



# **REDD+ in Madagascar: YOU CAN'T SEE THE WOOD FOR THE CARBON**

FIELD CASE STUDY IN MADAGASCAR, JULY 2013

**basta!**

 Les Amis  
de la Terre

# REDD+ in Madagascar: You can't see the wood for the carbon

## Contents

<b>Summary</b>	<b>4</b>
<b>01 Introduction: Les Amis de la Terre</b>	<b>5</b>
1.1 The REDD+ mechanism	5
1.2 REDD carbon credits: a strategy for putting pressure on the airline industry?	6
1.3 Carbon offsetting on the voluntary market	6
<b>02 REDD projects in Madagascar: context and history</b>	<b>8</b>
2.1 Key figures for Madagascar	8
2.2 The importance of conservation in Madagascar	8
2.3 REDD+ Conservation Projects	9
2.4 Focus on the Holistic Conservation Programme for Forests	10
<b>03 Agriculture: essential for local communities, and primary cause of deforestation</b>	<b>13</b>
3.1 National context: food insecurity	13
3.2 Spotlight on the traditional practice of slash-and-burn agriculture	15
3.3 Poorly defined and disputed land rights	16
<b>04 REDD+ Projects: a solution or a new source of problems for local communities?</b>	<b>18</b>
4.1 Projects that aggravate tensions over land – who wins, who loses	18
4.1.1 What about free, prior and informed consent?	18
4.1.2 Timber harvesting permits: a source of conflict between communities	20

4.2 Projects which place new constraints on local communities without providing any benefits	20
4.2.1 Restricted access to land and natural resources	20
4.2.2 Poor compensation and an absence of alternative practices	20
4.2.3 Reforestation projects with short-term benefits (monetary or alimentary). But then what?	22
4.3 Social tensions caused by projects	23
4.3.1 Aerial surveillance	23
4.3.2 The Forest police: from fines to prison	24
4.3.3 Sanctions: a cause of fear but difficult to apply	25
4.3.4 The impact on women	25
4.3.5 Who benefits from the profits?	25

## **05 The HCPF Project: an example of the risks and limitations of REDD+**

**28**

5.1 Too much attention given to carbon storage, and higher transaction costs	28
5.2 Is there any real benefit to the environment?	30
5.2.1 Is it possible to predict the future? The impossibility of drawing up a truly scientific baseline scenario	30
5.2.2 The difficulty of accounting for the effects of leakage	31
5.3 Carbon offsetting: a socially unjust scheme	32

## **Conclusions and recommendations**

**34**

Appendix 1: Carbon market, Kyoto, clean development mechanism, European Union Emission Trading System: what do these things mean?	36
Appendix 2: The thorny problem of the baseline scenario	37

### **A project in support of investigative journalism**

Within the framework of a European project, Friends of the Earth France and its partners have chosen to support reportage and journalism projects. This report is one of a series of five case studies focusing on issues surrounding the carbon markets and their impact on agriculture and forests.

This report examines the Holistic Conservation Programme for Forests in Madagascar, led by WWF Madagascar and GoodPlanet and funded by Air France. It was written by Sophie Chappelle, a journalist for the news website Basta! ([www.bastamag.net](http://www.bastamag.net)) and is the result of a field mission organised in May 2013.

Part 1 and the Recommendations of this report were written by Sylvain Angerand, for Friends of the Earth France. Part 5 was co-written.

## Summary

In 2003, Madagascar's previous president set the objective of increasing the size of the country's protected areas from 1.7 to 6 million hectares. Ten years after this announcement, REDD+ has become an essential part of national conservation strategies. The country has launched four REDD+ pilot projects, each led by large conservation NGOs. For these NGOs, carbon finance now seems the most promising option for the sustainable management of protected areas. Some of the NGOs have already started selling carbon credits from protected areas on the voluntary carbon markets. Others intend to follow suit, such as the French foundation GoodPlanet/Etc Terra and WWF Madagascar, who have been in charge of the Holistic Conservation Programme for Forests (HCPF) in Madagascar since 2008, with the financial support of Air France.

This pilot project has invested a large sum of its funds into means of measuring carbon and monitoring the forests. The logic of which is lost on the local communities who are nonetheless the ones who suffer the consequences including the restriction of available land for agriculture and collecting wood. What began as a project intended to benefit local communities by fighting against deforestation has become a project essentially focused on measuring the consequences of deforestation, and which contributes to food insecurity. This study uses money that could have been spent on taking grassroots action and putting in place real incentives for the local population. We must look to develop methods other than carbon finance to make real headway in the fight to stop deforestation and forest degradation. Ecological intensification, through agroecology and agroforestry, as well as land tenure security for communities living in forested areas, should be at the centre of the REDD+ agenda.

This report is the result of a field mission organised in May 2013 in a new protected area of Madagascar's spiny forest. It would have been interesting to compare the outcome of the HCPF in a different environment, such as the moist forests, but this was not possible as GoodPlanet/Etc Terra declined to help the report's author to carry out his mission.

# 01 Introduction

## Les Amis de la Terre

### 1.1 The REDD+ mechanism

It is estimated that around 12 to 15% of annual anthropogenic CO<sub>2</sub> emissions are related to deforestation and forest degradation. Therefore, the fight against deforestation is a major issue for climate stabilisation. With this in mind, in 2005 a group of countries led by Papua New Guinea brought a proposition to the negotiating table to create a new strategy for reducing emissions from deforestation and forest degradation (REDD). Two years later, the proposal was upheld by the United Nations Framework Convention on Climate Change (UNFCCC) in Bali (COP13). In December 2010, REDD was incorporated into the Cancun Agreements (COP16) despite strong criticism regarding the absence of operational efficiency and flaws in the mechanism.

In actual fact, the idea of developing a strategy to combat deforestation is not a new one and had already been discussed at Kyoto in 1997. At the time, the greatest concern was whether such a strategy would compromise the environmental integrity of the Kyoto Protocol by introducing fictitious forest carbon credits into the markets (but also whether it would threaten state sovereignty over forests for countries like Brazil).

