo Salama Isika
JSI R & T	John Snow Inc Research and Training
KM	Kaominina Mendrika
LDI	Landscape Development Interventions
MAP	Madagascar Action Plan
MCDI	Medical Care Development International
MCH	Maternal and Child Health
MDAT	Ministry of Decentralization and Land Use Management
MDG	Millenium Development Goals
MFPA	Makira Forest Protected Area
MGHC	Madagascar Green Healthy Communities
MHFPS	Ministry of Health, Family Planning and Social Protection
MICET	Madagascar Institute for the Conservation of Tropical Environments
MOH	Ministry of Health
MOHFP	Ministry of Health and Family Planning
MOU	Memorandum of Understanding
MPRDAT	Ministry of the Presidency of the Republic for Decentralization and Land Use Management
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
NHWP	Nature, Health, Wealth and Power
NPP	National Population Policy
NR	Natural Resources
NRM	Natural Resources Management
NWP	Nature, Wealth and Power
ONE	National Office of the Environment
PA	Protected Area
PAI	Population Action International
PATH	Program for Applied Technology for Health
PE	Population and Environment
PEC	Policy, Evaluation and Communication
PENSER	Population and Environment Services
PHE	Population-Health- Environment
PHI	Public Health Institute
PRH	Population and Reproductive Health
PRB	Population Reference Bureau
PSI	Project Services International
PSRP	Madagascar's Strategy for Poverty Reduction
PTE	Ecoregional Transition Program
RH	Reproductive Health
SAGE	Service Assistance to Environmental Management
SAPM	System of Protected Areas of Madagascar
SAVEM	Sustainable Approaches to Viable Environmental Management

SCALE	System-wide Collaborative Action for Livelihoods and the Environment
SO	Strategic Objective
SPARHCS	Strategic Pathway to Achieving Reproductive Health Commodity Security
TA	Technical Assistance
TFR	Total Fertility Rate
U of M	University of Michigan
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
US	United States
USAID	United States Agency for International Development
VS	Voahary Salama
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

Madagascar is the world's fourth largest island and among the world's most biologically diverse nations. The country is also among the most food insecure nations which contributes to it being among the world's poorest. It is mainly rural and many rural citizens depend solely upon local natural resources to meet their basic daily needs. Madagascar is still in the early stages of its demographic transition. Mortality and fertility rates are dropping but the former is dropping more quickly than the latter. Therefore, the country is experiencing a high rate of natural population growth (national estimate in 2006 was 3.3%), particularly in rural areas. The combination of high population growth, poor health, food insecurity and high poverty contributes to unsustainable natural resource use, in particular slash and burn agriculture ("tavy") and clear cutting for firewood. This has led to increasingly degraded natural environments and, in various locales, serious, irreversible biodiversity loss.

Much has been written on the history of and factors affecting environment sector successes and challenges in Madagascar. This case study focuses specifically on how the conservation sector has engaged in identifying and addressing unmet need for family planning (FP) in Madagascar over approximately two decades (1988 -2007), in the context of improving local livelihoods and reducing pressures on the country's dwindling natural resource base including its unique biodiversity. It looks at how previous and ongoing efforts linking or integrating population and environment (PE) efforts have been and are being scaled up past the site level. The purpose of this study is to highlight drivers of change, constraints and enabling factors to help explain the history and to identify strategies that may be replicable or newly applied elsewhere in-country or outside.

Efforts to address unmet need for FP in rural communities in Madagascar, close to conservation area targets, have been strongly influenced by local, regional, national and international FP, conservation and development initiatives as well as through focused site-based PE projects. Madagascar's "scale up" story is characterized by a number of central themes including:

- early and continued recognition by the conservation community of the contribution of FP to achieving environment (including natural resource management and conservation) goals;
- recognition among FP and other health partners of the benefits of conservation organizations as advocacy partners and of linking with conservation actors (as the latter routinely access remote areas traditionally underserved by the health sector);
- the need to reconcile in time and space the scale at which meaningful environmental impact occurs compared to the scale at which FP interventions are or can be programmatically supported; and
- the key role of partnerships among government structures, non-governmental organizations and local communities.

The history of PE scale up in Madagascar has its roots back in the 1980s when the link between deforestation and human pressures on the forest first began to be seriously discussed among government, non-government and environment sector donor actors. The potential for PE scale up in Madagascar has progressed since the late 1980s along

with some notable field project successes as a result, among others, of:

- leaps in thinking and changes in national initiatives directed at improving the environment;
- similar developments in the national FP program;
- lessons learned from experiences linking the two; and
- the influence of international thinking and funding.

This progress can be thought of as a transition in discernible stages, each of 5 stages representing a marked change in the potential for or actual expansion in one or more of four scale up “dimensions” (i.e., time, space, breadth or depth). The stage time periods are not official but provide an indication of the general time period during which a transition in one or more PE scale up dimensions occurred. The stages overlap in time reflecting the mosaic of actions and actors related to PE scale up in the country:

- The first stage of Madagascar’s PE experience (1988-1999) refers to initial in-country experiences linking conservation and development around newly established protected areas (PAs).
- Stage 2 (1997 – 2003) refers to PE efforts during the second phase of the Government’s National Environmental Action Plan operating at a larger geo-spatial scale, priority landscapes.
- Stage 3 (1999 – 2004) encompasses a period of greater appreciation of the importance of FP to national development and a move towards decentralized health services. Linkages with other health interventions within the framework of PE efforts also gained strength during this period.
- Stage 4 (2002 - 2007) represents a period of direct funding to conservation organizations for FP and select other health interventions around biodiversity priority landscapes in Madagascar. This provided an opportunity for increased hands-on experience with the challenges and benefits of providing FP and other health interventions to remote rural communities.
- The last stage, Stage 5 (2003 – present) reflects actions that are helping to move towards more “institutionalized” PE scale up. It is defined primarily by GOM decentralization and good governance initiatives including the recent Madagascar Action Plan (MAP).

This case study reveals that there is a wide base of PE experience, local and international advocates, locally adapted materials, tested strategies for engaging decentralized actors, favorable policies, and political commitment at the highest level. Progression at the field level has been less consistent, however, due to financial and infrastructural constraints - with intermittent activity “starts and stops” and periodic changes in local geographic focus, implementation partner, technical emphasis and/or programming strategies. The transition through stages in essence reflects the development over time of a more favorable environment in which scale up can occur. Overall, evidence suggests that the potential for scale up is greater now than ever before although, as noted above, this potential is far from being fully realized. Realizing the full potential for scale up will require considerably strengthened capacity (including funding and financial management) at decentralized administrative levels and real engagement of community members in identifying assets, prioritizing needs and focusing on achievable results.

INTRODUCTION

This case study is designed to help answer the question "How can the 'conservation community'² further contribute to meeting unmet need for family planning (FP) in Madagascar in order to reduce future pressure on natural resources (NR) and biodiversity and promote more sustainable livelihoods?" Specifically, the study looks at how previous and ongoing efforts linking or integrating population and environment (PE) efforts have been and are being scaled up.³ The purpose of this study is to highlight drivers of change, constraints and enabling factors to help explain the history and identify strategies that may be replicable or newly applied elsewhere in-country or outside. This paper describes Madagascar's PE evolution over approximately two decades (1988 -2007) by addressing the following points:

- how scaling up is happening;
- who are the main actors;
- what drives the scale up process;
- what are the opportunities, enabling conditions and constraints;
- lessons learned for consideration in the future and by other countries interested in scaling up.

Much has been written on the history of and factors affecting environment sector successes and challenges in Madagascar. This case study highlights only some of these important policies and actions, focusing mainly on points that help define *how the conservation domain has contributed and can continue to contribute to achieving FP goals that also help sustainable livelihood and conservation goals*. Efforts to address unmet need for FP in rural communities in Madagascar, close to conservation area targets, have been strongly influenced by local, regional, national and international FP, conservation and development initiatives as well as through focused site-based PE projects. These influences are described where relevant throughout this document.

² The term "conservation community" comes from the scope of work and fits into the larger study framework of population-environment (PE) scale up. The definition of "environment" in the current Madagascar context is provided below. As noted, conservation is one of a number of components defining the environment sector. This case study touches on the other environment components as they intersect with the main study question but focuses mainly on the subset of actors and actions for which conservation is a or the key goal (referred to hereafter as the conservation community or domain).

³ The terms "integrated", "population", "environment" and "scale up" have different meanings to different stakeholder groups. The term PE throughout this document refers mainly to where FP as a population intervention and conservation as a component of the environment sector interface. It is not a term universally applied in Madagascar and other terms to describe linkages of the two have been or are being used to adapt to new thinking and the national context. This phenomenon is both one of the enabling conditions of and constraints to Madagascar's scale up story (see below). To help differentiate the broader concepts of population and environment from the more specific areas of interest in this paper, FP and conservation, I arbitrarily consider the former "sectors" and the latter "domains". As FP is a well recognized health intervention, and other health interventions have been linked with PE efforts in the country, reference is also made throughout to the health sector.

Methodology

Various data collection methods provided the basis for this case study. These included a review of published, gray and web-accessible literature relating to the study themes. Two recent documents in particular provided a strong foundation for this report:

- “Linking Population, Health and Environment in Fianarantsoa Province, Madagascar” reviewed cross-sectoral efforts in one area in Madagascar where linked interventions have featured for over 15 years [1]. That effort involved a major literature search, interviews and questionnaires with key stakeholders.
- “Review of Population-Health-Environment (PHE) Programs supported by the Packard Foundation and USAID” focused on identifying lessons learned and likely long-term impacts from PHE efforts in numerous countries including Madagascar [2]. It also involved a review of the literature and interviews plus a visit to the field where site-based PE projects are ongoing in Madagascar.⁴

Additional information for this scale-up case study came from two years’ (2004-2006) hands-on experience by the author in Madagascar as a senior PHE fellow with the United States Agency for International Development (USAID), exploring the underlying case study question as well as other related questions. Those two years involving numerous field visits, collaborative work with stakeholders at many levels and across domains and access to in-house reports and other gray literature provided useful insights into the history of PE scale up in Madagascar. That experience together with lessons learned from the various other reports informed suggestions included herein on how the conservation sector can continue to help address unmet need for FP to achieve natural resource management (NRM), conservation and sustainable livelihood objectives as well as larger national health, poverty reduction and economic development goals.

As the storyteller, I have tried to pay attention to the multiple faces, facets and influencing features associated with the story. Inevitably, if told by another person, some of the emphases would be different. Of note, USAID features throughout as a strong influencing actor. This in part reflects the author’s familiarity with these efforts but also the fact that linkages between “population and environment” have been specifically programmed for years through this development funding source. The story is told from a country versus project perspective as scale-up in Madagascar has been and is influenced by many players working at many levels. A vision for country-wide development has been articulated by the President (including but not limited to FP, livelihoods and conservation) involving decentralized structures working in concert with national programs. Site-level PE projects play an important role in realizing this vision and opportunities exist to coordinate with commune and regionally-oriented efforts to expand beyond the site-level. Given the dynamic aspect of the process, the story continues to

⁴A third document “Notes from Brainstorming Session on Scaling up Population-Environment Approaches at WWF, November 2005” served as an additional resource for the enabling condition and limitations sections.

evolve. Therefore, the perspectives provided herein may in places be incomplete and outdated. I have added footnotes or endnotes throughout to clarify sources and to provide updates wherever possible and relevant.

Definition of terms

Population

The term “population” is used by some to refer to population dynamics. e.g., changes in the number and composition of populations and, in some contexts, environmental processes influencing these changes. It can also refer to factors affecting population demographics including births, deaths and migration [3]. For some PE practitioners, including various key actors involved in Madagascar’s scale up efforts, the term is used more broadly to encompass everything that has to do with “people and their well being”. For others it refers to fertility and, in the PE context, the effects high fertility have on women’s health, the health of her family, livelihoods, income, and sustainable use of local NR on which rural families often depend. When considering women’s fertility, ways to reduce high levels include postponing the age at first marriage, addressing adolescent sexuality and the age of first intercourse, and/or interventions that help space or limit the total number of children a woman has in her reproductive lifetime. By design, this paper emphasizes one specific application of the term: ways in which the conservation community can contribute to addressing unmet need for FP. While this helps focus the story, it also limits its richness as it leaves out development contributions of the conservation sector to overall “human well-being”.

Environment

The word “environment” in the current Madagascar context refers to NRM, sustainable land-use planning through improved forest management and agricultural practices and biodiversity conservation [4]. Various strategies have been promoted and are in use to achieve national environmental objectives. This document focuses mainly on strategies that help to address unmet need for FP as a means of reducing pressure on NR and biodiversity and promoting more sustainable livelihoods.

Integrated

Much discussion has taken place internationally and within Madagascar about the meaning of the term “integrated”. A dictionary definition is: “to join with something else; unite” [5]. Throughout this document “integrated” is used synonymously and interchangeably with the term “linked” (cross-sectoral is another term) [1]. Integration connotes action and in a PE programming context implies efforts or interventions that acknowledge and address interdependencies that exist in the world between nature and human actions. This usage also implies concerted efforts to coordinate population and environment interventions in time and space to achieve outcomes beneficial to both sectors, in some cases as well as other goals e.g. improved livelihoods, food security,

poverty reduction and/or economic development. In the Madagascar context, integration also implies partnerships and “complementarity” of technical domains.

Scaling up

A review of the literature on “scaling up” reveals varying approaches and definitions of the term. Four documents in particular were relevant to this review of Madagascar’s experience [7, 8, 9, 10]. They emphasize different aspects of scaling up but all appear to concur that “going to scale” requires i) *involvement of stakeholders at many levels and across sectors*. They also concur on the importance of ii) *bottom – up and top-down action* and the principle that iii) *change must be at a large “enough” level to be long lasting*. For all, scale implies both iv) *geographic/spatial and temporal dimensions*. For the purposes of this document, scaling up is defined as strategies or actions that significantly help to achieve PE outcomes beyond the “site-level”[6]. In Madagascar, PE project sites have traditionally been in communities near or adjacent to areas of biodiversity importance.

Central themes

Madagascar’s “scale up” story is characterized by a number of central themes. These weave throughout the different stages described, some also present as enabling factors or lessons learned. They include:

- early and continued recognition by the conservation community of the contribution of FP to achieving environment (including NRM and conservation) goals;⁵
- recognition among FP and other health partners of the benefits of conservation organizations as advocacy partners and of linking with conservation actors as the latter routinely access remote areas traditionally underserved by the health sector;
- the need to reconcile in time and space the scale at which meaningful environmental impact occurs compared to the scale at which FP interventions are or can be programmatically supported;⁶
- partnerships among government, non-governmental organizations (NGOs), and the human community.⁷

⁵ Various conservation players involved in and supporting FP activities from early days of linked conservation and development efforts still recognize the importance of access to FP in poor rural communities around biodiversity-priority areas.

⁶ In the mid to late 1990s, the conservation community in Madagascar appreciated the need for a landscape approach if meaningful conservation of biodiversity were to occur (see below). The national FP program currently aims to expand FP access to all Malagasy people so, with time, the spatial scales should converge.

⁷ The partnership theme helps address both the time and spatial coordination challenge and features as a key enabling condition.

RATIONALE FOR LINKAGES: Madagascar Context

As noted, this study focuses on how the conservation sector has engaged in identifying and addressing unmet need for FP in the context of reducing pressures on the country's dwindling NR base including its unique biodiversity. An important question behind this story is "what does FP use in Madagascar have to do with conserving its natural resources?"

Madagascar is the world's fourth largest island and is among the world's most biologically diverse nations. Nearly 80% of its flora and fauna (478 unique genera of plants and vertebrates) is endemic to the island [11]. Despite this natural wealth, the country is among the most food insecure nations and many of its citizens suffer from malnutrition and infectious disease. This contributes to Madagascar being among the world's poorest countries. In 2006, its human development index rank was 149 out of 177 nations and of the 18+ million Malagasy people in 2006⁸, the World Bank estimated that approximately 70% lived on less than \$1 a day [12, 13]. Poverty levels increased after the 1970s as per capita income decreased (estimated in 2005 at US\$290), a trend which now seems to be reversing [13]. The country is mainly (75%-80%) rural and a number of rural citizens depend solely upon local natural resources to meet their basic daily needs for food, water, shelter, etc. Expectedly, poverty levels in rural areas are higher than the national average and a considerable proportion of the rural poor qualify as extremely poor.

The poorest of the poor in rural areas are also the least educated and have the poorest health status. They experience high maternal mortality (estimated at approximately 500 per 100,000 live births) associated with high fertility and high infant and child mortality. These result from poor hygiene, household crowding, poor nutrition, infectious disease and large family sizes [14]. They frequently live in inaccessible areas, distant from reliable transportation, economic markets and social services (85% of the Malagasy population live 5 Km+ or more than one hour's walk from a basic health facility) [15].

Madagascar is still in the early stages of its demographic transition (see Annex 1) and experiences a high rate of natural population growth, particularly in rural areas (national estimate in 2006 was 3.3%).⁹ Data from a recent (2003/4) national demographic and health survey (DHS) indicate that, on average, a woman in rural Madagascar will have almost 6 children over her reproductive lifetime [14].¹⁰ Although both mortality and fertility remain high,¹¹ mortality is falling at a faster rate than fertility.

Total fertility is highly affected by contraceptive use which is considerably lower in rural areas (around 5-7 years behind urban areas). According to the 2003/4 DHS, one out of

⁸ 18,595,469 (July 2006 estimate) [<https://www.cia.gov/cia/publications/factbook/print/ma.html>].

⁹ This rate was among the top 5% (13/235) of all countries listed for 2006 [http://en.wikipedia.org/wiki/List_of_countries_by_population_growth_rate].

¹⁰ Total fertility rate (TFR) is the indicator measured as the number of children a woman would have in her reproductive lifetime if she experienced those years according to current age-specific fertility rates.

¹¹ Overall the TFR in Madagascar for the period 2003-4 was 5.2 children [14].

every two women in union indicated a desire to space or limit childbearing. While their expressed need for FP use was approximately 50%, only 22% reported using any method of contraception at the time [14]. If this unmet need were being met, the national contraceptive prevalence rate (CPR) would more than double.¹²

In the pre-colonial past, when population size and rate of increase were lower, use of NR in rural areas to meet daily needs was more sustainable. This changed during the colonial period when land policies supported unsustainably high levels of NR extraction in some areas. During the post-colonial socialist era, increases in poverty and population size contributed to unsustainable NR use. In particular, slash and burn agriculture (“tavy”) and clear cutting for firewood led to increasingly degraded natural environments and, in various locales, serious, irreversible biodiversity loss. Annually, a substantial part of the island is burned and deforestation continues at approximately 250,000 ha/year [16]. Consequently, a large proportion of the island’s initially-forested areas are presently deforested and much of the remaining natural forest is under threat.¹³

Many interventions are being supported via different mechanisms throughout Madagascar to improve soil fertility, increase crop yield, improve water flows and quality, reduce infectious disease, etc. Reduced total fertility and increased birth spacing through FP use (in addition to other health interventions) contribute by helping improve women’s, children’s and ultimately, the community’s health. FP also contributes to reductions in population growth rates. Both of these pathways promote more sustainable livelihoods as healthier populations are more productive and fewer people using and depending upon limited NR allows those resources to go farther.

As noted above, these benefits were recognized early in the history of the environment sector in Madagascar as they also have been in the health sector. This study describes the evolution of this recognition, action that has been taken, increases in the scale of that action from the site level, challenges in maintaining momentum and in coordinating in time and space, and how other countries might learn from this two decade-long experience. It is a story of how the thinking and rationale behind PE linkages has evolved as well as the ebb and flow of linked implementation in the field.

¹² In 2003/4 Madagascar’s national CPR was 18%. The rate in urban areas was 27% compared to 16% in rural areas (See Annex 2).

¹³ Of the original area, it is estimated that only about 10% remains and on average 1% of that is lost each year to provide charcoal for cooking fuel, pasture for grazing and/or fields for crops. These changes have reduced soil fertility and the reliability of water flows and water quality, substantially affecting agricultural potential and rural Malagasy quality of life. Poor health as a result of low crop yield and malnutrition, poor hygiene/sanitation and diarrheal disease, and crowdedness and respiratory infection, has reduced work productivity. For families living off the land, this has further perpetuated their cycle of poverty.

HOW SCALE UP IS HAPPENING

Defining progress in “stages”

The history of PE scale up in Madagascar has its roots back in the 1980s when the link between deforestation and human pressures on the forest first began to be seriously discussed among government, non-government and environment sector donor actors.¹⁴ Concerns were raised in the context of biodiversity loss as well as threats to the NR base upon which the majority of Malagasy people depend. Out of these discussions came the National Environmental Action Plan (NEAP) and the national environmental charter that established the government’s commitment to the plan.¹⁵ The NEAP, launched 1991, was to be implemented in three, 5-year coordinated multi-donor environment cycles or programs (1991- 2006) [17]. A key goal of the plan was to reverse the rate of deforestation threatening remaining biodiversity habitats. An underlying principle was the need for overall economic development based on sustainable NR use for biodiversity conservation as well as improved livelihoods of Malagasy living in rural areas.¹⁶

The potential for PE scale up in Madagascar has progressed since the late 1980s along with some notable field project successes as a result of:

- leaps in thinking and changes in national initiatives directed at improving the environment;
- similar developments in the national FP program;
- lessons learned from experiences linking the two; and
- the influence of international thinking and funding, among others.

This progress can be thought of as a transition in five stages, each stage representing a marked change in the *potential for or actual expansion* in one or more of four scale up “dimensions” (i.e., time, space, breadth or depth, see below). The stage time periods are not official but provide an indication of the general time period during which efforts (e.g. projects, government policies, etc) took place enabling the transition to occur (See Figure 1). Some important changes have persisted through time, up through the present stage.

- The first stage of Madagascar’s PE experience (1988-1999) refers to initial in-country experiences linking conservation and development around newly established protected areas (PAs), providing a baseline from which future PE “scale up” can be measured. This time period coincides with the first phase of the NEAP plus additional years during which the USAID Sustainable Approaches to Viable Environmental Management (SAVEM) Project

¹⁴ International conservation NGOs (especially those operating in-country) played a major role in promoting these discussions, supported in part in the late 1980s with funding from USAID and the World Bank.

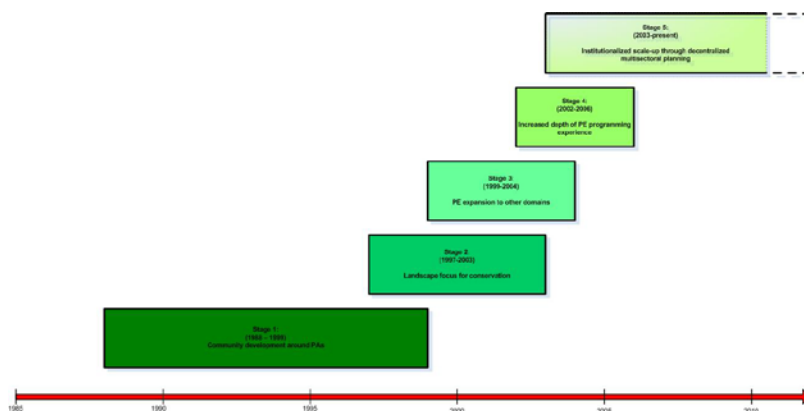
¹⁵ According to the charter (Law No. 90-033, Dec 21, 1990) the environment considers human activities, biological, physical and socio-cultural elements and the interaction of these elements.

¹⁶ In 1990, the National Office of the Environment (ONE) was established as the agency responsible for coordinating and executing all national environmental programs [<http://www.refer.mg/cop/one/>]. Later the Ministry of Environment was established to which ONE was attached [17].

operated (see Annex 3).

- Stage 2 (1997 – 2003) resulted from insights gained during Stage 1, influenced by changes in thinking internationally regarding relevant conservation geo-spatial scales. This time span coincides with the second phase of the Government of Madagascar’s (GOM) NEAP.
- Stage 3 (1999 – 2004) was a period of transition based on in-country lessons learned during Stages 1 and 2 and changes in thinking (influenced in part by international conferences) regarding the relationship between conservation, NRM, health and FP use. This time period also encompasses a period of change within the health sector in Madagascar marking greater appreciation of the importance of FP and a move towards decentralized health services. Linkages with other health interventions as part of a broader PE framework also gained strength during this period.
- Stage 4 (2002 - 2007) represents a period of increased self-reflection within the conservation community regarding the contribution of conservation interventions to human well-being goals and vice versa. This reflection increased the potential to expand both the geographic and temporal scales at which PE could occur through increases in understanding, commitment, and advocacy regarding community FP needs. This time span includes a period of direct funding to conservation organizations for conservation and development projects (focusing on FP and select other health interventions) around biodiversity priority areas in Madagascar and elsewhere.
- The last stage, Stage 5 (2003 – present) reflects actions that have helped move towards more “institutionalized” PE scale up. The initial year coincides with the beginning of the third phase of the NEAP. It is defined primarily by GOM decentralization and good governance initiatives [including the recent Madagascar Action Plan (MAP)] complemented by donor-supported, multi-sectoral approaches supporting these initiatives. This last stage, Madagascar’s current situation, represents a quantum leap in the future potential for expansion in all four of the PE scale up dimensions.

Figure 1: Timeline for Stages of PE Scale up in Madagascar



Geographic expansion and temporal extension (or the potential for) characterize most of

the five stages; an increase in breadth of development initiatives linking FP to NRM and conservation characterizes some stages whereas increased institutionalization of efforts supporting linkages defines others. Many stakeholders at different levels across sectors have been involved in the different stages using both “bottom up” and “top down” strategies. “Sideways in” e.g., technical assistance from NGOs has also been a key and defining feature of all stages. While this story focuses on the conservation community’s role in helping to meet unmet need for FP, PE scale up has resulted from many partnerships as well as progress within the national FP program itself (see Annex 2).

Drivers of and constraints to successful PE scale up are referred to briefly within each stage and summarized in more detail over all stages in subsequent sections. A key factor differentiating Stages 1-4 from the last stage is the extent to which the GOM is driving changes. Government entities have always been key partners but *for scale-up to be more extensive and longstanding* (one of the common features defining “scale up” – see introduction) *requires an articulated common vision and coordinated public action*. The vision exists - articulated by the President in the form of national development policies and strategies. Coordinated action is “in progress”.

Stage 1: Community development around PAs: 1988-1999

Madagascar’s NEAP promoted the establishment of PAs as a strategy for conserving the country’s remaining NR base. The National Association for the Management of Protected Areas (ANGAP),¹⁷ with support from USAID, was established under NEAP’s first program cycle (EP1: 1991-1995) to set up and manage the country’s PAs in collaboration with the national Department of Water and Forests [18].¹⁸ Biodiversity conservation in these PAs and development assistance to surrounding communities from NGOs working in the area was given high priority during this phase. Pressure analysis was used to identify threats to the PAs and underlying causes. Activities to address the threats were then identified and supported in the form of integrated conservation and development projects (ICDPs), funded by USAID’s Environment and Rural Development office (Env/RD, then Natural Resources Office) and the World Bank. Six PAs around Madagascar were identified as ICDP target areas: Amber Mountain, Andasibe, Andohahela, Masoala, Ranomafana and Zahamena (Map 1).

