

LINKING POPULATION, HEALTH, AND ENVIRONMENT IN FIANARANTSOA PROVINCE, MADAGASCAR

by Kathleen Mogelgaard and Kristen P. Patterson

For more than a decade, development practitioners and communities in Fianarantsoa province, Madagascar, have been involved in community-based projects that link family planning, health, and environment efforts.¹ Since the early 1990s, a range of approaches that combine family planning and/or health interventions with environment and rural development activities have been implemented throughout Fianarantsoa province, making it one of the richest centers of such programming in Madagascar and the world.²

This brief explores the evolution of cross-sectoral approaches and projects in Fianarantsoa, outlines ongoing challenges to effective project implementation, and highlights opportunities for strengthening and expanding collaboration. It is based on a review of published literature and project documents, and interviews with over 20 practitioners, technical advisers, and funders in Madagascar and the United States (see Acknowledgments, page 12).

Fifteen Years of Cross-Sectoral Experience

Early cross-sectoral initiatives in Fianarantsoa province had several goals. Natural resource managers recognized that the conservation and management of natural resources could be undermined by high fertility rates. Many also believed that addressing health needs—among the highest priorities in communities—would lead to greater trust between development partners and the community, and a greater community willingness to participate in conservation activities. Health practitioners recognized that partnerships with environmental projects operating in rural areas could reach previously inaccessible and underserved constituents.

How successful have these projects been over the past 15 years? Evaluations have demonstrated progress in reaching new audiences, fostering greater community involvement, and promoting programmatic efficiency.³ Increasingly in



Samantha Cameron, NY, Teminika

The commune of Ambolomadinika lies on the eastern side of the central forest corridor in Fianarantsoa, where forest cover is shrinking by approximately 2 percent per year.

Fianarantsoa and throughout Madagascar, cross-sectoral approaches are being incorporated into broader development approaches and local planning efforts. And perhaps most significant, a growing number of practitioners in the environment and health sectors have indicated in interviews that they support and promote these initiatives because they believe that coordination can yield better results and provide more benefits to communities than when the services are provided separately. Furthermore, the experience and dedication of these practitioners has positioned them to capitalize on new opportunities within the development community and the national political context to refine and expand cross-sectoral approaches.

Demographic, Socioeconomic, and Ecological Context

Fianarantsoa is among the poorest of Madagascar's six provinces and has the second-highest number of people.⁴ Access to potable water, the consumption of water and electricity per resident, and the rate of spending per person are the lowest among all provinces.⁵

Fianarantsoa's total fertility rate is higher than the national average (5.7 children per woman vs. 5.2 nationally) and its contraceptive prevalence rate is lower (11 percent of women in union in Fianarantsoa use a modern method of family planning, vs. 18 percent nationally). Children's health is of particular concern in the province, with infant mortality rates, child anemia, stunting, and wasting all slightly higher than the national average.⁶

Colonial policies dramatically altered traditional cropping and land tenure systems, some of which (such as the production of coffee for export) yielded mixed benefits to Fianarantsoa's

rural residents.⁷ In addition, the crash of the global coffee market in the mid-1990s severely affected the livelihoods and long-term food security of the region's residents.

Furthermore, during the country's socialist era (1975 to 1990), the government promoted a pronatalist population growth policy and open access land rights, which encouraged a population boom and the cultivation of previously unused land.⁸ In 1991, the government adopted a national population policy, which recognized the benefits of and need to promote family planning at all levels of society.⁹ The country's politically turbulent transition to democracy in the early 1990s led to a gradual integration of Madagascar into the global economy.¹⁰ Nevertheless, real per capita income declined almost 50 percent from 1972 to 2002,¹¹ dramatically increasing poverty among rural Malagasy, including those living in Fianarantsoa.