Currently, these criticisms have not received a satisfactory response and a relative consensus has been reached recognising that the integration of REDD carbon credits into the carbon market is not desirable (see Appendix 2). Thus, in 2011, the European Union announced that REDD credits would no longer be accepted within the European Union Emission Trading System until at least 2020.

However the strategy's supporters have not abandoned hope of integrating REDD credits into the carbon market and are now proposing a three-phase approach: firstly a period of development for REDD, supported by public funds; secondly, the use of public funds to set the strategy in motion and generate the first carbon credits; lastly, the introduction of the credits into the market if and when certain conditions are met. This approach has the advantage of silencing critics by specifying that the REDD strategy is financed by public funds whilst mobilising those same funds in order to construct a system whose ultimate aim is to generate carbon credits that can be legitimately traded on the carbon market.

But this approach does not address the problems raised in connection with REDD carbon credits: the absence of additionality (the guarantee of a real reduction in emissions) and leakage (the shifting of deforestation from one area to another), problems that cannot be resolved by hypothetical conditionalities. For example, it is impossible to draw up baseline scenarios for deforestation, the principal driving force behind the REDD programme, that are scientifically rigorous enough to guarantee additionality but no leakage (see Appendix 2).

These crucial issues, and the solutions proposed by the HCPF project, will be discussed in Part 5 of this report.

The REDD programme has continued its operations as if their approach had already been accepted: bypassing climate negotiations with parallel processes, mobilising public bodies and funds to create favourable conditions for the integration of REDD into the carbon market and increase the number of pilot projects.

In parallel with climate discussions, several multilateral initiatives have been put in place to prepare countries for REDD, such as the World Bank's Forest Carbon Partnership Facility (FCPF) and the United Nations REDD global fund, as well as numerous bilateral partnerships, including Norway's donation to the Amazon Fund and support given by development agencies to numerous pilot projects (the Agence Française de Développement is currently considering financing the HCPF in its second phase).

## 1.2 REDD carbon credits: an escape strategy for an airline industry under pressure ?

Greenhouse gas emissions from aviation currently account for 2 to 3% of global emissions. According to the projections of the International Civil Aviation Organisation (ICAO) these emissions will have quadrupled by 2050 but global emissions must be reduced by a factor of 4 before 2050 in order to maintain global warming below 2 degrees centigrade<sup>1</sup>.

Until now, the airline industry has never been under any obligation to reduce its impact on the climate. From 1 January 2012, the industry should have been officially included on the European carbon market – the EU Emissions Trading Scheme (EU ETS) – but under pressure from airline companies, the European Commission suspended their inclusion for a year in order to allow industry representatives to draw up regulations that will satisfy airline companies as well as the EU. If much of the opposition comes from non-European airline companies who do not believe they should be subject to EU regulations, the European companies have joined the resistance to try and block the process, as the Chairman and CEO of Air France-KLM, Jean-Cyril Spinetta, stated: “It is simply not possible for Europe to impose its will on the rest of the world”<sup>2</sup>.

Grouped together under the aegis of the International Air Transport Association (IATA), on the 3 June 2013 the airline companies submitted a resolution to put in place a strategy to ensure carbon neutral growth for aviation<sup>3</sup>. Central to this resolution is the creation of a carbon market specific to the aviation industry by 2020. This should halve the industry's net emissions by 2050, based on emission levels for 2005. According to the airline companies, this new market should in no way “be considered as a means of raising tax or

reducing the demand for air transport”, as is stipulated in the appendix, which no doubt means that the market will operate largely through flexibility or compensation mechanisms.

### 1.3 From voluntary offsetting to carbon market

Voluntary compensation, or offsetting, enables entities (organisations, companies or individuals) wishing voluntarily, and outside of any regulatory constraint, to compensate for their own emissions by buying CO2 emission credits on the carbon market.

Carbon offsetting supposedly represents a further effort beyond regulatory requirements and has little influence on official negotiations (like the obligation to join a carbon market or to pay tax). A point of view Friends of the Earth does not share for a number of reasons.

Firstly, voluntary carbon offsetting is based on the same methodological errors and lacks the same scientific foundations as officially recognised carbon compensation mechanisms, particularly in the case of carbon related to forest projects.

Secondly, voluntary and official carbon offsetting are very closely linked. A significant number of voluntary carbon compensation project developers present their projects at the same time as similar proposals are being discussed within the context of official climate negotiations. Numerous negotiators are invited to attend these presentations. For example, during the Durban Climate Change Conference, where important discussions were taking place regarding the REDD mechanism, WWF Madagascar and GoodPlanet organised a parallel event to present the HCPF project in Madagascar. Sometimes a project is not even presented as one of voluntary compensation but simply as a project aimed to measure carbon storage. This is, yet again, the case for the HCPF. Initially the project was presented as “an environment investment programme”, and claimed that the HCPF aimed to “advance scientific knowledge of forest carbon”. In December 2010, the project developers gave their assurance that “no carbon credits would be generated at the project's close”. Two and a half years later, as the second phase of the project was beginning, GoodPlanet stated that it had the ambition of “valuing knowledge of Carbon component from phase I in order to generate carbon credits and extra outcome for local communities”<sup>4</sup>.

“Our primary objective is to facilitate the integration of the forest carbon component into the post-Kyoto agreement”, explains Jean-Paul Paddock, International Business Development Director for the WWF, in an interview with Paris Match<sup>5</sup>. “But we are also considering ways of stimulating the market. We are currently working with major banks, such as Crédit Suisse, BNP Paribas and Goldman Sachs, to develop specific financial tools, for example ‘forest obligations’, which will allow the private sector to invest in forest conservation”. Hence, the journalist reminds us, the importance of pilot projects like those in Madagascar that can precisely calculate carbon stocks. As the article goes on to explain: “The ‘market’ for forest carbon is still tentative”, highlights Johannes Ebeling, a carbon finance specialist, and independent consultant in Madagascar, who works for private investors looking for projects in the region: “They are still extremely wary. The success of forest conservation programmes is dependent on a number of factors: the development of agricultural methods, population growth, State action, the political climate... Theoretically a market exists, but it very much hinges upon the hope of reaching an international agreement’.”