The ICDPs aimed to protect the country’s unique biodiversity for conservation purposes as well as to help meet immediate socio-economic needs of communities adjacent to areas of biodiversity importance. These projects characteristically involved a limited number of communities and socio-economic interventions. An underlying assumption of the ICDP approach was that “local populations will alter destructive behavior if they see a relationship between their *economic well-being* to the conserved area and if they are empowered to make the right kinds of decisions” [19]. Under ANGAP’s oversight, a

¹⁷ In 2006, a System of Protected Areas of Madagascar (SAPM) replaced ANGAP and expanded the organization’s mandate to include supporting sustainable development in areas surrounding PAs so that local communities can benefit directly from conservation (see Stage 5) [<http://www.wildmadagascar.org/conservation/angap.html>].

¹⁸ Water, forests and the environment are now combined into one Ministry.

consortium of international conservation NGOs¹⁹ undertook ICDP activities in the six areas, supporting change in local populations that would lead to less environmental destruction. Creating economically viable income-generating alternatives for the people living in the area and capacity building of national NGOs were key strategies of the projects. Community stakeholder involvement was facilitated through use of participatory rural appraisals.

After project initiation, ICDP NGO operators working closely with local communities recognized a need for FP. They and the communities the projects supported were the drivers for adding this component to various ICDPs. In 1995, in response to this identified need, FP planning support was provided to three of the ICDPs in Toliara, Toamasina and Fianarantsoa provinces through the USAID-supported Madagascar Population Support Project (APPROPOP) (see Annex 3 for a more detailed description of USAID support to both sectors and to PE linkages over all stages). Two themes that linked the three projects incorporating FP interventions were:

- How to reach target populations in remote areas around the PAs to increase contraceptive use, and
- How FP interventions could contribute to improving the management and conservation of the country's NR base [20, 21].

Much has been written on the relative merits and limitations of ICDPs in Madagascar and worldwide [22, 23]. It is not the intention here to present or debate those positions but simply to acknowledge that, in Madagascar, much was learned from that early experience linking conservation and development, including FP interventions, aimed at increasing local community economic well-being. Specifically, it was during this stage that the importance of supporting development interventions in addition to conservation actions to achieve conservation outcomes was fully realized.²⁰

Stage 2: Landscape focus for conservation: 1997 – 2003

The products and activities of EP1 laid the foundation for NEAP's second phase of program implementation (EP2). A key lesson learned from the ICDPs, appreciated with guidance from the World Wildlife Fund (WWF) [24], was that conservation priorities also lay outside of PAs and therefore programs were not operating at a large enough "landscape scale" to ensure biodiversity conservation. Appreciation of this broader landscape perspective was critical to embracing a multi-sectoral, multi-level approach to conservation.²¹ It also drew attention to the need for a unified approach to community

¹⁹ The consortium was headed by the international organization PACT.

²⁰ Later, during Stage 5, the interdependency and importance of conservation to development outcomes including poverty reduction and economic development was more fully acknowledged.

²¹ WWF identified Global Ecoregions as a science-based global ranking of the earth's various habitats. Madagascar covers 7 of these ecoregions.

[http://www.panda.org/about_wwf/where_we_work/ecoregions/about/index.cfm]. This definition of ecoregion differs from that used by USAID to define its priority ecoregions for conservation and rural development programming (see Stage 5). Both definitions however refer to larger landscapes and ecosystems than previously considered as PAs in Stage 1.

development, incorporating NRM and agricultural intensification, to achieve conservation outcomes [17].

This change in perspective among conservation sector actors contributed significantly to the history of PE scale up in Madagascar. Many more communities are located in broad landscapes (defined as areas that link key biodiversity areas including national PAs), the geographically-enlarged conservation target, than in the more restricted ICDPs that only included communities adjacent or close to protected areas. *Specifically, the change from PA to landscape-level conservation, by definition, scaled up the level at which rural development efforts, including FP as an important socio-economic intervention, needed to occur to help achieve conservation and sustainable NRM outcomes.*

Around the same time, the national FP program and donor-funded projects supporting national efforts began expanding to rural areas to more rapidly achieve national FP and health objectives (see Annexes 2 & 3).²² Geographic priorities however for the national program were not necessarily near biodiversity-priority areas where absolute population size and density can be lower (despite traditionally higher average family sizes and natural population growth rates) compared to e.g. along transport routes or in rural towns. Traditionally, social service programs are not organized around landscape-oriented boundaries; rather, they follow government-defined administrative lines of authority. Thus, when the ICDPs ended, the history of linked PE efforts faced a new challenge.

While the ICDP experience underscored the value of linking social services including FP to conservation, as well as the importance of linking efforts at a larger, landscape scale encompassing many communities, *mechanisms for successfully coordinating social service efforts at the larger landscape scale were not concurrently worked out.* That is, recognition of the importance of landscapes as the relevant geo-spatial scale for conservation did not automatically translate into coordinated conservation and development action in the field at this enlarged scale. To the contrary, unlike during the ICDPs when FP and other health interventions were components linked in time and space in communities around select PAs (granted with limitations), in the late 1990s, no official or specifically-funded efforts linked Madagascar's FP and environment partners. Some linked efforts continued to be supported however by environment and FP/health partners in the field including local NGOs previously involved in the ICDPs, a new USAID-supported Landscape Development Interventions (LDI) Project²³ and USAID's new health bilateral Jereo Salama Isika (JSI)²⁴, when funds and logistics permitted (see Annex 3 for more details). Stage 2 was thus characterized by an understanding of and advocacy about the increased geographic scale at which PE integration needed to occur to achieve meaningful conservation results, coupled with PE efforts by the parties noted above, rather than any wide-scale systematic change in linked efforts in the field.

²² After the 1997 DHS, the GOM realized that national improvements in FP were not being made. Therefore, in 1998 the Ministry of Health (MOH) made a move towards getting FP services to increased numbers of rural citizens through a more decentralized approach.

²³ LDI was managed by Chemonics International.

²⁴ The JSI Project went from 1999-2003 and was managed by John Snow International Research and Training (JSI R&T).

Stage 3: PE expansion to other domains: 1999 – 2004

Incorporating FP into ICDPs was initially conceived as a means of addressing the negative effects of population growth around PAs. As the ICDPs rolled out, the health benefits of FP (promoted through the APPROPOP Project and the MOH) received more emphasis as implementing NGOs appreciated that addressing immediate community health needs helped build trust and “open the door” for the introduction of other technical domains [25]. While various health interventions had been included as social service/development components of a number of the ICDPs, over time it became increasingly evident to implementing NGOs that *various* health interventions were critical to community socio-economic development, one of the key aims of the ICDPs.

In fact, the ICDP experience and early EP2 efforts among USAID-funded partners such as LDI (in collaboration with JSI) revealed that, in poor rural Malagasy communities, broader public health interventions that addressed basic human needs were needed *before* other development activities could be supported.²⁵ If improved health care did not occur in these remote areas, experience suggested that other elements of rural development were less likely to unfold [26]. For FP to be better perceived and received, various actors felt strongly that it had to be introduced as part of a broader health promotion initiative.²⁶ These perceptions and lessons learned led to targeted efforts by a number of health and environment partners to seek funding for a variety of public health interventions, including but not limited to FP, in communities near threatened conservation landscapes.²⁷ It was at this juncture in Madagascar’s scale up story, in the late 1990s, that health as a distinct community development need became more strongly emphasized within the framework linking population and environment efforts. This and other factors led to increased use of the term Population – Health – Environment (PHE) by many to describe efforts aimed specifically at addressing broader health outcomes e.g. infectious disease control through immunizations and hygiene and sanitation interventions - in addition to the health and demographic benefits conferred by FP - within the context of sustainable NR use in communities near biodiversity priority areas.

Two initiatives in particular defined this stage of Madagascar’s “scale up”. One, the Environmental Health Project (EHP) was funded through USAID/Washington’s Global Health Bureau (see Annex 3 for more details). A component of EHPII (1999-2004) focused on providing monitoring and evaluation support to document the synergistic efforts of linked interventions in the field. At the start of the project, planners traveled to Madagascar and observed that a number of organizations were supporting linked interventions addressing community development needs around critical conservation

²⁵ The need for health interventions was identified by communities themselves during rapid rural appraisals conducted early in the EP2 process by LDI [26].

²⁶ Many still maintain this position, based on years of experience working with rural communities. This poses a challenge when funding for PE efforts is restricted in terms of the range of activities/domains to which the monies can be applied.

²⁷ This position was facilitated by the fact that USAID’s health bilateral, JSI, had a comprehensive health focus including but not limited to FP whereas the APPROPOP project had a targeted FP focus.

areas. These organizations represented a variety of domains including conservation and health/FP as well as agriculture, food security and general rural development, among others. This observation and suggestions from actors on the ground²⁸ led to the establishment in 2000 of a Malagasy association, Voahary Salama [(VS) “human health and all that is natural” in Malagasy]. It was established as a platform for bringing together implementing organizations as well as government entities and donors embracing a common vision [27].

For VS members, a common geographic focus was biodiversity priority areas. Collectively, VS NGO members worked in over 120 communities in 35 communes, reaching approximately 120,000 people [27]. As an assemblage of organizations, however, decisions regarding which specific communities or in which priority landscape areas organizations worked were influenced by a myriad of factors including the affiliated government agency and donor priorities as well as organizational capacity, mandate and historical presence, among others. This meant that even for those actors united under the umbrella of VS, geographic PE expansion during this phase was not particularly strategic. Rather, it was defined more by increases in the number of communities benefiting from linked PE or PHE interventions as a consequence of more local organizations becoming involved and/or the same organizations expanding their efforts near identified priority landscapes.

PE/PHE linked activity among VS members was supported through a variety of mechanisms. For example, some members had monies specifically to implement linked projects; others obtained funding from different sources which they themselves brought together to ensure linked efforts and for some members, linkages were funded through Title II²⁹ or rural development projects. An important *unifying* philosophy of VS partners was the importance of work at the community level. Different strategies for effectively linking the population, health and environment domains and engaging stakeholders at the community level were tested and/or promoted by VS and its members. One such strategy was the “champion community” approach.³⁰

²⁸ The University of Michigan fellow involved in managing APPROPOP support to ICDPs was instrumental in pointing out the role for such a Malagasy organization. A second U of M fellow, posted to the Moramanga area, helped strengthen VS as an association and linkages in the field between health and environmental partners.

²⁹ Title II is a food security program set up by congressional mandate under PL480. Organizations that receive funds through this mechanism aim to enhance food security, viewed as a “critical step towards general development objectives of poverty alleviation and sustainable, broad-based economic growth” [36]. Three organizations in Madagascar are recipients of Title II funds, CARE, Adventist Development and Relief Agency (ADRA) and Catholic Relief Services (CRS). Achieving food security in Madagascar, as in other countries, requires consideration of a range of factors (ecological, agricultural, economic and social) and therefore such programs, by nature, are integrated. Two of the three Title II organizations incorporate FP as part of their overall programs, monies for which at times are supplemented through different sources (see Annex 3).

³⁰ This approach derived from experiences in-country with the USAID-funded child survival project, Basics Support for Institutionalizing Child Survival (BASICS). It was subsequently applied, in collaboration with the MOH, by USAID’s health bilateral JSI and the USAID centrally-funded LINKAGES Project supported by the Academy for Educational Development (AED) (see Annex 3).

A champion community was defined by achieving select basic development results, identified by the community itself, such as increased vaccination rates, increased understanding and/or use of FP and refraining from burning land for grazing or slash and burn agriculture. Key aspects of the approach (contributing to its continual application as part of Madagascar's scale up story) include community engagement in:

- identifying its needs;
- agreeing on *feasible* activities to undertake, given available resources (small, do-able actions) within a specified time frame;
- measuring ongoing progress through use of monitoring tools;
- measuring final achievement of results committed to, through a transparent and participatory evaluation; and
- public celebration of results achieved [28, 29].

In 2000, a unifying conceptual framework focusing on Household Food Security and Livelihoods was established as the basis for a quasi-experimental evaluation research study undertaken by EHP in collaboration with VS and the Institut National de la Statistique (INSTAT) [27].³¹ The evaluation aimed at quantifying the impact of and synergies realized by VS member activities. This framework recognized the interrelatedness among biodiversity conservation, habitat and environmental degradation, agricultural productivity, human productivity, health and family size and the central role of crop yield, food security and nutrition.

The second important initiative defining this stage, funded through the David and Lucile Packard Foundation, was the Madagascar Green Healthy Communities (MGHC) Project.³² The project was envisioned as a way to help achieve equilibrium between population growth, economic growth and use of NR. It contributed to the establishment and growth of VS as well as supporting some VS implementing member organizations among other objectives (see Annex 4 for a brief summary). Over the life of the project it operated in 100 communities in 33 communes reaching a population of 88,000. Of importance to Madagascar's scale up story, the project (and various VS member organizations) also supported income generation activities. *This reflected evolution in thinking at many levels and in many sectors within Madagascar at that time regarding the interdependence of conservation, rural development and overall national economic development.* Scale up in Stage 3 was thus characterized by expansion in the breadth of domains incorporated into efforts to help meet unmet need for FP while addressing rural food security and promoting sustainable livelihoods, NR and conservation.³³ The history of PE scale up in Madagascar after this reflects the advantages and challenges of incorporating additional domains to the already fairly complex conceptual underpinnings and operational feasibility of linking population and environment initiatives in rural areas of the country.

³¹ INSTAT is the GOM's national statistical institute.

³² The project lasted from 2001-2007 and was managed by JSI R&T.

³³ The JSI project incorporated FP with other maternal and child health (MCH) initiatives which helped set the stage for linking various health interventions in project areas.

Stage 4: Increased depth of PE programming experience: 2003-2007

An initiative that contributed to “scale up” in Madagascar during this next stage involved funding from USAID/Washington’s Office of Population and Reproductive Health (PRH), Policy, Evaluation and Communication (PEC) Division to two international conservation organizations, active in Madagascar for a long time: Conservation International (CI) and WWF. More recently, in 2005, a third conservation organization, Wildlife Conservation Society (WCS), also active for many years in the country, became a USAID PHE project partner.³⁴ The projects are designed to increase access to and use of FP to support national MOH goals while also improving livelihoods, NRM and conservation around priority biodiversity areas. Recognizing the importance in Madagascar of incorporating health as a specific component, over and above the health and demographic benefits of increased FP use, the projects are funded as PHE efforts and incorporate a number of activities addressing select health problems (e.g., nutrition) in focal landscape areas.

The projects all involve strong partnerships with health and/or rural development organizations that contribute to project implementation. For example, WCS is working with Project Services International (PSI)³⁵ in collaboration with CARE to expand their social marketing efforts to include FP contraceptives in communities near the protected area of Makira in the far northeast.³⁶ WWF has a partnership with a Malagasy health NGO (and long-time VS member) Action Socio-Sanitaire Organisation Secours (ASOS), through which community-based FP linked to local health centers is being strengthened in the far south of the island near the threatened spiny forest. CI also works with ASOS (representing a different regional office) as well as another VS member, Mateza, to increase access to and demand for FP in communities around the Mantadia-Zahamena protected area³⁷ (see Annex 3 for more details on each project).

In addition to providing much-needed support to communities around designated landscapes, extending the length of project support for some communities and/or expanding the number of communities with support, these projects have contributed to PE scale up by engaging three conservation organizations very active in Madagascar *directly* in the oversight of FP projects. Characterizing this stage, this arrangement provided an opportunity for greater *depth* of understanding among the conservation sector actors involved regarding what effective partnerships on the ground with the health/FP sector mean and strategies for overcoming logistical challenges in the field associated with linking PE interventions in time and space.³⁸

³⁴ All three organizations were involved with ICDPs in Madagascar during Stage 1.

³⁵ For this project, funding goes through PSI although WCS is the main implementing partner on the ground.

³⁶ Makira was recently designated a new protected area under SAPM contributing to the President’s Durban Vision. By addressing FP and health needs of the community, among other efforts, this and the other two PHE projects help contribute to the GOM’s objective of increasing capacity of the local community to be active stewards of their local environment, as envisioned under the President’s Madagascar Naturally vision.

³⁷ This area is now referred to as Ankeniheny - Zahamena corridor.

³⁸ Project end date for the CI and WWF initiatives is September 2008.

Funding to conservation organizations to support FP interventions within the context of and coordinated with the organization's own conservation efforts provided a prime opportunity to explore important questions raised regarding linkages between conservation and development, discussed during various international conservation meetings including the 2004 World Conservation Union (IUCN) meeting in Bangkok:

- to what extent should conservation organizations be directly engaged in addressing poverty reduction and ensuring community development?
- to what extent are they capable of helping address such needs, given the talents and experience of their human resource base?
- what is the role of partnerships with the health sector and how do these work best?

PHE project experiences are helping to inform internal organizational dialogue related to the above questions as well as contribute to a better understanding of rural Malagasy community perspectives and cultural values regarding the relationship between fertility, family size, health, sustainable NR use and conservation. This in turn increases organizational potential to consider the role and importance of FP in achieving conservation outcomes. It also increases their potential to consider the contribution of FP's health and demographic impacts to larger goals such as poverty reduction and economic growth. Advocacy from within the conservation sector about FP's multiple benefits helps increase visibility of this important development intervention which, in turn, helps increase the potential for national and international FP support.³⁹

During this stage, USAID PHE program funds also supported PE advocacy by both Malagasy and US-based organizations which helped deepen understanding of and commitment to challenges and opportunities specific to Madagascar. This included, among other actions: i) continued support to the University of Michigan and a third PE fellow,⁴⁰ ii) support to the Population Reference Bureau (PRB - see below), iii) support for VS central and member NGO staff to share program experiences at international fora, sponsoring a PHE workshop in Bangkok, timed to coincide with the IUCN meeting, and another one in Tanzania (to which various Malagasy representatives were invited) and iv) support for the author's PHE fellowship (matched with USAID/HNP funding) to help

³⁹A good example of this comes from the Sierra Club's Population and Environment Initiative [http://www.sierraclub.org/population/international_planning.asp].

In addition to their US-based advocacy work, a group of Sierra Club staff and volunteers visited Madagascar in November 2005 to show their support to the three PHE projects, to share perspectives and to increase their understanding of the issues. This experience provided the basis for trip participants to more effectively communicate to others the relationship between FP, NR use and conservation especially in the Madagascar context. An article describing their field visit was published in 2006 in the Sierra Club magazine [30].

⁴⁰ Since 2006, this program has been managed through the Public Health Institute (PHI) under their USAID-funded Global Health Fellows Program. A third PE fellow, based in Fianarantsoa, focused on building institutional capacity of the three VS NGO members based in the area and maintaining integration as a focus of the USAID-funded Fianarantsoa Ecoregional Alliance (see Annex 3).

strengthen operational PHE linkages and understanding of conceptual underpinnings (working from a central office/Antananarivo position).

Stage 5: Institutionalized scale-up through decentralized multisectoral planning: 2003 – present

This last stage characterizing Madagascar's PE "scale up" is characterized by expanded geographic and temporal scales at which linkages can occur as well as expanded content breadth and depth of experience. Specifically, it reflects both an increased understanding of the importance of a multisectoral approach and the increased capacity of government structures at multiple levels to support and engage in linked planning and action. It dates from early post-millennium years and is still in progress. .

Madagascar's Strategy for Poverty Reduction (PSRP), initially elaborated in 2000 and supporting the Millennium Development Goals (MDG), aimed to reduce national poverty levels by the year 2015 by half (from 70% to 35%). After President Ravalomanana's election in 2001,⁴¹ attention was focused on reorienting the country's poverty reduction strategy to better ensure achievement of this goal. The underlying principle was a public/private partnership in which good governance, economic growth at a larger scale, and expansion and improvements of social services were the major strategic axes [31].

In September 2003, at the Durban World Parks Congress, President Ravalomanana announced his "Durban Vision" which aims to increase by three times the amount of land under protected area status in Madagascar, from 1.7 to 6 million hectares over five years [32]. In November of the following year, 2004, the President presented his vision for development and achievement of poverty reduction goals for the country, "Madagascar Naturellement". Of relevance to this case study, his Madagascar Naturally vision acknowledges that Madagascar is rich in biodiversity and that this biodiversity is critical to the country's future economic growth [33].

In December 2004, the GOM presented its "Politique General de l'Etat 2005" proposing a number of national programs to achieve poverty reduction, as spelled out in the PSRP and based on the President's Madagascar Naturally vision [17]. 2004 is also the year during which a national workshop was held to reposition FP. During that event, the President made a commitment to ensuring improved access to FP and to personally guiding the repositioning of FP in Madagascar. The National FP Program for 2005-2009, a forward-thinking African initiative, further spells out how reductions in the TFR to balance demographic increases contribute to more effective national economic development [34].

A series of laws developed in the 1990s laid down the decentralization process, transferring authority, responsibility, and resources from the central to independent local governments (elected by their constituencies and accountable to them). It wasn't until 2004, however, that tangible progress towards realization of these laws gained

⁴¹ Due to the political crisis after the election, between Nov 2002 and July 2002, Presidential initiatives really only gained momentum after July, 2002.

momentum. In 2005, a National Program on Decentralization and Deconcentration was established by which the Ministry of Decentralization and Land Use Management (MDAT) was made responsible for ensuring coordination of actions to address poverty reduction in rural areas.⁴² One strategic axe of the program was capacity-strengthening of communes and regions⁴³ as administrative units.⁴⁴

Donors in Madagascar such as the European Union (EU), through its ACCORD project, have lent support to decentralization and strengthening of the commune and regional development planning processes.⁴⁵ With decentralization progressing to empower lower administrative levels, over time it will be easier for the government to coordinate where the various development sectors are working, for how long, and for what purpose. Clearly, wherever the interdependence between sectors is considered in establishing community needs and assets and where linkages between sectors are reflected in local development plans, PE “scale up” has greater *long-term potential*. As decentralized planning becomes the basis for program priority setting and resource allocation, linkages between sectors (including support to FP in communities around biodiversity rich areas) can become more “institutionalized”. *A key challenge is to keep currently or recently-funded PE efforts ongoing through this transition to effective decentralized planning.* Another challenge is educating and helping build capacity at the local planning levels to ensure that successful site-based efforts continue over time.

The President’s vision to expand protected areas three-fold to include land *outside* existing PAs further increased the geographic scale at which integration could and should occur. His “Madagascar Naturally” vision raised national awareness of the interdependence between rural development and conservation and his leadership in and commitment to FP highlighted the importance of FP to national development objectives. The latter further expanded the potential depth and breadth of how efforts to address unmet need for FP could help meet health, sustainable livelihood, conservation and country economic development goals.

USAID/Madagascar’s 2003-2008 Strategic Plan supported the GOM’s decentralization initiative and aimed to substantially increase the scale at which development and environment including conservation outcomes could be realized. For example, USAID’s Health, Population and Nutrition (HPN) office increased the scale at which its public health and FP interventions (both contributing to national development) would have impact by focusing on commune (in addition to national) level programming (see Annex 3 for more details including a description of the various FP efforts supported by USAID over the years). The champion community approach, described earlier, was adapted by USAID’s 2004-2008 health bilateral project, SanteNet, to engage commune (or county) level actors, to ensure their commitment and support to address community level needs.

⁴² In 2007, this ministry was named the Ministry of the Presidency of the Republic for Decentralization and Land Use Management (MPRDAT) [35].

⁴³ Currently there are 22 regions.

⁴⁴ Fokotany, the smallest administrative unit incorporating several villages and outlying hamlets, are now the main focus for local development under the country’s Madagascar Action Plan (see below) [35].

⁴⁵ USAID is also supporting this through support to MDAT commune support centers (see below).

The “scaled up” approach was called Champion Commune [Kaominina Mendrika (KM) in Malagasy]. The approach can be used to help communes achieve results in any domain and USAID’s Environment and Rural Development (Env/RD) office also identified KM as one among various strategies it supported for commune level programming.

The KM approach is similar to the champion community approach except it also engages actors at a higher, more aggregate administrative level – the commune. It is a means of facilitating large-scale and long-lasting behavior change by helping communes to:

- focus on and prioritize key development needs,
- set realistic objectives and identify ‘do-able’ actions to be implemented within a specified time-frame to yield measurable results,
- engage key actors within the commune to ensure their commitment and assistance to achieve the agreed-upon results,
- empower the commune to monitor its own progress in a transparent way and evaluate achievement of agreed-upon results, and
- jointly celebrate [37].

The approach aims to reinforce the central role of the communes in their own development. Expansion to the commune level using this approach was initially successfully tested during the latter part of the Packard-funded MGHC Project as decentralization was beginning to gain momentum (see Annex 4) [37].⁴⁶

USAID/Madagascar’s 2003-2008⁴⁷ Strategic Plan for the environment and rural development also aimed to increase the scale of program results. A broader, more regionalized landscape approach to conservation was promoted that emphasized:

- conservation of critical natural resources such as watersheds that provide important ecosystem services to communities and beyond, through various land use management strategies, and
- regional economic development and poverty reduction [17].

The broader approach emphasized sustainable NR use to conserve biodiversity as well as a means of empowering and elevating people out of poverty [37]. A key feature of the plan was a more holistic approach to forest ecosystem management to more effectively address the problems of the local Malagasy people. To work more “at scale”, considering key landscapes and GOM decentralization policies, “Ecoregional Alliances” were established in three areas of the country (see Annex 3 for more details). These alliances encourage cross-sectoral dialogue and planning among USAID supported partners

⁴⁶ SanteNet now also supports a Mendrika approach at the urban town and district levels illustrating that the underlying principle can be applied at any level to motivate to achieve progressive and sustained success.

⁴⁷ Subsequent to restructuring within USAID, in 2006 USAID Madagascar developed a 2006-2011 country strategy with the goal of “Sustainable and Inclusive Economic Development” comprised of three program areas (HPN, Env/RD and Democracy and Governance). [<http://www.usaid.gov/missions/mg/about/overview.html>]. That 5-year strategy builds on the previous USAID programs described in this document.

(including the three Title II cooperating sponsoring organizations⁴⁸ and SanteNet) as well as among other local stakeholders.

To facilitate greater understanding of the interrelatedness between sectors and cross-sectoral dialogue both within and outside of the three USAID alliance partnerships, a framework was elaborated by the USAID mission in 2005 called Nature, Health, Wealth and Power (NHWP). It was adapted from a similar framework used in West Africa⁴⁹ but differed in that health was included as a specific component (see Annex 3 for more details) [38, 39]. Subsequently, work among USAID Ecoregional Alliance members was organized around this framework which helped draw attention to the multi-dimensional aspects of their efforts and where interventions would be more effective, if coordinated in time and space. Where commune level work was a joint focus, the KM approach was identified as a useful way of linking FP (among other health/development interventions) with NRM and conservation within this framework.⁵⁰

In 2006, the KM approach was introduced to the MDAT to consider as one among a number of options for engaging community members and commune leaders in their own priority setting for development. That same year, the MDAT established the idea of “centers of support to communes” (CACs) to help ensure effective transfer of responsibility and consistency between national and sector-specific policies and between regional and communal development plans. Organizations were invited to support a CAC as a means of assisting with decentralization goals. Encouraging organizations involved in or experienced with linked PE field efforts to offer support to one or more CACs,⁵¹ and/or helping ensure FP is reflected in updated or new regional and commune development plans, are ways of increasing sustained attention in the longer-term to unmet need for FP in communities surrounding biodiversity-rich areas in the country.⁵²

In 2006, the GOM introduced a new park management system, the System of Protected Areas of Madagascar (SAPM). The system was designed to simplify the legal process of creating new PAs and ways of supporting land use management around PAs that contributes to sustainable development and poverty reduction (Map 2). That year, the GOM also established a Madagascar Action Plan (MAP) for 2007-2012 which outlines a

⁴⁸ Given that the rural economy is mostly agricultural based and that these programs have an agricultural component, there was an obvious place for these Title II organizations within the USAID Ecoregional Alliances. Their projects provide an additional means of reaching remote communes, some of which are located close to biodiversity priority areas.