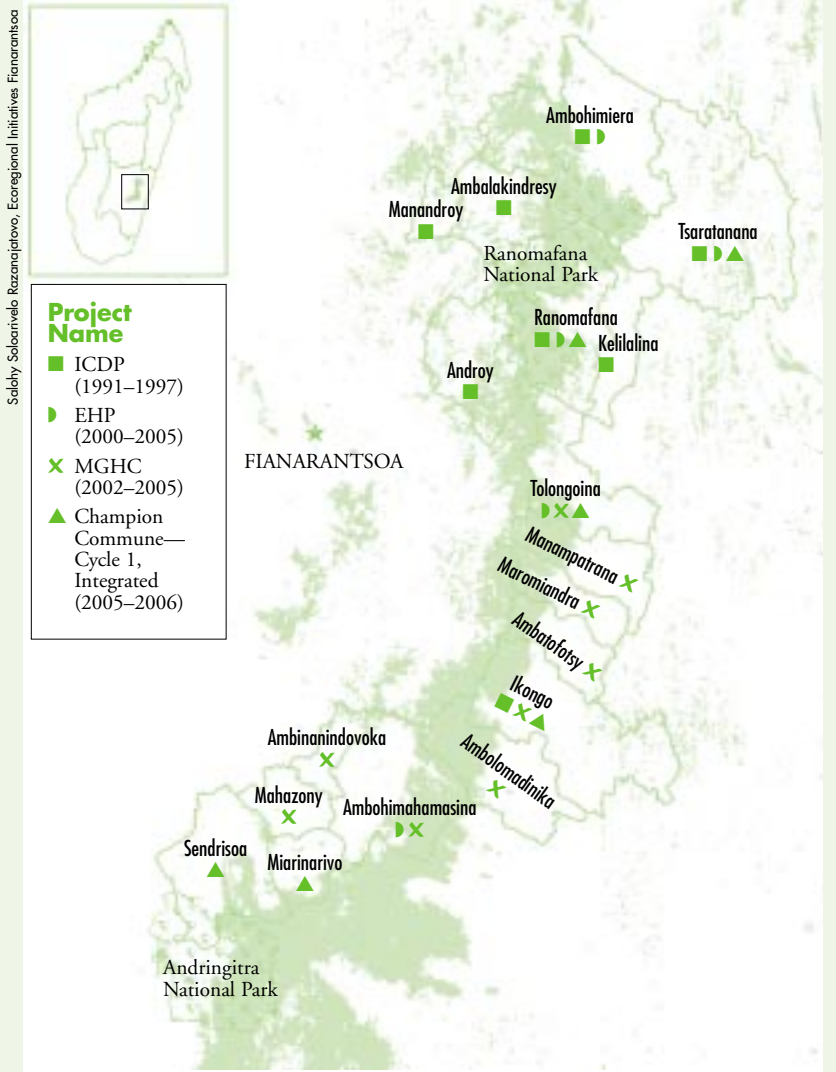
Rich ecological diversity is found within the province. Fianarantsoa contains some of the country's most popular national parks (Isalo, Ranomafana, and Andringitra). In 2005, Fianarantsoa hosted more tourists than any other province.¹² A 500-km long moist forest corridor harbors extraordinary biological diversity, contributing to Madagascar's designation as one of the world's "biodiversity hotspots."¹³ This forest provides numerous ecosystem services such as watershed protection and soil erosion prevention, which support agricultural activities and biodiversity maintenance within and beyond the forest.

Most cross-sectoral activities in Fianarantsoa have been implemented in and around the central forest corridor that lies between Ranomafana and Andringitra national parks (see map). This 280,000-hectare central corridor, measuring 200 kilometers long and only 4 to 5 kilometers wide in some sections, experienced a 1 percent to 2 percent annual forest cover loss between 1990 and 2000. Additional losses could further threaten biodiversity and the ecosystem services relied upon by regional communities.

Evolution of Cross-Sectoral Approaches

Approaches linking family planning and other health interventions with natural resource management activities in Fianarantsoa province have evolved and expanded over time. The evolution

Cross-Sectoral Projects in Communes Along Fianarantsoa's Central Forest Corridor



of these cross-sectoral efforts can be grouped into three phases (for a detailed account of the projects in these phases, see the Appendix on page 8).

Phase 1, 1990-1998. In the first phase, cross-sectoral efforts accompanied Madagascar's adoption of a 15-year National Environmental Action Plan (NEAP). The early years of the NEAP focused on implementing integrated conservation and development projects (ICDPs) associated with Madagascar's national parks, including Ranomafana National Park. The Ranomafana ICDP, initiated in 1991 by the Natural Resources Office of the United States Agency for International Development (USAID) mission in Madagascar, included economic and social development interventions in addition to biodiversity conservation activities.¹⁴ In 1995, USAID Madagascar's Health Office added a family planning component to the project.¹⁵ Individuals involved in the Ranomafana ICDP learned to develop strategies to implement community-level interventions across sectors, such as creating networks of community-based distributors of contraceptives in rural areas and designing effective community-based environmental education programs. After the ICDP ended in 1997, many of the Malagasy who worked for the ICDP went on to establish or work for NGOs that were engaged in cross-sectoral projects.

Phase 2, 1998-2005. The second phase mirrored the changing direction of the NEAP: Interventions that previously focused on national parks and communities immediately adjacent to them moved into the broader landscape, encompassing ecosystems and communities throughout the central forest corridor. In this phase, USAID partners and NGOs developed and implemented new models for cross-sectoral projects. One of these models, Champion Community, was implemented widely throughout this phase. This community involvement approach encouraged project managers to amass a large number of volunteers; conduct short, practical trainings; promote small, doable actions; use simple and adaptable tools; provide mass media support; and celebrate achievements.¹⁶

USAID partners and NGOs involved in cross-sectoral projects formed the Voahary Salama Association in 2000 to share information and resources. Their efforts drew the attention of

the international development community, and practitioners successfully solicited support from private foundations. Two major cross-sectoral projects, the Environmental Health Project (EHP) and Madagascar Green Healthy Communities (MGHC), were started in communities located along the central forest corridor in Fianarantsoa.

The innovations and successes in the second phase generated momentum for communication, outreach, and advocacy to expand these approaches. Unfortunately, the destabilizing effects of the eight-month nationwide political crisis of 2002 disrupted this momentum; practitioners had to focus on maintaining field activities in the context of weakened rural health care services and declining household incomes in Fianarantsoa.¹⁷ Nevertheless, in this phase effective tools and organizational partnerships for managing cross-sectoral programming were developed (see Box 1, page 4).

Phase 3, 2005-present. As the funding for the second phase's projects drew to a close in 2005, a third phase has taken shape. This phase is marked by the end of private foundation support for integrated work, and the gradual embedding of cross-sectoral initiatives into comprehensive development programming. This shift is largely supported by USAID Madagascar in the implementation of its integrated strategic plan, which contains common goals for all of its program areas, including its work in the health and natural resource management sectors.