This is not the only so-called scientific project to have evolved in this manner, from assessing carbon stocks to generating carbon credits<sup>6</sup>. In 1998 the first carbon sink project set up in Brazil by Peugeot and ONF International (the international branch of the French National Forests Office) was presented as a scientific project whose only purpose was to develop methodologies for calculating carbon stocks. In the face of criticism, Peugeot and ONF International have always denied that they wished to generate carbon credits. But in 2011, ONF International and Peugeot announced that they were issuing the first carbon credits generated from the project.

Voluntary carbon offsetting is often used as a Trojan horse by companies who wish to anticipate and influence regulatory constraints. In the United States, companies like General Motors or Chevron have financed powerful lobbies against climate legislation whilst at the same time financing numerous voluntary offsetting projects led by NGOs, notably REDD+. If they fail to block legislation then, to avoid putting all their eggs in one basket, they can try to influence legislation. This is a strategy that pays off because if discussions are at a dead end at federal level, in California – the only state currently in the process of adopting climate legislation – the laws

would be considerably watered down if compensation mechanisms were recognised.

European airline companies are currently in the same situation: on the one hand they are opposed to any new obligation to reduce their emissions and on the other, by investing in voluntary projects to help them gain recognition, companies can anticipate the possibility that they fail to block legislation. Thus the IATA's resolution of 3 June 2013 stated in its Core Principles that: “Governments should consider acknowledging voluntary industry commitments”<sup>7</sup>.

Without claiming that this is the only context in which the intentions and interests that led to the creation of the HCPF project can be explained, we nonetheless think it is crucial to understanding the way the project has been carried out and its consequences for the local community.

1 See the Issue Paper by the Ministry of Ecology, August 2011: [durable.gouv.fr/IMG/pdf/Note\\_thematique\\_N14.pdf](http://durable.gouv.fr/IMG/pdf/Note_thematique_N14.pdf).

2 See Reuters press release, 7 June 2011: <http://www.euractiv.fr/entreprises-et-emploi/secteur-aerien-hostile-entree-marche-quotas-carbone-8168.html>.

3 See the closing statement for the IATA AGM: <https://www.iata.org/pressroom/pr/Documents/agm69-resolution-cng2020.pdf>.

4 See: <http://www.goodplanet.org/hcpf-in-madagascar-successful-results-and-future-perspectives-2/>.

5 See: <http://www.parismatch.com/Actu/Environnement-et-sciences/Durban-Madagascar-Climat-a-la-recherche-du-carbone-vert-avec-WWF-et-Good-Planet-150839>.

6 “Renault have insisted that they chose not to include this project in the clean development mechanisms put in place by the Kyoto Agreement”. See: <http://www.actu-environnement.com/actualites/news/1377.php4>.

7 See: <http://www.iata.org/policy/Documents/consumer-rights-principles-2013.pdf>.

## 02

# REDD projects in Madagascar: context and history

## 2.1 Key figures for Madagascar

Madagascar is an island country situated off the north east coast of Africa. Amongst the 22 millions inhabitants of the 'Red Island', over 92% live on less than 2\$ a day (World Bank, 2013). According to the United Nations Development Programme (UNDP), Madagascar, along with Afghanistan and Haiti, is the country hardest hit by malnutrition. The latest figures from UNICEF show that over 50.5% of the Madagascan population are affected. Women and children are the most vulnerable: 43 in every 1,000 dies before the age of one. In the south of the island, 10 women every day die in childbirth (UNDP, 2011).

Madagascar has been politically instable for many years. For the last four years, the country has been governed by the High Transitional Authority (Haute Autorité de Transition, or HAT), led by the former Mayor of the capital Antananarivo, Andry Rajoelina. Not recognised internationally, the HAT came to power in March 2009 as the result of a coup d'état overthrowing the previous president, Marc Ravalomanana, whose election in 2002 was also contested. Since 2009, the country has paid a high price for this serious political crisis: an increase in non-attendance at school (more than 600,000 children according to the World Bank), severe malnutrition (more than 50% in some areas), and the deterioration of roads as well as water and electricity infrastructures. The Madagascan economy has been more or less in recession since the country gained independence in 1960<sup>8</sup>.

## 2.2 The importance of conservation in Madagascar

The island's extreme socio-economic poverty is in stark contrast with its rich biodiversity. 80% of the fauna and 90% of the flora are endemic. Nevertheless, Madagascar's forestland, estimated to cover 15.88% of the surface area of the country in 2009, is diminished every year. The annual deforestation rate remains a concern, at around 0.53% a year between 2000 and 2005 (MEFT, USAID and CI, 2009). The incredibly high levels of endemism found on the 'Red Island' coupled with the significant threat to its biodiversity caused by man have qualified Madagascar as a biodiversity hotspot. The main cause of the country's deforestation is small local farming – which relies heavily on hatsake,



The lemur, a species endemic to Madagascar, feeds on the leaves from the native Madagascan ocotillo tree.

or slash-and-burn agriculture – and wood collection from natural forests to provide firewood and charcoal.

The threat facing this small island has attracted attention from conservation organisations since the mid-1980s. The high rates of deforestation combined with a low level of forest cover have helped considerably in the provision of international funding for conservation (Muttenser, 2009). Funding comes largely from the United States (USAID Forest Sector Reform Program), from French and Germans foreign aid services and the World Bank. A National Environmental Action Plan (NEAP) was put in place in 1989. In 1996, the NEAP began the process of transferring forest management to local communities.

