The roots, persistence, and character of Madagascar's conservation boom

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Introduction

In the span of 30 years, Madagascar has been transformed from a forgotten, isolationist republic to an emblem of biodiversity and environmental crisis. Even Disney has cashed in on the island's natural image with its 2005 eponymous animated film. Behind this transformation lies a complex, multimillion-dollar effort that has linked together international conservation organizations, multilateral agencies, bilateral donors, the Malagasy government, and many passionate individuals in an effort to protect the island's flora and fauna. Conservation spending in Madagascar by the World Wide Fund for Nature (WWF) increased more than ten-fold between 1983 and 1993 (Figure 7.1). Other actors, such as American and Swiss development aid (Figure 7.2), showed similar explosions in spending. This level of activity has - with occasional hiccups from political crises - been maintained until today. The multi-year National Environmental Action Plan (NEAP), running from 1990 to 2009, mobilized almost half a billion dollars. While the post-NEAP future is in question due to the impacts of a national political crisis and the global economic downturn on conservation funding, conservation organizations such as the WWF, Conservation International (CI), and the Wildlife Conservation Society (WCS) are as active as ever, joined by a host of smaller actors and an entire generation of Malagasy professionals and students.

What is behind this transformation? Naturalists have long raved about the island's distinct flora and fauna - Philibert Commerson reported on it after a visit in 1773, BBC naturalist David Attenborough first filmed there in 1961 - so this interest alone is not sufficient to explain the conservation boom. Did environmental degradation pass some critical threshold? Can we attribute it to the international wave of environmental consciousness characterizing the late twentieth century? What role does Madagascar's situation as a poor, indebted, third-world nation play? This chapter tells the story of the conservation boom and its perpetuation. It demonstrates how geopolitics, political, and economic ideologies, environmental discourses, specific institutional logics, and motivated actors came together to write the story of conservation in Madagascar.

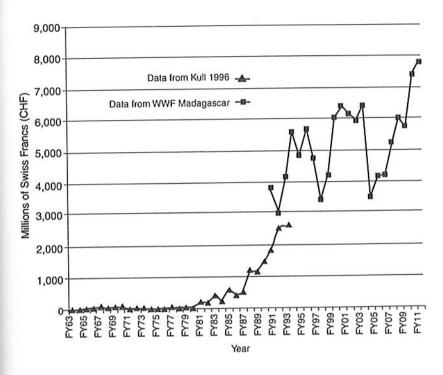


Figure 7.1 Annual expenditures by WWF in Madagascar - currently celebrating 50 years of work on the island - are illustrative of the conservation boom and its persistence

Notes: WWF, while the oldest and largest, is only one of many actors investing in conservation on the island. Note also that strong WWF expenditures in the past few years, since the 2009 political crisis, reflect its ability to seek alternative funding through its global network at a time when much traditional bilateral and multilateral donor environmental funding has dried up. Many other conservation actors have struggled to maintain funding and activities in the current political situation.

Sources: FY63-FY93 are from WWF International as reported in Kull (1996); FY91-FY2012 were kindly provided by WWF Madagascar (Richard Hughes and Zo Rakotonomenjanahary). Note that differences in accounting procedures result in inconsistent data between the two series (the 1962-1993 data, for example, only includes those funds passing through the Swiss headquarters of WWF International). Note also that fluctuations in foreign exchange rates strongly affect the figures.

ERRATUM

The publishers would like to apologise for the following error in this book:

The Y axis of figure 7.1 (p.147) should be labelled 1 to 9, not 1,000 to 9,000

provides a summarized timeline), I reflect on five important factors that

have caused, shaped, and facilitated the conservation boom.

Total ODA 40 Development funds ('technical cooperation') 30 25 20 15 10 5961 10 50002 500

Figure 7.2 Bilateral aid from Switzerland to Madagascar, 1963–2011. Swiss aid in Madagascar has a five-decade history representing nearly half a billion francs of investment, often in the agricultural, forestry, and rural development sectors

Notes: from 1987 to 1995, Switzerland participated in the initial development and implementation of NEAP. At this point, Madagascar was always among the top three countries in Africa receiving Swiss aid, with funding stabilizing at 15–20 million Francs per year (except for a 1990 peak related to 21 million francs of debt service). Funding declined from 1996 in direct response to the unresolved assassination of Walter Arnold, a Swiss aid worker. While some projects continued through to final closure at the end of 2012, the Swiss Agency for Development and Cooperation (SDC) closed their Antananarivo office in 1996 and Madagascar was no longer considered a priority country (Jaberg, 2011).

Source: SDC annual reports, available at www.sdc.admin.ch/en/Home/Documentation/Publications/Annualreports, accessed June 5, 2013. Note that reporting formats in these reports have not been consistent over the years, hence some years do not have data for either ODA (a combined figure for Overseas Development Assistance that includes development projects, humanitarian aid, loans, and grants) or specifically development funds. Some early figures were converted from U.S. dollars at average exchange rates for that year.

Early conservation in Madagascar

Today's environmental efforts have numerous antecedents. Here I summarize a few important ones that set the scene for the ongoing boom (for more detail, see Chapter 6 by Scales). I begin in the nineteenth century, for while matters of resource management surely occupied the minds and activities of people on the island long before then, they are poorly documented. Events of the nineteenth century are significant to conservation history for three reasons. First, a proliferation of contact with Europeans set the stage for long-term influences – from missionaries to colonists to global trade and environmental politics. Second, the early explorers that brought stories of the island's exotic natural beauty back to Europe contributed to the romantic myth of a wild Africa that lies at the roots of the conservation movement. Finally, this period includes several oft-cited precedents for forest conservation policies, including a ban on cutting live firewood issued by King Andrianampoinimerina, and forest burning prohibitions in the 1881 Code of 305 Articles.¹

France conquered Madagascar in 1896 and controlled the island until 1960. The colonial period is an important precursor to today's power relations and resulted in many enduring administrative, legal, and social structures (see Figure 1.2, Chapter 1, and Chapter 6). For one, the colonial government intervened strongly in a variety of natural resource management sectors, both in the interest of creating a profitable colony (e.g. protecting valuable logging timber from peasant fires) and reflecting nascent scientific interest in conservation (e.g. establishing the first nature reserves in remote areas in the 1920s). Roads and train lines were built, the Agricultural and Livestock Services supported plantation crops, fought pests, and sought to intensify rice production, and a Forest Service oversaw the exploitation and protection of native hardwoods and widespread planting of eucalypts, pines, and other exotic trees (Kull, 2004). Today, linguistic, commercial, personal, and geopolitical links with France (including nearby Réunion) persist strongly through business channels, a strong French role in training institutions, and a large elite diaspora.