Building on the success of the integrated Champion Community approach, USAID Madagascar led an extensive scale up of these efforts from the community level to the commune level (equivalent to a county in the United States) in several communes in Fianarantsoa. In implementing the Champion Commune approach, USAID Madagascar and its partners aim to link development interventions in natural resource management, public health, economic development, and good governance (a USAID framework known as Nature, Health, Wealth and Power). Voahary Salama members work with USAID Madagascar partners in implementing Champion Commune, and six of the 23 Champion Commune sites in Fianarantsoa engaged in both health and environmental activi-

*Box 1***Promising Results of Cross-Sectoral Projects During Phase 2**

While the precise “value-added” of providing health and environment interventions in a coordinated fashion rather than separately is difficult to quantify, a recent review of the David and Lucile Packard Foundation and USAID Washington-funded population-environment and population-health-environment projects (including the Environmental Health Project and Madagascar Green Health Communities) reported promising results.

The assessment specifically noted the effectiveness of the integrated Champion Community approach in mobilizing communities to achieve clearly defined, cross-sectoral results within a one-year period. In addition, there is evidence that cross-sectoral approaches encourage efficiency in obtaining multiple objectives.

The assessment found that these projects bring three major advantages to family planning efforts:

- Greater access to and interaction with men;
- Greater access to and interaction with adolescent boys; and
- Positive changes in the community perception of women and in women’s self-perception when they have access to credit.

Equally compelling advantages for conservation efforts were also noted:

- Greater female involvement in natural resources management;
- Increased participation of adolescents; and
- Providing an “entry point” by offering health services, thus building trust within the community.

SOURCE: John Pielemeier, “Lessons From the First Generation of Integrated Population, Health, and Environment Projects” (Population Reference Bureau, www.prb.org, accessed Sept. 20, 2006).

ties in the first phase of the project (2005 to 2006). One commune’s experience is highlighted in [Box 2, page 5](#).

Challenges of Project Implementation

Throughout all three phases, cross-sectoral approaches have adapted in response to the challenges and obstacles inherent in carrying out community-based development programming in remote areas. In interviews, practitioners noted the most common ongoing challenges they encounter when implementing cross-sectoral projects in the central forest corridor:

Transportation, Communication, and Cultural Isolation

The target communities for most cross-sectoral projects in Fianarantsoa are remote, underserved

communes in areas of high biodiversity or ecological sensitivity, and are often beyond the network of passable roads, telephone lines, and even radio broadcast coverage. During the peak of the rainy season (January through April), many of the existing roads in the most remote areas become impassable, making field visits and in-person technical assistance difficult. Unpredictable and severe weather, such as the cyclones in 2000 that were particularly devastating in Fianarantsoa, worsen an already weak transportation network. The lack of transport and communication networks perpetuates the distrust of outsiders—including government agency officials and development practitioners—common in the central forest corridor region.¹⁸ Furthermore, multiple political jurisdictions create additional communication and coordination challenges, because the central forest corridor lies within five separate government *Régions*, each with distinct development plans and authorities.

Turnover of Funding Cycles

NGO practitioners in Fianarantsoa are concerned about the current funding structures for cross-sectoral projects. While efforts are underway to engage new funders, including government agencies at the national and provincial levels, cross-sectoral projects in Fianarantsoa have thus far been supported by private foundations and USAID. Presently, USAID is the sole funder for these efforts in the province. Funding cycles from USAID tend to be four to five years long, and while funding and staffing within USAID Madagascar have remained remarkably consistent, each cycle brings in new partners with different work styles and leaders, as well as modified goals, objectives, and strategies, especially at the field level. The transition can bring fresh perspectives, but can also bring a loss of momentum and institutional knowledge, since new partners sometimes need up to a year to become fully operational.

Limited Government Capacity

The government of Madagascar has traditionally been unable to ensure adequate staffing and regular provision of medical supplies to remote health clinics such as those in the central Ranomafana-Andringitra forest corridor. The transfer of gov-

ernment personnel also can adversely affect a project's success: Medical personnel in rural health clinics are regularly relocated (at times unpredictably) due to personnel reallocations at the district level or in response to personal requests for reassignment. Thus, a project's success can be derailed when health clinic staff who have received project training and who work well with community health volunteers (such as community-based distributors of contraceptives and treated mosquito bed nets) are relocated. Also, in the environment sector, cross-sectoral projects often operate in rural communities where the government does not provide rural agricultural extension services.

Limited NGO Capacity

Civil society in Madagascar remains in the early stages of development compared to many other developing countries. Some NGOs involved in cross-sectoral work in Fianarantsoa, while diligent and committed to working in rural areas, do not have long-established histories or clear missions. In some cases, NGOs are established when a donor needs a local partner to implement a project. The number of staff may grow or downsize depending on funding. Such fluctuations can limit an NGO's ability to develop the institutional knowledge and experience needed to operate effectively in difficult field environments.

Lack of Uniform Measures of Success

For some practitioners, the lack of a common results framework (with specific goals, objectives, activities, and indicators) for cross-sectoral projects has hampered coordination of project design and implementation. While population and health interventions are typically evaluated using common maternal and child health indicators (such as contraceptive prevalence rate or childhood vaccination coverage), no such set of indicators exists yet for environmental interventions. This lack of a commonly accepted suite of environment indicators adds to the time and discussion needed to design effective programs, determine activities, and develop budgets. Comparing success across projects is also more difficult because activities—particularly in the environment sector—are not standardized.