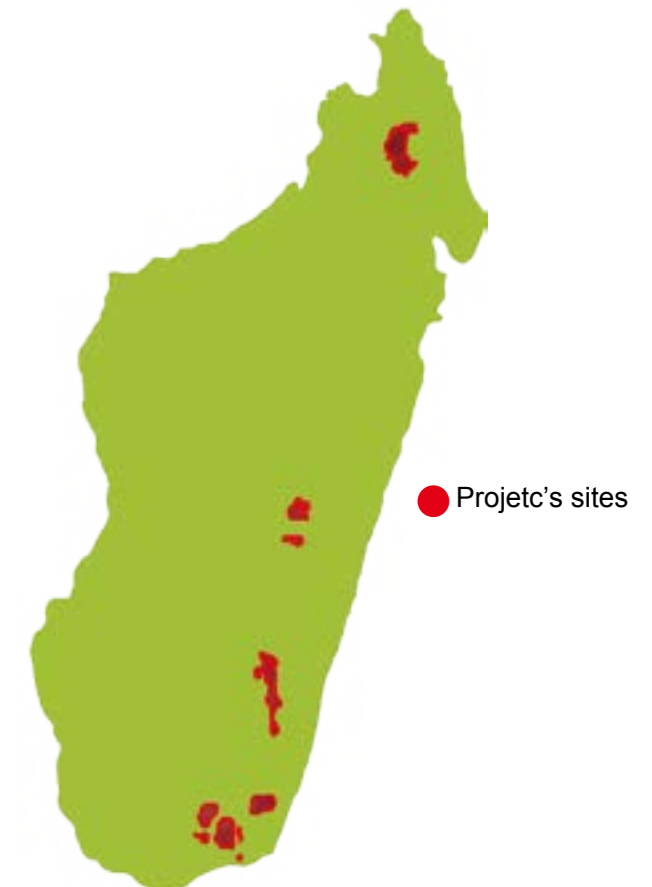
Concerns for the island's conservation date back to the beginning of the twentieth century and in 1927 a decree established Madagascar's first ten nature reserves. In 2003, a second generation of protected areas (PA) were created at the World Parks Congress in Durban (South Africa). As part of the 'Durban Vision', former president Marc Ravalomanana committed to tripling the protected areas of Madagascar within five years. The challenge: to increase the protected areas from 1.7 to 6 million hectares, an equivalent of 10% of the land (in accordance with recommendations from the IUCN, International Union for Conservation of Nature). To reach this objective, a new legal framework was created in December 2005: the System of Protected Areas of Madagascar (SAPM), which redefines and simplifies the legal process used to create a protected area. The management of protected areas was opened up to a wide range of stakeholders, notably NGOs, local community associations and private owners.

## 2.3 REDD+ Conservation Projects

Ten years after this announcement, REDD+ is an essential part of national conservation strategies. The REDD+ mechanism was introduced into the country via pilot projects, of which there are currently four, all based in protected areas and covering over 1.7 million hectares of the island. These projects, led by conservation NGOs, are presented as new funding and management systems for forest conservation and the fight against climate change. Some of these NGOs have already begun selling carbon credits generated by these protected areas on the voluntary carbon markets<sup>9</sup>. Others intend to follow suit, for example, the GoodPlanet Foundation/Etc Terra and WWF Madagascar who have been in charge of the Holistic Conservation Programme

for Forests (HCPF) in Madagascar since 2008, with the financial support of Air France.

In 2008, a REDD Madagascar technical committee (known both as CT-REDD and REDD Task Force) was created and entrusted with coordinating efforts to draft a national REDD Readiness Preparation Proposal (R-PP). At that time, Madagascar was one of the first countries to officially join the World Bank's Forest Carbon Partnership Facility (FCPF). In 2011, according to the Ministry of Environment and Forests, three strategic options had to be further explored to prepare Madagascar for REDD+: the improvement of forest



The Holistic Conservation Programme for Forests (HCPF), led by GoodPlanet/Etc Terra and WWF Madagascar, has spread its activities over five sites. This report concentrates on a zone of spiny forest, at Fort Dauphin, in south east Madagascar.

governance, the management of access to forestland and the development of alternatives to deforestation and degradation. An aspect of the REDD strategy particular to Madagascar has been the concentration until now solely on the creation of new protected areas.

<sup>8</sup> Mireille Razafindrakoto (IRD-DIAL), François Roubaud (IRD-DIAL) and Jean-Michel Wachsberger (Lille University 3, DIAL), Institutions, gouvernance et croissance de long terme à Madagascar: l'énigme et le paradoxe, March 2013.

<sup>9</sup> See: <http://www.wcs.org/conservation-challenges/climate-change/forest-conservation-and-carbon-markets/makira-carbon-company.aspx>.

Of the four REDD+ pilot projects in Madagascar, only one has begun selling carbon credits: the Makira project in the north-east of the island, led by the Wildlife Conservation Society (WCS) and supported by Conservation International (CI). According to the agreement signed with the government of Madagascar in 2008, the Makira Carbon Company has been selling carbon credits generated by protected areas on the Voluntary Carbon Markets since the beginning of 2013, at 10\$ per ton. According to the WCS, the creation of the Makira Forest Protected Area will prevent over 33 million tons of greenhouse gas emissions over 30 years. WCS has assured that half of the net carbon revenues will be allocated to local communities living within and around the protected area.

This report's author also visited the Corridor Ankeniheny-Zahamena (CAZ) REDD+ pilot project. Launched in 2005 and covering 371,000 hectares along the eastern escarpment of Madagascar, this project is overseen by Conservation International (CI), which is working on a detailed methodology for reducing greenhouse gas emissions. According to the American organisation, Winrock International, up to 10 million tons of CO2 emissions could be avoided over 30 years<sup>10</sup>. The aim is to reduce CO2 emissions by 4 million tons by 2017. A feature of this project is that it involves establishing community-based forest management through a Secured local management contract (GELOSE, Gestion local sécurisée) or a Forest management contract (GCF, Gestion contractualisée des forêts). CI has been trying to develop carbon projects in the CAZ forest corridor for several years, notably with TAMS, a regeneration and reforestation project in the Andasibe region, funded by the Clean Development Mechanism (CDM). The World Bank has recently funded a case study on the distribution, management and use of carbon revenues from the REDD+ CAZ project in Madagascar. Consultation is currently taking place with local communities.