⁴⁹ The NWP framework was developed by International Resources Group (IRG) with support from USAID/Washington’s EGAT Bureau.

⁵⁰ With ERI project assistance, the Koloharena have integrated use of KM for their own annual planning process. They have also become central actors at the commune level in defining the contributions of farmers to KM objectives and in successfully achieving development targets [46, 63, 64].

⁵¹ USAID’s Ecoregional Initiative (ERI) project has been providing considerable support to this effort (see Annex 3).

⁵² A good example of this is ADRA that agreed in 2006 to support a CAC in a region of Madagascar where they have actively worked for years to increase food security and rural development. ADRA also receives funding to support FP in a number of communes, some of which are priorities for landscape conservation in the area. They invited VS to help them with their CAC effort. USAID’s ERI project also has been actively supporting the creation of CACs and strengthening of its structures [63].

plan for rapid development. It is intended to help the country reach national economic goals as well as its MDGs [40]. The MAP is a bold 5-year plan to accelerate and better coordinate Madagascar's development process. It contains commitments, strategies, actions, indicators and targets that clearly outline a pathway towards "transformation". Of the 8 commitments contained in the plan, one focuses on "cherishing the environment", one on "rural development and a green revolution" and another on "health, FP, and HIV/AIDS". By incorporating the environment and FP as specific commitments, this latest action plan ensures that these domains will continue – until at least 2012 - as national development priorities.

Of importance to this study, in the plan's introductory Presidential message, he notes that the MAP establishes directions and priorities leading to poverty reduction in accordance with the national vision (Madagascar Naturally) and the UN's MDGs. He also notes that the MAP establishes the need for strong cooperation to "create a comprehensive health sector that aggressively addresses family planning" [40].⁵³ To achieve the latter, one of the MAP's Breakthrough Reform Initiatives focuses specifically on new measures for health and family planning.

Given the MAP's 8 commitments, the country's decentralization policies and donor support to strengthen commune and regional planning, the stage is clearly set for "population and environment interventions, more coordinated in time and space, to achieve outcomes beneficial to both domains as well as to overall national goals of poverty reduction and economic growth" (see definition of integrated in the introduction section). An ongoing challenge remains translating these national level commitments and policies into action in the field that sustains ongoing site-based PE projects and allows for expansion in all four scale-up dimensions, consistent with resources and need.

⁵³ One of the stated rationales underlying this initiative is that Madagascar's "population rate is increasing too rapidly and that family size needs to be reduced" [40].

MAIN ACTORS

The list of who has contributed to scaling up of efforts to meet FP needs to also support sustainable NRM, livelihoods and biodiversity conservation in Madagascar is impressively long. Groups of actors that have contributed in a substantial way to one or more of the five stages are listed below with a brief synopsis of their contribution.

Government of Madagascar

Key among those who have contributed to the potential for scale up, particularly in the past 5 years, is the Malagasy government including both the health/FP and environment sector ministries and the President of the Republic. Through its various development policies and plans, the central government is defining what integration, linkages and/or cross-sectoral initiatives mean in the Malagasy context. Within the past few years, reflecting progress in decentralization and assistance from donor-funded projects, commune and regional administrative heads in select geographic areas have assumed a greater leadership role in terms of interpreting what linkages should look like in rural Madagascar and promoting cross-sectoral linkages in the context of local economic development.

Donor community

Another key actor has been and remains the donor community. In particular, the Env/RD, HPN and Title II programs within USAID/Madagascar have acknowledged sector “interdependence” and promoted cross-sectoral planning and implementation for many years (see Annex 3). Various USAID/Washington programs have also actively supported PE scale up in Madagascar including the Global Bureau’s Infectious Disease Program (e.g., EHP), the PRH Office’s Flexible Fund Project (e.g., support to VS and a number of local implementing NGOs) and the PRH Office’s PHE Program (e.g. support to CI, WWF, and WCS/PSI projects, to PE/PHE fellowships and to various advocacy efforts). Among other actions relevant to PE scale up, USAID/Washington’s Economic Growth, Agriculture and Trade (EGAT) Bureau supported the Nature, Wealth and Power (NWP) initiative which, in Madagascar, incorporates a health domain (NHWP) that includes FP as one key component of health.

Other multi-lateral organizations including the United Nations Population Fund (UNFPA) and the World Bank have provided support to FP/health or NRM/conservation interventions at different levels over different time periods. This sector specific-support has directly contributed to improvements in those sectors, which in turn, affects the potential to scale up linked interventions. As noted above, current support to the GOM from the EU, among others, is helping to strengthen decentralization of the governance process which contributes to the potential for scale up through that mechanism. Contributions of a few private foundations, particularly the Packard and Summit Foundations (the latter through the Malagasy organization Tany Meva – see Annex 3) have allowed for flexibility and experimentation in making PE operational linkages in the field at critical time periods in the past [2, 41].

Non-governmental implementing organizations

Many organizations, local and international, have contributed and continue to contribute to helping Madagascar achieve its environment sector goals [18]. This story acknowledges the efforts of all those organizations but, given the story focus, emphasizes the subset of those organizations also supporting efforts to meet unmet need for FP. Similarly, various health organizations, international and local, have appreciated the importance of expanding FP access to isolated rural communities, both to increase equity and improve rural health as well as a means of promoting greater balance between NR use and local demographics. *The above two groups of NGOs have been a key driving force behind the evolution from Stage 1 through Stage 4 of PE scale up in Madagascar.* Actual linkages in the field would have not occurred without their collective and sustained effort.

Non-governmental advocacy organizations

A number of US-based international organizations [e.g. PRB, U of M, Population Action International (PAI)] have contributed substantially to strengthening capacity to advocate more effectively for the benefits of linking PHE and/or have supported advocacy efforts nationally and internationally related to this theme (see below). The establishment of VS as a Malagasy advocacy platform constitutes one among a number of defining historic features of scale up efforts in Madagascar to address unmet need for FP and unsustainable NRM practices around geographic areas of biodiversity importance. Key actors associated with this include those who actively advocated for such a Malagasy platform as well as its member and partner organizations.⁵⁴

⁵⁴ As conceived, VS served to bring together other local Malagasy as well as international NGOs, government and donor organizations with a common vision (“healthy people, living in a healthy environment using local natural resources in a sustainable way”). The platform provided a way of sharing information among organizations experimenting how best to engage and mobilize communities towards this vision. It also provided a means of more efficiently providing technical training, including in FP, in a standardized way, to organizations with a common vision but with different mandates, strengths and geographic coverage. Its actions, including those of its member organizations, contributed especially to Stage 3 of Madagascar’s PE scale up story. The organization continues to evolve in response to changes in national and local priorities as well as funding opportunities.

DRIVERS OF SCALING UP

National and international policies and program-related decisions

National and international policies and political decisions over the years have strongly determined the pathway that scale up in Madagascar has taken through the five stages. For example, the establishment in 1990 of a national population policy officially recognizing the benefits of FP and the need for expanded FP activities set the stage for all future FP related activities in the country. The ministry's decision to integrate FP into its MCH program further demonstrated GOM commitment to FP. The 2003 Presidential decree which renamed the Ministry of Health to the Ministry of Health and Family Planning (MOH/FP) similarly sent out a strong message regarding the importance of FP to the national development agenda.⁵⁵

An early key national policy that established the framework for efforts aimed at arresting environmental destruction and reducing rural poverty was the 1990 national environmental charter, operationalized as the NEAP. *This policy clearly states that the environment is a priority of the state and that one of the principal structural causes of environmental degradation is the disequilibrium between demographic and economic growth* [44]. A Presidential decree in 2002 outlawed fires and a subsequent national environmental initiative “Green Communes” (Kaominina Maitso), developed by the General Directorate of Water and Forests (DGEF), rewarded communes that respected the “zero fire” decree and initiated reforestation.⁵⁶

The President's 2003 “Durban Vision” and 2004 “Madagascar Naturally” vision provided a new roadmap for biodiversity conservation through emphasis on the importance of biodiversity and sustainable NRM to rural development, in turn, essential for national economic goals. In 2005, the GOM, CI and WWF jointly established the Madagascar Protected Areas and Biodiversity Foundation as a source of sustainable financing to help achieve this vision.⁵⁷ The GOM's 2007-2102 MAP is the latest forward-looking national planning document aimed at ensuring that “all Malagasy people are healthy and can contribute productively to the nation's development in accordance with Madagascar Naturally and UN Millenium Development Goals”. Of particular relevance to this study, among other goals, it aims to ensure that the average family size of Malagasy people will be reduced as a means of supporting overall economic growth [40].

⁵⁵ The name of the MOHFP was revised again in 2007 to include Social Protection (MHFPSP).

⁵⁶ Kaominina Maitso has not reduced all fires but established a commune-level framework for environmental protection, consistent with progress towards decentralization [45]. The initiative still exists and discussions were held between USAID, USAID implementing partners and DGEF in 2006 to consider how that approach and the Kaominina Mendrika approach might work in complementary ways in communes where both were being considered. Evaluation to verify accomplishments and support for commune level rewards in recognition of achievements (and as an incentive) are common elements to both initiatives.

⁵⁷ CI's Global Conservation Fund (GCF) and other donors including the Agence Française de Développement, Fonds Français pour l'Environnement Mondial and Kreditanstalt für Wiederaufbau assisted with this important financial sustainability effort [<http://www.conservation.org/xpCIWEB/regions/africa/>].

USAID/Madagascar recognized early on that the country's high rate of population growth was a major contributor to the country's low standard of living [46]. This manifest in the establishment of a specific sub-goal "Balancing Population Growth and NR use" in USAID's 1992-1998 Country Strategic Plan. This sub-goal established the programming context within which USAID support to national FP, environment and rural development goals could be linked during that program period. The decision by USAID/Madagascar's Env/RD and HPN offices to include a common Strategic Objective (SO) indicator related to FP in conservation priority areas in their respective 2003-2008 results frameworks further emphasized their belief in the value of linking these domains. This opened the door for projects funded through these two programs to find ways to work together towards achieving this shared result.⁵⁸

A decision by the United States (US) government influencing scale-up in Madagascar was the appropriation of funds to "support family planning and reproductive health (RH), including in areas where population growth threatens biodiversity or endangered species". This directive, first introduced in 2001 by the US Congress, was renewed subsequently and in 2003 additional language from the US Senate similarly urged USAID to undertake FP/RH in such regions [42]. On top of allowing for funding, this decision sent out a strong message regarding the importance of FP to biodiversity conservation which, in Madagascar, is closely linked to overall rural development and national economic growth.

Some of the above policies and programs specifically called for operational linkages at the field level between NRM/conservation and FP/health which helped produce or support "site-specific" projects. Others helped establish the broader foundation for integration, recognizing FP, biodiversity conservation and sustainable NRM all as critical elements of rural development, poverty reduction and economic growth. Such recognition does not necessarily translate into coordinated PE activities at the field level but at least provides a rationale for multisectoral planning as the basis for sustainable rural development.

Dedication of local partners

Past experimentation linking population and the environment produced a group of local NGOs with hands-on experience in the specific challenges and advantages of linking FP with NRM and conservation initiatives. These organizations work directly with local communities so have a deep understanding of their needs and how linked efforts better meet these needs. Despite the challenges of working in remote areas, with unstable funding and other constraints, these organizations continue to pursue avenues to help these communities break out of their cycle of poverty, some with more success than

⁵⁸ The principle underlying this sub-goal was that an "integrated population-environment approach would lead to stabilization of the population and eventual decrease in high population growth rates, reducing pressures on the NR base. Health-environment linkages on the other hand were defined as improved NRM activities that contribute to improved food security that leads to healthier and more productive families and vice versa. Within watersheds, a direct relationship exists between watershed land management, improved water quality, increased supply of potable water for and the health of rural populations [USAID/Madagascar 1992-1998 Integrated Strategic Plan: Attachment C/Scope of Work].

others. Their collective dedication to multisectoral development (including FP) in rural communities near biodiversity priority areas, linked in time and space, is what has made implementation at larger scale possible. For some, their commitment to linking PE has been fortified through membership in the VS partnership. Belonging to a larger Malagasy advocacy group in particular has helped some smaller, local NGOs to have a voice, successfully solicit funds, and expand their experience base.⁵⁹ Some, however, still face considerable challenges in terms of technical and management capacity.

The success and expansion of the Malagasy “Koloharena” (farmer) movement, especially in communes around protected forest corridors, is an example of how local partners have helped drive scale up. As Madagascar is a predominantly agricultural nation, these associations (federations and confederations) play a key role in reducing population pressure through increasing agricultural productivity and engaging in “environment-friendly” agricultural techniques (among other actions). Their embrace of the NHWP framework and partnership in the KM process (identifying relevant “green” and “white” star indicators) helps ensure local ownership of and commitment to approaches that support linked interventions at the *operational* level.⁶⁰

Sense of urgency and commitment among conservation actors

Every year approximately 1% of Madagascar’s remaining forested areas is destroyed. With it, more of the island’s plant and animal species found nowhere else on this planet are lost. This loss profoundly affects conservationists and other world citizens and a multitude of dedicated organizations work at the local, national, regional and global levels to bring attention to this tragedy. Their dedication to stopping future forest (freshwater and coastal marine) loss and regenerating previously forested areas throughout the country helps drive efforts to increase the scale of any and all interventions with the potential for positive conservation outcomes.⁶¹

⁵⁹ In a number of other countries in sub-Saharan Africa, advocacy organizations such as women’s groups have operated for many years to bring attention to “questions of public interest” that are not being adequately addressed by the government. In Madagascar, such an advocacy movement is relatively young. Strengthening of local capacity to voice collective needs is an objective of the current government, supported by various donors (e.g. the previously USAID-funded Misonga Project managed by PACT).

⁶⁰ From an initial number of 50 Koloharena associations they number now more than 1000 in more than 30 communes around 2 forest corridors [64].

⁶¹ According to a 2005 study, such commitment by the international organizations has contributed to measurable positive conservation outcomes in the form of lower rates of deforestation rates during the 1990s within PAs managed by international organizations as compared to areas with no formal management schemes (or areas managed by ANGAP). Reasons cited for this difference include greater funding and management capability during that decade among the managing international organizations (e.g. WWF, CI, WCS) (Sommerville M 2005. Chapter 3: Protected Areas, Buffer Zones and High Conservation Value Areas: Do Madagascar’s Reserves Deliver? Unpublished dissertation; Environmental Change Institute, Oxford University).

Conviction among the greater FP community of the value of linkages

Various international conferences over the past decade brought increased attention to the links between poverty and total fertility and between population policies and economic development and to the relationship of all these to NRM practices and conservation.⁶² Numerous FP advocates have taken the conference messages to heart and have looked for ways to actively link FP with other interventions including conservation. Given Madagascar's profile as a biodiversity "hotspot", one of the world's poorest nations, with one of the highest population growth rates and high maternal and infant mortality, it became a logical priority target country for experimentation on how to best operationalize linkages. This has translated into funding from numerous FP sources (albeit at times with gaps) for innovative linked projects or activities over the years.⁶³

Strong and varied advocacy

The fact that Madagascar is a country with irreplaceable natural wealth alongside disturbing levels of human poverty has gained world attention through advocacy in many forms, by many organizations. Some, particularly in the FP/health sector, have addressed the connection by focusing on PE or PHE linkages.⁶⁴ Advocacy within the environment sector considers a broader picture, addressing NRM/conservation objectives in the context of good environmental governance, improved livelihoods and overall rural development.⁶⁵ Collectively, these advocacy efforts have helped maintain a high external profile for Madagascar as a country moving forward but still very much in need. This, in turn, has helped to secure funding at times specific for PE linkages (e.g. Packard's

⁶² For example, international conferences in the 1990s (e.g., International Conference on Population and Development and the Rio Earth Summit) helped frame the dialogue and encouraged experimentation in linked initiatives.

⁶³ As described under Stage 4, US congressional language in the 2001 Foreign Operations Bill mandated funding under Child Survival and Health Program Funds to support "FP/RH, including in areas where population growth threatens biodiversity or endangered species" [42]. Madagascar benefits from three country projects funded in response to this language covering three threatened biodiversity-priority areas.

⁶⁴ PAI for example became active in the early 1990s researching and publishing documents explaining links between population and NRM. In 1998, the program published a book "Plan and Conserve: A Source Book on Linking Population and Environmental Services in Communities" in which they articulated the principles behind "community-based population and environment", drawing on experiences of projects initiated in the early 1990s in Latin America and Africa (see PAI website for a full list of PE related documents; <http://www.populationaction.org/issues/environment/index.htm>). PRB has had an active PHE program for a number of years and has been instrumental in i) helping define what PHE means across the globe and ii) developing and maintaining a community of PHE practitioners. To that end, they have produced a number of practical references (see PRB website for full list; <http://www.prb.org/Topics/Environment.aspx>) and facilitate workshops where practitioners share experiences. The U of M has contributed substantially to the growth of the PE initiative by supporting PE fellows which increases the pool of professionals with hands-on field experience. Madagascar has benefited from three U of M fellows over the past 7 years, all of whom have contributed substantially to scale up through their capacity-building support to local NGOs including VS and USAID implementing partners involved in linked interventions in communities around biodiversity-priority areas (PHI has also contributed by supporting the author as a fellow as well as the second year of the latest PE fellow). Additionally, the U of M supported training of VS partners in how to perform participatory rural appraisals, an approach employed by LDI and others as the basis for environmental project planning.

⁶⁵ Within the latter framework, population pressures resulting from high population growth rates are often considered an underlying or root cause [43].

MGHC project and three USAID-funded PHE projects) as well as sector-specific funding including, as appropriate, provisions for linkages.⁶⁶

⁶⁶ Examples of specific advocacy activities and products that have promoted population and environment linkages, some within the larger context of rural development in Madagascar include (partial list):

- Documentary DVDs:
 - USAID's "Madagascar: A New Vision"
 - JSI/LDI/VS's "The Champion Community Approach: Engaging Communities, Reinforcing Partnerships";
 - JSI/SAGE/VS' "Building Sustainability: The Champion Community Approach in Antsiranana"
 - PAI's "Finding Balance: Forests and Family Planning in Madagascar"
- Websites:
 - EHP: http://www.ehproject.org/phe/phe_projects.html
 - VS: www.voaharysalama.org
 - PAI : <http://www.populationaction.org/issues/environment/index.htm>
 - PRB : <http://www.prb.org/Topics/Environment.aspx>
 - UofM : <http://www.sph.umich.edu/pfpps/pubsresources/pe-docs.htm>
 - WWF : http://www.panda.org/about_wwf/what_we_do/policy/people_environment/pop_health_environment/index.cfm
 - CI: http://www.conservation.org/xp/CIWEB/programs/population/index.cfm?topic_id=1413&fuseaction=topics.categoryview&categoryid=A8374B58-65BF-E7DC-4FAA15117F5B45C2
 - International Resources Group (IRG)'s -FRAME: <http://www.frameweb.org>
- International conference or workshop presentations by VS, LDI, MGHC, Santenet (e.g. American Public Health Association, Global Health Council, PHE workshops in Thailand, Tanzania and the Philippines and a recent Madagascar Symposium in the UK)
- Conservation International's "Defying Nature's End" symposium, June 2006, examining how conserving Africa's biodiversity can help alleviate poverty, fight disease and improve the quality of life for Malagasy people <http://www.conservation.org/xp/CIWEB/regions/africa/>
- *Intermedias* in-country journal articles (supported, in part, through PRB)
- Study tours (e.g. Sierra Club)
- Journal or newsletter publications [e.g., 1, 21, 30, 46, 56, 61, 62, 64]
- Project reports and evaluations [e.g., 1, 2, 27, 28, 41, 49, 50, 51 52, 53, 54, 55)

OPPORTUNITIES AND ENABLING CONDITIONS

Support from the top

A key enabling condition that has helped drive the potential for scale up in the last 5 years is the fact that the President is an outspoken advocate supporting the goals associated with both sectors (and rural livelihoods). His “Durban Vision” communicates to all Malagasy citizens and the world the importance of conserving Madagascar’s unique biodiversity while increasing the geographic focus on remaining forested areas. His “Madagascar Naturellement” vision established a framework for what the Durban Vision means, how it can be operationalized and for updating the country’s Poverty Reduction Strategy to include FP as a specific development intervention.⁶⁷ The President’s Madagascar Action Plan is the most recent roadmap for achieving national objectives and his vision of “Madagascar Naturally”[48].

The President presided over the 2005 Repositioning FP conference and announced his personal commitment to ensuring universal FP access to all Malagasy citizens. High increases in FP in one area in the country were the focus of one of the President’s early Rapid Results Initiative exercises. The MAP specifically highlights reduced family size (and fertility levels) as national goals. This is evidence that he fully recognizes the role of FP in improving health and limiting family size and as a critical factor for rural development. To that end, in 2006 he authored an article explicitly describing how FP and NRM/conservation are both important to his economic growth agenda [56]. He also served as a key note speaker at the 2003 Global Health Council meeting in Washington DC which further demonstrated his commitment to linking health, including FP, to the environment.⁶⁸

Country reform

In 2000, the GOM developed a national RH policy. However, in 2001-2002 there was social and political unrest as a result of the disputed presidential election, followed by an economic crisis. In 2002, when the new, democratically-elected government was inaugurated, the country entered an era of active policy and national program reform. Progress was made in both democracy and governance including a strengthened capacity of the National Assembly to review and draft legislation and to communicate more effectively with its constituents. This continues through today resulting in policies and political actions that directly or indirectly support scale up as well as a more favorable environment in general for development initiatives.⁶⁹

⁶⁷ FP was added as a specific objective in Madagascar’s Poverty Reduction Strategic Plan when it was updated in 2005.

⁶⁸ Our Future on Common Ground: Health and the Environment (see http://www.globalhealth.org/view_top.php3?id=177).

⁶⁹ In April 2007, a constitutional referendum was passed (voted down in some cities) that made Madagascar a Christian state and increased presidential powers. If or how this referendum will affect the ability of the conservation community to contribute to FP, NRM, livelihood and conservation objectives is not evident.

High domain profile

Scaling up of PE in Madagascar has benefited from the talent, funding, passion and high profile associated with both the FP and biodiversity conservation domains. Appreciation of the importance of sustainable NR use and conservation dates back more than two decades. There has been and continues to be a concerted effort on behalf of the Malagasy government, various donor groups and implementing organizations to develop policies, test and adapt program strategies and establish partnerships that will contribute to biodiversity conservation (including a focus on rural development). Since the early 1990s the same is true for FP. Conservation and FP in Madagascar have their own separate histories but the fact that the two are both priorities for the country means there is momentum on which to add. Open acknowledgement of the interdependence between the two allows for programmatic interweaving when situationally appropriate and opportunities present themselves.

High level dialogue

One factor that has facilitated scale up is dialogue at high levels between donors, NGO partners and the GOM (and more recently, the private sector). For example, USAID, the World Bank, the EU, UNDP, France, Germany and Switzerland are all active members of a multi-donor group on environment, rural development and food security. USAID and its implementing partners actively participate in the Ministry of Water, Forest and the Environment⁷⁰ working groups and the government's NEAP third phase (EP3) results framework provides the foundation for USAID's Env/RD program SO results package. A coordinating unit within the (new) Ministry tracks common indicators across donor organizations and country programs [17]. All this has allowed for cross-fertilization and increased unification of ideas and programming across donors and between donors and the GOM. The establishment of a FP steering committee within the MOHFP has similarly helped ensure greater coordination between the public sector, NGOs, and partners regarding FP programming strategies and activity implementation.⁷¹

USAID Mission programming

Promotion of PE linkages through sector-specific funding is well illustrated by the expansion of USAID's NWP framework in Madagascar to include health/FP and development of a generic KM approach to support the four development domains represented by NHWP (now five including education) [58]. That the three agencies receiving USAID Title II funds in Madagascar were invited to be partners in the Ecoregional Alliances and all are KM partners further expands the resource and advocacy base supporting PE linkages. USAID formalized its commitment to linking FP (and water) and conservation for the 2003-2008 programming period by establishing common indicators between the Env/RD and HPN offices. The annual work plans of the Ecoregional Alliances, organized around the NHWP framework, contain reference to FP objectives and SanteNet's project objectives include a provision for supporting KM in

⁷⁰ This ministry was recently established by combining the Ministry of Water and Forest with the Ministry of the Environment [17].

⁷¹ In recognition of the role of various conservation organizations in helping meet national FP goals, in 2006 the Minister invited the three conservation organizations implementing USAID PHE projects (CI, WCS, WWF) to participate in the FP working group of the MOHFP.

communes around biodiversity priority areas. A special USAID HPN program developed in 2005, the “Extra Mile Initiative”, provided additional support to increase access to FP among Madagascar’s poorest citizens including people living in remote communities close to threatened forest corridors.⁷²

FP and conservation organization partnerships

To help address unmet need for FP, a number of conservation organizations have formed long-lasting partnerships with health and/or FP organizations (local and international), able to provide expertise that can enhance overall FP programming effectiveness. In some cases, there has been cross-training between the health and the environment partners (a strategy promoted by VS). Such partnerships have continued around some of the priority landscapes, despite fluctuations in funding and other resources. The founding of VS in 2000 (including Tany Meva as an environmental partner organization) allowed for technical, funding and implementing partners dedicated to linking health/FP and environment interventions around priority landscape areas in the country to share ideas, strategies, materials and other resources in a more systematic and ongoing way.

The establishment of USAID’s Ecoregional Alliances operating at the national level and in three provinces provides a platform for continual dialogue and joint programming among environment sector partners as well as between environment and other development partners working in the field. As SanteNet was designed as a partnership among local NGOs, the government and a consortium of organizations⁷³ and now includes other partners (including e.g., food security representatives) facilitates dialogue and coordination among the various parties to achieve results. Two of the USAID funded PHE projects overlap geographically with USAID supported Ecoregional Alliance, NHWP and KM efforts. This has provided an opportunity to capitalize on the tools and structures of these initiatives to expand their own and local NGO capacity to scale up.

Country technical support

As is evident from this report, USAID funds and programming have contributed substantially over time to site-based PE/PHE efforts in Madagascar as well as to scale up beyond the site level in some areas. Technical assistance from a multitude of US-based organizations has contributed substantially to the strength and relevance of local implementing partner contributions to scale up. This list expands substantially when sector-specific technical assistance is considered.

⁷² Two organizations, CARE and JSI R&T (in 2006, the Madagascar office of this organization established itself as the Malagasy organization PENSER) received funding under this mechanism.

⁷³ SanteNet is organized through a contract with Chemonics International in collaboration with JHPIEGO, Helen Keller International, Training Resources Group (also a partner to EHP, aiding with institutional strengthening of VS), Georgetown University’s Institute for Reproductive Health and Medical Care Development International.