The First Republic of President Philibert Tsiranana began with independence in 1960 and is important to our story in three ways. First, the government replaced colonial rules with a fairly complete and long-reaching environmental legislation that reflected a strong agenda to develop the

Figure 7.3 Timeline of key events in Madagascar politics and conservation, 1970-2012

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nation through increased, modernized agricultural production twinned with environmental protection. This included land tenure laws stressing investment in cultivated land, rules that forbade forest fires but made room for economically necessary pasture fires, policies for reforestation that required all men to plant 100 seedlings a year, new protected areas categories, and hunting restrictions on endangered species. The second important thing is that the enforcement of this hopeful set of laws was meagre, reflecting limits in the reach of the state and underlying tensions with affected parties that persist to this day (Kull, 1996, 2004). Third, this period is an important precedent to the conservation boom, in that non-French foreign involvement in Madagascar through development and conservation agencies began at this time. The WWF began working on the island in 1963 with a project aimed at preserving the endangered ayeave (Daubentonia madagascariensis), a lemur. The United States Agency for International Development (USAID) began its activities with a 1966 loan for railway improvements and Switzerland began to develop its Malagasy aid program at the same time.

The 1970s and 1980s: the run up to the boom

In 1970, the Malagasy government, working in close collaboration with the International Union for Conservation of Nature (IUCN), hosted an International Conference on the Conservation of Nature and its Resources, co-sponsored and attended by the leaders of institutions such as the WWF, the Food and Agriculture Organization of the United Nations (FAO), France's overseas research office (Orstom), and the Paris Museum of Natural History. The high-level meeting took place during a major global wave of environmental interest and was justified with reference to the island's scientific importance and the spectre of species extinctions. Calvin Tsiebo, Vice President of the Republic, stated in his opening remarks: 'Unfortunately, our incomparable natural heritage, this unique natural capital, is gravely endangered. According to the specialists, few areas of the world suffer from such grand and rapid degradation' (IUCN, 1972, p9).

The conference was a milestone in Malagasy conservation; it put the issues on the front page of the newspapers.2 Tsiebo closed the conference by calling for a variety of actions, including new protected areas and, most importantly, increased involvement and financial support from international and national organizations.

At the same conference, however, Etienne Rakotomaria, then Director of Scientific Research, questioned the dominance of foreign scientists:

We have touched on three problems - forest reserves, education, and the role of foreign scientists. In all three spheres we have seen international organizations negotiate with Frenchmen in the name of Madagascar but systematically exclude the Malagasy from our own

concerns ... in the future, however, you will find that negotiations must take place only with our government's representatives. Scientists will only be allowed to work here if they arrange reciprocal benefits for Malagasy colleagues. The people in this room know that Malagasy nature is a world heritage. We are not sure that others realize that it is our heritage.

(Jolly, 1980, p7, emphasis added)

Rakotomaria's statement is relevant today: the conservation boom is still largely driven by outsiders. But it particularly reflects the post-colonial tensions felt in Madagascar at the time. The Tsiranana government and armed forces were full of French advisors, foreigners controlled 80 percent of the economy, and university instructors were predominantly French. University students instigated protests that were joined by the masses and which led to Tsiranana handing over power to a military transition government lead by General Ramanantsoa. The 1972 revolution was seen as a second independence from continued French domination. During the tumultuous period that followed, France was asked to close its military base at Diego Suarez, Madagascar quit the Zone franc (the French-backed monetary system in its ex-colonies), most Western technical assistants and scientists were banned. and conservation efforts stalled (Covell, 1987).

The following three years were characterized by power struggles, riots, and a presidential assassination. In 1975, Admiral Didier Ratsiraka, minister of foreign affairs under Ramanantsoa, took power. By the end of that year, he had put in place a new Constitution and been elected President. Thus began the Second Republic, characterized at its inception by a commitment to nationalization, 'scientific socialism', 'humanist Marxism', and a lack of environmental concern (Jolly, 1990).

Like other developing countries, Madagascar followed the advice of wealthy country lenders and international financial institutions and borrowed heavily from commercial banks (which were cash rich from oilexporting countries following the 1970s energy crisis) to invest in education, the military, transportation, communications, and industrial development. Irresponsible lending, ill-advised borrowing, and a global recession led to a rapidly deepening crisis of deficits, debts, and inflation. By 1980, a billion dollar external debt meant that Madagascar had little choice but to seek its first bail-out from the International Monetary Fund (IMF). The condition for IMF assistance was a program of 'structural adjustment'. Prescribed for developing countries around the world in order to receive IMF loans, structural adjustment consisted of macroeconomic reforms such as government austerity and balanced budgets, currency devaluation to improve exports, and reduction of trade barriers. By 1986, the World Bank had become a struggling Madagascar's dominant source of funding, with attendant pressure for further policies such as liberalization and privatization

(Covell, 1987; Mukonoweshuro, 1994). Such structural adjustment policies were known as the 'Washington Consensus', reflecting their advocacy by the headquarters of the IMF, the World Bank, and the U.S. Treasury Department. They were underpinned by an emerging 'neoliberal' ideology. Neoliberalism seeks to orient economic and political governance in line with classical liberal theory, including faith in the market and civil society, and hostility to the state. A strong ideological influence in governments around the world over the past three decades, neoliberalism promotes free-market policies such as trade liberalization, privatization of state assets, outsourcing of state services, and opening of markets.