The Way Forward: Strengthening Cross-Sectoral Collaboration

The third phase of cross-sectoral programming in Fianarantsoa offers practitioners valuable opportunities to address ongoing challenges by capitalizing on the experience and lessons learned from the first two phases. New initiatives promoted by USAID and other international development

Box 2

Champion Commune Approach in Tsaratanana



Kristen P. Patterson, SamiNdi

Community members are involved in setting their own environmental and health goals as part of the Champion Commune approach in Tsaratanana.

Association Ainga receives funding from both health and environment/rural development partners of USAID Madagascar. This funding allows them to implement the Champion Commune approach in two communes on the eastern side of the Ranomafana-Andringitra forest corridor. Eight months into the project, the commune of Tsaratanana had embraced the cross-sectoral model. In May 2006, the committee of local leaders that oversees the coordination of Champion Commune in Tsaratanana cited the following compelling advantages of simultaneously implementing health and environment interventions:

- Even if people use family planning to have healthier children, unless they are able to grow nutritionally good food, their family's health won't improve.
- Improved agricultural techniques that don't rely on herbicides and pesticides are better for the environment and for families.
- Protecting the surrounding area adjacent to water sources helps the environment and provides cleaner water for human consumption.
- One cannot separate the two: Healthy people and a healthy environment go hand in hand!

SOURCE: Meeting of Champion Commune Committee, Tsaratanana (May 9, 2006).

actors, changes in Madagascar's governance structure, and efforts to share information and best practices among local and international practitioners offer new platforms to refine and expand cross-sectoral approaches.

Ecoregional Alliance and Local Planning Committee

In 2004, USAID Madagascar formed the Fianarantsoa Ecoregional Alliance, a consortium of USAID-funded partners. Members of the alliance represent the four pillars of Nature, Health, Wealth, and Power (natural resource management, public health, economic development, and good governance), and meetings are used to promote cross-sectoral thinking and programming.¹⁹ The Fianarantsoa Ecoregional Alliance collaborates closely with the *Comité Multi-local de Planification* (Local Planning Committee), a Malagasy consultative body that advocates for interventions around the central Ranomafana-Andringitra forest corridor in Fianarantsoa.

Creative cross-sectoral approaches have been initiated as a result of the alliance. For example, in early 2006, members collaborated with the European Union-funded Andrew Lees Trust to establish contracts with five radio stations in the central Ranomafana-Andringitra forest corridor to broadcast information about health-environment linkages. More recently, alliance members strategized to foster stronger cross-sectoral collaboration during the second phase of Champion Commune.

The alliance also provides members with new ideas for their own work: the Madagascar Program Office of the World Wide Fund for Nature (WWF), an alliance member, is implementing activities such as transfer of forest management and installations of potable water systems in select communes located in the southern forest corridor in Fianarantsoa, and hopes to secure funding for a health component. Notably, WWF and other environmental NGOs involved in the alliance, such as Conservation International, are interested in using the Champion Commune approach in their work in Fianarantsoa.

Engagement of Other Development Actors

In addition to the work of the Ecoregional Alliance, opportunities exist for engaging additional development actors. The Champion

Commune approach, in particular, has attracted the interest of bilateral donors. USAID partners in Fianarantsoa are working to place U.S. Peace Corps volunteers in Champion Commune sites, noting the past contributions of volunteers in the health, environment, and education sectors. The European Union has also shown interest in supporting the good governance component of Champion Commune.

National development initiatives also represent new opportunities for collaboration. Building upon water resource management and sanitation activities undertaken by cross-sectoral projects, government entities, and national and international NGOs in Fianarantsoa, representatives of the Ministry of Energy and Mines, the U.S. Peace Corps, and USAID's health and environment partners collaborated to establish a Fianarantsoa-based WASH (Water, Sanitation, and Hygiene) Committee in 2006. The provincial committee (a coordinating body for more than 30 water, sanitation, and hygiene organizations) helped create committees in four of the five *Régions* in the province, and the original provincial committee now solely represents the Haute Matsiatra Région. Regional government representatives as well as national NGO staff serve on the board of the Haute Matsiatra committee, contributing to the sustainability of the effort to provide improved water, sanitation and hygiene in the region. As communication and coordination increases through such mechanisms as these regional committees, there will be more opportunities to engage new actors.

Decentralized Decisionmaking and Funding

In 1996, the Malagasy government began an incremental process of government decentralization. In 1998, each government ministry installed a *Direction Inter-Régional* representative at the provincial level. In 2004, the government created new sub-provincial government units, or *Régions*. Regional development plans were elaborated for Fianarantsoa's five *Régions* in 2005, with input from the communal development plans of most of Fianarantsoa's communes.²⁰

By involving local government, Champion Commune complements the decentralization process by supporting communes' identification of priority activities and development indicators.

The approach engages commune leaders and community members in ways that can facilitate effective and sustainable cross-sectoral programming, particularly as communal development plans are further elaborated and implemented. The Ministry of Decentralization and Regional Planning plans to establish pilot *Centres d'Appui aux Communes* (Communal Support Centers) to assist selected communes in implementing their development goals in 2007.