CONSTRAINTS

Unreliable financial support

A key constraint to the magnitude and effectiveness of linkages between population and the environment in Madagascar, as elsewhere, has been funding. Consistent funding has not been available for replication or expansion from site-level to the landscape/ecoregion level. While both biodiversity conservation and FP are priority national agendas, and both benefit from donor support, the need is much greater than available resources. This is particularly problematic given the poverty profile of communities in rural areas around biodiversity priority areas.

Greater impact on CPR of larger population centers

The 2012 national goal for FP is 30% contraceptive prevalence, up from the 2004 national rate of 18%. This is an average increase in the number of contraceptive users nationwide of 1.5% per year. While this demonstrates the government's commitment to achieving reduced fertility and family size goals, meeting national contraceptive prevalence goals requires program effort in areas with large populations. Communities around the forest with smaller absolute population sizes are less competitive in this regard, especially when FP program funds are limited (on the other hand, population growth and fertility rates in these areas are among the highest in the country and access to services minimal).⁷⁴

Addressing root versus proximate causes of biodiversity loss

Environmental degradation or destruction (e.g. due to fires) and biodiversity loss are ongoing and actions to halt or reverse the process, as quickly as possible, are urgently needed. It has been a challenge to the environment sector to develop and support programs and strategies that effectively address urgent (proximate) environmental degradation issues, as well as to keep alive and coordinate efforts to address underlying (root) causes such as those associated with population growth and addressing unmet need for FP. Support to multisectoral platforms described herein is one way of addressing the multiple contributing factors to poverty and environmental degradation. Strengthening local capacity to implement linked interventions through approaches like champion

⁷⁴ As noted elsewhere, the USAID mission has addressed this dilemma, in part, by:

- establishing an “Extra Mile Initiative” (EMI);
- supporting FP with some of the Title II agencies working in remote areas;
- incorporating FP in its Ecoregional Alliance work plans;
- promoting the use of the KM approach (which currently incorporates FP as a key health indicator option); and
- supporting VS members, united in a common vision to improve health, in part through FP in communities around priority landscapes.

Additionally, USAID/Washington has helped increase FP coverage in priority communities by supporting focused, linked PHE projects in three biodiversity priority zones in the country. The above all aids to reach priority areas for conservation but, given the number of communities surrounding priority landscapes, the need is still greater than available resources.

community, KM, NHWP and support to the commune and regional development planning process including through CACs and the Koloharena is another.

Accessing the inaccessible

Most remaining biodiversity-rich areas in Madagascar are remote and relatively inaccessible. Consequently, the logistics associated with delivering any health intervention including FP are more challenging. This explains why public services in these areas are so minimal to begin with. Also, Madagascar is in a low stage of demographic transition and many communities still exist with few or no FP users. More accessible urban areas or areas near rural towns are likely to have experienced a longer history of exposure to FP-related information and method use, less persistent or strong cultural barriers to FP uptake as well as fewer supply issues. In remote areas, on the other hand, more effort and time has been and is required to find early adopters, to increase contraceptive uptake and to support method continuation. Coupled with the relatively smaller population sizes in many of these areas, some common measures of FP success (e.g. contraceptive use) per dollar invested are likely to be lower for projects operating in remote areas.

Meeting basic community needs

Given the overwhelming levels of poverty in rural Madagascar, many basic, immediate needs (e.g. health) have to be met before more future-oriented development interventions can be introduced. In this regard, FP interventions in many places have to be complemented or preceded by other interventions that improve basic health status. This in turn requires that funding and other resources for these interventions be available and also coordinated in time and space. In such situations, it is particularly important that the immediate health benefits of family planning to the mother and children be understood and emphasized in introductory efforts.

Limited cross-sector technical expertise

While strong partnerships have developed between some health/FP and conservation/NRM organizations, there is still a wide gap between the two groups in terms of comfort and/or familiarity with FP-related terms, policies and appropriate technologies. To support FP initiatives, conservation organizations do not need to be FP “experts”. However, they do need enough knowledge to be effective advocates and to ensure effective FP programming when funded to support PE projects. Given high demands on their time, it is difficult to find the right forum and/or means through which to strengthen their FP knowledge base. The case is the same for health/FP organizations and their knowledge of environment-related issues including biodiversity conservation and sustainable NRM. While field worker cross-training occurs as part of some linked programs, technical information sharing about the other domain occurs more informally at other levels, especially among program managers/supervisors operating out of central country offices.

Variable understanding of the PE conceptual framework

While cross-training (when provided) is often limited to field staff, discussions about the conceptual underpinnings of initiatives more often take place in central offices or at international, national or regional fora. This leads to weaker understanding of the rationale behind linked interventions at the operational levels.⁷⁵ Clearly, it is difficult for conservation actors at the operational level to effectively advocate for the importance of FP without a strong understanding of the underlying logic and timeframe linking the interventions with important conservation outcomes. The same is true for FP/health organizations and actors deliberating where and how they should prioritize their FP efforts.

This has been addressed in Madagascar, in part, through participation by some VS members (including both health and conservation organizations) in advocacy trainings and in international PHE workshops (e.g. Thailand, Tanzania, and the Philippines). Also, the conservation organizations implementing the three USAID-funded PHE projects are engaged in efforts to increase field staff appreciation and understanding of i) the rationale for linkages, ii) how to operationalize linkages and iii) relevant technical aspects related to health/FP programming.⁷⁶ As mentioned throughout, at the ecoregional level, USAID's alliances are using NHWP as the organizing framework for their workplans as are the Koloharena associations they are supporting. At the commune level, the KM approach is being successfully used as a basis for planning by objective by SanteNet- and some ERI-supported partners (including the MOHFP for health).

Other constraints to PE scale-up include the following:

- Local NGO capacity is not always adequate enough to increase programming technical breadth nor geographic extension;
- When the six ICDPs ended and geographic focus expanded to landscapes, responsibility for development around conservation area targets changed. Whereas previously projects coordinated both conservation and development interventions under one (ANGAP) management, landscape-scale development interventions fell under the responsibility of individual sectors (e.g. agriculture, health). These sectors did not necessarily see the same communities as priorities for funding. At times, this led to a loss of continuity/momentum at the site-level.
- The country's, multisectoral poverty reduction strategy and recent MAP provide a general roadmap to development but not a detailed one for operationalizing linkages or ensuring funding at decentralized levels.
- Ministries still maintain a sectoral focus and communication between them is limited. To some measure this has been addressed more recently by having other ministries participate in major sector-specific events.
- Both the environment and FP sectors in Madagascar have been heavily-donor supported since national programs were initiated. With changes in funding cycles

⁷⁵ One the other hand, understanding of the rationale is often very strong at the community level, among community members, whose daily experience emphasizes the inter-relatedness of all "ecosystem" components including humans.

⁷⁶ For example, WWF and ASOS undertake joint supervisory visits to the sites and meet periodically at the field office to share ideas and to brainstorm how to problem solve.

- come changes in implementing partners which affects the momentum and possibly direction of programming strategies.⁷⁷
- Both “opportunity” and “transaction” costs to coordinate across sectors are high. Because terminologies, priorities, programming strategies and technical competencies differ, finding a “common ground” takes time. This reduces the time and funds available to focus on their sector-specific responsibilities.
 - Results frameworks for FP have been worked out and available for many years. Pathways illustrating the relationship between inputs, activities, outputs, outcomes and impact are also fairly standardized among FP programs and common indicators are used. This is less the case for the environment sector including conservation outcomes which makes programming for comparable levels of results over the same time period more challenging.
 - The coupling of population and environment oversimplifies the complex, interdependent relationships among the many factors contributing to environmental degradation and poverty. The addition of health (PHE), improved the framework some but it remained inadequate given other important interventions and domains affecting environment outcomes. USAID/Madagascar addressed this, in part, through their introduction of the NHWP lens. While operationally linking interventions from two domains is usually easier than coordinating activities from many domains, finding an appropriate balance between operational feasibility and conceptual adequacy continues to challenge scale-up efforts in Madagascar.
 - To date, research findings have not proven the value of linking population and the environment. Such data are very difficult to generate however given the timeframe required to achieve measurable conservation outcomes and the complex web of causality. On the other hand, program evaluations, repeated surveys and personal testimony all support the logic behind a linked approach [2, 27, 49, 50]. Observations from site visits and talking to the people (“see is believing”) contribute to the evidence base on which policy-makers, including the President, depend to make decisions regarding the need for “at scale” linkages.
 - As in many countries in a low stage of demographic transition, traditional culture places a high value on children. Consequently, in areas where such traditions are strong e.g., among families living in isolated rural areas near priority biodiversity hotspots, interventions focusing on limiting family size are not easily accepted.

⁷⁷ The MAP acknowledges the large role that donors have played to date in Madagascar’s development process and calls for the country to contribute more to its own development, relying less over time on donor assistance.

LESSONS LEARNED

Highlight the varied benefits of FP

Addressing unmet need for FP in Madagascar reduces pressure on NR and biodiversity through a number of conceptual pathways. One pathway involves ensuring greater equilibrium between population numbers and available NR over time. Another pathway works through the health benefits conferred by spacing and/or limiting the number of children a woman and the family have. Healthier, more productive family members are more able to engage in sustainable livelihoods, acquire additional income and make different choices regarding how limited NR are used. Thirdly, working together with community members and officials to meet basic social service needs enhances trust which can help open the door for more meaningful dialogue about how limited NR can be used more sustainably. And, there are other pathways.

Many within the conservation community in Madagascar are familiar with the various potential pathways linking population and the environment. However, the health and self-empowering benefits of FP, an advantage long emphasized among health practitioners and FP advocates, are often less emphasized among conservation actors. Increased sensitization and/or technical training on the health benefits of FP, complementary to the positive demographic and “door opening” benefits, could potentially help conservation community actors feel more confident and comfortable advocating for FP as an important woman and child health intervention, as well as a strategy to improve rural development by better balancing NR availability and population growth.

Enlist local partners to address more community needs

Promoting and nurturing partnerships to better ensure all basic needs are met within targeted communities should be considered a strategy, and responsibility of conservation actors committed to livelihood, NRM and conservation goals. After the ICPDs ended, a few such partnerships were established that have continued despite fluctuations in funding sources. Various local NGOs are very committed to helping communities in their area. Conservation actors nurturing those relationships, helping local NGOs survive gaps in funding and helping identify ways to increase their capacity is an investment in communities and consequently an investment in development and conservation. Similarly, a number of local leaders have demonstrated commitment to improving rural Malagasy well-being. Conservation actors should do what they can to increase capacity for local development, including support to CACs in target areas, to the decentralized planning process and to strategies (e.g., NHWP and KM) that help empower local actors.

Support tools that help operationalize linked interventions

The NHWP framework has proven to be a useful lens and organizing tool, encouraging more “lateral” thinking and acknowledgement of the interdependency of domains at different local levels (regional offices, rural federations, inter-regional platforms and communes). It supports the new national MAP and regional MAP formulations that, in turn, were influenced by the ongoing experiment linking development interventions in rural areas, especially those of biodiversity importance. Similarly, the KM approach has turned out to be a useful tool for operationalizing interventions in more than one domain, coordinated in time and space. The two together are helping to break down sector-specific mindsets and development action. The more that local actors and structures embrace the same tools and conceptual frameworks, the easier it will become to overcome the enormous logistical challenges inherent to development in inaccessible, rural communities.

Moving from projects to programs and beyond

Projects by definition are limited in time and space. Expansion of efforts can come in the form of follow-on projects but to really move forward requires finding a “home” within programs and/or national initiatives. Ministries support programs as do organizations with longer-term time horizons and commitment and a reliable finance base. In Madagascar, PE (PHE) efforts have been (and continue to be) supported by various projects but they have not yet found a “home” with a reliable finance base. The VS members and association itself have expressed (and demonstrated) their commitment to integration and most have a long-term time horizon. Unfortunately, however, a number are hindered by weak institutional resource bases. Most government Ministries represent a specific sector but the recently established MDAT encompasses all sectors contributing to decentralized development. This provides one place for integrated planning and development action - including FP in areas of biodiversity priority - to land. CACs are currently the operational arm of the MDAT. Support to these centers is a logical strategy for conservation actors to help scale up past the site-level. Support to regional planning and ecoregional platforms would also help ensure that the linkages between population and environment interventions is an automatic reflex at these levels of decentralized decision-making.

Maintain commitment and flexibility

Funds for FP in Madagascar have come from various sources. Due to the country’s unique and rich biodiversity and strong in-country and international conservation advocacy, decisions about sectoral FP funding in Madagascar have, at times, also considered how actions will contribute to environment sector goals. Over the years, however, funding for FP in remote areas has fluctuated, especially during periods when donor-supported projects have changed hands or ended. Where support for FP has become part of the conservation and/or local development organization’s value system, it has been easier for them to solicit additional funding and/or form partnerships in the field to keep FP activities ongoing.

The terms used in Madagascar to link FP with conservation or other environment actions including agriculture have varied over time, depending on the funding source and development context. This report emphasizes the term PE as the underlying case study question. However, scale up over the five stages has occurred in association with various projects, programs and country initiatives (e.g., ICDP, PHE, NHWP, KM, Madagascar Naturally), each with their own terminology. Some terms refer more to strategies for operationalizing linkages on the ground, others to conceptual and/or organizing frameworks linking development including FP with conservation (and, in some cases, with livelihoods and economic growth). While changes in terminology can be confusing, maintaining flexibility in how linkages are described or labeled will increase partnering and funding opportunities and the potential for scale up in all dimensions.

Increase emphasis on equity

In Madagascar, TFR and population growth rates are higher in rural areas, often highest in remote areas near biodiversity priority landscapes. Unmet need for FP is also high in rural areas.⁷⁸ As noted elsewhere, however, for numerous reasons more effort is required to achieve FP impact in more remote areas. Thus, the absolute return on FP programming investment may be less if measured using standard FP indicators (e.g. couple years of protection (CYP), new acceptors, CPR). Consequently, for remote areas, increased access and equity may be more valid programming goals than just the size or proportion of the target population reached. Alternatively, measures of *proportional* increase (e.g. from 1% to 2% FP use = 100% increase) or increase in FP *service coverage* (including through community-based agents and/or social marketing) may better reflect the value of FP funds being allocated to remote areas, in addition to the complementary environment-related, health and overall development results.⁷⁹

Support to local structures for sustainability

PE scale up in Madagascar has been characterized by influencing actions at the site level as well as forces affecting “the big picture.” These forces have often operated during different time periods, described in this document as stages. Site-based projects provide an opportunity to test strategies, approaches and tools including how to measure the “value-added” of integration and what integration looks like. Advocacy efforts based on actual experience and evaluation findings can then be directed at increasing support at various political/decision-making levels.

⁷⁸ In contrast to countries like Uganda and Rwanda that have high population densities around some priority protected areas, in Madagascar, the average population density in rural areas is relatively low (20-25 people per km²). This has been used at times as a rationale against the need for FP programs in such areas. However, these areas often have the highest fertility rates, poor maternal and child health indicators and lack access to services for which universal coverage is the national standard. The latter may provide a more convincing rationale than population density for ensuring access to FP interventions in such locales.

⁷⁹ A key “value-added” for FP programs of linking FP and NRM/conservation efforts is the presence of conservation organizations in areas not well serviced by public programs. Conservation organizations that emphasize this, offering FP programs or projects a way to extend their normal reach, increasing service coverage and thus equity, may find it easier to solicit funding for remote area projects.

Many successes at the site-level in Madagascar have been documented, illustrating what integration looks like and that it can work. These have provided the basis for an impressive array of advocacy efforts (documented within) making the case for continued support and operating more “at scale”. A framework like NHWP that addresses population and environment objectives, among others, has helped facilitate integrated planning as well as integrated action along multiple scales. MGHC project achievements and recent (and ongoing) positive results with the KM approach (applied in the context of NHWP, now including education as a separate domain) are an example of successful scale up of linked FP and conservation interventions at the commune (and in some cases, even higher) level. Recent national policy reforms and statements of commitment by the President himself further ground these efforts, placing them within the larger context of nation-building.

To ensure long-term sustainability, however, linkages need to be an “automatic reflex” at decentralized planning levels. For this to happen, local actors (in Madagascar including the CACs and Koloharena as well as official regional, commune, community and traditional leaders) need to be involved in planning for development as well as evaluating progress. Conservation actors can contribute to this by intensifying their support to local planning processes, structures and leaders.

Consider the impact of populated rural centers

Where slash and burn (tavy) agriculture by local farmers is a key environmental threat, support for health/FP and development interventions in communities as close to threatened areas as possible is a logical strategy to help reduce that threat. Where tree-cutting for charcoal production (for household fuel or income generation) is highly prevalent, reducing the demand for charcoal from *larger population centers*, farther away from the targeted landscape, will also help reduce environmental threats.⁸⁰ In this regard, FP projects targeting larger population centers in rural areas can also contribute in an important way to conservation goals.

As noted under “Constraints”, FP programs face the challenge of deciding where limited program funds should be invested to best achieve national goals (e.g., in larger population centers or more remote communities with high TFRs and unsustainable NR use). One way to help address this dilemma is for conservation organizations to help the FP community identify and prioritize larger rural population centers that most negatively affect protected areas, in addition to the high impact communities located immediately adjacent to priority landscapes.

⁸⁰ It is estimated that 80% of human energy use in Madagascar comes from fuelwood.

Consider the impact of mobile individuals

Another important group for the conservation sector to consider is individuals who move frequently to the forest frontier to find new land. These people are on the move from remote areas where the land has been degraded due to “tavy”, population growth and lack of market access that would otherwise stimulate agricultural intensification. This subgroup is difficult to identify and track but can be responsible for much of the deforestation.

Maintaining a landscape focus

A key lesson learned from ICDPs and other experiences was the importance of a landscape approach to conservation. Madagascar embraced this approach in the 1990s and it has been the spatial framework around which environmental efforts including community development, agroforestry, natural resource management and biodiversity conservation have since come together. The government’s SAPM identifies priority landscapes and outlines a system for variable natural resource use and community stewardship.

Watersheds and water as unifying themes

As mentioned earlier, there are various pathways through which FP contributes to health, livelihoods, improved NRM and conservation. The emphasis on health (food security and income generation) during Stage 3 of Madagascar’s PE scale up added *new* conceptual pathways through which linked interventions can work synergistically to achieve both common as well as sector-specific outcomes. Water is a theme for which stakeholders across sectors, at many levels, can fairly easily identify the interdependencies that exist and the importance of coordinated local action.

Recognizing this unifying feature, USAID/Madagascar’s Env/RD and HPN offices developed a common water indicator as part of their 2003-2008 SOs (in addition to a common FP indicator). Additionally, a common approach to addressing water from a health, livelihood and conservation perspective was embraced (SCALE – see Annex 3). The use of a common “systems” and “at scale” approach towards water involving stakeholders at many levels provided an opportunity for these stakeholders (many of whom are also involved in FP, rural development and environment programming) to gain understanding and skills in how to coordinate interventions at different levels. Hopefully, these skills can be applied equally to the objective of expanding PE efforts from the site-level up.

A feature of the systems approach for water involves identifying priority watersheds for protection. This strategy protects the environment, soil integrity and biodiversity as well as helping ensure increased quality and quantity of water for household and agricultural use. As such, a watershed focus expands both the geographic scale and breadth of scale up and clearly fits in with the country’s MAP goals and the President’s Madagascar Naturally vision.

Planning by objectives

The champion community and KM approaches have proven to be successful tools for engaging the community and commune in their own development through e.g., joint assessment of assets, needs and priorities and, importantly, through defining “do-able” actions based on these assessments. The process of assisting the community/commune to identify how it can take action to move forward, with available resources (internal and through external donor/project assistance), and how to monitor progress and evaluate success helps change the dynamic from development “assistance” to self-development or partnering in development [46]. Planning by specific objectives also fits into the government’s results framework embodied in MAP policies and is the orientation of Phase III of the NEAP [63, 17].

NEXT STEPS

Key to expanding PE linkages beyond the site level is attention to:

- solid and long-term partnerships with a variety of organizations and local structures and communities,
- continued funding,
- valid evidence of need and results, and
- active support to FP in areas (including priority landscape watersheds) and among subgroups of people critical to conservation.

While this study has documented influences of and action by conservation, FP and other actors at many levels, the following steps apply specifically to conservation actors that operate and/or support site-based PE projects. The steps aim to increase the conservation sector's capacity to meet unmet need for FP to sustain livelihoods and biodiversity conservation. The steps are not in order of priority nor necessarily chronological and some steps listed have already been successfully undertaken or are in process by various organizations. That history has been described throughout this document. Their successes provide the rationale for including these steps for other actors to consider. For future extension in all dimensions of scale up to be substantial and enduring, efforts must support GOM's decentralization structures and processes. For real institutionalization of these efforts, ownership must rest with local and national conservation, FP and overall development leaders.

- 1) Actively engage in identifying and prioritizing target communities, around priority SAPM landscapes, where pressures from local human actions can be alleviated, in part, through FP interventions. This can be done through:
 - mapping exercises, similar to that WWF conducted by WWF in the south,
 - participatory rural appraisals or appreciative inquiry, methods used by LDI, MGHC and ERI projects among others, or
 - “question of public interest” efforts, an approach promoted by PACT/Madagascar.

Within the list of communities adjacent to priority landscapes, communities should be prioritized based on knowledge of where FP interventions are most needed and are likely to most effectively improve livelihoods, improve health, contribute to sustainable NRM and reduce conservation threats. Priorities may change over time and therefore this needs to be a continuous process.

Conservation actors should also proactively identify priority population centers within the regions that exert pressure on the environment, where FP interventions can be directed towards larger numbers of people and also have a substantial positive environmental

impact. Additionally, they should identify areas of origin of migrants who are moving deeper into the forest to acquire more land and water.

- 2) Develop or strengthen partnerships with local development NGOs that have or could have a long term presence in and commitment to priority communities.
 - The partnerships should be developed based on a common interest in the development of communities in a particular area.
 - Funding cannot be guaranteed so the underlying premise of the partnership should be that the partners will work together and support each other to achieve common goals.
 - Part of the partnership agreement should be for all parties to try to help each other find the resources they need to play their respective roles and assume respective responsibilities.
 - Conservation actors should jointly engage with the NGOs in helping to identify other community needs and how FP fits into these broader health and general development needs.
 - Develop terms of reference and/or a Memorandum of Understanding (MOU) with all partners regardless of whether funding is available. This will better ensure that a working relationship is formalized based on a joint commitment to agreed upon goals and objectives. The MOU could include a (non-binding) statement that all parties (including communities) will actively seek funding and other opportunities to help ensure achievement of common goals and objectives.
 - Conservation actors should work with the local NGOs to ensure mutual understanding of the conceptual underpinnings of how FP contributes to health, NRM, livelihood and conservation goals as well as poverty reduction and general rural development.
 - Local NGO partners should agree to emphasize the links between FP interventions, health, environmental goals and general community development in their interactions with community members as part of their partnership role.
 - Local NGOs may need general capacity-building assistance (e.g., project planning, budgeting, monitoring and evaluation and personnel management). Partnerships may need to expand to include projects or organizations that offer TA in order for the local NGO to serve as an effective FP partner.
 - Conservation actors should support Malagasy platforms that bring partners together for advocacy, training, planning and other purposes for greater efficiency and effectiveness of local efforts.

3) Develop or strengthen partnerships with organizations with FP content expertise

Such partnerships can provide a source of important technical content expertise to local NGOs as well as conservation partners to ensure FP interventions are appropriate and in keeping with national and international standards. Such partnerships should be developed regardless of funding availability.

- An important such technical partner is the MOHFP including representatives at different administrative levels. The three PHE USAID funded conservation organizations invited to join the MOHFP's national FP steering committee should respond to this offer. Ensuring representation on the committee and attending select meetings would help ensure that FP needs in remote rural communities near priority landscapes are considered and supported through national programs.
- Donor-supported health/FP projects are good potential content-expert partners. As some partners change over time, conservation actors should also consider technical partners with a local term presence in-country and a commitment to working in remote rural areas.
- These technical partnerships should operate at all levels (central, regional, communal and community) to help increase competency in FP and to help build bridges wherever programming decisions are made.

4) Develop in-house messages and materials that communicate the relevance of and logic behind linking population and the environment within Madagascar.

- These should be non-project related but rather developed for any application including funded projects.
- These resources should be drafted in collaboration with local NGO partners and FP expert partners as part of the partnership development process. Materials may need adapting to fit specific local rural contexts but having prototype materials on hand better ensures that important environmental messages are adequately incorporated into scale up efforts at any level and in any locale.
- A variety of such messages/materials already exists in Madagascar from previous or ongoing linked efforts (e.g. VS, MGHC, LDI or on PHE websites). These should be reviewed and catalogued to facilitate retrieval as needed.

5) Increase understanding of how FP programs work and what FP “system” components are critical (e.g. contraceptive supplies). This will better enable conservation actors to help solve system problems that inevitably arise or at least to identify and inform others about the problem so that it can be addressed.

- Training for conservation actors supporting FP interventions should be organized for staff working at different levels, including the central office, including a review of national program goals and strategies and relevant technical FP updates.
- Conservation organizations should also invite FP expert partners to provide conservation staff with periodic updates relevant to PE linkages. Such a forum would provide an opportunity for *FP/health partners* to adapt the way they present FP information to reflect livelihood, NRM and conservation as well as health/FP interests.

6) Help FP/health actors to identify indicators of success that will be better achieved through partnerships with conservation organizations working in remote rural communities near biodiversity priority landscapes.

- Focusing on increased equity or universal access can justify extra effort required to work in remote communities with smaller population sizes.
- Cost savings realized (resulting from shared supervisory visits and supply shipments, etc) as a result of them partnering with conservation organizations and local health/FP partners already working in the area should be emphasized.
- Maps of forest coverage and forest conversion rates compared to key health indicators and social service statistics will help demonstrate change over time in the respective domains and point to possible synergies or areas requiring more coordination. This requires a reliable source of local health and social service data (at the commune or community level). The latter are not always readily available and therefore the conservation sector should help however they can to ensure meaningful data are collected/available.

7) Support the role of FP and PE linkages in the context of GOM national planning, deconcentration and decentralization.

- Lend support to strengthening region, commune and community level planning in priority areas and help incorporate FP in those plans.
- Lend support to MDAT CACs and ecoregional platforms in priority areas and advocate for the role of FP in accelerating local development.
- Strengthen Koloharena farmer involvement in the development process at all levels.
- Promote “planning by objectives” using the KM approach in focal communes.
- Identify if the KM approach has been expanded to Distrika Mendrika in areas containing site-level projects
- Promote a multi-sectoral framework such as NHWP to facilitate integrated planning.
- Proactively identify FP/health actors willing to assist communities bordering newly established PAs, set up under SAPM, to assist those communities to function as effective environmental stewards.

8) Actively advocate for the importance and relevance of FP within the conservation sector

- Ensure FP is identified as a strategy that also supports environment goals in sector, national or rural development strategic and/or program planning documents.
- Widely distribute PHE/PE experiences and reports within participating organizations and to other conservation actors (ideally in both French and Malagasy).

- Ensure PE/PHE results are incorporated into national and donor summary statistics.

9) Help identify priority landscapes where support to FP efforts would be most successful and cost-effective, based on partners already working in the area, projects planned or ongoing that include support for FP interventions and local (region, commune, community) leadership and commitment to linking population and the environment as a means of local development.

9) The conservation community should work closely with the development community including health/FP actors so that the latter can help inform them about how best to implement interventions (or coordinate so that the health/FP actors support the interventions themselves). This will help ensure that conservation outcomes, as part of PE efforts, will more likely be realized.