There is another project in the Didy region of the CAZ corridor, alongside that of Conservation International, known as COGESFOR. Overseen by CIRAD (a French agricultural research organisation working for development in the South and the French overseas regions), this project combines coordinated land planning (based on transferring management to local communities), the development of environmentally-friendly recycling procedures (for example of wood, or of aromatic and medicinal plants), and the improvement of

agro-pastoral agriculture, as well as the implementation of internal control and traceability procedures for forestry operations. Funded over a period of four years (2009-2012), this project is coming to an end. But on visiting the site, the author noted a genuine desire to integrate the fight against deforestation with the introduction of alternative agricultural practices amongst local communities. 70% of the Madagascan population still lives in isolation and is not connected to the national power grid, prompting COGESFOR to fund the installation of a cogeneration unit which will provide electricity either using agricultural waste (corncoobs and rice husks), or sawmill waste. Alternative crop management techniques to that of slash-and-burn agriculture have also been put in place and have helped improve the lives of farmers who have adopted them. Budgetary constraints have nevertheless meant that only a few dozen households have benefitted.

#### 2.4 Focus on the Holistic Conservation Programme for Forests

The HCPF pilot project (Holistic Conservation Programme for Forests) was co-founded in 2008 by WWF Madagascar and the French foundation GoodPlanet, with funding from Air France.

The first phase of HCPF, overseen by WWF Madagascar and GoodPlanet, began in October 2008 and ended in December 2012. This phase was funded entirely by Air France at a cost of 5 million euros.

WWF Madagascar recruited around 50 people for the project, spread across several regions (Andapa, Fandriana and Fort Dauphin), who are working towards reinforcing the following initiatives: the creation of protected areas, raising public awareness on climate change, the reduction of deforestation by promoting and encouraging alternatives to slash-and-burn agriculture, the transfer of forest and natural resources management and the restoration of degraded forest landscapes.

GoodPlanet acts as the liaison between Air France and WWF Madagascar and is responsible for the methodological and scientific aspects of the project, with the support of several French research organisations including the National Centre for Scientific Research (CNRS) and the Institute for Development Research (IRD) as well as the Universities of Antananarivo and Marne la Vallée. In 2012, the GoodPlanet Foundation delegated management of HCPF field operations of to the association Etc Terra.



To the left, a rainforest in the Ankeniheny-Zahamena Corridor (north east Madagascar). This reforestation zone is funded through the COGESFOR project, implemented by CIRAD. To the right, a spiny forest at the Fort Dauphin site, part of the Holistic Conservation Programme for Forests, which is the subject of this report.

The HCPF is the largest pilot project in Madagascar: it occupies five sites, covering 380,000 hectares of moist forest and 125,000 hectares of dry, spiny forest. According to the projects developers, their objectives are as follows:

- to encourage and support local communities in the conservation of biodiversity;
- to improve human development by promoting alternative activities;
- to improve scientific knowledge on forest carbon assessment.

The benefits of the project should be both environmental (reduction of greenhouse gas emissions, protection of biodiversity, restoration of ecological services) and social (improved living conditions for local communities, job creation, strengthening the capacity of local authorities).

In a report released in April 2013, the GoodPlanet Foundation stated: "All 2008 targets have been reached/achieved or even exceeded". According to their website, their programme "has already contributed to:

- Raise 34,000 households awareness regarding sustainable alternative to slash-and-burn cultivation practices: 5,000 have already adopted at least one of these techniques,
- Restore 23,000 hectares of fragmented forest,
- Reforest 2,200 hectares of land for energy and construction wood, to support local population needs,

- Developing alternative agriculture by diffusing alternative practices to local population, including farming and conservation techniques, development of activities on the hillsides and converting valleys in sustainable cultivable areas,

- Create 470,000 hectares of new protected areas, in order to conserve forests and biodiversity, Transfer management of natural resources to local communities,

- Estimate precisely the CO2 emission reduction potential: This scientific work led by several partners allows to estimate it at 35 billion tons during 20 years<sup>11</sup>.

"We have achieved or exceeded all our targets", confirms Pierre Caussade, former Environment and Sustainable Development Director for Air France, now Director of International Affairs. "This project was developed partly to help local communities better manage their livelihoods and improve their living conditions. But there was also a scientific aspect, consistent with our concerns about climate change. We estimate that the programme will enable us to reduce emissions caused by deforestation by 35 billion tons of CO2."

Plans for the second phase are currently being completed. Pending the finalisation of agreements, funding should come from:

- Air France, at a cost of 1 million euros ("subject to finalising a partnership agreement", a representative of Air France specified);

<sup>10</sup> See: <http://www.wcs.org/conservation-challenges/climate-change/forest-conservation-and-carbon-markets/makira-carbon-company.aspx>.

<sup>11</sup> See: <http://www.goodplanet.org/hcpf-in-madagascar-successful-results-and-future-perspectives-2/>.

- the AFD (the French Development Agency) and the FFEM (the French Global Environment Facility), at a cost of 3.5 million euros.

This second phase has three objectives:

- “Strengthening conservation activities in the different sites (via local structures), ensuring proper management of the new protected areas and the monitoring of the transfer of natural resources management contracts, for greater community participation and empowerment,”
- “Developing alternative agriculture by diffusing alternative practices to local population, including farming and conservation techniques, development of activities on the hillsides and converting valleys in sustainable cultivable areas,”
- “Valuating knowledge of Carbon component from phase I in order to generate carbon credits and extra outcome for local communities<sup>12</sup>.”

To confirm that the aims of phase I of the HCPF have been successfully achieved, the author of this report asked GoodPlanet/Etc Terra to accompany him on a visit to one or two of the protected areas covered by the HCPF in order to meet local communities involved in the project. After Etc Terra declined the request, we decided to go ahead with this field mission, which took place from 17 to 30 May 2013. We are immensely grateful for the help we received from our contacts on the ground. The following analysis concerns the new protected area (NPA) in south west Ifotaka, in the southern ecoregion of Madagascar, covered by the HCPF project. This area of spiny forest is part of one of the first protected areas to be jointly managed with local communities. According to the project developers, the action plan put in place should enable this new protected area to contribute to the conservation of biodiversity without impacting negatively on the lives of local communities. Has this been the case?

<sup>12</sup> Ibid.