The Malagasy government is working closely with the World Bank and the European Union to put in place *Fonds de Développement Locales* (local development funds), which will help support regional and communal development plans in Fianarantsoa and throughout Madagascar. Once local development funds are in place, decentralization will offer interested local governments a way to dedicate funds for long-term, cross-sectoral initiatives in their development plans.

Building a Community of Practice

As the breadth of experience in cross-sectoral programming grows, capturing and sharing information about best practices and lessons learned will become increasingly important. Improved telecommunications in the province will bring valuable online resources to practitioners for collaboration and capacity building. For instance, the USAID Washington-funded FRAME program's website helps build online knowledge-sharing networks among natural resources management professionals for the natural resource management community.²¹ In addition, USAID Washington's Global Health Bureau supports and manages a web-based clearinghouse of population-health-environment tools and information, designed to assist field practitioners and others interested in cross-sectoral approaches.²²

While the activities of the Voahary Salama Association have slowed somewhat in the mid-2000s as the association transfers from a USAID-funded project to an independent Malagasy association, Voahary Salama could, with adequate funding and support, continue to serve as a convener of interested and experienced parties. The association could play an expanded role in promoting the Champion Commune approach—particularly by leveraging the decentralization process to develop and implement local develop-

Timeline of Cross-Sectoral Approaches in Fianarantsoa

- | | |
|------------------|---|
| 1991-1997 | <p>Ranomafana Integrated Conservation and Development Project</p> <ul style="list-style-type: none"> ■ Supported by USAID Madagascar ■ Partners: APPROPOP/Management Sciences for Health; Cornell International Institute for Food, Agriculture, and Development; Institute for the Conservation of Tropical Environments; North Carolina State University |
| 1997-2000 | <p>University of Michigan Population-Environment Fellow based in Fianarantsoa</p> <ul style="list-style-type: none"> ■ Supported by USAID Washington ■ Hosted by APPROPOP/Management Sciences for Health, then Jereo Salama Isika/John Snow, Inc. ■ Collaborated with Landscape Development Interventions/Chemonics International Inc. |
| 2000-2005 | <p>Environmental Health Project</p> <ul style="list-style-type: none"> ■ Supported by USAID Washington ■ Fianarantsoa-based partners: Association Ainga; Madagascar Institute for the Conservation of Tropical Environments (MICET); Ny Tanintsika |
| 2000 | <p>Voahary Salama formed</p> <ul style="list-style-type: none"> ■ Supported by the Summit Foundation and USAID Washington ■ Fianarantsoa-based members: MICET (founding member in 2000); Ny Tanintsika (joined in 2002); Association Ainga (joined in 2003) |
| 2002-2005 | <p>Madagascar Green Healthy Communities</p> <ul style="list-style-type: none"> ■ Supported by the Packard Foundation (via JSI Research & Training Institute, Inc.) ■ Fianarantsoa-based partners: Association Ainga; Jereo Salama Isika/John Snow, Inc.; Landscape Development Interventions/Chemonics International Inc.; MICET; Ny Tanintsika; Supporting Service for the Management of the Environment (SAGE) |
| 2005 | <p>Champion Commune launched</p> <ul style="list-style-type: none"> ■ Supported by USAID Madagascar (primarily via SantéNet/Chemonics International Inc. and Ecoregional Initiatives/Development Alternatives, Inc.) ■ Fianarantsoa-based cross-sectoral partners: Association Ainga; MICET; Ny Tanintsika |
| 2005-2007 | <p>University of Michigan/Public Health Institute Population Environment Fellow based in Fianarantsoa</p> <ul style="list-style-type: none"> ■ Supported by USAID Washington ■ Hosted by SantéNet/Chemonics International Inc. ■ Collaborates with Ecoregional Initiatives/Development Alternatives, Inc. |

ment plans, build capacity, and maintain an information clearinghouse on cross-sectoral approaches in Fianarantsoa and throughout Madagascar.

Building Leadership and Sustainability

How successful have partnerships been between the health and environment sectors in Fianarantsoa province? The outcomes have been shaped by a combination of persistent challenges and incremental but meaningful accomplishments, not unlike most development work initiated in the province over the past 15 years. The assessments and experience of cross-sectoral projects in Fianarantsoa have shown that humans and the environment can benefit from efforts to link interventions in health and environment in rural areas. One of the most compelling results is the development of a community of dedicated practitioners who promote continued interventions in the rural central Ranomafana-Andringitra forest corridor.

These practitioners are beginning to capitalize on a suite of new opportunities for expanded programming. Recent efforts by USAID Madagascar and its partners to mainstream cross-sectoral efforts within broader development planning efforts are beginning to bear fruit, and could lead to increased sustainability of these approaches. Documenting these experiences and sharing information on effective tools and approaches is critical as these efforts continue to evolve and strengthen. Madagascar, and Fianarantsoa province in particular, has the potential to continue to be a leader in advancing cross-sectoral approaches in support of sustainable human development.