10) Conservation actors should invest more in monitoring progress of development “outreach” to ensure that the needs of communities near priority landscapes/PAs are being better met. The latter, in turn, allows communities to serve more effectively as environmental stewards.

CONCLUSION

Throughout this document, scale up of the conservation community's contribution to unmet need for FP while sustaining livelihoods and conserving biodiversity has been described as a progression through discernible stages. In general terms, this reflects the development of a more favorable environment in which scale up *can* occur. Overall, evidence points to the conclusion that potential for scale up is greater now than during the previous millennium. Stage 5 in particular offers a greatly enhanced potential for scale up although this potential is far from being fully realized.

There is a wide base of experience, local and international advocates, locally adapted materials, tested strategies for engaging decentralized actors, favorable policies, and political commitment. It is important to clarify however that manifestation of progression at the field level has been less consistent, with intermittent activity "starts and stops" and periodic changes in local geographic focus, implementation partner, technical emphasis and/or programming strategies. Therefore, whether or not scale up past the site level actually has taken place or is currently sustained in a particular *locale* depends upon a myriad of factors.

Communities exist in which FP has been supported (in the context of improved health, sustainable NRM and livelihoods and biodiversity conservation) for over two decades. Some of these communities are also now part of a KM initiative under the umbrella of an Ecoregional NHWP Alliance effort. Others are part of an "Extra Mile" initiative or under the umbrella of a Title II effort. Regardless, all fall under the MOHFP's target for and the President's commitment to universal access to FP and the President's Durban and Madagascar Naturally visions. Realizing the full potential for scale up however will require considerably strengthened capacity (including funding and financial management) at decentralized administrative levels and real engagement of community members in identifying assets, prioritizing needs and focusing on achievable results. The extent to which these requirements are successfully met remains another chapter to be written.

Bibliography

- [1] Mogelgaard, K.A. and Patterson, K.P. 2006. *Linking population, health, and environment in Fianarantsoa Province, Madagascar*. Population Reference Bureau. <http://www.prb.org/pdf06/PHEM Madagascar2006.pdf> (accessed June 5, 2007).
- [2] Peilmeier J. August 2005. *Review of population-health-environment programs supported by the Packard Foundation and USAID*. PRB and CEDPA.
- [3] Wikipedia. Population dynamics. Wikipedia, http://en.wikipedia.org/wiki/Population_dynamics (accessed June 5, 2007).
- [4] Gaylord, L, USAID/Madagascar Environment/Rural Development Team Leader. 2006. Personal communication to Mogelgaard and Patterson.
- [5] Answers.com. <http://www.answers.com/topic/integrate> (accessed June 5, 2007).
- [6] World Wildlife Fund. November 2006. *Terms of reference for consultancy on population-environment learning*. World Wildlife Fund.
- [7] Taylor-Ide, D. and Taylor, C. E. 1995. Community-based sustainable human development: Children, environment and sustainable development. *UNICEF Primary Environmental Care Discussion Papers*, Number1, February.
- [8] Future Generations. *Redefining community futures: A functioning system for sustainability and equity*. Future Generations. http://www.future.org/pages/04_process_of_change/04_going_to_scale.html (accessed June 5, 2007).
- [9] Academy for Educational Development (AED). *Going to scale: System-wide collaborative action for livelihoods and the environment, GreenCOM, 2004*. Academy for Educational Development. http://www.greencom.org/greencom/pdf/scale_final.pdf (accessed June 5, 2007).
- [10] Hygiene Improvement Project (HIP). Madagascar presentations. Hygiene Improvement Project, <http://www.hip.watsan.net/page/334> (accessed June 5, 2007).
- [11] Conservation International. Critical Ecosystem Partnership Fund news. Conservation International, http://www.cepf.net/xp/cepf/news/in_focus/2007/march3007_feature.xml (accessed June 5, 2007).
- [12] United Nations Development Programme. Human development reports. UNDP, http://hdr.undp.org/reports/global/2003/indicator/cty_f_MDG.html (accessed June 5, 2007).

- [13] World Bank. Country briefs: Madagascar. World Bank, <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/MADAGASCAREXTN/0,,menuPK:356362~pagePK:141132~piPK:141107~theSitePK:356352,0.html> (accessed June 5, 2007).
- [14] Institut National de la Statistique (INSTAT) and ORC Macro. March 2005. *Demographic health survey, Madagascar 2003-2004*. INSTAT and ORC Macro.
- [15] Aramati M et al. December 2005. *Using the SPARHCS approach to reposition family planning in Madagascar: A success story*. Policy Project.
- [16] Kremen, C. Traditions that threaten. Madagascar: A world apart. Public Broadcasting System, <http://www.pbs.org/edens/madagascar/paradise.html> (accessed June 5, 2007).
- [17] Razafindralambo, G and Gaylord, L. *Madagascar National Environmental Action Plan and MFDR Sourcebook*. MFDR. <http://www.mfdr.org/sourcebook/6-2Madagascar-National.pdf> (accessed June 5, 2007).
- [18] Conservation International. Ecosystem profile: Madagascar and Madagascar Indian Ocean islands. Conservation International, http://www.cepf.net/xp/cepf/where_we_work/madagascar/full_strategy.xml (accessed June 5, 2007).
- [19] Pact. *Sustainable Approaches to Viable Environmental Management (SAVEM) report* (September 1991 – September 2000). Pact, http://www.pactworld.org/programs/country/madagascar/madagascar_savem.htm (accessed June 5, 2007).
- [20] Rabelahasa, E. and Whyner, D. 1998. Evaluation Finale des ‘AAPS Environnementaux.’ *AAPS Environnementaux. Management Sciences for Health Serie d’Evaluations Finales du Programme APPROPOP/FP* No 5 Sept 1993 – Aout 1998.
- [21] Whyner, D. 1999/2000. Collaborating for more effective population-environment interventions. The Experience of the APPROPOP Project and its Environmental Partners in Madagascar. *University of Michigan Population-Environment Fellows Program Newsletter*.
- [22] McCoy, K.L. and Razafindrainibe, H. May 1997. *Madagascar’s integrated conservation and development projects: Lessons learned by participants*. SAVEM Steering Committee for Lessons Learned.
- [23] Brown, M. and Wyckoff-Baird, B. November 1992. *Projets Integres de Conservation de la Nature et de Developpement*. Biodiversity Support Group.
- [24] USAID Madagascar Environment and Rural Development Program. 2004. *Evolution of USAID Madagascar’s environment program: Twelve years later: 1991-2003*. USAID.

- [25] Stein, C. and Margoluis, R. December 2004. Conventional wisdom on causal linkages among population, health, and environment interventions and targets. Document prepared for USAID Healthy People, Healthy Planet Workshop 2004: World Conservation Congress Foundations of Success.
- [26] Chemonics International. March 2004. *Landscape development interventions: July 1998-2003 Final Report to USAID*. Chemonics International.
- [27] Kleinau, E., Rosensweig, F., and Tain, F. September 2002. *Integration of health, population and environment programs in Madagascar*. Environmental health project activity report 115. USAID.
- [28] Voahary Salama. April 2005. *Comment devenir communautaire championne*. Voahary Salama.
- [29] Harris, N. 2003. *Jereo Salama Isika 1999-2003: Final Report*. John Snow International.
- [30] Snell, M. 2006. Flora, fauna, and families: Spreading health and love in Madagascar. *Sierra Club Magazine* July/August.
- [31] World Bank PovertyNet. *Document de strategie pour la reduction de la pauvreté: July 2003*. World Bank.
http://poverty2.forumone.com/files/Madagascar_PRSP_French.pdf (Accessed June 5, 2007).
- [32] USAID Madagascar. Conserving Madagascar's biodiversity. USAID,
<http://www.usaid.gov/missions/mg/about/biodiversity.html> (accessed February 17, 2007).
- [33] Ravalomanana, M. January 2005. Scéance d'ouverture conférence internationale 'biodiversité : Science et gouvernance.' Presentation delivered on 24 January.
- [34] Ministère de la Santé et du Planning Familial. April 2005. *Programme de planification familiale 2005-2009 pour la mise en oeuvre de la nouvelle stratégie*. Ministère de la Santé et du Planning Familial.
- [35] Patterson, K. 2005. Personal communication with the author.
- [36] USAID. USAID Madagascar: Food for peace. USAID,
<http://www.usaid.gov/missions/mg/program/food.html> (accessed June 30, 2007).
- [37] USAID. USAID Africa: Madagascar. USAID, http://www.usaid.gov/locations/sub-saharan_africa/countries/madagascar/index.html (accessed July 1, 2006).

[38] Raik, D. 2005. Nature, health, wealth, and power. Minutes from USAID Madagascar Workshop on July 21.

[39] International Resources Group. 2002. *Nature, wealth, and power: Emerging best practice for revitalizing rural Africa*. International Resources Group.

[40] United Nations Economic and Social Development. Madagascar action plan. United Nations,
<http://www.un.org/esa/coordination/Alliance/MADAGASCAR%20ACTION%20PLAN.htm>. (accessed June 5, 2007).

[41] Pielmeier, J. Lessons learned from the first generation of integrated population, health, and environment projects: September 2006. Population Reference Bureau,
<http://www.prb.org/Articles/2006/LessonsFromtheFirstGenerationofIntegratedPopulationHealthandEnvironmentProjects.aspx> (accessed June 5, 2007).

[42] Population Action International (PAI). February 2005. *Linking reproductive health and natural resource management: An official guide*. Population Action International.

[43] Stedman-Edwards, P. and Mang, J., eds. 2000. *The root causes of biodiversity loss*. United Kingdom: World Wildlife Fund Earthscan Publications.

[42] World Health Organization Division of Health Environments and Sustainable Development. *Country profile: Madagascar*. World Health Organization.
http://www.afro.who.int/des/phe/country_profiles/madagascar_policy.pdf (accessed June 5, 2007).

[43] USAID. *Madagascar data sheet*. USAID.
<http://www.usaid.gov/policy/budget/cbj2006/afr/pdf/mg687-006.pdf> (accessed June 5, 2007).

[44] USAID. USAID congressional presentation: Madagascar, fiscal year 2000. USAID,
<http://www.usaid.gov/pubs/cp2000/afr/madagasc.html>. (accessed June 5, 2007)

[45] USAID: Madagascar. 2004. Atelier de renforcement et de planification de l'alliance ecoregionale. PowerPoint presentation delivered in Antananarivo on October 22.

[46] Ramanase, Z. 2006. Promises and challenges with the Koaminina Mendrika Approach, Madagascar. Behr's Environmental Leadership Program Alumni Newsletter, Fall 2006. <http://behrself.berkeley.edu> (accessed May 30, 2007).

[47] Kleinau, E., Randriamananjara, O., and Rosensweig, F. May 2005. Healthy people in a healthy environment: Impact of an integrated population, health, environment program in Madagascar. Environmental health project. USAID.

- [48] Ribaira, Y. August 2003. *Project Madagascar Green Healthy Communities: Monitoring and evaluation of population-health-environment programmes (2002-2005)*. JSI, Chemonics International, LDI, and Voahary Salama.
- [50] Fanomezantsoa, A. November 2005. *Madagascar green healthy communities: Final Evaluation of the project: Natural resources component*. JSI, Chemonics International, LDI, and Vahary Salama.
- [51] Chemonics International. November 2004. *Ecoregional transition program (PTE): Final report to USAID (Jan 2004-September 2004)*. Chemonics International.
- [52] Edmond, J. and Fisher, K. 2005. *Combining conservation and care: Lessons learned from population and environment initiatives*. Conservation International.
- [53] World Wildlife Fund. 2006. *Successful communities from ridge to reef: Madagascar wemi-annual report to USAID July – December 2006*. World Wildlife Fund.
- [54] Holmes, C. January 2007. *Conservation and human welfare in northeastern Madagascar: Integrating health and family planning interventions into the Wildlife Conservation Society's Makira Project: USAID six month report, July 2006–January 2007*. Wildlife Conservation Society.
- [56] Ravalomanana, M. 2006. Madagascar naturellement: birth control is my environmental priority. *World View Magazine for Peace Corps Alumni* Fall 2006. <http://www.worldviewmagazine.com/issues/article.cfm?id=188&issue=43>.
- [57] USAID. Summary of USAID fiscal year 2001 budget: Madagascar. USAID, <http://www.usaid.gov/pubs/bj2001/afr/mg/> (accessed June 2006).
- [58] Chemonics International. April 2007. *SanteNet semiannual report to USAID Madagascar. October 2006 – March 2007*. Chemonics International.
- [59] Hughes, D. and McGuire, M. 1996. The cost-effectiveness of family planning service provision. *J Public Health* 18: 189-196. <http://jpubhealth.oxfordjournals.org/cgi/content/abstract/18/2/189> (accessed May 18, 2007).
- [60] Potts, M. 2007. *Population and environment in the Twenty-First Century*. Population and Environment.
- [61] Gaffikin, L. 2007. *Family planning: Building blocks to a better environment and better world*. Population and Environment.
- [62] Talbot, J. 2004. Integrated programs in Madagascar: A population-health-environment success story. *University of Michigan Population-Environment Fellows Program Newsletter* 2004.

[63] Development Alternatives Incorporated. Eco-Regional Initiatives 2006 Progress and 2007 Perspectives. May 2007. Development Alternatives Incorporated.

[64] Ratsisompatrarivo, JS. 2006. Extending Natural Resources Management and Community Empowerment: The Koloharena Perspective, Madagascar Beahr's Environmental Leadership Program Alumni Newsletter, Spring 2007. <http://beahrself.berkeley.edu> (accessed June 5, 2007).

Annex 1

Madagascar's Demographic Transition

Madagascar has been characterized as being in the early stages of a demographic transition.⁸¹ Out of four demographic transition stages identified by Zarnoun and Tabutin in 1994, Madagascar was classified as Stage 2, that is, with high rates of fertility and mortality and mortality declining at a faster rate than fertility [2]. The data below support this assertion.

Declines in mortality

In 1992, a national DHS⁸² was conducted in Madagascar which revealed an infant (< 1 yr) mortality rate (IMR) of 93/1000 and a child (under 5 yrs) mortality rate (CMR) of 163 [3]. Mortality rates were lower than previous years which contributed to an increased annual population growth rate (2.8%). Another DHS conducted in 1997 revealed little change in the IMR and CMR from the previous time period [4].⁸³ This led to intensified child survival efforts nationally. These and the child health benefits conferred by increases in FP use resulted in improvements in both the infant and child mortality indicators (as high as a 40% decline, according to some estimates), evident from the results of the next (2203-4) survey [6] (Figure 1).⁸⁴

Declines in fertility

When declines in fertility do not keep pace with declines in mortality, Stage 3 of the demographic transition, a *substantial* increase in the population size results. This appears to be how Madagascar's transition is progressing, based on the 2003/4 DHS data. In a study of the demographic transition in 12 countries worldwide, the percent decline in TFR from 1980-1995 was the lowest for Madagascar (11%) compared to all other countries [5]. Since then, reductions in the TFR in Madagascar have been realized but at a slower rate than for mortality. Specifically, the TFR in 1992 was 6.0 and increased to 6.2 in 1997. By 2003/4 it had dropped to 5.2. This translates to a percent decline between 1992 and 1997 of 1.6% compared to a 13% decline between 1997 and 2003/4 (Figure 1).⁸⁵

Proximate determinants of fertility

⁸¹ The demographic transition of a country reflects the relationship between decline in its fertility and decline in its mortality rates [1].

⁸² Undertaken by the GOM through its national statistical organization, INSTAT, with financial support from USAID and UNICEF and technical support from ORC/Macro.

⁸³ In fact, the values for both IMR and CMR for the two surveys overlap considering confidence intervals around the point estimates.

⁸⁴ While these two indicators do not add up to overall mortality, they provide an indication of reduction in this mortality measure with which to compare with fertility rate declines.

⁸⁵ In a more recent cross-country comparison (Figure 2), Madagascar ranked 5th lowest out of 13 African countries including South Africa.

The proximate determinants of fertility include age at first marriage and proportion of women married, contraceptive use, abortion rates and infecundity [6]. Changes in any of these will affect overall fertility. Experience over the years suggests that the easiest and most cost-effective way of reducing TFR is through increasing contraceptive use to space or limit the number of children [6]. Increases in use of contraception in Madagascar, especially in the past decade, have contributed to gains in reducing the TFR. Figure 3 provides a comparison of modern contraceptive use from the three DHS efforts, nationally and in urban versus rural areas. The CPR for modern methods among women in union increased from 5% in 1992 to 10% in 1997 to 18% in 2003/4 (a 2.6 fold increase over 11 years) [3, 4, 5]. Changes in other determinants of fertility in those three time periods are provided in Figure 4 for comparative purposes.

Rural versus urban differences

National rates mask inequities that exist between the urban and rural areas. In the 2003/4 DHS, the CPR was 11 points lower in the rural versus urban areas (16% and 27%, respectively). Although the CPR in both urban and rural areas increased by about 9 percentage points between 1997 and 2003/4, the levels in rural areas from the third survey were similar to what was observed in urban areas in the previous survey (1997). This means that rural area CPR lagged behind urban ones by about 5-7 years. Consequently, they are experiencing an even more delayed demographic transition. Urban/rural inequities are relevant to PE scale up as increasing the CPR in rural areas becomes more difficult as continued increases in absolute population size and an ever larger population base require more contraceptives to meet demand [2]. This is over and above the challenges posed by inaccessibility, remote rural populations living more traditional lives and lack of a health infrastructure and reliable distribution systems.⁸⁶

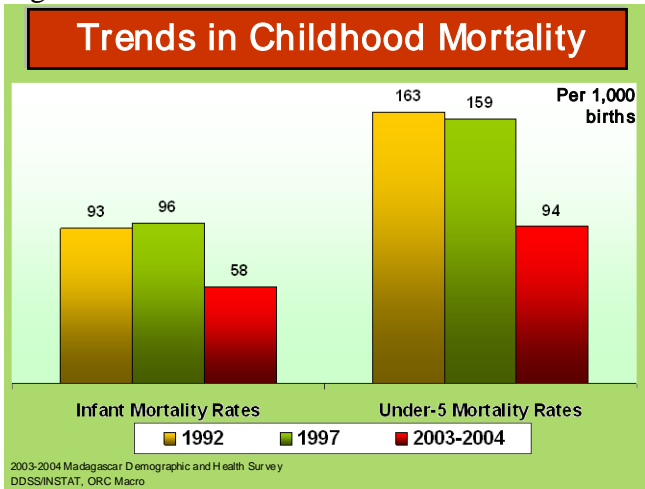
It is not unexpected that inequities also exist in Madagascar's TFR between the urban and rural areas. In 2003/4, the TFR among rural was 2 points higher than among urban women (3.7 compared to 5.7). In addition, the risk of death for a child under 1 was also much higher in rural areas compared to urban ones (62 versus 43 per 1,000 children < 1)⁸⁷ [5]. These inequities add to the justification for supporting special FP efforts in rural areas including communities around biodiversity-priority landscapes.⁸⁸

⁸⁶ Increasing the contraceptive prevalence rate (CPR) becomes more difficult with delayed demographic transition as continued increases in population size and an ever larger population base require more contraceptives to meet demand [2].

⁸⁷ These estimates derive from DHS and official GOM documents. Specific values may differ from estimates cited elsewhere but the point about urban/rural differences in these measures still holds.

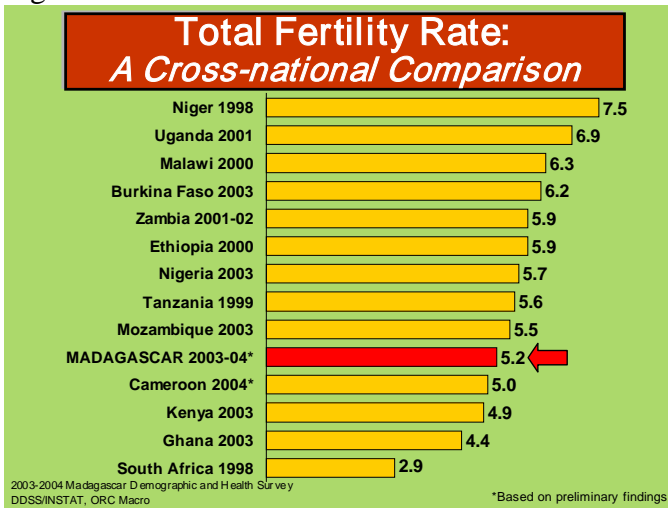
⁸⁸ Not until there is a demographic balance with equally low mortality and fertility rates (Stage 4) will population growth rates in those areas slow down.

Figure 1



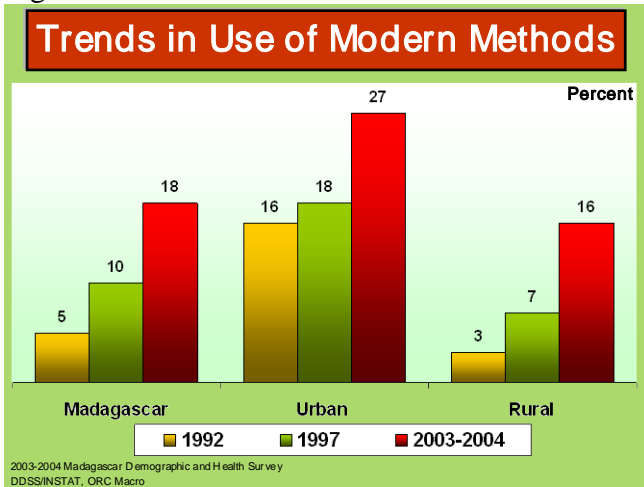
Source: INSTAT/ORC MACRO

Figure 2



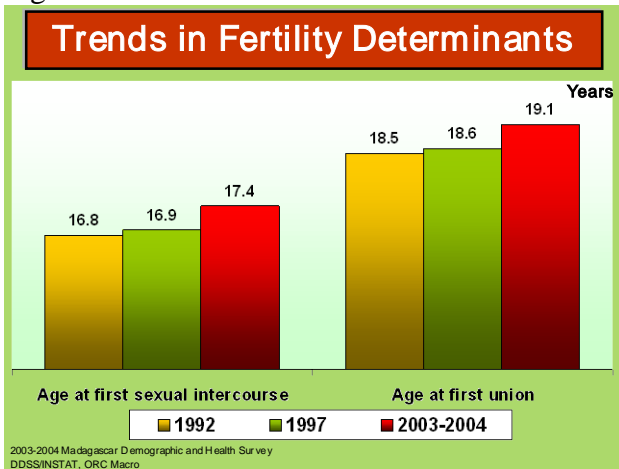
Source: INSTAT/ORC MACRO

Figure 3



Source: INSTAT/ORC MACRO

Figure 4



Source: INSTAT/ORC MACRO

REFERENCES

- [1] Bloom, D., Canning, D., and Sevilla, J. December 2001. Economic growth and demographic transition: NBER working paper: Series 8685. *National Bureau for Economic Research*. <http://www.nber.org/papers/w8685> (accessed June 5, 2007).
- [2] Economic Commission for Africa: Food Security and Sustainable Development Division. December 2001. *The state of demographic transition in Africa*. Economic Commission for Africa. http://www.uneca.org/eca_resources/Publications/FSSD/State_of_Demographic_Transition_in_Africa.PDF (accessed June 5, 2007).
- [3] Centre National de Recherches dur L'Environnement et Macro International. February 1994. *Demographic health survey: 1992*. Centre National de Recherches dur L'Environnement et Macro International. <http://measuredhs.com/pubs/pdf/FR50/00FrontMatter.pdf> (accessed June 5, 2007).
- [4] Institut National de la Statistique (INSTAT) and ORC Macro. Nov 1998. *Demographic health survey: Madagascar 1997*. INSTAT and ORC Macro. <http://measuredhs.com/pubs/pdf/FR93/00FrontMatter.pdf> (accessed June 5, 2007).
- [5] Institut National de la Statistique (INSTAT) and ORC Macro. March 2005. *Demographic Health Survey, Madagascar 2003-2004*. INSTAT and ORC Macro. <http://measuredhs.com/pubs/pdf/FR158/00FrontMatter.pdf> (accessed June 5, 2007).
- [6] Cross, H., Hardee, K., and Ross, J. August 2002. *Completing the demographic transition in developing countries*. Policy Project.

Annex 2

Brief History of Family Planning in Madagascar

Early history

The roots of FP in Madagascar go back as early as the late 1960s when a pioneer organization - Fianakaviana Sambatra (FISA) - affiliated with the International Planned Parenthood Federation (IPPF) - first initiated activities. These were private sector services and it was not until a few decades later that public sector FP activities gained momentum. During the socialist regime, especially in the two decades between 1965 and 1985, the Malagasy government took a very pro-natalist stance, encouraging population growth and expansion of its population to previously unoccupied areas [1]. In 1989, the GOM reversed its pro-natalist position as it became increasingly aware of the relationship between declining standards of living, high population growth rates and unsustainable use of the country's precious NR base.

In 1990, a population policy was established (National Population Policy [(NPP)] that recognized the benefits of FP and the need for expanded FP activities [1, 2]. The policy set as an objective reducing the TFR from six to four children by the year 2000 [2]. The NPP was ratified by the GOM in 1991⁸⁹ and in 1992, the GOM developed FP service standards [3]. A strategy for implementing the population policy was to set up a coordinated program of FP assistance in the Population and Development Unit at the Ministry of Planning. Recognizing the relationship between fertility rates and the health of the mother and her children, the government also decided that year to integrate FP services into its MCH program [4].

In the early 1990s, a multi-million dollar, multi-donor health sector support program with the GOM was established. Part of that effort, led by UN's Family Planning Assistance (UNFPA), was dedicated to achieving the MOH's goal of increasingly integrating FP into more health centers, to complement other MCH services provided in all health centers across the country [2, 5]. Specifically, UNFPA led efforts to expand FP from 130 to 500 GOM health centers within 5 years [4].

As might be anticipated, with national efforts just gaining momentum after decades of a pro-natalist government, improvements in attitudes towards and use of FP came slowly. The fact that only marginal gains in many health indicators were made between 1992 and 1997, as measured by the two DHS', influenced how subsequent health including RH/FP activities were organized in Madagascar. For example, starting in 1998 there was a shift towards getting FP services to community members *at a larger scale*, through a decentralized approach. Two other actions supported by the GOM around this time

⁸⁹ Despite this ratification, the anti-contraception law passed by French colonials making contraception illegal in the country was not repealed. The process of repealing this law did not gain momentum until after 1997 [2].

served to improve the policy and advocacy environment in which FP programs and activities were being planned. One was a national symposium on RH held in 1997 and the other was the adoption of a national health policy in 1998.

FP Reform in Madagascar

In 2000, the GOM developed a national RH policy. However, in 2001-2002 there was social and political unrest as a result of the disputed presidential election, followed by an economic crisis. The history of FP over the next few years was affected by this internal strife. Efforts to achieve the government's health/FP goals continued however, to the extent possible, despite difficult political and economic conditions. In 2002, a new, democratically-elected government was inaugurated which provided an impetus for change in vision and programming. The new government supported a reform agenda which included a renewed commitment to FP [6].