## 03

# Agriculture: essential for local communities, and primary cause of deforestation

### 3.1 National context: food insecurity

The new protected areas (NPAs) are made up of different zones, which require very different approaches:

- priority conservation areas: the only activities allowed are wood felling to make coffins, the collection of medicinal plants and honey, and the use of land for pasture between May and December;
- fully protected areas: these are areas of sacred forest used for burying the dead, where activity of any kind is forbidden (fady). In this case, the area was fady prior to being a designated protected area;
- usage rights areas: all activities are permitted (wood felling, firewood collection, collection of medicinal plants, etc.) but subject to certain conditions cited in the Forest management transfer contract (GCF);
- buffer zones: includes areas of controlled occupation, controlled usage rights and rehabilitation (plantation, creation of production areas). Activities permitted in buffer zones include using land for pasture, firewood collection, collection of medicinal plants and wood felling for non-commercial construction.

Slash-and-burn agriculture and the hunting of endangered species are forbidden across the entire of the protected area.

So how has the establishment of this protected area impacted on the Malagasy people? 96% of the inhabitants of Ifotaka work in agriculture<sup>13</sup>. Apart from rice, which is impossible to grow because of the dry climate, the inhabitants in the conservation zone

cultivate most crops: manioc, sweet potatoes, corn, beans, pumpkins, watermelon, bananas, sugar cane, peanuts, potatoes, onions, cauliflower, tomatoes, and the list goes on. The problem is that a large area of the land suitable for cultivation has been included in the protected area, as several villagers have testified.

Patrol officers confirm these reports:

“Those caught breaching the protected areas say they are hungry, that they don't have enough land.”

The establishment of the protected area, which includes land under cultivation, seems to be contributing to an increase in food insecurity. Yet one of the objectives outlined by REDD+ project developers was “to improve human development”<sup>14</sup>.

<sup>13</sup> From an interview with Lea Onyksa, taken from her report on the means of subsistence for various Ifotaka communities.

<sup>14</sup> See: <http://www.scribd.com/doc/102824909/Dossier-de-Presse-Air-France-partenaire-du-PHCF-Madagascar>.

“ I am still allowed to cultivate [my land within the protected area] but I am not allowed to expand.” ”

*Ifotoka's inhabitants*

“ We would like to protect the forest but we can't because we do not have enough land ” ”



96% of the Malagasy population work in agriculture. The inhabitants encountered in the spiny forests cultivate a diverse range of crops including sweet potatoes and beans. Léfa (pictured above) cultivates a field of manioc intended for feeding his family.

### 3.2 Spotlight on the traditional practice of slash-and-burn agriculture

The practice of hatsake, or slash-and-burn agriculture is one of the most common in the region for growing corn, manioc and sweet potato. It is the technique of cutting or burning forest or woodland to create land for cultivation. Employed on the limestone hills of Madagascar, it makes the cultivation of corn possible for one or two agricultural seasons. At the end of this very short period of exploitation, the fertile land has disappeared and it becomes difficult if not impossible to cultivate the land thereafter. It is sometimes referred to as “mining agriculture” in the sense that the soil is treated like a mine, to be exploited until it is no longer fit for cultivation.

One of the aims of the HCPF is to eradicate hatsake. “Sacrificing a forest in order to cultivate the land for one agricultural season is like dismantling a bridge to build a house. You might improve your quality of life slightly but you cause great harm both to your fellow man and to yourself”<sup>15</sup>, explains the project manager for WWF Madagascar’s aerial surveillance scheme of protected areas, which aims to reduce slash-and-burn agriculture. “The strict enforcement of forestry laws is crucial to putting a stop to these practices. Such enforcement demands that those concerned, at every level, assume their responsibilities”<sup>16</sup>. As this study shows, financial and even criminal sanctions have been put in place (see Part 4.3).

The developers of the HCPF also claim they want to combat hatsake by developing conservation agriculture,



As part of the COGESFOR project implemented by CIRAD, local inhabitants have been taught methods of direct seeding on plant cover, and are therefore slowly abandoning slash-and-burn agriculture in favour of more productive and sustainable farming practices. In the photo, an area of land under trial in the Didy region, in north east Madagascar.

namely “alternative agricultural techniques, that are both profitable and sustainable, in parallel with effective natural resource management.” As a representative for WWF Madagascar points out (Antananarivo, May 2013): “The rice yield from Tanety (high and fairly level ground) is very poor, less than a tonne per hectare. And we know that the population is going to double in the next twenty years. We need to raise production by building dams to increase the available land, as well as improving the crop yield through ecological intensification.”

Amongst the alternatives to slash-and-burn agriculture, the HCPF developers have recommended:

- additional income-generating activities (beekeeping, fish farming, or growing cash crops such as clove plants, coffee plants, lychees, pepper or vanilla);
- crop diversification (market gardening, growing fruit trees, improving fishing);
- methods for increasing crop yield and reducing the area of land needed (systems of rice intensification);
- activities which make best use of available resources (for example, installing foyers améliorées, energy-efficient ovens designed to reduce harmful smoke fumes and deforestation);
- installing hydro-agricultural infrastructures (small-scale dams and irrigation systems) to develop land currently unsuitable for agriculture.

These are all suitable options yet none of them has been set up in the area of south west Ifotoka visited by the author. According to the Chef de Cantonement (local area leader): “If the land is situated in the centre of the protected area, we are not allowed to cultivate it. If the land is situated in an area that is going to be transferred, then we can cultivate it. Those who are having problems are those whose land is in the centre. But we are looking for a solution or alternative plots of land for them to cultivate.”

When questioned about these restrictions, GoodPlanet and Etc Terra explained: “The HCPF has only been up and running for a couple of years and in one of Madagascar’s most unforgiving terrains (the spiny forests and the ‘Grand Sud’ de Madagascar), we hope that no one expected us to have managed to either 1) bring a complete halt to deforestation in the project’s area of operation or 2) introduce alternative agricultural techniques to the entire of the region’s households.

<sup>15</sup> See: <http://www.panda.org/fr/?206007/le-hatsake-menace-la-population-de-latsimo-andrefana>.

<sup>16</sup> Ibid.



It is quite simply impossible given the large number of households that have to be assisted in adopting sustainable practices.”

Former Environment and Sustainable Development Director for Air France, Pierre Caussade, confirms that: “The training and assistance offered in helping to establish alternative practices to slash-and-burn agriculture have borne fruit. Nevertheless, I would by no means claim that it has been easy. A project of this scope is not going to have the same success everywhere.”