APPENDIX

Three Phases of Cross-Sectoral Approaches in Fianarantsoa Province

Phase 1, 1990 to 1998: Cross-Sectoral Initiatives Around National Parks

In 1990, the government of Madagascar adopted a 15-year National Environmental Action Plan (NEAP)—the first in Africa. The NEAP's early

years focused on the implementation of integrated conservation and development projects (ICDPs) associated with Madagascar's national parks. These projects coupled biodiversity conservation efforts with social and economic development interventions throughout Madagascar, and within this context efforts began to explicitly link family planning and health services to conservation interventions. The Natural Resources Office of USAID Madagascar funded an ICDP around Ranomafana National Park that included park management, ecological monitoring, biodiversity research, community-based natural resources management, community health, economic development, and education and ecotourism interventions. In keeping with USAID Madagascar's strategic plan at the time and its goal of "balancing population growth and natural resource use," the USAID Madagascar Health Office added a family planning component in 1995, making it the first population-health-environment project in the province.

Cross-sectoral programming received another boost in 1997 with the arrival of a University of Michigan Population-Environment (PE) Fellow, funded by USAID Washington, who played a critical role in helping to manage grants made to NGOs to implement the family planning component of the Ranomafana ICDP.²³ The presence of an early-career professional who was dedicated to advancing cross-sectoral approaches helped to build interest, capacity, and momentum for integrated programming among development practitioners in Fianarantsoa.

Phase 2, 1998 to 2005: Population-Health-Environment Integration

Coordination Among USAID Health and Environment Partners. Even though no formal cross-sectoral project existed in the early years of Phase 2, USAID Madagascar's health and environment partners worked together to implement their respective activities in remote communities near the biodiverse forest corridor, and they recognized the benefits of sharing information and resources.

In 1997, a USAID child survival health partner and the Ministry of Health developed and piloted a new approach for community engage-

ment and behavior change. In 1998, a USAID comprehensive health partner joined the effort, adopting the new approach, expanding it, and naming it “Champion Community.” Champion Community differed from ICDPs in that communities set their health goals. Notably, with the support of the USAID comprehensive health partner, cross-sectoral projects such as the Environmental Health Project and Madagascar Green Healthy Communities (see below) later adopted the Champion Community approach and added natural resource management components to existing health activities, creating a tool for integrated population-health-environment (PHE) initiatives.

Voahary Salama Association. In 2000, individuals from several organizations that had been involved in ICDPs and other cross-sectoral activities in Fianarantsoa and across Madagascar formed the Voahary Salama (“Healthy Nature”) Association. Voahary Salama is a consortium of funding, technical, and implementing partners dedicated to promoting sustainable natural resource management and addressing the health and livelihood needs of communities living around biodiverse forest corridors in Madagascar. The PE fellow based in Fianarantsoa and the Tany Meva Foundation helped Voahary Salama secure funding from the U.S.-based Summit Foundation. Voahary Salama combined this with funding provided by the USAID Madagascar health partner to support organizational development and capacity building for the cross-sectoral work of member organizations.²⁴

Environmental Health Project. Momentum for cross-sectoral approaches continued to build later in 2000, when Madagascar was selected as a site for the Environmental Health Project (EHP). Funded by USAID Washington, the project included an operational research component to test whether linked health and environment interventions were more effective than single-sector programs, and to measure the effectiveness of various integrated organizational implementation models. In addition, later in its project cycle, EHP funded select Voahary Salama member NGOs to implement coordinated activities in the health and environment sector, such as installing potable water systems, increasing vaccination coverage, and promoting reforestation in several communes adjacent to Fianarantsoa’s central for-

est corridor, all of which were designed to complement and reinforce the lack of government infrastructure in the remote area.²⁵

For its field-supported activities, EHP used the integrated Champion Community approach. Community members helped set a range of health and environmental goals, such as reductions in infant mortality, improved nutrition, agricultural intensification, and alternatives to slash and burn agriculture. Community members monitored results and publicly celebrated the achievement of self-identified targets.

The project ended in 2005, and project managers concluded that the use of local NGOs (rather than international NGOs) was cost-effective; that better results can be achieved in areas where government services are stronger, such as health clinics that are adequately staffed and receive regular provisions of contraceptives and immunizations; and that the organizational implementation model (for example, two NGOs from different sectors collaborating vs. one NGO training their staff in multiple sectors) is not as important as the capacity and commitment of the NGO.²⁶

Madagascar Green Healthy Communities. In 2002, USAID Madagascar health and environment partners and Voahary Salama received funding from the David and Lucile Packard Foundation to implement PHE activities in rural zones under a project called Madagascar Green Healthy Community (MGHC).²⁷ MGHC used the integrated Champion Community approach, and adopted other proven community education and mobilization approaches such as “Child to Community” (an approach that motivates children to achieve goals and share their knowledge with their community) and “Farmer to Farmer” exchanges (where farmers teach other farmers about health behaviors and agriculture techniques). The MGHC pilot phase was implemented in two communes (13 villages) on the eastern side of the central Ranomafana-Andringitra forest corridor, and then scaled up to work in partnership with four NGOs and two USAID Madagascar partners in more than 100 villages in eight communes adjacent to the central forest corridor.²⁸

Like EHP, MGHC ended in 2005. Based on their experience, MGHC project managers concluded that integrated population, health, and environment programs can produce better results

than single-sector programs, and felt that adding a microcredit program helped foster greater community engagement.²⁹ During this period, EHP and MGHC focused their cross-sectoral projects in sections of the central forest corridor most vulnerable to being cut. EHP and MGHC had their own goals and objectives, but worked together to support the larger vision of Voahary Salama and to reinforce the capacities of its members in implementing PHE programs in the field.