A defining point in the history of FP in Madagascar was the 2003 Presidential decree which renamed the Ministry of Health to the Ministry of Health and Family Planning (MOH/FP).⁹⁰ This was followed by another decree in 2004 whereby the MOH/FP organigram was modified to include two directorates, one specifically for FP (previously it had been under the Preventive Medicine Department).⁹¹ The MOH/FP focuses its efforts on objectives identified in the GOM's National Healthy Policy such as decentralizing the national health system and promoting community mobilization, among others [7].

Another important milestone in strengthening the GOM's FP program was the addition in 2003 of contraceptives to SALAMA's (the national drug supply agency) list of essential drugs. This action eliminated taxes on contraceptive supplies. Integrating contraceptive commodity and essential drug distributions greatly improved the decentralized availability of contraceptives which was a key barrier to FP uptake [6]. The above action was followed by a contraceptive stock survey at the service delivery level and recommendations to improve the distribution system (implemented over the following year).

Another system improvement was expanding FP contraceptive supply options to help meet demand through social marketing. This involves i) establishing local distribution sites (operating as part of a larger distribution network); ii) training of community-based distributors (CBD) who can obtain new supplies from the periodically restocked distribution site as needed; iii) sale of these supplies to community members at a small profit (the cost of the supplies are subsidized to keep the sale price affordable enough for local purchase) and iv) periodic information campaigns to increase awareness and

⁹⁰ The name was changed again recently, in 2007, to become the Ministry of Health, Family Planning and Social Protection (MHFPSP).

⁹¹ In 2007, under the MHFPSP, the FP Directorate was moved into the Social Protection Department.

demand.⁹² Between 1997 and 2003/4 gains were made in FP use, undoubtedly due in part to the above changes in national policies and FP-related system improvements.

Repositioning Family Planning

In early 2004 there was a national workshop to coordinate RH efforts and a series of technical and strategic planning workshops to elaborate a new National FP Strategy. The goal of the new strategy was to guarantee couples access to information and quality FP services through, among others, creating a more favorable environment towards FP including a policy framework [6]. In December 2004, a national conference was held to present and validate the new strategy that positioned FP as an essential component of the country's development agenda. This "National Conference to Reposition Family Planning" was attended by heads of major state bodies (e.g. Parliament and six government Ministers), church leaders and the President of Madagascar himself who officially closed the meeting. At the conference, the President stated that he personally would guide the repositioning of FP in Madagascar.

After the repositioning FP strategy was adopted, a five-year action plan "to ensure improved access to FP services and achievement of the GOM's contraceptive prevalence goals" was developed [6]. A FP steering committee was established within the MOHFP to foster coordination between the public sector, NGOs, and other partners. President Ravolomanana continued to provide leadership by calling for increased participation in strengthening the country's FP program.⁹³

Another important action by the GOM during this period was the addition of FP objectives to Madagascar's Poverty Reduction Strategic Plan (PSRP) for 2005.⁹⁴ These included increasing the nation's CPR and reducing the number of non-desired pregnancies among adolescents. An important operational strategy to help achieve Madagascar's PSRP-related FP objectives was revitalizing the role of long-term FP methods. This became the focus of a workshop held late 2005 during which the MOHFP reiterated that FP was one of the GOM's top priorities. Another important action around this time was UNICEF's decision to incorporate FP into its Integrated Management of Childhood Infections (IMCI) Management and Mother to Child Transmission programs.

⁹² Over the years, social marketing to increase FP contraceptive supply (and other health products) has been promoted by the GOM, PSI, the two USAID health bilaterals (JSI and SanteNet) and the MGHC project, among others.

⁹³ The President developed a Rapid Results Initiative (RRI) to jump start economic growth in select areas. This approach involves creating objectives and indicators related to a certain development domain and focusing strategies and efforts to achieve large gains in the development-related indicators within 100 days. One such early effort focused on FP whereby contraceptive prevalence jumped from 2% to 11% in the target region in 50 days and to 14% within 100 days [8]. By 2007, all regions in the country had established RRI in select facilities in their areas to increase FP use— 6 regions of which were supported by USAID's bilateral Project SanteNet.

⁹⁴ The GOM initially developed its Poverty Reduction Strategy Paper (PSRP) in 2003 with the objective of reducing poverty by half over the next 10 years. [7].

In 2006, a contraceptive line item was created in the national budget (resulting from the addition of FP monies in the World Bank health loan – CRESAN) along with the first procurement of contraceptives by the GOM.⁹⁵ The World Bank contributed to this momentum by expanding their CRESAN budget to include \$3 million US for FP assistance (including procurement of contraceptives). A Contraceptive Security document for 2007-2012 was also developed in which contraceptive needs were forecasted through 2008.

In November 2006, a workshop was held to define the strategic axes of the GOM's new National Policy of Health Promotion.⁹⁶ Subsequently, in December 2006, there was a workshop to validate a National FP Communication Strategy. In 2007, a foci of the MHFPSP became strengthening of its FP communication strategy to increase national CPR from 18% in 2004 to 28% in 2009 (an increase of 1.3% per year).

The GOM's recent Madagascar Action Plan (MAP: 2007-2012) replaces the PSRP. One of the stated rationales for the MAP is that Madagascar's "population rate is increasing too rapidly and family size needs to be reduced" [9]. In the President's message introducing the MAP, among other points he notes that the plan establishes the need for strong cooperation to "create a comprehensive health sector that aggressively addresses family planning..." [9] FP is thus included as one of eight specific commitments, ensuring that FP will continue (at least until 2012) as a national development priority. The 2012 MAP target for contraceptive prevalence is 30% [9].⁹⁷

In response to this, starting in May 2007, the Ministry's Reproductive Health and Safe Motherhood Unit worked with its Information/Education/ Communication and Social Mobilization Unit to launch a FP media campaign in a number of provinces. An innovative community-based approach "Everyone invites three" ("Samia Mitondra Telo") was used as part of this campaign. Under this approach, local leaders and regular FP users are mobilized to tell their friends/neighbors/relatives (through interpersonal communication and peer education) about the benefits of FP, encouraging them to visit their local FP clinic.

Additionally, to ensure services are universally available for interested new FP users, a concerted effort was made in late 2006/early 2007 to ensure that all existing public health facilities have the capacity to offer FP services. According to MFPSP quarter reports, 2331 of 2376 functioning basic health centers (CSBs) were offering FP services as of March 2007 (98% of coverage) [10]. That effort (including various actors) involved establishing norms and standards of performance, training of providers, fortifying the contraceptive supply system and strengthening clinic quality assurance, among other actions.

⁹⁵ The GOM also contributed to procuring contraceptives in 2007.

⁹⁶ The World Health Organization has taken the lead on this in Madagascar.

⁹⁷ The 2012 target for total fertility is 3 (urban areas) and 5 (rural areas) down from the current national average of 5.2.

REFERENCES

- [1] Mogelgaard, K.A. and Patterson, K.P. *Linking population, health, and environment in Fianarantsoa Province, Madagascar*. Population Reference Bureau.
<http://www.prb.org/pdf06/PHEM Madagascar2006.pdf> (last accessed June 5, 2007).
- [2] International Planned Parenthood Federation,
http://www.ippf.org/imspublic/IPPF_CountryProfile/IPPF_CountryProfile.aspx?ISOCod e=MG (last accessed November 29, 2006).
- [3] Ribaira, Y., JSI, and R&T. 2005. Liens population et biodiversite : nouvelle vision. Powerpoint presentation delivered at meeting in Fianarantsoa, Madagascar on 26 September.
- [4] Akotomanga, J.D.M. August 2005. *Analyze Situationelle des Etudes socioculturelles SR/FP a Madagascar*. UNFPA.
- [5] Basics Project. October 2005. *Improving family health using an integrated community-based approach: Madagascar case study*. Basics Project Report.
- [6] Aramati, M. et al. December 2005. *Using the SPARHCS Approach to reposition family planning in Madagascar: A success story*. Policy Project.
- [7] Chemonics International. Oct 2006. *SanteNet semiannual report to USAID Madagascar. October 2005 – Sept 2007*. Chemonics International.
- [8] Malagasy Republic Minister of Health. 2005. As quoted in L'Express Journal on 25 March 2005.
- [9] United Nations Economic and Social Development. Madagascar Action Plan Commitment 5, Challenge 4.
<http://www.un.org/esa/coordination/Alliance/MADAGASCAR%20ACTION%20PLAN.htm> (last accessed July 8 2007)
- [10] Ribaira Y. 2007. Personal communication with the author.

Annex 3

USAID's contribution to the population and environment sectors and linkages between the two

For decades, USAID has provided leadership and resources, financial and technical, to promote conservation and economic growth in Madagascar through sustainable NRM, development in rural areas, increasing access to FP and other health and nutrition services and linking population and environment actions, among other efforts. Select sector-specific and linked actions relevant as contextual background to the story of Madagascar's PE scale are presented below. This review is by necessity truncated and does not incorporate all efforts supported by USAID over the years contributing to PE scale up.⁹⁸

Early USAID Madagascar mission history

The US assistance program to Madagascar was first established in 1962 and aimed mainly at improving food security. The USAID mission officially opened in 1984 and a biodiversity and environmental conservation initiative within USAID was launched in 1988. The goal of the first USAID/Madagascar program (1988 to 1992) was to increase rural incomes, household nutrition and overall quality of life in rural areas [1].

1992-1997

In keeping with the GOM's development priorities, the goal of the mission's 1992-1997 Strategic Plan was to accelerate sustainable economic growth. This was to be achieved through two sub-goals: stimulating private investment and *balancing population growth and natural resource use*. To accomplish this, two USAID SOs were identified: reducing NR depletion and reducing total fertility [1]. The fact that population growth was a specific mission sub-goal drew attention to the importance of population-related factors such as TFR and contraceptive use to overall development and facilitated coordination of interventions across mission programs during that timeframe.

Env/RD office support to EPI: SAVEM and KEPEM

In 1990, to help implement Madagascar's NEAP⁹⁹, the World Bank and USAID jointly launched an environmental protection program called SAVEM (Sustainable Approaches to Viable Environmental Management). SAVEM aimed at identifying ways to manage both the country's PAs as well as peripheral zones of biodiversity importance. As noted in the text, six protected areas around Madagascar were identified for SAVEM funding as

⁹⁸ Also not covered in detail is the extensive sector-specific support provided by USAID and other donors and the GOM nor support by NGOs funded through other sources that have contributed to developments in the environment and health/FP sectors.

⁹⁹ USAID was instrumental in helping to develop the plan.

ICDPs under ANGAP management: Amber Mountain, Andasibe, Andohahela, Masoala, Ranomafana and Zahamena. SAVEM was scheduled to end in 1998 but USAID extended the project through the end of 1999 because of natural disasters that developed during 1998 [2]. Biodiversity conservation was further supported by the 1992 Knowledge and Effective Policies for Environment Management (KEPEM) Project which encompassed a broader geographic focus than just the PAs and addressed policy and institutional changes supportive of sustainable conservation [3].

HPN office support to APPROPOP

The agenda of the office supporting health/population and nutrition (HPN) initiatives in the early 1990s was helping the GOM build societal consensus on its National Population Policy including: the need for a rapid expansion of FP services; accurate use of data to support national and local planning and integrating FP and health services throughout Madagascar [3]. The DHS conducted in 1992 provided baseline data to support periodic program evaluation and as a basis for long-term planning. To help the country achieve reductions in total fertility, a 5 year (1993-1998) FP project was put into place called APPROPOP (Madagascar Population Support Project). The purpose of the project was to rapidly expand the availability of high quality FP services, increase contraceptive prevalence and bring population growth to a level consistent with Madagascar's socio-economic objectives and resource base [4].¹⁰⁰

Around that time, the GOM assigned donor agencies providing support to the health sector in Madagascar to specific provinces so that the agencies could focus their assistance and decrease overlap [5]. USAID agreed that APPROPOP would work mainly in Antananarivo and Fianarantsoa provinces, two of the most densely population areas in the country [3, 6, 7].¹⁰¹ To increase demand for services, APPROPOP initiated a grants program to encourage organizations to develop more effective ways of quickly increasing contraceptive prevalence. In 1995, in response to demands from ICDP NGO operators, APPROPOP began providing FP planning support to three ICDPs: in Toliara, Toamasina and Fianarantsoa provinces. The three projects all incorporated mobile health teams to execute health/FP activities and to assist providers in local health facilities. The projects differed, however, in how they worked with local health NGOs.¹⁰²

¹⁰⁰ Interventions under APPROPOP included many national level policy and systems activities as well as training of managers, development of a cadre of trainers and working with government health clinics as well as NGOs.

¹⁰¹ A review of the history of cross-sectoral efforts focusing mainly on the province of Fianarantsoa is provided in a recent PRB publication [8].

¹⁰² Around Zahamena-Mantadia, for example, where CI directed the ICDP, the mobile team was the main mechanism for delivering health/FP interventions. Where WWF worked on the ICPD in Toliara, it collaborated from the beginning with a health NGO ASOS that took responsibility for all health/FP activities. For the Ranomafana Park ICDP in Fianarantsoa Province, an NGO, MICET, was created at the end of the project to address the ICDP health/FP and education components. The founding members of the new NGO were members of the mobile health team that had implemented these activities throughout the project.

Early centrally-funded efforts

In 1996, the USAID Mission invited PRB to assist agencies supporting FP [e.g. INSTAT, the MOH, UNICEF, and UNFPA] to better use population and health data when developing FP related policies and programs. Over the next few years, PRB also worked with journalists to improve their technical knowledge and how to recognize the newsworthiness of FP and population stories as a means of increasing media coverage of population issues. *Intermédiás*, an independent association of journalists dedicated to covering health and development issues, was set up during this period and coverage of RH/FP issues in the press, radio and TV markedly increased for a period of time thereafter [9].¹⁰³

In early 1997, a University of Michigan PE Fellow was identified to help the environmental organizations contracted under APPROPOP to implement FP around their respective ICDP communities. The fellow helped build capacity and interest in linking FP and biodiversity conservation¹⁰⁴ and identified operational and conceptual issues related to linkages [10].¹⁰⁵ Also in 1997, a USAID centrally-funded child survival project (BASICS) was invited to Madagascar to help address persistent issues affecting infant and child morbidity and mortality. BASICS, implemented by a partnership of organizations¹⁰⁶, aimed to assist *scale up* of the use of proven nutrition and health interventions for newborns and children [11]. Among other accomplishments, the project worked jointly with the MOH to develop and pilot a new approach for community engagement and behavior change.¹⁰⁷ This approach was later adapted by USAID's health bilateral JSI as a key means of delivering integrated child survival and FP services in rural areas.

¹⁰³ In 2004, PRB also supported two capacity building workshops for VS and its members. The aim of those workshops was to strengthen capacity to analyze and communicate important population, health and environment (PHE) linkages. The first workshop, *Participatory Demographic Appraisal for Local Environmental Management Planning*, provided training in demographic and participatory appraisal techniques. Participants conducted demographic appraisals in the field and analyzed PHE connections in villages. Village plans were then developed, projecting forward 15 years, that could serve as the basis for future PHE work in those villages, assisted by VS members. The second workshop focused on how to develop and use a fact sheet for communicating PHE themes with policy audiences [9].

¹⁰⁴ This assistance included applying for Summit Foundation funding for Tany Meva and advocating for the establishment of a Malagasy PHE platform (Voahary Salama – see below).

¹⁰⁵ The University of Michigan PE fellows program was established in 1993, in partnership with USAID/Washington's PRH Office. The purpose of that program was to develop a cadre of professionals specializing in population-environment issues who could link with conservation organizations in the field, providing technical assistance (TA) and helping to develop linked approaches appropriate for local contexts. As of late 2006, the fellowship program was transferred and is being managed by the Public Health Institute (PHI) as the Global Health Fellows Program (GHFP).

¹⁰⁶ Project organizations include MSH, JSI, Academy for Educational Development (AED), Program for Applied Technology for Health (PATH), Save the Children, the Manoff Group, and TSL (<http://www.basics.org>)

¹⁰⁷ BASICS continues to operate in Madagascar supporting the introduction of zinc for the treatment of diarrheal disease [http://www.basics.org/about_basics/countries/madagascar.htm]

1998-2003

HPN office support to Jereo Salama Isika

In 1997, the USAID Madagascar mission completed a new Country Strategic Plan for FY 1998-2003. The goal was poverty reduction through two SOs: Smaller, Healthier Families and Biologically-Diverse Ecosystems Conserved in Priority Conservation Zones. To achieve the first SO, USAID's HPN office supported a new five-year bilateral project Jereo Salama Isika ("Look, We Are Healthy" in Malagasy).¹⁰⁸ The project initiated activities in early 1999 and had a broad mandate to integrate child survival, nutrition, sexually transmitted infections including HIV as well as RH/FP activities at both the community and service delivery/facility site levels.¹⁰⁹ The project assisted the MOH to decentralize health care by working through local NGOs and encouraging local communities to take responsibility for their own health status. JSI focused early on at the district level although central level assistance was also provided to ensure a continuous flow of contraceptives and drugs and to improve the quality of services e.g., through in-service medical school training.

Throughout the life of the JSI project, activities were implemented in over 20 districts in the provinces of Fianarantsoa and Antananarivo in collaboration with UNFPA and local implementing NGOs [8, 11]. Overall, 17,000 community volunteers were mobilized in those districts. FP was not provided as a single intervention but was integrated into a package of MCH-oriented health services (including IMCI, immunization, nutrition,¹¹⁰ HIV/AIDS, and Young Adult Reproductive Health). The network of volunteers proved effective in increasing demand for health including FP services through community mobilization efforts such as radio communications [11]. The JSI project embraced the same social mobilization approach introduced through the BASICS project, adopted it and gave it the title "Champion Community".¹¹¹

Env/RD office support to EP2: MIRAY and LDI

A qualitative evaluation among seven groups of stakeholders conducted at the end of the SAVEM Project provided a means of documenting opinions about how the ICDPs functioned and their strengths and weaknesses [12]. USAID's (then) NR Office responded to the recommendations regarding landscape scale by supporting the MIRAY Program for Ecoregion-Based Conservation and Development.¹¹² MIRAY operated

¹⁰⁸ The JSI project was implemented by JSI R&T.

¹⁰⁹ This broad mandate was in contrast to APPROPOP for which FP was its main focus.

¹¹⁰ Between 1999 and the end of the project, JSI collaborated with the USAID centrally funded LINKAGES Project to integrate nutrition into IMCI. LINKAGES (1997-2004) was managed by the AED and operated in six provinces.

¹¹¹ The efforts of JSI /LINKAGES were geared towards "scale up" by means of the following strategies:

- Partnerships
- Multiple communication channels
- Interventions not dealt with in isolation

[http://www.linkagesproject.org/publications/Scaling_up_Madagascar.pdf]

¹¹² MIRAY partners included PACT, WWF and CI.

between 1998 and 2004 and sought to develop national capacities to manage NR sustainably at the local, regional and national level through participatory processes [13]. Under this program, landscape-level conservation planning was organized in the context of “ecoregions”.¹¹³

USAID’s NR Office also supported the Landscape Development Interventions (LDI)¹¹⁴ Project that operated in 4 geographic areas (Mahajunga, Fianarantsoa, Moramanga and Antsiranana). LDI similarly embraced an ecoregional approach, focusing on conservation and development activities to protect priority ecosystems while simultaneously improving the well-being of small farmers living near and depending on these ecosystems [15]. A key strategy for economic development within that project was promoting a holistic “farming systems” approach which involved expanding agricultural intensification and crop diversification in various agroecological niches based primarily on the offering of agroecological techniques to farmers associations known as Koloharena.¹¹⁵ The project promoted the “farmer to farmer” approach in which extension workers or farmers trained to be “experts” served as agents of change, adopting less destructive and more productive agricultural practices [16].¹¹⁶ Building on ICDP experiences and the fact that “population growth balanced with natural resource use” was a USAID sub-goal, the LDI project approached various entities (including the newly established health project, JSI) to collaborate and provide health including FP intervention in biodiversity priority areas. LDI was able to work in partnership with various VS members to link its interventions to FP and other health efforts (including through the MGHC project). A second University of Michigan PE fellow posted to Madagascar in 2000 helped link activities between LDI and VS health partners around the Mantadia-Zahamena forest corridor, served as liaison between USAID and local implementing partners and helped strengthen the VS association [17].¹¹⁷

1998-2003

Population Services International: social marketing

¹¹³ WWF defines ecoregions as “large units of land or water that harbor geographically-distinct assemblages of species, communities, dynamics and environmental conditions” [14].

¹¹⁴ LDI was a project organized under contract to Chemonics International, Inc. The project ended in December 2003 and an ecoregional transitional program, (PTE), was funded by USAID between Jan and Sept 2004 to bridge activities until the next program period’s projects were operational.

¹¹⁵ The Koloharena are unique in having a strong environmental basis. This is reflected in the fact that their by-laws state a commitment to not practicing tavy and adopting improved agricultural and sustainable NRM practices [55].

¹¹⁶ Voahary Salama (VS) later promoted this approach among partner organizations as one of various community-focused social mobilization approaches for effectively linked population, health and environment efforts (see below).

¹¹⁷ In 2004, a third U of M PE fellow was posted to Fianarantsoa to assist local NGOs with linked PE efforts and keep integration a focus of USAID’s Fianarantsoa Ecoregional Alliance (she transitioned to PHI/GHFP in 2006 when USAID awarded a new contract for the management of the fellows program); additionally, a PHI/USAID fellow (the author) was posted to Antananarivo to support linked efforts from a central office position. .

Population Services International (PSI) is a US-based social marketing organization that promotes products and services at subsidized, more affordable prices to motivate commercial sector involvement. It uses modern techniques of marketing and communication through many channels to encourage behaviors that will result in improved health (including RH) outcomes [18]. It initiated activities in Madagascar with USAID support in 1998 and has since been a key actor in the country, improving access to FP and other health services and products. Of importance to this case study, PSI has a network of community level points of sale for pills and condoms that allows for increased access to these contraceptive methods, if interested users cannot or chose not to access the nearest public health facility (or if supplies at that facility run out).¹¹⁸ Madagascar's PSI office currently also supports a "rural penetration" strategy for increasing the reach of its FP and other health products (e.g. water disinfectant, bednets) to more remote communities than routinely served through its existing distribution network.¹¹⁹

Environmental Health Project

The Environmental Health Project (EHP), a project funded through USAID's Global Health (GH), Bureau, Office of Health, Infectious Diseases and Nutrition (HIDN), was set up to assist USAID missions with programs to improve environmental conditions as a means of reducing exposure to disease agents. The project focused on: household water treatment, sanitation, hygiene promotion, prevention and treatment of diarrheal diseases and prevention and control of malaria and other waterborne diseases [20, 21]. During the first phase, EHP I, there was an expressed interest among stakeholders for the project to address linkages between human health and "green" environmental issues (e.g. biodiversity conservation and sustainable use of NR) as well as focusing on the "brown" environmental issues noted above.

In response, USAID/Washington included an initiative in the next phase (2000-2005) of the contract, EHP II, entitled Environmental Change and Health Outcomes (ECHO). One component of ECHO dealt with integrated programs. As the EHP II project fell under USAID's GH/HIDN and had an environmental health mandate, it incorporated broad health issues, including but not limited to RH/FP. Specifically, the EHP II scope of work called for the program to demonstrate "in several rural settings, the effectiveness of linking community-based NRM with interventions to improve health, including the potential for scale-up involving both NGOs and governmental organizations" [21]. As funds to *implement* linked activities in the field were being provided through other sources, including the JSI and LDI projects, this made Madagascar a good candidate for EHP II in terms of evaluating the effectiveness and potential for scale up of linked PE activities. The USAID mission invited EHP II to undertake such an evaluation, focusing on three geographic areas (Fianarantsoa, Moramanga and Tolagnaro) where biodiversity-

¹¹⁸ In addition to its various projects, PSI works collaboratively with USAID's current bilateral project, SanteNet, to expand social marketing distribution of FP and other health products in all Koaminina Mendrika communes (see below).

¹¹⁹ Various communities near biodiversity-priority areas are among the latter and PSI recently partnered with WCS and CARE in Madagascar to expand access to FP products around Makira Forest within the context of a newly funded PHE project there (see below) [19].

rich forest corridors were under threat from human pressures, where human health conditions were poor and where various linked PE efforts had been undertaken to date with USAID, government and other support.¹²⁰

Voahary Salama

During one of its early visits (2000), representatives from EHP organized a workshop to bring together the many players involved in or supporting linked efforts to develop a common vision, to explain the underlying evaluation hypothesis and to agree on how the initiative being evaluated would unfold over the following four years (four years being the minimum time period considered necessary for “synergies” resulting from linked health/FP and NRM activities to measurably occur) [21].¹²¹ It was at that workshop that participating organizations decided to organize themselves as a consortium of agencies called Voahary Salama (VS) meaning in Malagasy “human health and all that is natural.” Included in this consortium were funding, technical, as well as implementing partners, unified in their dedication to improving NRM, food security, nutrition and health/FP in communities around biodiversity-rich forested areas in Madagascar, particularly the forest corridors near Fianarantsoa and Moramanga and Tolagnaro.

As initially conceived, VS served as a Malagasy platform for bringing together local and international implementing and technical assistance NGOs, government and donor organizations with a common vision “healthy people, living in a healthy environment using local natural resources in a sustainable way”.¹²² The consortium provided a way of sharing information among organizations experimenting how best to engage and mobilize communities towards this vision. It also provided a means of more efficiently offering technical training, including in FP, in a standardized way to organizations with this common vision but different mandates, strengths and geographic coverage.¹²³ VS changed its official status to become an association in 2005 and in 2006 engaged in an institutional assessment and development exercise to reflect on its comparative advantages, market niche and technical competencies. This resulted in a reorganization of the Directive Office and the establishment of new partnerships.¹²⁴ The vision remains the same however as well as a focus on communities including poor rural communities near areas of biodiversity importance.

Tany Meva

¹²⁰ See reference 8, 21 and 22 for a review of the evaluation findings.

¹²¹ This effort was encouraged by a number of actors in-country who had been involved with integration before then including the Uof M fellow, LDI and JSI project staff, among others.

¹²² For more detailed information on VS, see its website www.voaharysalama.org and references 17, 21, 22.

¹²³ For example, ORC/Macro supported a number of FP-related trainings between 2001 and 2005 as did PRB.

¹²⁴ For example, VS’ central office worked closely with SanteNet during its first two start up years to share experiences and to help scale up from champion communities to Kaomanina Mendrika. Additionally, a number of VS member organizations became SanteNet implementing partners and continue in this partnership to date (see below).

Tany Meva, a Malagasy environmental NGO established in 1996 with USAID support, was a founding VS member. The main goal of Tany Meva is to support GOM's efforts to implement the country's NEAP. Through its grants program, the foundation focuses on national needs for management and capacity building at the grassroots level. The organization received Summit Foundation funding at the turn of the decade for linked health/FP and environmental activities but in 2001 these monies had to be cut back as a result of stock market losses. Consequently, negotiations were made for EHP II, starting the next year, to financially cover those activities in Madagascar [22, 23]. Thus, while EHP1/ECHO had initially been designed to provide support to *monitoring and evaluation* of linked activities in Madagascar, starting in 2002, the project also began supporting *implementation* of project activities through VS.