If forest conservation measures have been put in place, they have not been matched by compensation measures. The best-case scenario is that training in more sustainable agricultural practices will come later. But for the moment, families stripped of their land have not been given any alternative means of livelihood. Those who find themselves in this situation have no choice than to break the law and continue to use hatsake to ensure their food supply.

### 3.3 Poorly defined and disputed land rights

Legally, nearly all of Madagascar's natural forest belongs to the State. In fact, land reform is in the process of being drawn up. Currently, half of the population living inside the project area do not hold rights to their agricultural land. At a national level, only 15% of the land is registered. Although forbidden, slash-and-burn agriculture remains a means of acquiring land rights within the customary land tenure system. By clearing land, villagers make their occupation of the land official

it is known as the droit de hache, right of the axe. “We keep the land that we have already cleared.”

Recognition of land rights operates therefore at a local level and provides no protection from attempted dispossession from outside the local community.

Some of those still resorting to slash-and-burn agriculture to clear land were willing to testify:

- “I do it because that is how I feed my family. I clear land because of poverty.”
- “I am not allowed to clear land but I do it anyway. Otherwise I would not have enough to feed my family.”

Many villagers farm along the river. But flooding also encourages people to turn to land clearing.

- “When the river rises, we lose all our crops. So we go up into the forest to find a bit of land and clear it for cultivation. It's not enough to farm along the river: we also have to farm in the forests.”

Some villagers request permission to clear land from the COBA (Communauté de Base), the local community association in charge of forest management. But their request can be denied:

The Chef de Cantonement confirms:

- In areas under management, the land available for cultivation is insufficient and people tend to resort to land clearing. Villagers are asking for alternative options to avoid having to go into the forest.”

Customary land rights were neither recognised nor



Although forbidden within the protected area, hatsake (slash-and-burn agriculture) continues to be practised by villagers. In the absence of land rights legally recognised by the State, this is the only means available to them for making their ownership official.



The creation of new protected areas has forced many villagers into growing their crops along the river. But regular flooding has driven families to break the forestry laws by clearing land inside the conservation zones in order to ensure food security.

taken into consideration when the protected area was set up. How can communities be expected to commit to the REDD+ process when they do not even have any right to the land? It is obvious that conservation initiatives can only be sustainable if we can secure local land rights.

Regarding this issue, GoodPlanet/Etc Terra are confident they have the answer: “Local communities can obtain community land certificates for areas of land included in the transfer of management contracts. These certificates (issued by local land management offices, whose installation we will be supporting in phase II of the project, in close partnership with the National Land Programme) do not have the same value as land rights but still provide protection against outsiders taking up land. The procedures are also much quicker and less expensive, which is what is making the implementation of this reform across the country such a success.”

As things stand currently, it is hard to find out any more, the National Land Programme's website is still under construction...

Other researchers have offered a more qualified response to the question of land rights: “Non-titled private property rights (PPNT: propriété privée non titré, 2005) were conceived as a quick and inexpensive way to provide certificates for those already permanently occupying land. However the system has barely got underway in forest areas and requires an ongoing presence on the ground. For this reason fallow systems of farming are excluded.” (Ferguson, 2013) Yet the people met by the author of this report rely largely on just such fallow systems. Pasture land for transhumant

livestock and tribal land are also key issues relating to land rights that have not been addressed by the conservation measures.

## 04

# REDD+ Projects: a solution or a new source of problems for local communities ?

## 4.1 Projects that aggravate tensions over land – who wins, who loses

### 4.1.1 Free, prior and informed consent ?

The area of the Holistic Conservation Programme for Forests (HCPF) that we studied is subject to a Forest management contract (GCF, Gestion contractualisée des forêts). This is a method for transferring management of the forests to local communities via the COBA (Communauté de Base) with the aim of ensuring secure, sustainable and local management of forest resources. The initial transfer contract lasts three years and is renewable. As of the end of 2012, WWF Madagascar had registered 110 management transfer contracts across the country, 32 of which had been formalized, at a total cost of 340,000 euros.

GoodPlanet/Etc Terra specify that the Forest Management contract “does not signify a transfer of property (the State retains bare ownership whilst the local communities have beneficial rights) but the contract once accepted and signed by the Administration nonetheless allow communities to protect their resources from the possible threat of migrants. In the region of Ifotaka, the contract allowed community representatives to appeal to the forest administration and the local police to halt others clearing land in their management transfer area [...] Indeed, it is essential that a local community that makes an effort to commit to the sustainable management of its resources also has the means to protect itself from those outside the community, wherever they may come from.” These different means, known as Secured local management (GELOSE, Gestion local sécurisée) and Relative land security (SFR, Sécurisation foncière relative) are only

just being set up in the areas visited by the author, according to the accounts of a number of local people.

To ensure the smooth transfer of the management of resources, WWF Madagascar has created local community associations known as COBAs (Communautés de Bases), which are run by the local population. The members of the COBA are elected by villagers. At village level, some members are part of surveillance or patrol committees (Polisin'Ala) (see Part 4.3). Other members of the association are responsible for reboisement familial, family reforestation (see Part 4.2).

The Chef de Cantonnement is satisfied with the implementation of the new protected areas:

“There are only two of us acting as agents for the entire district. We can't regularly check in across the whole area. The creation of protected areas helps us to effectively maintain forest administration, especially when it comes to forest law enforcement. We have transferred management and skills to the members of the COBA and that has eased our work.”

According to the project developers, the zoning of the protected area “was made in collaboration with the communities affected. The borders of the five areas concerned by the transfer of management are based on ancestral territorial boundaries.”

According to the Chef de Cantonnement: “As for these boundaries, they concern some of the locals, the forest administration, the project developers, the president of the Fokontany. These boundaries are controversial.”

On the ground, the level of information provided seems to vary widely from village to village.



The forest provides pasture land for zebu cattle (pictured), sheep and goats. In the rainy season they eat grass and in the dry season feed on cactuses, which are burned to rid the leaves of prickles. Pasture land for transhumant livestock is a key issue relating to land rights that has not been addressed by the conservation measures.

Villagers who have a local association said they participated in setting the boundaries for the protected area but most say that this meant they simply ‘observed’ or were ‘present’ when the boundaries were established.