It is within this political and economic context that conservation activities resumed. Slowly but surely, the debt crisis forced a geopolitical rapprochement of the isolationist Second Republic with foreign influences. Doors were also re-opening through connections in the conservation community. In 1979, the WWF established an official representation in Antananarivo under the direction of Barthélémi Vaohita, a long-time conservation activist and a strong advocate for environmental education. As a good public speaker and a friend of President Ratsiraka, Vaohita was important in aiding progress in Malagasy conservation.3 While the WWF continued to focus on species conservation and protected areas, it also initiated an awareness campaign aimed at decision-makers and the public. Foreign research was invited again and, in 1983, a council was created, under the guidance of the Jersey Wildlife Preservation Trust and Yale, Duke, and Washington universities, which facilitated the granting of research permissions.4

By the mid-1980s, the momentum created at the 1970 conference resumed. The 1980s was a decade when Malagasy governmental opinion shifted from 'outright denial that the environment could affect human welfare, to being one of the leading countries in at least the rhetoric of sound policy' (Jolly, 1990, p121). In 1984, Madagascar adopted a National Strategy for Conservation and Development, signed by every government minister. Called for in the World Conservation Strategy (IUCN/WWF/UNEP, 1980), Madagascar was the first major nation in the Afrotropics to prepare such a document. The strategy stresses public awareness and environmental education, behavioural changes with respect to the environment, technical competency, program evaluation, and local participation. What precipitated this groundbreaking document? According to one conservationist, 'it was kind of a Malagasy thing', and 'few expatriates were involved'; yet another supposed that WWF pressure did have an influence.5

A second milestone International Conference on Conservation and Development was held in November 1985. Joseph Randrianasolo, then Minister of Livestock, Water, and Forests, declared that 'before, people only spoke of the beauty and scientific interest of our flora and fauna. This time we are speaking of our people, and how to manage our resources to be self-sufficient in food and fuelwood' (Jolly, 1990, pp119-120).

The linkage of conservation to human welfare in the newly minted concept of 'sustainable development' was a critical factor in bringing the government on board. Rooted in the World Conservation Strategy and enthroned by the Brundtland Report (WCED, 1987), sustainable development responded in part to a concern by poor countries that environmental rhetoric would impede their desperate goal of economic development.

The 1985 conference was attended by many international agencies, government members, as well as by Prince Philip, the International President of the WWF. It is said that he confronted President Ratsiraka with the statement 'your nation is committing environmental suicide', an event that is touted as a major milestone in Malagasy conservation awareness. One conservation agent I interviewed called it the key event in his career, as he was deeply impressed by the intense external interest in his nation's natural heritage.⁶ During the conference, Minister Randrianasolo established the first new protected area since the 1960s (Beza-Mahafaly), and requested financial and technical assistance to implement the 1984 National Strategy.

Several programs were initiated in the aftermath. These included, for example, soil conservation and forest management projects financed by the World Bank, Switzerland, and Norway. The WWF and American universities were asked to assist in the management of protected areas with USAID and United Nations Educational, Scientific and Cultural Organization (UNESCO) funding. An important review of the protected areas system was commissioned, which stimulated plans for expansion and integrated conservation and development projects (Nicoll and Langrand, 1989; Hannah, 1992).7 Finally, the WWF was asked to develop an environmental education program, which by 1992 had reached most school districts.

Despite high expectations, however, the successes of the mid-1980s were limited. The Forest Service, responsible for the protected areas, was caught between structural adjustment budget austerity requirements and an overwhelming number of projects (Schmid, 1993). As a result, the government, strongly pushed by the World Bank, asked international donors to help design a more effective action plan for the environment. The World Bank, under its new President Barber Conable, was seeking to demonstrate its green credentials after years of harsh environmental criticism. It introduced, encouraged, and largely funded NEAPs across Africa, pushing them as unofficial structural adjustment conditions for the receipt of countryoperating budget loans in the wake of the debt crisis (Dorm-Adzobu, 1995; Lindemann, 2004). In each country, the NEAP took on its own character, leading to different kinds of conversations and results. Madagascar's was particularly prominent, given the antecedents described above and external conservation interest (World Bank, 1988; Falloux and Talbot, 1993; Hufty and Muttenzer, 2002; Sarrasin, 2007; Pollini, 2011).

On the Malagasy side, political support was not immediate from all parts of government. In one recounting:

Many of the influential Malagasy were preoccupied with the country's urgent economic problems ... they simply had other priorities than the environment ... However ... on the basis of the alarming estimates of the costs of the environmental degradation the Prime Minister joined the Director of Planning as a sponsor of the NEAP. The President initially remained on the sidelines ... [but] was obliged to enter the arena after the showing of an excellent series of televised environmental episodes produced by Radio Télévision Malgache ... intended to strengthen public opinion in favour of the NEAP. This coincided with the start of the President's re-election campaign ... Happily, the development of the NEAP came at a good time, and the President adopted it and became an ardent supporter of the NEAP.

(Falloux and Talbot, 1993, pp34-35)

Another source claimed that the 1989 appointment of Victor Ramahatra as Prime Minister was pushed by the World Bank, thus ensuring support and good coordination of the NEAP.8 Malagasy cooperation in environmental action was never an explicit condition for World Bank aid, yet 'which government can ignore the strong wishes of its foreign donors?"9

The NEAP was developed by Malagasy government with strong technical guidance and financial support from the World Bank, U.S. and Swiss bilateral aid agencies, the WWF, the United Nations Development Programme (UNDP), and UNESCO (Sarrasin, 2007). UNESCO and the UNDP had, through their Man and the Biosphere programme, been playing an important role in environmental efforts on the island in the 1980s, including sponsoring another conference in Toamasina in 1988 (Maldague et al., 1989). The Swiss, at the time, included Madagascar as a focal country for their development aid, focussing on soil conservation and farming systems. The Americans were increasingly becoming involved specifically through the environmental sector. France, despite ongoing ties and an active development aid program, was absent in this original formulation (Andriamahefazafy and Méral, 2004; Freudenberger, 2010).

Booming conservation: from 1990 to today

This section tells the story of conservation in Madagascar since 1990, highlighting key themes and putting events into broader political and historical context. The NEAP served as an umbrella for most conservation activity in the 1990s and 2000s. Over \$100 million was committed for the initial years of the NEAP by foreign donors in an accord signed in January 1990 in Paris, and the national assembly put the plan into law as the Charte de l'Environnement later that year. The NEAP was developed with an unusually long 15-20 year vision. Promotional materials announced that it would promote sustainable development by raising living standards, better resource management, and conservation of nature, and touted principles of dialogue,

benefits to local communities, and continuity. Emphasis, however, was on the environment. Priority programs included rural and urban environmental management, institutional support, mapping, environmental education and training, and, in particular, biodiversity protection through the addition of 400,000 ha to the protected areas system (World Bank, 1988; Kull, 1996; Freudenberger, 2010).