Strategic Pathway to Achieving Reproductive Health Commodity Security (SPARHCS) and DELIVER: contraceptive security

In 2003, USAID/Madagascar invited the centrally-funded Policy Project to strengthen commodities security for reproductive health. To do this, an assessment was conducted using the SPARHCS (Strategic Pathway to Achieving Reproductive Health Commodity Security) methodology. The process involves identifying strengths, weaknesses and opportunities with the current commodities system and recommended follow-up action. Using SPARHCS helped to initiate important changes including the degree of involvement of the public sector in FP and improved relationships between the public sector, NGOs and partner communities. The SPARHCS assessment findings fed into the development of a one-year draft plan of action, designed to move Madagascar towards its goal of contraceptive security. The plan, accepted in 2004 by the MOHFP at a national conference co-sponsored by the USAID-funded DELIVER Project ¹²⁵ (designed to help strengthen supply chain performance by strengthening country logistics management information systems), was to be implemented over a 16-month period [5].

Flexible Fund Project

In 2003-2004, additional monies were granted to EHP specifically to implement FP activities in the field through USAID/Washington's PRH Office Flexible Fund (FF) project (Service Delivery Improvement Division). The monies, funneled through VS, were provided as grants to member NGOs also receiving support from EHP for other health interventions near the forest corridors. Approaches employed by VS members to expand and strengthen FP services with this funding included 1) Intensive Functional Literacy to support Development (AFID) incorporating FP messages, and 2) an "advanced strategy" for FP services involving a monthly satellite clinic where injectables (the most frequently used modern method of contraception in Madagascar) were provided to women in communities in target geographic areas, located over 10 km from a fixed public health facility. That funding to VS members ended around the same time that EHP Project activities in Madagascar ended (August/Sept 2004) [24, 25].

¹²⁵ DELIVER is managed by John Snow Inc.

In 2003, FF monies were also provided to the international organization ADRA to strengthen FP services at both the community and health facility levels. This is relevant to Madagascar's scale up story as ADRA has a long history of working on community development in remote rural areas in the Toamasina Province with Title II and other funds, including in communities close to biodiversity priority landscapes. ADRA was a member of VS during the 2000-2004 evaluation and achievements in communities supported by this organization were particularly impressive [21].

In late 2004, additional FF project monies (REACH) were made available to VS at a critical time when EHP funding to the association had ended and when funding to VS members implementing health/FP or environment activities (in association with JSI, LDI, MGHC or FF projects) was also winding down or had ended. These funds aimed to provide additional capacity-building support to VS and its members through organizational development activities, needs assessment training (i.e., "question of public interest" inquiry) and strategic and operational planning assistance [26].¹²⁶ This funding was extended through early 2006.¹²⁷

In 2006, USAID/FF monies were also provided to a VS member organization, Medical Care Development International (MCDI), to support FP activities. While MCDI has historically worked in the Toliara Province, these monies were directed towards efforts in the Fianarantsoa Province. They will complement funds awarded to MCDI by the African Development Bank (ADB) for a three-year Water and Sanitation Project [27].¹²⁸

Centrally-funded PHE projects

In 2001 the US Congress added language to the Foreign Operations Bill allocating monies under the Child Survival and Global Health Funds for RH/FP "including in areas where population growth threatens biodiversity or endangered species". This directive was subsequently renewed [28]. In 2002, a communication went out from the PRH Office to all HPN officers in countries containing biodiversity hotspots about the new language. The communication encouraged HPN officers to consider opportunities for programming, especially where RH interventions could enhance the effectiveness of existing community-based conservation and NRM management programs [29]. In 2003, the Senate included additional language urging USAID to undertake FP/RH in such regions and the House Appropriations Committee urged USAID "to develop performance goals and indicators which promote cross-sectoral collaboration" [28].

USAID's GH Bureau responded to the above directives by supporting an integrated Population, Health and Environment (PHE) Program in coordination with the EGAT

¹²⁶ These REACH funds were channeled through the PACT/Madagascar Office.

¹²⁷ Over the years, the US-based organization ORC/Macro facilitated three "Program Design, Monitoring and Evaluation" workshops for VS members emphasizing FP with FF support.

¹²⁸ Current plans are for USAID/FP funds to be provided to VS through World Learning to support both VS' platform strengthening role and as a means of channeling funds to VS NGO members to implement FP activities in the field.

Bureau's Biodiversity Team in the Office of Natural Resources Management (NRM). The PHE program's SO is to advance and support links worldwide among the population, health and environment sectors through partnerships. Its efforts support the GH Bureau's objective of advancing FP/RH programs worldwide while simultaneously supporting EGAT Bureau's NRM objective to improve conservation management and sustainable use of NR [22, 30].

Currently, the PHE program falls under USAID's PRH Office, PEC Division. The program has two parts: one, a Global Leadership Priority, that contributes to existing PRH projects and a second part that funds stand alone projects.¹²⁹ A number of activities described earlier, such as the University of Michigan PE fellows program¹³⁰ and PRB advocacy work (including in-country training) was or is supported through this USAID centrally-funded program. The program has also supported papers and panels at key international fora and workshops to which many Malagasy representatives have been invited. Different aspects of Madagascar's PE scale up story have been told by representatives from LDI, VS, JSI, MGHC and SanteNet, among others, at past Global Health Council (GHC), American Public Health Association (APHA) and World Congress conferences. Additionally, Madagascar's PE actors have benefited from participating in USAID PHE program-funded workshops in Thailand, Tanzania and the Philippines.

The program has also provided funding to incountry PHE field efforts. Three such efforts are supported in Madagascar: CI, WWF, and WCS/ PSI projects (in communities surrounding the Mantadia-Zahamena forest corridor in the east, the Spiny Forest in the south and the Makira Forest in the north, respectively) to improve livelihoods, NRM and/or biodiversity conservation. The PHE project funds complement conservation efforts by these organizations and focus principally on helping address unmet need for FP in communities around their respective conservation target areas.¹³¹

CI: "Healthy Families, Healthy Forests: Combining Reproductive Health with Biodiversity Protection for Effective Programming"

CI's PHE project aims to reduce human impact on limited NR in rural, high biodiversity areas [31]. They do this in part by helping rural communities understand the relationship between having smaller, healthier families, improving the stewardship of NR and protecting forests that are habitat for globally significant biodiversity. One strategy they employ for improving local conservation practices is by providing basic services including FP/RH. They operate in a number of countries and each country project involves selected partners based on existing relations in the target communities and complementary skills to existing CI staff and activities [32].¹³² In Madagascar, the

¹²⁹ Under the latter comes funding to WWF, CI, the Woodrow Wilson Center and a PHE task order under the Environmental Health Project's Indefinite Quantity Contract [56].

¹³⁰The author's fellowship was partly funded through this program, and partly through the USAID/Madagascar/HPN office.

¹³¹ CI's and WWF's PHE projects are undertaken within the wider framework of VS partnerships and the local implementing health partners (ASOS and Mateza) are long-time VS members.

¹³² CI initiated its Madagascar project in 2002.

project supports two local health NGOs, ASOS and Mateza, to provide RH/FP services and nutritional training in communities around the Mantadia-Zahamena corridor.¹³³ Field agents provide information on both health/FP and alternatives to slash and burn, a major cause of deforestation and subsequent soil erosion and degradation around the corridor [33].

WWF: “Successful Communities from Ridge to Reef”

In 1998, WWF established a program in Madagascar called “Ala Maiky” aimed at achieving long-term maintenance of biodiversity representation, ecological processes and viable species populations in the dry (spiny) forests of the country. This was to be accomplished through a network of nine priority areas in the ‘ecoregion’ [34].¹³⁴ WWF’s Ecoregional Conservation Plan, completed in 2002, spelt out the strategies, actions and players needed to achieve this vision [35].

WWF’s PHE project in that ecoregion got under way in 2003.¹³⁵ The project goal is to promote sustainable conservation of biodiversity in targeted areas by addressing identified population threats and improving local people’s ability to take part in development initiatives [36]. Specific threats in the Spiny Forest ecoregion were identified as part of a mapping exercise undertaken by WWF in 1999.¹³⁶ Based on the mapping exercise findings, the project aims to:

- control population growth through RH/FP, girls’ education and literacy programs;
- control migration trends, and
- influence consumption patterns of local NR (especially trees for firewood) [37].

WCS: “Conservation and Human Welfare in Northeastern Madagascar: Integrating Health and Family Planning Interventions into the Wildlife Conservation Society’s Makira Forest Project”

The third USAID funded PHE project in Madagascar was initiated more recently, in 2006. It targets an important area for biodiversity in the country, Makira Forest Protected Area (MFPA), newly established through the country’s system of protected areas (SAPM), contributing to the President’s “Durban Vision.” This PA exemplifies the philosophy underlying SAPM, i.e., conservation in partnership with local communities so that they can be effective stewards of the local NR base upon which their livelihood depends [38]. MFPA is located in the north of the country near Masoala National Park

¹³³ CI supports PHE projects in four countries through this funding source.

¹³⁴ WWF has defined ecoregions worldwide of which seven exist in Madagascar. This specific definition differs from USAID/Madagascar’s “ecoregions” which refer to landscapes of biodiversity importance in Madagascar, for programming purposes specifically in the provinces of Fianarantsoa, Toamasina and Toliara. Consequently, while the latter contain areas falling within one or more of WWF’s worldwide ecoregional categories, there is not a one to one correlation between the two.

¹³⁵ WWF supports PHE Projects with this USAID central funding in 9 countries.

¹³⁶ The mapping effort aimed to identify connections and interactions between population and biodiversity at the ecoregional scale [14].

where, starting in 1992, WCS began working with the Ministry of Water and Forests and the Peregrine Fund (in partnership with CARE International) to implement an ICDP (with SAVEM funding) [39].

No local health NGOs or VS members currently support development projects around MFPA and the area does not currently fall within the geographic focus of any USAID-supported Ecoregional Alliance. Consequently, the model for this project differs from the other two in supporting partnerships with two international development NGOs that do have a presence in the area: PSI, a social marketing organization operating in the region distributing bednets (see above) and CARE (CARE has a long history of supporting broad development initiatives in hard to access places, including in this area of Madagascar). The three partners work collaboratively to integrate FP (and other health) interventions into an already-established community environment and development program supported by WCS in the communities bordering the MFPA. The long term goal of this PHE project is to improve human health while reducing unsustainable human NR use thereby enhancing community well-being and the ability of community members to effectively steward the land [40].

2003-present

The goal of USAID/Madagascar's 2003-2008 Integrated Strategic Plan was Sustainable and Inclusive Economic Development.¹³⁷ It aimed to contribute to the country's poverty reduction and economic growth goals. A feature of that plan of relevance to this story is that the HPN and Env/RD program offices shared two sub-results: one related to FP (i.e., Demand for and Availability of Family Planning and Health Services and Products in Priority Conservation Areas Increased) and the other related to water (i.e., Water Resource Availability and Management for Agriculture and Household Use Improved). This design feature aimed to demonstrate that achieving biodiversity conservation depends upon rural communities having: 1) access to adequate quantities (and quality) of water and 2) balancing population size increases with NR availability, among other factors. It also demonstrates the belief that for FP and safe water to contribute to improved health and economic growth, interventions and services must be extended to the rural poor, a number of whom live close to and depend upon NR from biodiversity priority areas.

Env/RD Office's Ecoregional Approach

USAID's Env/RD program designed its 2003-2008 program plan recognizing the "inextricable links between natural resources, economic growth, agricultural productivity, water quality and availability, poverty, health, and governance".¹³⁸ In keeping with the NEAP and the GOM's PSRP, the program's results framework emphasized "sustainable

¹³⁷ USAID has more recently developed a 2006-2011 strategic plan that incorporates three program areas (HPN, Env/RD and Democracy and Governance) and builds upon activities initiated during the 2003-2008 program period [<http://www.usaid.gov/missions/mg/about/overview.html>].

¹³⁸ The program funded (and continues to fund) various complementary projects to address these links: MIARO, Jariala, ERI, Bamex and, during initial program years, Misonga.

use of forest and NR as a means to conservation and as a means of empowering and elevating people out of poverty” [1, 3, 41].¹³⁹ Linkages between technical domains and respective contractors were built into the program as a means of achieving multiple outcomes.

Of relevance to this story, in 2004 “Alliances”¹⁴⁰ were established to facilitate coordination within three areas identified by USAID’s Env/RD program as ecoregions. These ecoregions incorporate landscapes of biodiversity priority for the GOM – two are located in the tropical forest ecoregion of low, medium, and high altitudes and one is within the dry forest ecoregion of the south. They are different in size and cover different numbers of administrative regions.

USAID’s Ecoregional Alliances were designed to undertake conservation planning within the context of decentralized regional development. Members of the three alliances were expected to develop a common vision based on an understanding of the interdependency between project domains and to collaborate closely to achieve USAID program, NEAP and national poverty reduction objectives [42]. Pressure (threats) analysis was used to identify human impacts threatening biodiversity conservation. Additional insights to guide the development of program strategies were obtained through an appreciative inquiry which focuses on community assets and opportunities to support positive behavior change. Implementing partners involved in complementary activities, not contracted under the program but supported by USAID through other funding mechanisms (e.g. Title II¹⁴¹ and SanteNet) were invited to join in the alliances to maximize impact.

Nature (Health) Wealth and Power Framework

Past experiences in the environment sector highlighted the importance of income (wealth) and good governance (power) to effective NRM [43]. Recognizing this, USAID’s EGAT Bureau supported an initiative called Nature, Wealth and Power (NWP), considered a “lens” or “framework” through which objectives associated with NRM and conservation could more appropriately be viewed. In 2004, USAID/Madagascar’s Env/RD office invited IRG, experienced applying this framework in West Africa, to Madagascar to share their experiences and lessons learned. In 2005, the Env/RD office then organized a workshop for a number of Madagascar stakeholders to discuss the relevance of the NWP framework for achieving NEAP goals and poverty reduction. Considering the many years’ experience in Madagascar integrating health including FP and environmental issues, health was identified as an important domain for Madagascar’s situation that was missing from the general NWP framework. Workshop participants were invited to debate whether and how the health domain should be incorporated as part of the NWP lens.

¹³⁹ The Ministry of Environment and Water results framework provides the basis for USAID environment programming indicators.

¹⁴⁰ USAID defines its Ecoregional Alliance as executing partners operating in the same ecoregion, having complementary domains of expertise and working together to contribute to the achievement of EP3 results [38].

¹⁴¹ This was supported by USAID’s Ecoregional Initiative (ERI) project that also helps coordinate the Alliances in two of the three provinces.

Consensus of the group was that for many reasons, health should be incorporated as its own domain to form the Madagascar framework Nature, Health, Wealth and Power (NHWP) [44].¹⁴² There was considerable discussion during the workshop about the importance of education to development and initial perspectives were to emphasize the role of education within each of the four domains.¹⁴³

Once agreed upon, the Ecoregional Alliances organized their workplans to conform to the NHWP framework, acknowledging that biodiversity conservation requires consideration of all these interdependent domains and community needs. They then focused on trying to ensure that a “minimum package” of interventions from at least the four domains were offered to as many communities as possible in target communes, within the focal biodiversity priority regions. Where possible, this was done using the Kaomanina Mendrika approach (see below).

Considerable investment of time and energy has been made to obtain national and regional buy-in to support the NHWP framework. In Fianarantsoa, the ERI project supported a process whereby the 15,000 strong Koloharena rural federations also developed and implemented their work plans using this framework. While the long-term impact of this effort is not yet known, the fact that a strong rural Malagasy federation is implementing their work in the context of the NHWP framework, in collaboration with communes along forest corridors, is in itself an important step forward.

A few years ago, a constitutional mandate dissolved “provinces” as an official administrative level, creating 22 new regions. The Ecoregional Alliance members work in tandem with ecoregional platforms/interest groups (ie: PlaCaz in Toamasina and CMP in Fianarantsoa) to assure harmony and coordination between the administrative regions falling within their respective USAID ecoregion. Following the dissolution of provinces, it is not yet evident how these inter-regional platforms will be structured. Therefore, the inter-regional coordination role of the Alliances is especially important to retain a broad ecoregional vision for conservation and development. This vision may not endure however unless official inter-regional structures are set up by the state. In the interim, the Ecoregional Alliances have gone an impressively long way to build effective inter-project collaboration, teamwork and a sense of team spirit

HPN Office’s bilateral SanteNet

In 2004, USAID’s health bilateral project, SanteNet (2004-2008), became operational. Its results framework mirrors that of the HPN Office, focusing on increasing demand, availability, and quality of select health and FP products and services and strengthened

¹⁴² Reasons included that USAID’s then five-year strategic plan was organized around four SOs including health and because the health sector had been actively involved for many years supporting linked health, population and environment efforts in rural areas of biodiversity importance.

¹⁴³ Since then, education has been included as a separate “star” within the KM approach (see below).

systems to support these interventions [45, 46].¹⁴⁴ Its focus on commune (or county) level results through community interventions (in addition to system strengthening and advocacy work at the national level) is in keeping with the GOM's decentralization strategies and poverty reduction objectives. The project was designed to promote partnerships and it is currently partnering with the government, the commercial sector, faith-based organizations, local development NGOs as well as other international organizations to take health interventions, including FP, "to scale" (launched in 303 communes in 2007). Project activities focus on the three provinces within which the ecoregions (supported by USAID's Env/RD office) are located (Toamasina, Fianarantsoa and Toliara) as well as in Antananarivo (the other focal province where JSI/LINKAGES efforts resulted in impressive gains). One of SanteNet's result indicators focuses specifically on improving access to FP in USAID target priority conservation areas.¹⁴⁵

Kaominina Mendrika

For this program period, the HPN Office promoted use of the 'Champion Commune' approach [referred to hereafter by its Malagasy title – Kaominina Mendrika (KM)], based on successful experience in prior years with the champion community approach. That approach's success derived, in part, from cooperation fostered among key community and commune groups including local authorities, health workers, community volunteers, churches and schools. Success also came from engaging the community in identifying their own development needs through participatory rural appraisals. In principle, applying a similar approach at the commune level would provide an opportunity for commune officials and members of various communities to review their development needs, resources, linkages between sectors and strategies to address these needs. As part of the KM process, it is expected that the commune will consider the adequacy of its existing development plan. If such a plan does not yet exist, after engaging in the KM process, the commune should be more motivated, and enabled, to develop such a plan.

Given the importance of FP to achieving national poverty reduction goals, FP features prominently in the current range of interventions discussed with communes as part of SanteNet-supported efforts. Specifically, out of 10 indicators initially proposed to communes as part of the KM health menu, five were FP related. To qualify for SanteNet support, a majority (70% +) of communities within the commune are supposed to commit to and participate in the process. Incorporating FP into a social mobilization strategy aimed at engaging the majority of a commune's members was one way USAID and its partners could support increasing the number of men, women and couples exposed to FP messages, products and services nationwide to help meet the MOHFP and GOM's FP goals.

¹⁴⁴ The definition of a partnership for SanteNet is "organizations with common objectives and complementary areas of expertise, committing their resources and working together to produce results that would be difficult to achieve on their own" [57].

¹⁴⁵ In keeping with the MHFPSP's focus, in SanteNet's latest workplan, intermediate result (IR) 1.3 is designated specifically to reinforcing community mobilization, IEC and BCC in priority conservation areas.

KM meets NHWP

Given successful HPN experiences with the champion community approach in the past and initial positive experiences with the KM approach, USAID considered it a means of going to scale and operationalizing commune level development activities in other domains [including the other three domains represented by the NHWP framework: NRM/conservation (nature), livelihood/income generation (wealth) and good governance (power)]. Where the KM approach was being successfully introduced to improve health outcomes, communes were (and are) being encouraged to identify other domains and financial resources to more comprehensively meet their respective development needs. Under the KM approach, different colored “stars” are awarded to communes that achieve their established objectives – each star representing a different domain. As such, the KM approach involving “stars” is a way of operationalizing the NHWP framework at the commune level. By engaging communities in their own development decisions, the KM approach itself helps empower community members, representing the power domain within the NHWP framework. Where the KM approach is used successfully, as conceived, and supports various development domains (and linkages among domains is well articulated), it is more likely that these domains will be incorporated in future commune and regional development plans. Recognizing this, in 2006 USAID approached MDAT to consider the KM approach, among other options, for strengthening commune level development planning.

In 2005-2006 (Cycle 1), SanteNet supported the KM approach (through its various implementing NGO partners) to improve health outcomes in 81 communes (1 urban town) involving more than a million Malagasy citizens [58]. Of these, 27 (33%) were situated around the forest corridors of biodiversity importance in the two Ecoregions (Toamasina and Fianarantsoa) where the USAID-funded Env/RD partner Ecoregional Initiative (ERI)¹⁴⁶ operates.¹⁴⁷ Twenty five additional communes along the corridors were slated to be provided KM support in the next cycle (Cycle 2 covers 222 communes for a total of 303 communes using the KM approach through SanteNet-supported efforts over the life of the project). Of the initial 27 communes, ERI provided support to 11 (through implementing partners) to apply the KM approach for achieving environment-related outcomes.

A number of key lessons were learned from the first KM cycle that were incorporated into the second cycle, Cycle 2 (currently ongoing) These included:

- “Scale up of KM requires that implementing partners use the approach as a tool to achieve better results where they are *already* implementing other projects and activities”

¹⁴⁶ ERI is managed through the US-based organization Development Alternatives Incorporated (DAI).

¹⁴⁷ This reflects the fact the SanteNet partners include VS members and organizations supported by EHP, MGHC and JSI that previously worked around these corridors. They are extending PE scale up temporally and spatially through support to some of the same communities over time, at a higher administrative level (commune), focusing on the landscape as the geographic scale of conservation interest.

- “Optimal synergy at the commune level comes from simultaneous implementation of complementary approaches”
- “Adding new communes in close proximity to ones already supported allows for cost-sharing”
- “Existing commune structures should be incorporated to the greatest extent possible (e.g Commune Development Committees)”.¹⁴⁸
- “Other decentralized structures should also be involved to maximize impact.”
- Implementing a multi-sectoral KM approach requires flexibility and adaptation in the selection of methodologies, tools, timing and implementing partners.” [58].

In 2006, USAID supported the establishment of a Commune Support Committee and KM Task Force which has since combined to become the Commune Support Task Force. This task force, in collaboration with MDAT, works to support communes in managing their own development through identifying appropriate strategies, tools and through supportive supervision. The KM approach is one of the various tools that the task force has introduced to support commune level development. To promote scale up and to facilitate adoption of the KM approach, generic KM guidelines and tools were developed by the task force and a pool of national KM experts was developed through a training of trainers exercise, supported by SanteNet.

While regions were designated a key administrative level as part of Madagascar’s decentralized decision making, and landscapes are the spatial unit of importance for environmental conservation, the district still plays a role in health sector planning. Consequently, the District Health and Family Planning Services (DHFPS) was invited to participate in KM’s Cycle 1 evaluation process and in Cycle 2, they have become an implementing partner.¹⁴⁹ In this second cycle, SanteNet is also promoting champion districts (Distrika Mendrika) as a means of scaling up health improvements, including FP, from communities and communes to an even bigger geographic scale.¹⁵⁰ Based on lessons learned including issues related to sustainability, in Cycle 2 Santenet decided to cover 9 health districts in full and, where other community mobilization approaches and information, education, communication/behavior change communication (IEC/BCC) activities were scaling up, to partially cover another 34 districts.

Additionally, MHFPSP decided to integrate KM into its Health Sector Development Plan as a strategy for promoting community mobilization and behavior change. In keeping

¹⁴⁸ CDCs are commune-level coordination structures comprised of various subcommittees.

¹⁴⁹ The MHFPSP is directly applying the KM approach in communes in several districts through both its Regional and District Health and Family Planning Directorates. This effort is financed through the World Bank [58].

¹⁵⁰ This progressive increase in administrative levels for becoming a champion is consistent with how MGHC scaled up its efforts in northern Madagascar during the latter part of that project.

with the Ministry's emphasis on community mobilization, a mass media campaign was developed¹⁵¹ and is being used to make awareness-raising easier in KM communes. Finally, PSI's community-based social marketing network (including for pills and condoms) is also being expanded in KM communes through training of volunteer community agents (AVBCs).

USAID/Washington's Repositioning FP Initiative

In 2001, in response to growing concern about the status of FP programming in sub-Saharan Africa, USAID/Washington launched an initiative to reposition FP as a critical component of RH programs and of national and international development agendas. The initiative aims to develop a long-term plan of action to meet the needs of individuals in partnership with countries, governments, and communities, building on the momentum of ongoing repositioning actions in the field [47]. The World Health Organization of Africa (WHO/AFRO) lent support this effort by developing its own "Framework for Accelerated Action for Repositioning Family Planning in Reproductive Health Services" [48]. Subsequently, a multi-lateral operational plan to mobilize commitment and resources and strengthen services was developed.¹⁵² The latter was designed to guide future investments and, pertinent to this study, one objective is to provide support for scale-up or expansion of proven approaches to increase voluntary contraceptive use.

Recognizing Madagascar's commitment to FP, in 2004 the country was chosen by the PRH Office and Africa Bureau to be one of two focus countries under USAID's Repositioning FP Initiative. Under that umbrella, USAID/Madagascar received TA from the central office, exchanges between USAID Mali and Madagascar were initiated and additional funds were provided to support increased access to FP in rural areas of the country.

USAID/Madagascar's Extra Mile Initiative

In Madagascar, the "Extra Mile Initiative" (EMI) was conceived as a strategy under Repositioning FP to increase remote rural community access to basic FP services. It aimed to respond to the GOM's request to expand access to the very poorest of the poor and the hardest to reach populations in rural areas, thereby complementing SanteNet's and other USAID-funded FP activities.¹⁵³ The initiative was also designed to reach people who, because of their poverty, are more likely to engage in actions that have a detrimental impact on the environment (e.g., slash and burn agriculture). This includes communities close or adjacent to biodiversity priority landscapes whose members are the

¹⁵¹ This is supported through the Health Communication Project (HCP), Center for Communication Programs, Johns Hopkins University.

¹⁵² The underlying logic for the plan is that increases in political commitment (for financial and human resources for FP), strengthened participation and coordination among donors and partners, and more effective programming of resources will expand access and meet unmet need for FP in the region [48].

¹⁵³ To achieve national level impact, the actions of HPN's main bilateral project, SanteNet, are mainly directed at more highly populated communes including in rural areas.

most dependent on NR and have traditionally had the least access to any social services, especially health and FP. These are the same populations that tend to have the largest families, with children too closely spaced and that experience the highest maternal and child morbidity and mortality rates [50]. Two organizations with considerable previous experience supporting health/FP programming in remote communities in Madagascar were invited to submit proposals in 2005 for EMI funding which were successfully received.¹⁵⁴

As an example of another approach to linking FP and environmental protection, PENSER, with EMI funding and the support of UNESCO and Tany Meva, worked in communes around the National Park of Midongy Atsimo in Fianarantsoa. As of July 2007, this southeastern cluster of rainforest has become a UNESCO Natural World Heritage site [59]. The organization is also working with SanteNet to promote FP coverage in 9 remote communes in Fianarantsoa and it is in the process of negotiating for funding to improve community-based FP in various other locales, with VS as a subgrantee [59].

Faith-based Initiative

Churches and faith-based organizations in Madagascar have the capacity to reach the most underserved populations in rural areas through their religious networks. Some of these organizations are very active in social programs and health services but traditionally they have not integrated FP as an important component.