Growing International Interest. During this phase, cross-sectoral approaches in Fianarantsoa and elsewhere in Madagascar generated international interest. Supported by the U.S.-based Population Reference Bureau and Voahary Salama, Fianarantsoa-based NGO leaders were trained on improving their skills to communicate their cross-sectoral work.

The cross-sectoral efforts of EHP, MGHC, and Voahary Salama were highlighted in international venues such as the Global Health Council annual conference and the Woodrow Wilson Center in Washington, D.C.; and a documentary video produced by U.S.-based Population Action International that featured the work of Voahary Salama. By the end of this phase, many in the international development community saw Madagascar as a leader in this emerging field.

Phase 3, 2005 to Present: Scale-Up and Expansion of Cross-Sectoral Initiatives

Integrated USAID Strategic Plan. The groundwork for this third phase was laid in 2002, when USAID Madagascar built upon goals from its previous strategic plan and adopted an integrated strategic plan for its 2003-2008 funding cycle.³⁰ The integrated strategic plan was designed to establish several goals that would be shared between all four USAID Madagascar program areas. For instance, the goals “Demand for Family Planning and Health Services and Products in Priority Conservation Areas Increased,” “Water Resource Management for Agriculture and Households Improved,” and “High Nutritional Value Agricultural Products Increased” are shared by the Health, Population, and Nutrition program as well as the Environment and Rural Development program. As one of the only strategic plans with targeted

integration between single-sector programs among USAID missions worldwide, these shared goals help to drive deeper communication and collaboration among the sector-specific USAID programs.

NHWP and Champion Commune. In mid-2005, USAID Madagascar adopted Nature, Health, Wealth, and Power (NHWP)—a framework linking natural resource management, public health, economic development, and good governance.³¹ The NHWP model seeks to support interventions in at least these four general sectors to meet minimum development needs of communes around biodiverse areas.

In keeping with the NHWP framework, USAID Madagascar health partners have used previous achievements of the Champion Community approach and collaborated with other USAID partners in an extensive scale-up of the approach from the community level to the commune level in Fianarantsoa and three other provinces in Madagascar. Champion Commune is implemented at a higher level of government, ensuring greater geographic coverage than working at the community level, and providing a foundation for good governance through its development of community capacity for priority-setting and development planning.

During the first cycle of Champion Commune (2005 to 2006), Malagasy and international NGOs implemented the health component in 23 communes in Fianarantsoa. In six of these communes, Voahary Salama member NGOs concurrently implemented the health and environment components of Champion Commune. Another PE Fellow, based in Fianarantsoa from 2005 to 2007, is supporting the Fianarantsoa-based Voahary Salama member NGOs as they implement the health and environment components of Champion Commune.