Conservation activities in Madagascar accelerated rapidly as the NEAP got underway, ushering in an era of multi-million dollar projects. Madagascar became an 'El Dorado' for conservation, 10 witnessing an incredible surge in conservation activity (Hough, 1994; Kull, 1996). USAID, which had sponsored only a smattering of projects in Madagascar, introduced no less than six major conservation projects in the years 1988-1992, and took the lead in sponsoring the biodiversity component of the NEAP. The U.S. Peace Corps arrived in September 1993, and sent volunteers to work in environmental projects. This was also the era of Debt-for-Nature swaps, whereby conservation donors pay off a portion of a country's foreign debt in exchange for an agreement that the country will finance local conservation activity. CI, the WWF, and USAID facilitated at least seven swaps beginning in 1989. In 1991, the government gazetted brand-new Ranomafana National Park, with the help of a broad consortium of largely American sponsors. This first new National Park in 30 years symbolized the resurgent activity.

In 1991, conservation activities were dealt minor setbacks as the opposition to authoritarian President Ratsiraka, frustrated by the lack of economic progress, organized a general strike that paralyzed the economy. A new constitution in August 1992 marked the beginning of the Third Republic. On February 10, 1993, a general election replaced Ratsiraka with Albert Zafy, leader of the opposition coalition, in a smooth transition. Zafy's government, led by Prime Minister Francisque Ravony, was largely preoccupied with economic and political problems, but did not interfere with the NEAP. This is unsurprising, given the context of government bankruptcy, an economy stricken by the political crisis, and the unity of major donors behind a sustainable development agenda (remember, the UN Conference on Environment and Development (UNCED) took place in Rio in 1992). Conservation actors had unusually high-level access to government officials and convinced them to continue conservation actions in order to attract foreign funding. For example, the WWF's Chargé du Programme, Sheila O'Connor, was reputed to have had the ear of the Prime Minister.11 It was in this context - political uncertainty, economic difficulties, and the near-free reign of conservation organizations - that the first phase of the NEAP was implemented. Known as the first environment program, or PE1, it ran from 1990 to 1996.

PE1, integrated conservation and development under Zafy

The PE1 had three major thrusts. The first was the creation of institutional structures to carry out the NEAP. In 1991, the government established an

Office National pour l'Environnement (ONE) to coordinate the activities of the NEAP. It also created the Association Nationale d'Actions Environnementales (ANAE) to focus on soil management and rural development, and the Association National pour la Gestion des Aires Protégées (ANGAP) to oversee protected areas management. ANGAP was created under a neoliberal spirit as a parastatal agency to facilitate the temporary management of protected areas by international non-governmental organizations (NGOs) with the idea of building up local capacity to take over.12 Finally, in 1994, a new Ministry of the Environment was created, but had a weak mandate.

The creation of new institutions - designed under a dominant neoliberal ideology of shrinking the state and outsourcing certain functions - was not without tensions at the time as well as long-term consequences (Andriamahefazafy and Méral, 2004). For example, the Direction des Eaux et Forêts (the Forest Service) was historically responsible for protected areas and resisted transferring authority to ANGAP.13 The Forest Service had a proud tradition in the colonial administration as a highly professional agency, but had fallen apart during 1980s austerity measures. The NEAP simultaneously sought to circumvent it and to re-build its capacity (Montagne and Ramamonjisoa, 2006; Freudenberger, 2010).

A second, related thrust of PE1 was the modernization of the country's environmental legislation. A significant milestone was the passage in 1994 of the first environmental impact assessment legislation, called MECIE (for Mise en Compatibilité des Investissements avec l'Environnement). A few years later, facilitated by a Swiss project, Madagascar also passed a full new set of forestry legislation (Montagne and Ramamonjisoa, 2006).

The third and most visible thrust of PE1 was to solidify and expand the country's network of protected areas. Donors sponsored over a dozen Integrated Conservation and Development Projects (ICDPs), which sought to twin conservation efforts inside the park or reserve with development efforts in the surrounding villages, with the idea that the latter efforts would reduce human pressures on the protected areas. Some illustrative examples included Ranomafana National Park, funded by USAID via a consortium of American universities; Mananara-Nord, a UNESCO biosphere reserve funded by the World Bank and the UNDP; Masoala pensinsula, funded by USAID and implemented by the WCS together with the development organization CARE; and the Marojejy region, operated by the WWF initially through German funding (Kull, 1996).

USAID was effectively the key driver of NEAP activities during PE1, as it and the World Bank were the main funding sources (Méral, 2012). USAID's offices were classified as a 'major mission' and had a large staff presence, while the World Bank had its key staff based in Washington (Freudenberger, 2010). The USAID mission was downgraded in 1994 and 1996 due to Madagascar not meeting structural adjustment commitments, but support to environmental programs continued due to a Congressional earmark for biodiversity (Medley, 2004; Corson, 2010), so USAID maintained its key role throughout the rest of the NEAP. Its strong presence was also aided by the continuity in the coordination of its environment programs by the same person, Lisa Gaylord (Freudenberger, 2010).

A key trend in PE1 was the inexorable shift of emphasis from the broad goal of sustainable natural resource management (including biodiversity conservation), to a narrow focus on biodiversity first and foremost. This tension was already visible in earlier 'conservation and development' conferences, and is manifested in the fate of the three institutions that were created - ONE, ANGAP, and ANAE. Of the three, ANAE, which focussed more on soil conservation and rural development, was the weakest and eventually ceased being funded (Andriamahefazafy and Méral, 2004). The move towards a biodiversity focus was aided by the structural and political constraints on USAID funding (Corson, 2010). Furthermore, the Swiss emphasis on sustainable forestry and rural development was reduced when Swiss aid demoted Madagascar from 'focal country' status (in response to the unresolved assassination of one of its contractors in 1994).