In January 2006, a Religious Leaders Platform was formalized including 9 major faith-based organizations that come together to promote the use of FP. The group identifies programmatic socio-cultural factors that prevent men and women from acting on their fertility intentions [51]. These Malagasy faith-based organizations and other local NGOs aim to identify the poorest segments of the rural population and to increase access to FP to these people through a variety of interventions including the GOM's health equity fund called FANOME.¹⁵⁵ A USAID PRH Office initiative (FF project), designed to complement the work of these organizations, supports FP education and advocacy through this platform in 20 communes.¹⁵⁶

USAID's focus on water and the SCALE approach

¹⁵⁴ CARE (5 communes) and JSI R&T/Madagascar (11 communes) whose work, as of 2006, was continued by the Malagasy NGO PENSER, Population and Environment Services.

¹⁵⁵ FANOME was established as a cost-recovery system for drugs. This Equity Fund provides basic medical coverage but operates at the hospital level which leaves out needy populations in rural areas. "Mutuelles", community-based, risk-sharing health insurance schemes were developed as well as a community based health care component within the Equity Fund to address this gap.

¹⁵⁶ This project is managed under a grant to the Malagasy organization, SAF/FJKM, through an award to World Learning. ORC/Macro provides TA to this effort.

In 2005, A USAID GH Bureau/HIDH Office-supported initiative called the Hygiene Improvement Project (HIP) was launched. HIP is mandated to bring about at-scale improvements in three key hygiene practices to reduce deaths due to diarrhea. The initiative works in partnership with a number of USAID missions to achieve sustainable hygiene behavior change at lower cost than traditional programming [52]. In May 2005, USAID/Madagascar invited HIP to initiate activities in-country to help meet MOHFP and USAID diarrhea-related health goals.

HIP facilitates the work of existing institutions and agencies across multiple levels and multiple sectors, encouraging the integration of multiple interventions. A key approach of the project is working “at scale”. The latter is defined as coordinated action of many players towards a common goal and the convergence of actions, competencies, and interventions linked in time and space to benefit the same target audience [53].

The above differs from the concept of “going to scale” or “scaling up” in that action focuses from the start on the highest level at which coordinated efforts is both appropriate for achieving the goal and that can be ensured. This level is based on:

- delineation of relevant geographic boundaries for coordinated action;
- identification of all key players operating within those boundaries;
- agreement of a common goal (in the case of HIP, a water related goal that also addresses morbidity and mortality due to diarrheal disease)
- agreement by the above players to be part of a partnership working towards this common goal [in addition to any other goal(s) their organization aims to achieve].

HIP employs a “systems’ approach to determine how all relevant development interventions work as inter-dependent components of a larger system, considering and building upon the relationships that already exist between all components in that system [54]. The latter derived in part from many years’ experience of the leading HIP organization (AED) with the environment project GreenCOM. GreenCOM promoted SCALE (System-wide Collaborative Action for Livelihoods and the Environment) as an approach for broadening development impact and achieving wide-spread and lasting change [55]. The USAID/Madagascar Env/RD office embraced GreenCOM’s SCALE approach when that project was operational and integrated the systems approach philosophy into its ecoregion-based program. In 2006, a team from USAID’s GH and EGAT Bureaus were invited by USAID Madagascar to help ensure that the SCALE approach was being internalized by USAID- Madagascar’s various programs, focusing on priority ecoregions and the shared HPN and Env/RD water indicator. Among other observations, the team identified the KM approach as a useful tool for operationalizing water and diarrheal-disease related objectives at the commune level. Since then, HIP and SanteNet have worked together to add relevant indicators to KM’s menu of indicators for the communes. This collaboration has also provided an opportunity for stakeholders, some of whom also support FP interventions at different levels, to gain experience with a systems approach to working “at scale”. This is another enabling factor to the potential for PE scale ongoing in Stage 5 of Madagascar’s scale up experience.

Summary of current USAID support to FP scale up past the site level

In summary, USAID's Ecoregional Alliances help coordinate USAID-supported FP/environment links in regions containing biodiversity priority areas [47]. USAID's decision to expand support of the successful social mobilization approach "Champion Community" to the commune level as KM enhanced opportunities for operationally linking FP and biodiversity conservation at that level of decentralization [48]. This complemented the MDAT's plan for establishing CACs to help strengthen and coordinate development at the commune level. Given that only limited amounts of health and FP sector funds can be directed towards the most inaccessible areas - if those funds are to affect national level change - periodic special FP funding (e.g. Repositioning Extra Mile Initiative, FF Faith-Based Initiative) and Title II rural development funds are helping to fill some of the resource gap. USAID's PHE program projects play a special, important role in expanding opportunities for linkages in that those funds for FP are *specifically* targeted to remote communities near areas of biodiversity priority. Those projects are in a position to identify the most highly threatened conservation area targets and to organize FP interventions in as many surrounding communities as funds will support. Scale up of those projects efforts past site-level to the commune level and beyond and to more communities around the landscape in the ecoregion can best occur through partnerships with local NGOs and/or support to decentralized government structures (including MDAT's CACs), the Koloharena federations, the ecoregional platforms and to donor-supported efforts like the KM approach, NHWP framework and the Ecoregional Alliances.

REFERENCES

- [1] USAID. USAID: Madagascar mission history. USAID, <http://www.usaid.gov/missions/mg/about/history.html>.
- [2] Pact. Sustainable approaches to viable environmental management (SAVEM) (September 1991-September 2001), http://www.pactworld.org/programs/country/madagascar/madagascar_savem.htm (accessed July 1, 2007).
- [3] USAID. Country information: Madagascar. USAID, www.usaid.gov/regions/afr/country_info/madagascar.html (accessed July 1, 2006).
- [4] Management Sciences for Health. Where we work: Madagascar. Management Sciences for Health, http://www.msh.org/where_msh_works/africa/madagascar.html.
- [5] Aramati, M. et al. December 2005. *Using the SPARHCS Approach to reposition family planning in Madagascar: A success story*. Policy Project.
- [6] Basics Project. October 2005. *Improving family health using an integrated community-based approach: Madagascar case study*. Basics Project Report.
- [7] International Planned Parenthood Federation, http://www.ippf.org/imspublic/IPPF_CountryProfile/IPPF_CountryProfile.aspx?ISOCod e=MG (accessed November 29, 2006).
- [8] Mogelgaard, K.A. and Patterson, K.P. *Linking population, health, and environment in Fianarantsoa Province, Madagascar*. Population Reference Bureau. <http://www.prb.org/pdf06/PHEMadagascar2006.pdf> (accessed June 5, 2007).
- [9] DeSouza, R.M. 2004. Personal communication with the author.
- [10] Whyner, D. 1999/2000. Collaborating for more effective population-environment interventions. The Experience of the APPROPOP Project and its Environmental Partners in Madagascar. *University of Michigan Population-Environment Fellows Program Newsletter*.
- [11] Harris, N. 2003. *Jereo Salama Isika 1999-2003: Final report*. John Snow International.
- [12] McCoy, K.L. and Razafindrainibe, H. May 1997. *Madagascar's integrated conservation and development projects: Lessons learned by participants*. SAVEM Steering Committee for Lessons Learned.
- [13] Pact. The MIRAY program for eco-region-based conservation and development (June 1998 - March 2004). Pact,

http://www.pactworld.org/programs/country/madagascar/madagascar_miray.htm
(accessed November 2006).

[14] World Wildlife Fund. 2002. *Mapping the connections: the population-environment lessons from Madagascar*. Center for Conservation Innovation, Washington, D.C.

[15] Pact. Country programs: Madagascar. Pact,
http://www.pactworld.org/programs/country/madagascar/madagascar_ldi.htm (accessed June 5, 2007).

[16] Chemonics International. March 2004. *Landcape development interventions: 2002-2003 Annual Report*. Chemonics International.

[17] Talbot, J. 2004. Integrated programs in Madagascar: A population-health-environment success story. *University of Michigan Population-Environment Fellows Program Newsletter*.

[18] Population Services International. About PSI. Population Services International,
http://www.psi.org/about_us/ (accessed November 30, 2006).

[19] Population Services International. *Marketing social et communication pour la sante*. Population Services International Madagascar pamphlet (USAID Strategic Objective # 05 Use of selected health services and products increased and practices improved).

[20] USAID Environmental Health. 2004. *Environmental health: Technical and program background*. USAID.
http://www.usaid.gov/our_work/global_health/home/News/ehaad.pdf (accessed June 5, 2007).

[21] Kleinau, K., Randriamananjara, O. and Rosensweig, F. May 2005. *Healthy people in a healthy environment: Impact of an integrated population, health, environment program in Madagascar: Final report*.

[22] Peilmeier, J. August 2005. *Review of population-health-environment programs supported by the Packard Foundation and USAID*. Packard Foundation and USAID.

[23] Moye, M. and Norris, R. May 2000. *Preliminary assessment: The current situation and capacity building needs of environmental funds in Africa*. New York: International Resources Group, Pact Publications.

[24] Environmental Health Project. *June 2001 Brief: Linking health, population, and the environment in Madagascar*. Environmental Health Project.
http://pdf.dec.org/pdf_docs/pnacm714.pdf (accessed November 30, 2006).

[25] Voahary Salama. June 2005. *USAID Flexible Funds Final report*. Voahary Salama.

- [26] Voahary Salama. 2005. Rapport technique REACH: Appui technique de Pact Madagascar : February – September. Voahary Salama.
- [27] Medical Care Development International (MCDI). October 2005. *Family planning integration through a community-based approach: Concept paper*. Medical Care Development International.
- [28] Population Action International. February 2005. *Linking reproductive health and natural resource management: An official guide*. Population Action International.
- [29] Outlaw, T. 2004. Personal communication with the author.
- [30] USAID. January 2006. *Population health environment global leadership priority strategy document*. USAID.
- [31] Conservation International. Population and environment. Conservation International, <http://www.conservation.org/xp/CIWEB/programs/population> (accessed June 5, 2007).
- [32] Edmond, J. and Fisher, K. 2005. *Combining conservation and care: Lessons learned from population and environment initiatives*. Conservation International, PRD Conservation Learning and Practice.
- [33] Environmental Health Project. Conservation International: Madagascar health-population-environment (HPE) project. Environmental Health Project, <http://www.ehproject.org/phe/ci-madagascarfinal.html> (last accessed 6/5/07).
- [34] World Wildlife Fund Madagascar. 2005. Successful communities from ridge to reef: WWF population-health-environment program. Briefing document for Sierra Club meeting and USAID Madagascar on 31 October.
- [35] USAID. USAID Madagascar: FY 2001 program description and activity data sheets. USAID, http://www.usaid.gov/pubs/bj2001/afr/mg/madagascar_ads.html (accessed June 5, 2007).
- [36] Environmental Health Project. WWF successful communities from ridge to reef. Environmental Health Project, www.ehproject.org/phe/wwf-madagascarfinal.html (accessed June 5, 2007).
- [37] World Wildlife Fund. 2006. *Successful communities from ridge to reef: Madagascar semi-annual report to USAID July 2006 – December 2006*. WWF.
- [38] Holmes, C. January 2007. *Conservation and human welfare in northeastern Madagascar: Integrating health and family planning interventions into the Wildlife Conservation Society's Makira Project*. USAID six month report July 2006 – January 2007. Wildlife Conservation Society.
- [39] Rubel, A., Hatchwell, M., MacKinnon, J. and Ketterer, P. 2003. *Masoala – The Eye of the Forest*. Zurich Zoo.

[40] Environmental Health Project. Wildlife Conservation Society integrating health and family planning interventions into the Makira Forest Project. Environmental Health Project, <http://www.ehproject.org/phe/wcs-madagascarfinal.html> (accessed June 5, 2007).

[41] USAID Madagascar. 2004. Atelier de Renforcement et de Planification de L'alliance Ecoregionale. PowerPoint presentation delivered in Antananarivo October 22.

[42] USAID. 2005. Madagascar interdependent approach to implementing programs” PowerPoint presentation delivered in October.

[43] International Resources Group. 2002. *Nature, wealth and power: Emerging best practice for revitalizing rural Africa*. International Resources Group.

[44] Raik, D. 2005. Minutes from USAID Madagascar’s Nature, Health, Wealth, and Power workshop on 21 July.

[45] USAID Madagascar Health Population Nutrition Office. 2004. *2003-2008 Strategic Objective Framework*. USAID.

[46] Chemonics International. October 2005. *SanteNet Performance Monitoring Plan (PMP)*. Chemonics International.

[47] USAID. *Repositioning family planning in sub-Saharan Africa Operational Plan July 2005-June 2008*. USAID.

[48] World Health Organization Regional Office for Africa. June 2004. *Repositioning family planning in reproductive health services: Framework for accelerated action 2005-2014: Report of the regional director*. WHO. <http://afrolib.afro.who.int./RC> (last accessed June 5, 2007).

[49] Malarcher, S. and Sow, C. 2005. *Trip report: Madagascar: September 16-30*. USAID.

[50] USAID Madagascar. 2005. *Repositioning family planning for the well-being of Malagasy families: Going the extra mile*. USAID.

[51] Randriamalala, H., SAF/FJKM and Madagascar Faith Based Organizations Network. *Family Planning Initiative Proposal October 2005-September 2009*.

52. Academy for Educational Development Hygiene Improvement IQC website: http://aed.org/Projects/HIP_Hygiene.cfm (last accessed 6/10/07)

53. Cogswell L Power point presentation. « Visite de l’HIP au Madagascar de 9 juillet au 5 août 2005 » Aug 2005

54. GreenCOM Strategic Participatory Communications website:
<http://www.greencom.org> (last accessed 6/10/07)

55. Ratsisompatrarivo, JS. 2006. Extending Natural Resources Management and Community Empowerment: The Koloharena Perspective, Madagascar Beahr's Environmental Leadership Program Alumni Newsletter, Spring 2007.
<http://beahrselfp.berkeley.edu> (accessed June 5, 2007).

56. D'Agnes, H 2007. Personal communication with the author.

57. Chemonics International. April 2007. *SanteNet semiannual report to USAID Madagascar. October 2006 – March 2007*. Chemonics International.

58. Chemonics International. Oct 2006. *SanteNet semiannual report to USAID Madagascar. October 2005 – Sept 2007*. Chemonics International.

59. Ribaira, Y. 2007. Personal communication with the author.

Annex 4

Madagascar Green Healthy Community Project

During EP2, after the ICDPs ended, USAID's bilateral JSI project supported health and FP interventions in a number of communities close to areas of biodiversity importance. However, more support was needed to bring key health including FP activities to as many communities as possible located near priority landscapes. To address this, LDI approached JSI to jointly develop a proposal for funding from the David and Lucile Packard Foundation which was successfully received. The resultant project was entitled Madagascar Green Healthy Communities (MGHC) and funding was funneled through JSI's R&T Office in Madagascar. The MGHC project operated primarily in communities around the forest corridors of Ranomafana- Andringitra in Fianarantsoa and Mantadia-Zahamena in Taomasina, around Andohahela Park and the dry forest of the southwest in the Anosy region, and in coastal areas in the north in the DIANA region [1].

The project was envisioned as a way to help achieve equilibrium between population growth, economic growth and use of NR. Specific objectives of the project were increased use of modern contraceptives, improved health and nutritional status, a clean environment, and effective management of local NR in zones peripheral to areas of biodiversity importance.¹⁵⁷ These objectives mirrored the collective vision of the VS partners and the project's integrated design was built upon the strengths of these partners. MGHC called for close collaboration with USAID's LDI project and involvement of local development NGOs supported through the JSI and EHP II projects. It incorporated social marketing techniques to increase community capacity to improve its health status and to achieve food security in ways that protected the environment [2]. MGHC adapted experiences and approaches from USAID's JSI project including "Champion Communities," reinforced by a radio program.

MGHC also incorporated other community mobilization approaches promoted by VS partners such as "Child to Community" (in which children are motivated to achieve objectives and to share their knowledge with their community) and the "Farmer to Farmer" approach - piloted by the LDI project (in which farmers, serving as models, teach other farmers about agriculture techniques and, in this project, healthy behaviors). A key objective of MGHC, in common with the EHP II project, was to help strengthen VS as an association and to help build capacity of local NGO VS members to implement linked activities in the field [3].

Of relevance to this case study is how MGHC "scaled up" from working in select villages in a few communes to operating in many villages in more communes by the end of the project period.¹⁵⁸ This is particularly pertinent as the project was operational in the field

¹⁵⁷ The project focused specifically on: FP, malaria prevention, immunization, diarrheal control, improved rice cultivation techniques, vegetables gardens, improved rice cultivation techniques, soil fertility, and community management of NR [1].

¹⁵⁸ By the end of the project, MGHC worked in 4 provinces encompassing 7 regions, 11 districts, 33 communes and 100 communities (fokontany) [1].

between 2002 and 2005 while the two USAID bilateral projects (LDI and JSI) also supporting the effort ended in 2003 (and EHPII ended in 2004). This meant that towards the end the funding source for all planned activities (health, population and environment) in participating areas had to come from one source, MGHC.

One way MGHC scaled up by project end was by shifting emphasis from activity implementation to how accomplishments during previous years could be sustained and extended. The time period for this shift (2004) coincided with progress within the GOM to decentralize decision-making and authority, with communes officially becoming the lowest administrative level¹⁵⁹ and regions the key administrative unit between communes and the national level.¹⁶⁰ To support this decentralized planning, the integrated, social mobilization approaches promoted by MGHC, VS and its members e.g., Child to Community, Farmer to Farmer and Champion Communities, were marketed as tools for local and regional development. Additionally, the project shifted its focus in some areas from champion communities to “Champion Communes” as the unit of analysis. Focusing on landscapes versus PAs to define the geographic target for biodiversity conservation, as described under Stage 2 of the main text, was another strategy embraced by the project. A third strategy was forming partnerships that expanded the geographic focus and range of resources and talents beyond that which a single organization could support on its own.¹⁶¹ Evidence of project scale up success includes the fact that one region in which MGHC supported activities (DIANA) announced its plans at project end to expand use of the Champion Commune approach in all communes in the region to become a Champion Region [4]. Other results achieved by the project are summarized in various project and evaluation documents [3, 5, 6, 7, 8].

¹⁵⁹ Currently, under the GOM’s MAP the fokotany is the lowest focal administrative level.

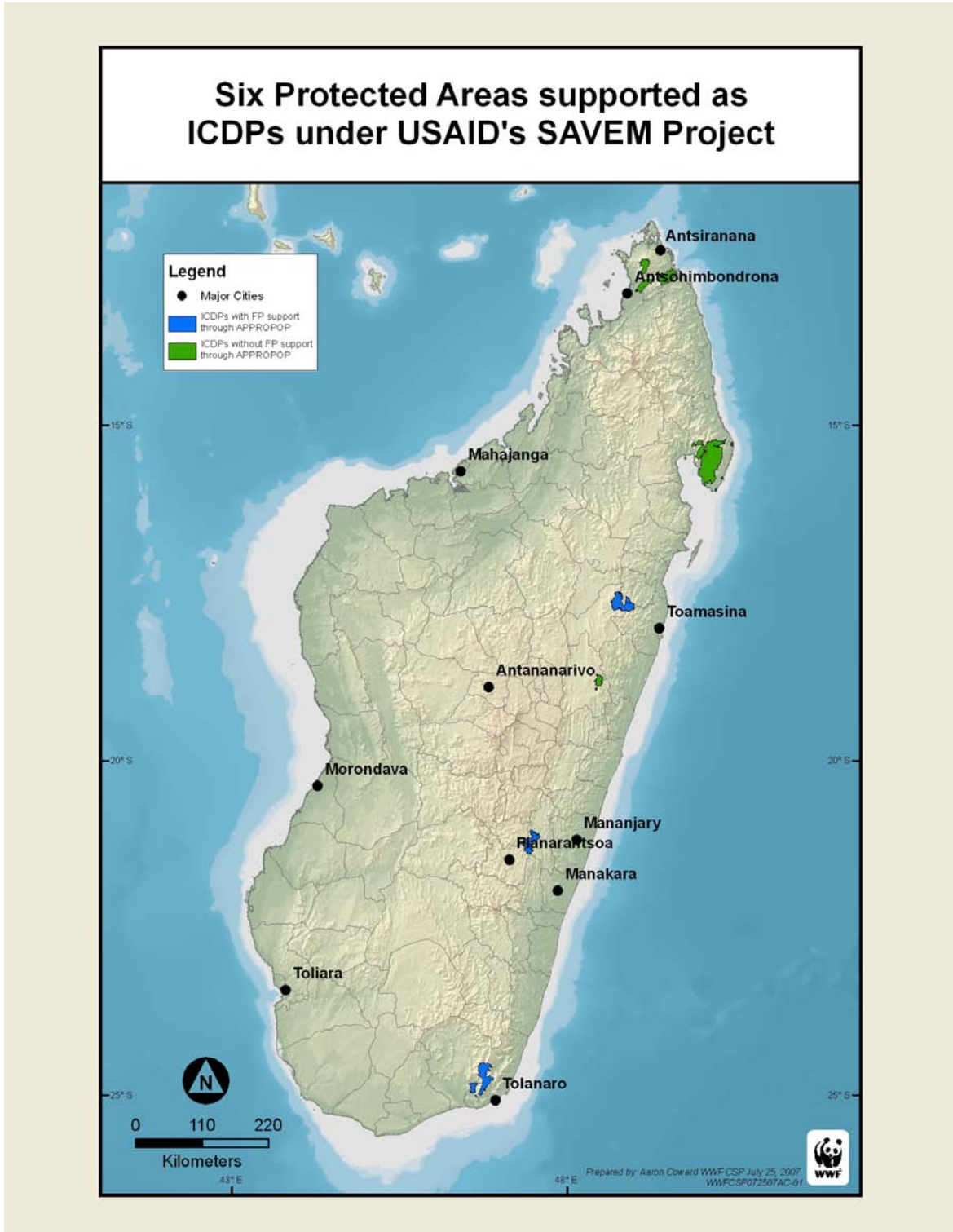
¹⁶⁰ Regional heads/chefs are appointed by the Office of the Presidency, making officials filling these positions directly accountable to the President. Tenure in these positions is based on performance as measured by results achieved according to regional development plans.

¹⁶¹ This was the same justification for the formation of VS. It was also the underlying rationale for establishing Ecoregional Alliances as part of USAID’s 2002-2008 Strategic Country Plan for the Env/RD office (see Annex 3). It also characterizes how USAID’s HPN bilateral, SanteNet for 2004-2008 operates to achieve broader health, including FP, impact (see Annex 3 and main text Lessons Learned and Opportunities sections).

REFERENCES

- [1] Ribaira, Y. *Project Madagascar green healthy communities: Final report January 2002-September 2005*.
- [2] John Snow International. Madagascar Green Healthy Communities. JSI, <http://osiris.jsi.com/htmldoc>.
- [3] Mogelgaard, K.A. and Patterson, K.P. 2006. *Linking population, health, and environment in Fianarantsoa Province, Madagascar*. Population Reference Bureau. <http://www.prb.org/pdf06/PHEM Madagascar2006.pdf> (last accessed June 5, 2007).
- [4] Ribaira, Y. 2005. Population et environnement: les progress. Presentation at a workshop to disseminate MGHC results at the Hilton Hotel Antananarivo, Madagascar on 18 October.
- [5] Fanomezantsoa, A. November 2005. *Madagascar green healthy communities: Final evaluation of the project: Natural resources component*.
- [6] Peilmeier J. August 2005. *Review of population-health-environment programs supported by the Packard Foundation and USAID*.
- [7] Kleinau, E., Rosensweig, F. and Tain, F. September 2002. *Integration of health, population and environment programs in Madagascar*. Environmental Health Project Activity Report 115.
- [8] Chemonics International. *Ecoregional Transition Program (PTE) final report to USAID: Jan 2004-September 2004*.

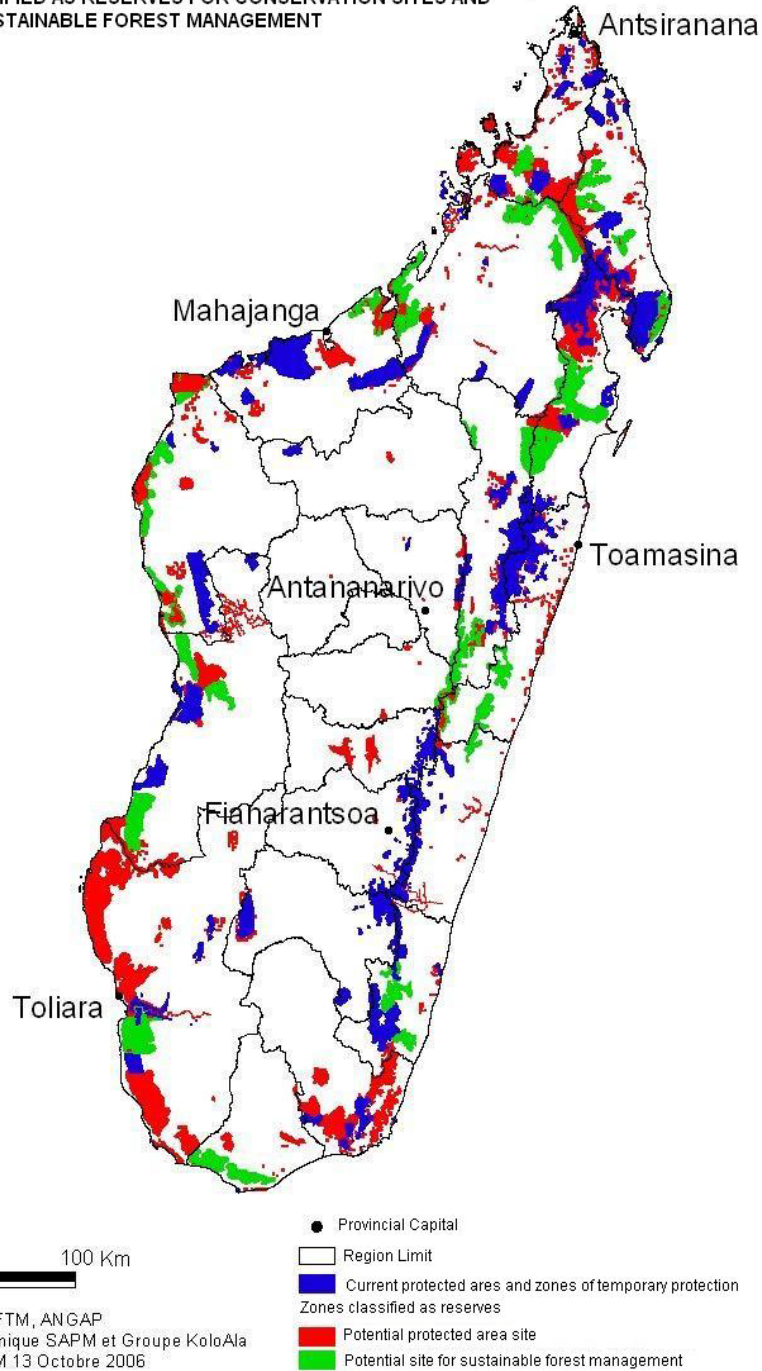
Map 1:
Protected areas with FP support to surrounding communities: Stage 1



Source: World Wildlife Fund/Conservation Science Program

Map 2:
System of Protected Areas of Madagascar: Stage 5

ZONES CLASSIFIED AS RESERVES FOR CONSERVATION SITES AND
AREAS OF SUSTAINABLE FOREST MANAGEMENT



Source: Adapted and reproduced with permission from Madagascar's Durban Vision Group