References

- ¹ The term “environment” is used by current practitioners in Madagascar to mean biodiversity conservation, natural resources management, and sustainable land use planning through improved forest management and agricultural practices. The term is not equated simply with “conservation.”
- ² Practitioners in Fianarantsoa province use a variety of terms to describe these projects, including complementary, integrated, PHE or HPE (population, health and environment), and CBPE (community-based population and environment).
- ³ John Pielemeier, “Lessons From the First Generation of Integrated Population, Health, and Environment Projects,” Population Reference Bureau website, accessed online at www.prb.org, on Sept. 20, 2006.
- ⁴ Institut National de la Statistique (INSTAT) and ORC Macro, *Enquête Démographique et de Santé, Madagascar 2003-2004: Rapport de Synthèse* (Calverton, MD: INSTAT and ORC Macro, 2005).
- ⁵ INSTAT, *Tableau de Bord Social: Fianarantsoa* (Antananarivo: Ministère de l’Economie, des Finances et du Budget, 2003).
- ⁶ INSTAT and ORC Macro, *Enquête Démographique et de Santé, Madagascar 2003-2004*.
- ⁷ Madagascar was a French colony from 1895 to 1960.
- ⁸ Karen S. Freudenberger, *Livelihoods Without Livestock: A Study of Community and Household Resource Management in the Village of Andaladranoavao, Madagascar* (Fianarantsoa, Madagascar: Landscape Development Interventions, 1998).
- ⁹ Dan Whyner, “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 Newsletter* (Winter 1999/2000); and personal communication with Lisa Gaylord, Mamy Randriambololona, and Yvette Ribaira.
- ¹⁰ Joanna Durbin, Koto Bernard, and Mark Fenn, “The Role of Socioeconomic Factors in Loss of Malagasy Biodiversity,” in *The Natural History of Madagascar*, ed. Steven M. Goodman and Jonathan P. Benstead (Chicago and London: University of Chicago Press, 2003); and USAID Madagascar, *Madagascar Integrated Strategic Plan FY 2003-2008* (November 2002).
- ¹¹ USAID Madagascar. *Madagascar Integrated Strategic Plan FY 2003-2008*.
- ¹² Comité Multi-local de Planification (CMP) PE3 meeting notes, March 6, 2006.
- ¹³ To qualify as a biodiversity hotspot, a region contains at least 1,500 species of vascular plants (greater than 0.5 percent of the world’s total) as endemics, and has lost at least 70 percent of its original habitat. For more information, see Conservation International’s website, accessed online at www.biodiversityhotspots.org/xp/Hotspots, on July 5, 2006.
- ¹⁴ Now known as the Environment/Rural Development Office.
- ¹⁵ Now known as the Health, Population, and Nutrition Office.
- ¹⁶ Jereo Salama Isika Final Report (2003).
- ¹⁷ The results of the presidential elections of December 2001 were disputed by the two candidates, which led to an eight-month political crisis during which the losing candidate’s supporters bombed and blockaded major transport routes around the country. The crisis was resolved in July 2002.
- ¹⁸ Whyner, “Collaborating for More Effective Population-Environment Interventions”; and Karen S. Freudenberger, *Flight to the Forest: A Study of Community and Household Resource Management in the Commune of Ikongo, Madagascar* (Fianarantsoa, Madagascar: Landscape Development Interventions, 1999).
- ¹⁹ Fianarantsoa Ecoregional Alliance members include: ERI; BAMEX; SantéNet; MIARO/WWF; MIARO/CI; JariAla; Title II/CRS; ANGAP; Ministry of Environment, Water, and Forests; and CMP.
- ²⁰ *Sous-préfectures*, the foundational units for the central government that were demarcated in the 1960s and 1970s, were renamed *Districts* in 2005. Development plans have not yet been elaborated at the *District* level.
- ²¹ The FRAME website can be accessed at www.frameweb.org
- ²² USAID’s Population, Health, and Environment information clearinghouse can be accessed at www.ehproject.org/ehkm/phe.html
- ²³ Established in 1984, the Population Fellows Programs were funded by USAID Washington and managed by the University of Michigan until September 2006. The programs are now part of the Global Health Fellows Programs, also funded by USAID Washington, and managed by the Public Health Institute.
- ²⁴ The Summit Foundation lost the majority of its assets after the stock market crash of September 2001, and renegotiated all of their multiyear grants, including Tany Meva. Summit arranged for USAID Washington to cover the remaining portion of the grant in October 2002.
- ²⁵ Personal communication with Association Ainga; MICET, and Ny Tanintsika; and Eckhard Kleinau, Odile Randriamananjara, and Fred Rosensweig, *Healthy People in a Healthy Environment: Impact of an Integrated Health, Population, and Environment Program in Madagascar* (Washington, DC: Environmental Health Project Final Report, May 2005).
- ²⁶ Kleinau, Randriamananjara, and Rosensweig, *Healthy People in a Healthy Environment*.
- ²⁷ Madagascar Green Healthy Communities (MGHC) project management was designed to pass from JSI Research and Training Institute, Inc., to Voahary Salama in year three (2004) of the project. The transfer of management responsibilities never occurred, which resulted in the implementation of two “parallel” PHE projects in Madagascar in the early 2000s (MGHC and EHP). Also, MGHC was conceived as a grant project with multiple four-year cycles. The Packard Foundation cut back on its programs after depreciation of its stock in September 2001, and discontinued funding the PHE project in Madagascar after the initial four-year cycle.
- ²⁸ Madagascar Green Healthy Communities, *Contrat de Subvention, Programme LDI, “Fast-track activities”* (February 2002); Yvette Ribaira, *Madagascar Green Healthy Communities Annual Report* (September 2002–August 2003); and *Madagascar Green Healthy Communities Annual Report* (September 2003–August 2004).
- ²⁹ Yvette Ribaira, *Madagascar Green Healthy Communities Final Report* (January 2002–September 2005).
- ³⁰ A second University of Michigan PE Fellow, based in Moramanga and Antananarivo, contributed significantly to the development of USAID Madagascar’s first programmatically integrated strategic plan.
- ³¹ USAID Madagascar added a health component to USAID Washington’s Nature, Wealth, and Power framework. For more information, see USAID, *Nature, Wealth, and Power: Emerging Best Practices for Revitalizing Rural Africa* (Washington DC: USAID, 2004).

Acknowledgments

Kathleen Mogelgaard, Population, Health, and Environment Fellow with the Population Reference Bureau; and Kristen P. Patterson, Population and Environment Program Officer for SantéNet Fianarantsoa, prepared this brief. Thanks are due to the many professionals who committed their time and shared their knowledge and institutional memory in order to help us make this document as thorough as possible. Special thanks are due to our interviewees: Wendy Benazerga, Samantha Cameron, Mark Freudenberger, Lynne Gaffikin, Lisa Gaylord, Philippe LeMay, Michael Park, Voahanginirina Ramanandafy, Zoelimalala Ramanase, Odile Randriamananjara, Mamy Randriambololona, Johanesa Rasolofonirina, Tiana Razafimahatatra, Diamondra Razaivaovololoniaina, Yvette Ribaira, and Elaine Rossi in Madagascar; and Roger-Mark De Souza, Janet Edmond, Peter Gottert, Nancy Harris, Tom Outlaw, John Pielemeier, Jennifer Talbot, and Dan Whyner. Thanks also to Erica Brewster, Heather D'Agnes, Karen Schoonmaker Freudenberger, Rachel Nugent, Suzanne Petroni, Daniela Raik, Salohy Soloarivelo Razanajatovo, Melissa Thaxton, and Frank Zinn for their valuable assistance and helpful insights.

Funding for this policy brief was provided by the U.S. Agency for International Development under the BRIDGE project (No. GPO-A-00-03-00004-00) and the University of Michigan Population Fellows Programs.

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