In the closing two years of PE1, there was a sudden rush - reflecting global trends - towards community-based natural resource management. The main NEAP donors (France was now involved too) sponsored a series of workshops and expert missions that promoted ideas from a communitymanagement paradigm, including from University of Wisconsin's Land Tenure Center and from the French research agency Cirad (Weber, 1995; Montagne and Ramamonjisoa, 2006). The result was that policymakers developed a law, called GELOSE for Gestion Locale Sécurisée, facilitating the transfer of specific resource management rights and responsibilities to community associations. It was passed in 1996 (for greater detail see Chapter 8 by Pollini et al.; Pollini and Lassoie, 2011).

The return of Ratsiraka, PE2, and regional approaches

After little progress in the management of Madagascar's economic crisis, Albert Zafy was forced out of the Presidency in 1996 (Marcus, 2004). Reflecting frustration with his efforts to centralize authority, the National Assembly impeached him for exceeding his constitutional powers. This political crisis, which ended with the re-election of former dictator Didier Ratsiraka in early 1997, did not result in strikes or violence, but provided a measure of political uncertainty during the transition from PE1 to PE2.

The second environmental program ran from 1997 to 2002. Evaluators of PE1 had found that the ICDP approach had delivered little conservation benefit from poorly targeted development activities around protected areas. They proposed for PE2 a broader, more strategic, more comprehensive regional approach with significant emphasis on decentralization and participation (Gezon, 2000; Freudenberger, 2010; Pollini, 2011). USAID projects focussed on 'eco-regions' that linked corridors of protected areas with the regions around them. For instance, the U.S. sponsored Landscape

Development Interventions project (LDI) focussed on two major forest corridors in eastern Madagascar, undertaking a bewildering diversity of initiatives including alternatives to slash-and-burn agriculture, remote rural health, natural product commodity chains, ecotourism, market roadbuilding, local irrigation systems, farmers cooperatives, and participatory planning structures. One of the impacts of this regional focus was the territorial entrenchment of different actors - the Americans in Fianarantsoa and Moramanga, the Swiss in the Menabe, and the Germans in the Vakinankaratra (Moreau, 2008; Méral, 2012).

Several projects sought to promote the co-management of natural resources, as initiated through GELOSE. Yet, for some, GELOSE was seen as too legalistic and cumbersome. They developed a simpler alternative, called GCF (Gestion Contractualisée des Forêts; for forest management contracts), by decree in 2001. Unlike GELOSE, GCF can only be applied to lands controlled by the Forest Service, and it requires no tenure allocation and no negotiation with a municipality. At one point, these competing approaches became emblematic of rivalries between donors, sometimes over-simplified as tensions between French adherents of GELOSE and American sponsors of GCF.14 In the end, over 450 local management contracts using one or the other legislation were reported in the period 1997-2006 (see Chapter 8 by Pollini et al.; Montagne and Ramamonjisoa, 2006; Montagne et al., 2007).

In the meantime, much work was continuing in Antananarivo on refining the institutional, technical, and legislative basis for environmental management. Aid and conservation agencies provided support, for instance, to the Forest Service, by developing a satellite-based fire monitoring tool. 15 Likewise, a Multi-Donor Secretariat was established by a number of the multilateral and bilateral agencies and conservation organizations, with a mission to coordinate their activities (Lindemann, 2004; Freudenberger, 2010).

PE3, Ravalomanana, and the Durban Vision

The transition from PE2 to PE3 was long and confused, due to another round of political crises. The results of Presidential elections in December 2001 were contested by partisans of the mayor of Antananarivo, Marc Ravalomanana, who claimed he had won an outright majority in the first round of voting. Months of street protests and tensions followed. Rapidly recognized diplomatically by the Americans, Swiss, and Norwegians, Ravalomanana's control of the island was assured in July 2002 when France facilitated the exile of President Ratsiraka. Ravalomanana, a selfmade entrepreneur and businessman, brought a brash new attitude to the Presidency: a results-oriented, top-down management style; openness to non-French contacts and investors (the U.S., South Africa, China, and other Asian countries); and hostility to the old Franco-Malagasy establishment (Marcus, 2004; Rakoto Ramiarantsoa, 2008).

While bilateral funders and NGOs quickly resumed their work, the World Bank delayed implementation of PE3, awaiting guarantees that the new government would demonstrate its commitment. In the event, Ravalomanana's government did so in spades. It announced a strict ban on burning, launched awareness and repression campaigns (jailing several slash-and-burn farmers), linked municipal (commune rurale) budgets to performance measures such as fire prohibition, and, most dramatically, announced an ambitious goal of tripling protected areas in five years. As a result, the start of PE3 was messy and uncoordinated (Pollini, 2011; Méral 2012).

President Ravalomanana's aggressive agenda, which also included large mining projects, land tenure reforms facilitating foreign investment, agribusiness deals, and road building (Rakoto Ramiarantsoa, 2008; Rakoto Ramiarantsoa et al., 2012), changed the tenor of the third phase of the NEAP. While there was a general continuity in the key actors, in their projects, and in their intervention zones, PE3 (2003-2009) was marked by three major departures from earlier efforts: i) a resurgent focus on the protected areas system; ii) a more assertive state and less room for local participation: and iii) efforts to achieve conservation through economic tools. I address each in turn.

First, the protected areas system – and its expansion – became the central focus of conservation action. In 2003, the government passed new protected areas legislation called COAP (Code des Aires Protégées), which outlined different categories of protection and prohibited most human resource use within protected areas. Then, President Ravalomanana announced at the World Parks Congress in Durban, South Africa, that Madagascar would triple its protected areas in five years. The urgency of this 'Durban Vision' unleashed a flurry of activity and debate (see Chapter 9 by Corson for more detail). To simplify, the debate pitted preservationist interests, led by U.S.based conservation organizations CI and WCS (whose stars were ascendant under Ravalomanana) against diverse actors whose interests were threatened by the rapid, top-down expansion of strict conservation zones. This included not only government ministries, mining, and forestry interests, but also many within the environment and development sectors who preferred sustainable use approaches and saw the hard-core approach as undermining relationships with poor rural communities (such as French¹⁶ and German bilateral aid agencies, some local NGOs, UNESCO, and to a lesser extent the WWF and UNDP).

The impasse was only broken through after the IUCN (the sponsor of the Durban conference) sent two major missions, led by Grazia Borrini-Feyerabend, which proposed that the less restrictive IUCN categories 5 and 6 (protected landscapes and sustainable use areas) be used for the new protected areas. The result was a new policy in 2005, called SAPM for Système des Aires Protégées de Madagascar, which aligns the protected areas system with the IUCN categories and gives its overall management to the Ministry

of Environment and Forests, but gives responsibility for individual reserves to actors such as Madagascar National Parks (formerly ANGAP), regional governments, NGOs, or private actors. Furthermore, modifications to the COAP legislation in 2008 allowed for participatory approaches and some natural resource use in the more flexible park categories 17 (Duffy, 2006; Freudenberger, 2010; Pollini, 2011; Corson, 2012).

Second, during PE3 and Ravalomanana's presidency the state became more assertive, sometimes in partnership with conservationists, while the participatory, community-based management spirit that had grown during PE2 was dealt a number of setbacks, despite many intentions and much rhetoric to the contrary (for detail see Chapter 8 by Pollini et al. and Chapter 9 by Corson). It should be noted, however, that on the ground, many other actors sought to maintain strong co-management components to their projects. Government assertiveness was aided by some long-overdue administrative changes that clarified rivalries among different sectors and institutions, reducing the influence of the para-statal agencies created in PE1. Most crucially, in 2003 a newly merged Ministry of Environment, Water, and Forests took over coordination of the NEAP (from ONE) and later of the protected areas system (from ANGAP and the Forest Service). In principle, such centralization facilitates control and coordination, but this particular ministry has also been seen as an 'institution having as a mission to obey international environmental objectives' (Rakoto Ramiarantsoa et al., 2012, p253).

Third, environmental initiatives during PE3 took a strong turn towards 'neoliberal' conservation approaches, seeking to harness financial or economic tools to make environmental protection last. In 2005, the WWF and CI collaborated with the Malagasy government to establish a 'Madagascar Biodiversity Fund'. With funding from the World Bank, France, and Germany, the endowment accumulated US\$25 million by the end of 2010. The goal is to have an operating budget capable of sustaining the protected areas system. At the same time, increasing efforts have been made to harness Payments for Environmental Services (PES) approaches. Such approaches were already discussed in the lead-up to PE2, but - aside from an innovative pilot project at Makira - were dropped due to uncertainty about their efficacy (Freudenberger, 2010). More recently, however, market-based approaches have climbed the global agenda. The Malagasy government approved its first carbon purchases in 2005, and several PES projects have been set up, including four focussed on carbon, three on biodiversity, and one on watershed protection. Funding comes from sources ranging from conservation NGOs or the World Bank (via its Biocarbon Fund), to private sector actors such as Air France, Mitsubishi, and Pearl Jam (for more detail see Chapter 13 by Brimont and Bidaud; see also Méral et al., 2011; Méral, 2012).

After NEAP

The NEAP ended in 2009 with somewhat of a whimper, overtaken by the events of yet another political crisis. Ravalomanana's heavy-handedness in the environmental sector contributed (among many other complaints, tactical errors, and geopolitical machinations) to growing dissatisfaction with his regime. After his troops shot at street protesters, the tide turned against him and he was forced into exile in March 2009, with power over a 'transitional authority' going to young rival Andry Rajoelina. Rajoelina has clung to power for three years now (these words are written in 2012). Numerous donors suspended their non-humanitarian funding in 2009 in protest, including the U.S., the World Bank, the EU, the African Development Bank, the IMF, and the UNDP (Rakoto Ramiarantsoa et al., 2012). While the U.S. has continued to maintain its distance from what it calls an 'illegitimate regime', the World Bank resumed partial funding of critical programs (including the environmental sector) in June 2011, and proposed in Februray 2012 to resume full relations.

Explaining the boom and its persistence

This overview of the history of conservation in Madagascar shows that the events of the past decades have a variety of antecedents and driving forces, In this section, I discuss five important and interlinked factors that have driven and shaped the conservation boom and its persistence.

Madagascar's environment, real and imagined

Conservation action in Madagascar is motivated by people's perceptions that the island's biodiversity is both unique and particularly threatened. The highly endemic flora and fauna has inspired naturalists for decades (see Chapter 2 by Ganzhorn et al.).18 Their observations of the rapid disappearance of the island's natural forests, habitat of much of this natural heritage, impelled them to action. On top of these empirical observations, several 'received wisdoms' have shaped how Madagascar's environment is talked and written about. These include contested ideas of an original island-wide forest and oft-repeated but exaggerated figures such as the loss of 90 percent of forests (see Chapter 4 by McConnell and Kull; Kull, 2004), as well as theories about the causes of degradation (such as the 'spiral of degradation' that linked population growth, poverty, and environmental destruction - World Bank, 1988) that tend to ignore other driving forces (see Chapter 5 by Scales). Together, these real and imagined components of Madagascar's environment have constructed the island as a global conservation priority. The island is now one of the 'hottest' of the biodiversity hotspots (Ganzhorn et al., 2001), an image endlessly reproduced through television and the media.

Global environmentalism

Conservation in Madagascar was undoubtedly shaped by the broader context of global (or, perhaps more honestly, Euro-American) environmentalism. With antecedents in concerns over pollution and species losses caused by industrial activities, the environmental movement first captured widespread public attention in the period around 1970, leading to the UN Conference on the Human Environment in Stockholm in 1972. Resurgent from the mid-1980s, the emphasis turned to crisis buzzwords such as acid rain, desertification, rainforests, biodiversity, and global warming. Attention moved towards the new idea of 'sustainable development', pushed by highprofile documents such as the Brundtland Report (WCED, 1987), which sought to reconcile economic growth in both industrialized and poor countries with environmental conservation. This contributed to a 'greening of aid' (Adams, 1990). Sustainable development arguably reached its zenith in the 1992 UNCED, held in Rio de Janeiro. Global environmentalism has continued to evolve, with two trends reflecting different manifestations of neoliberal ideas: the move towards decentralization and participation in the 1990s; and another move towards market-based instruments in the 2000s (reflected in the UN's Rio+20 Conference and its theme of the 'Green Economy'; Carrière et al., 2013). Throughout this long history, global conservation has felt tensions between more 'preservationist' views that seek to preserve portions of nature from human influence, and more 'sustainable use' views that draw less stark lines between humans and the wild.

The story of conservation in Madagascar clearly reflects this evolving global context. In the 1970s, interest in the island's nature dovetailed with a global interest in 'ecology'. The late 1980s focus on sustainable development and the greening of aid were a critical element in the conservation boom, as they led to a dramatic increase in available funding. Madagascar was an 'object of prestige' for environmentally minded donors.19 More recently, conservation activities on the island reflect, as we have seen, the trends towards community- and market-based approaches, and the tensions between preservationist and sustainable use philosophies.

Indigenous environmentalism

While foreign interest and funding is undoubtedly a prime motor for the conservation boom, it is also important to recognize the role of Malagasy individuals in advocating for the protection of the island's natural heritage. Had key decision-makers not been on board, it would have been easy for the government to make it more difficult for foreign groups to undertake their activities.20 In addition, the influence of the small but dedicated Malagasy scientific and intellectual community should not be underestimated. Key figures, for example, might include Leon Rajaobelina, Ambassador to the U.S. in the 1980s, Minister of Finance during the elaboration of the NEAP,

and now regional Vice President at CI. His son, Serge, has taken up his mantle, founding the NGO Fanamby in 1997 (see also Kull, 1996). The implication of Malagasy actors has increased through each stage of the NEAP (Andriamahefazafy and Méral, 2004).

While some observers have suggested that 'the Malagasy perspective on the natural forest per se can best be characterized as indifferent' (Freudenberger, 2010, p89), their perspective might rather be seen as different, reflecting the cultural lenses and socio-economic interests of rural farmers (Keller, 2008; Scales, 2012). Malagasy environmental attitudes differ widely, depending on social context, urban vs. rural location, and what is meant by 'the environment'. What is sure is that three decades of booming environmental action on the island - including WWF's awareness programs²¹ – has resulted in the mainstreaming of green discourses in urban society and the creation of a cadre of field workers, park staff, graduates, and professionals whose careers and identity are linked to the conservation boom. Surprisingly missing, however, is any broad-based movement or activism by rural residents related to land, environment, and livelihood issues.

Politics and economics: the foreign role

Foreign government agencies and international NGOs play a preponderant role in conservation in Madagascar (Duffy, 2006; Méral, 2012; Rakoto Ramiarantsoa et al., 2012). The amount of development aid disbursed to Madagascar in the past decades has been similar in magnitude to the operating budget of the central government. The NEAP involved nearly half a billion dollars of funding over 20 years. When donors such as the World Bank and USAID went green in the late 1980s, the country had little choice but to follow.²² As Alison Jolly (1990, p121) stated, 'the country depends on Bank-funded projects ... Madagascar is too poor and too much in debt to do otherwise'.23 This dependency arises from complex historical factors including colonialism and its political and economic legacy, ill-advised borrowing in the 1970s, and structural adjustment policies in the 1980s.

The timing of the conservation boom has much to do with the convergence of Madagascar's debt crisis, its political re-opening to the outside world, and the global rise of sustainability discourse. Geopolitical strategic issues also played a role. For instance, the increase in American aid to Madagascar coincided with threats posed by instability in South Africa to strategic mineral supplies (Hannah, 1992). The island's transition to democracy, exemplified in the 1993 elections and the relative stability of that decade, helped attract aid from major donors who saw the island as a 'good pupil'. In this context, the influence of conservation organizations was facilitated by the lack of a strong lobby for mining or logging interests.24 The result was a close relationship between conservation NGOs and the bilateral aid sector (Duffy, 2006).

The strong role of foreign funders and international environmental organizations was compounded by the weakness of the state and the civil society (Freudenberger, 2010). The contrast with, say, another conservation prize - the Brazilian Amazon - could not be stronger. There, the federal state is better resourced and has a strong agenda, and social movements are vocal in defending a variety of interests. In contrast, no civil society groups participated in the development and running of Madagascar's NEAP (Lindemann, 2004). As an interviewee stated when asked why the conservation boom took place, 'it is cheaper and easier to work in Madagascar than, for example, Brazil'.25 In the end,

eco-power remains in the hands of big environmental NGOs specialized in being financial intermediaries [between donors and the field]. They orient the aid programs, giving priority to biodiversity conservation and climate change adaptation. These two types of action are re-packaged as poverty eradication.

(Rakoto Ramiarantsoa et al., 2012, p256)

Rivalries, ideologies, and lobbies within the conservation effort

While it is crucial to appreciate the overwhelming foreign role in the conservation boom, it is also necessary to understand the ideological tensions and geopolitical rivalries that play out between the different actors (Méral, 2012). While nascent conservation activities up to the late 1980s were designed by a small, cooperative group of individuals, the higher stakes in the years that followed led to more competition and conflict.²⁶

An illustrative tension has been between strict nature conservation goals and a broader focus on sustainable natural resource management. The 1970 and 1985 conferences and the 1988 NEAP documents were framed in terms of sustainable resource management in the context of a poor population seeking social and economic development. In part, this framing assured Malagasy government interest. Yet while there have been efforts focussed on soil conservation, sustainable farming systems, and rural development, the lion's share of attention and funding has gone to biodiversity conservation (Pollini, 2011).

A major impetus for this tendency has been the structure of American aid. For complex reasons, the domestic political landscape in the United States caused biodiversity protection to dominate USAID's environment portfolio. As a result, this agency has essentially adopted the protected areas approach of its conservation NGO partners (WWF, CI, WCS) (Andriamahefazafy and Méral, 2004; Medley, 2004; Corson, 2010; Freudenberger, 2010). Under the separate economic development portfolio, a major contribution of American aid was the 2000 African Growth and Opportunity Act, which lowered tariffs on imports from countries such as Madagascar, and contributed to the expansion of its textile industry.

The American approach, 'modernist' in the sense that it separates nature conservation on the one hand from economic (industrial) development, on the other, differs from the strong rural development tradition in the aid programs of other NEAP partners, such as France, Switzerland, and Germany. It also reflects a somewhat different conception of what constitutes 'nature', with American approaches dominated by a wilderness ideology and a preservationist model inspired by Yellowstone National Park, whereas continental European approaches are oriented more towards sustainable use, incorporating rural farm landscapes like in the French Parcs naturels régionaux (Marcus and Kull, 1999; Carrière and Bidaud, 2012; Méral, 2012).

While certainly not absolute in any sense, these ideological tensions played out - as we saw earlier - in an initial minimal French involvement in the NEAP, in the conflict between GELOSE and GCF participatory models of conservation, and in the debates over the post-Durban approach to expanding the protected areas. These ideological (or cultural) tensions are at times entwined with institutional and geopolitical rivalries. Some French. for example, perceive of the environment as a Trojan Horse for 'Anglo-Saxon' influence on the island (Moreau, 2008).

France provided less than three percent of development assistance in the category 'environment' between 1990 and 2003; the big environmental donors were the U.S. (32 percent), the World Bank (20 percent), Switzerland and Germany (15 percent each), the EU (six percent), and the UNDP (four percent). Instead, France funded rural development, fishing, cotton, irrigated rice, agro-ecology, and livestock (Andriamahefazafy and Méral, 2004; Méral, 2012). Its environmental influence came through advisory positions in government agencies (see Pollini, 2011 for an autobiographical view) and through large, long-term research collaborations through its research agencies.

With the rise and fall of the Ravalomanana regime, the French-American rivalry gained a geopolitical aspect. Ravalomanana offended the established Franco-Malagasy elite and cultivated Anglophone links, even establishing English as an official language. France was slow to recognize his Presidency in 2002. After the 2009 coup that deposed him, rumours abounded of French help or opportunism (Deltombe, 2012), while America was the quickest and most vocal in shutting down its programs in protest at what it called an illegitimate regime. Given the strong foreign role in conservation in Madagascar, the ideological and geopolitical tussles of the main actors - particularly ex-colonial master France and chief environmental financier America - have shaped the course and character of the 20-year-long conservation boom.

Conclusion

Madagascar has long exerted a particular attraction to nature-lovers, due to its peculiar flora and fauna found nowhere else. It is through this naturalist's lens that many foreigners have viewed the island - despite its other attractions, such as its musical traditions or cultural landscapes of rice terraces and red-brick houses. The booming efforts at nature conservation from the late 1980s until now were based in this particular view of the island, and have reinforced it.

The conservation boom was ultimately caused by a combination of the island's special biological characteristics, the degradation of this natural heritage, the dominant discourses of environmental crisis that amplified the speed and effects of this degradation, the expanding reach and evolving ideas of the global environmental movement, and, most crucially, the political-economic influence of bilateral and multilateral institutions in a desperately poor, post-colonial country. The timing of this boom was due to a global boom in the late 1980s of environmental activism (extending, via sustainable development, into the corridors of the World Bank) coinciding with Madagascar's financial crisis and political re-opening. The efforts of numerous passionate individuals contributed all along the way.

Conservation activity has come a long way in the 20 years of the NEAP. Yet, new challenges call for attention today. Two large mining projects are underway, with several more planned. Agricultural investors seek land concessions for cash crops. European and American aid donors are crippled by economic crises. Asian investors have an increased influence in business and in development projects. And a 'shadow state' of networked elites plays a nefarious role in profiting from activities in direct contradiction to environmental goals, such as illegal logging (Duffy, 2006; Pollini, 2011).

The results of the conservation boom - protected areas, legislation, institutions, and more (see Freudenberger, 2010) - are simultaneously appreciated and contested by many of the stakeholders. Conservationists may rightly be proud of progress such as the expansion of the protected areas, but also frustrated at the many failures and obstacles along the way - trees are still being cut, after all, even in parks. Advocates for poor rural Malagasy residents can appreciate the development efforts that have been undertaken around protected areas, the occasional employment opportunities for rural communities, and the recognition given to them through co-management initiatives, but may still be frustrated at restrictions on rural ways of life. This tension has never been resolved in a satisfactory way; the 'eco-power' of the conservation lobby continues to be 'confronted with problems of legality and legitimacy' (Rakoto Ramiarantsoa et al., 2012, p256).

Many of the world's flagship protected areas were tenuous and contested affairs at first. Madagascar nature reserves are certainly no exception, and one can ask whether over the longer term its parks will succeed. These protected areas and other initiatives certainly have positive implications for nature conservation, but their sustainability depends on broader social and economic factors. Most important at this point, now that so much energy has focussed on lemurs, chameleons, and endemic flora, is to resolve the political, economic, and governance challenges of the island nation, and to focus on the sustainable management of all landscapes, focussing on those who make a livelihood from them. After all, the original aims of the NEAP were not just conserving the natural heritage, but also developing human resources, raising living standards, and promoting sustainable development through improved resource management.

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Notes

- 1 These precedents, often cited to justify conservation policies, are often removed from their context (see Kull, 2004).
- 2 Source: anon-e (code refers to anonymous interviews conducted during 1994 with conservation and development professionals. The letter code identifies the individual).
- 3 anon-g.
- 4 anon-h.
- 5 anon-c; anon-j.
- 6 anon-f.
- 7 anon-j.
- 8 anon-a.
- 9 anon-d.
- 10 anon-a.
- 11 anon-c.
- 12 anon-j.
- 13 anon-e.
- 14 Moreau, 2008; interviews, Antananarivo, 2003.
- 15 Interview, Andy Keck, Jari-Ala program, 2006.
- 16 Ironically, in 2003, France moved the environment portfolio of its development assistance from the Ministry of Foreign Affairs (which, for example, had placed experts on matters such as decentralized resource management into government advisory positions) to the Agence Française de Développement which is more like a development bank and which decided to put all its money into the Biodiversity Foundation, effectively supporting a harder-core position (Méral, 2012 and pers. comm., October 26, 2010).
- 17 P. Méral, pers. comm., October 26, 2010.
- 18 anon-a; anon-g.
- 19 anon-n.
- 20 anon-j.
- 21 anon-c.
- 22 anon-a; anon-d; anon-k; anon-o.
- 23 anon-a; anon-d; anon-k.
- 24 anon-g; this changed in the 2000s.
- 25 anon-g. Similar comment also made by anon-a.
- 26 anon-h.

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