Whereas villagers without a communauté de base were neither informed about nor invited to sign the management transfer contract.

“We have no idea what is going on.”

“For the moment, there is no COBA, so no one has shown us the boundaries.”

Certain villagers are not even aware that their village is in a protected area.

“As long as the WWF [Madagascar] has not created a COBA in our village, that means there is no protected area.”

Others feel they have no choice.

“Even if we do not want a protected area, they will force it on us. We have no choice.”

Some villagers believe they are already carrying out conservation work, without external aid.

“Even without the WWF [Madagascar], villagers can

conserve the forests, stop people from destroying the forest, stop the sons of the land, those who live in the villages, from collecting firewood or taking wood to build their houses. Villagers are forbidden to do these things in sacred forests, even without the WWF. We are already working towards this.”

Villagers are demanding that a COBA be created, that they be kept informed about boundaries and that they be involved in future decisions.

“We are asking the WWF to show us which areas are protected and which are not, that is, where we can get firewood and wood to build our houses in order to provide for our families. But above all, these things must be discussed with all the villagers. We can't make decisions on our own.”

With regards to the transfer of the management of resources, free, prior and informed consent does not simply mean consulting local communities - when that actually happens! - but ensuring a real involvement for all those concerned. Women and children should also be part of the process, as well as being represented in the local association in charge of the management transfer.

**4.1.2 Timber harvesting permits: a source of conflict between communities**

The local association grants timber harvesting contracts. Villagers see their ancestral lands cleared by inhabitants of other villagers.

“I have the impression that the WWF [Madagascar] is selling the land I use daily to others. For example, villagers from Mangily come and cut down the forest belonging to the inhabitants of Morafeno. But they show me their permits and I can't do anything about it. Even their zebu graze in our forest. I want the land to be passed on to my children.”

Drought can also cause migration.

“One year there was a very severe drought in Ifotaka. People had nothing so they migrated to the other bank of the (river) Mandrare where there was forest, in order to find food.”

Greater transparency and more information on the issue of timber harvesting permits are needed to avoid causing tensions between local communities.

**4.2 Projects which place new constraints on local communities without providing any benefits**

**4.2.1 Restricted access to land and natural resources**

Since the establishment of the protected area, numerous villagers say their quality of life has deteriorated.

“I have to buy food elsewhere because there is not enough here to feed my family.”

“Before we had enough land, what we grow alongside the river is not enough. We have to buy corn and manioc from the market.”

At the same time, the villagers rely very heavily on natural resources for:

- “housing and heating: houses in the Ifotaka region, whose surface area ranges from 6.25 to 9m2, are made of wood. It takes 15 ocotillo (*Alluaudia procera*) trunks, a tree native to Madagascar, to construct one house. A house will last on average for 5 years. A timber harvesting permit, costing 3,000 ariary, must be requested from the COBA (the average monthly income is estimated to be 100,000 ariary, the equivalent of 35 euros). However, it seems that many villagers do not bother going through the forestry service in order to get the wood they need.

As for firewood, all sorts of dead wood are used (except Fatra, which is forbidden), particularly Katrafay (*Cedrelopsis grevei*).

“pasture land: the forest provides pastureland for zebu cattle, sheep and goats. In the rainy season they eat grass and in the dry season they feed on cactuses, which are burned to rid the leaves of prickles. Each village has its own area of pastureland.

- “ medicinal plants: over half the population of this region still goes to the forest to get medicinal plants.
- “fruit and vegetable picking: tubers and fruit, such as cactus and tamarind, as well as honey.
- “hunting: tenrec, guinea fowl, birds (buttonquails), wild boar, etc.

Generally, REDD+ projects have been based mainly in areas where the population lives in and on the forests, and not necessarily in central areas of deforestation. The new protected areas have also brought with them new restrictions on land available for agriculture and wood collection. Conservation NGOs have proposed practices to local communities that aim to introduce ‘income-generating activities’. But as the HCFP reached the end of its first phase, a member of WWF Madagascar acknowledged that the ‘alternatives aspect’ of the project has been underdeveloped and would receive more attention during phase II. “Greater time and attention will be given to developing the agricultural side of the project in phase II,” confirmed Pierre Caussade, Air France. But what about the Ifotaka region?

**4.2.2 Poor compensation and an absence of alternative practices**

Conservationists prefer to talk of ‘alternatives’ rather than ‘compensation’. In this case, WWF Madagascar acknowledges the lack of indicators from phase I (2008-2012) to evaluate the establishment of alternative practices to slash-and-burn agriculture. A member of WWF Madagascar stated, “a new agency, more specialised in agricultural development will be recruited to participate in phase II” (from 2013 onwards, ed.).

According to the Chef de Cantonnement “there have not yet been any income-generating activities established” in his area.

In fact, villagers say that training and income-generating activities have been set up but without any long-term support.

“Yes, the WWF [Madagascar] has created market

gardening systems, for potatoes for example. There have also been beehives, notably at Fenoaivo, but it doesn't last long. For six months, a year... And then things don't continue, it stops there, there is no production.”

“There were several projects in our community but we only had training for two months, or two days, or even just a single day. It's not enough.”

For many, there is an underlying feeling that they have simply been penalised, without receiving any benefit:

“Neither the information nor the money reaches us here, everything stays with the WWF [Madagascar]. There is no compensation, only penalties to pay.”

“We protect our environment but we don't get anything back. We have had nothing in exchange.”

“The WWF [Madagascar] has taken our forest without providing us with compensation or remuneration. They say they are taking it to protect it.”

“They promised to supply us with agricultural materials but we still haven't received anything.”

Certain local inhabitants also feel that it is always the other villagers who are reaping the benefits.

“No one has ever helped us do anything. The only place that receives compensation is central Fenoaivo.”

When an initiative is set up, it is judged not to go far enough.

“They contribute a bit, when they rebuild the road, but it doesn't help feed my family.”

“It's not enough because the work lasts a year and the following year, it stops.”

Apparently, during phase I, 123 plant nurseries were set up across the country and 473 nursery workers were trained. A plant nursery was duly set up in central Ifotaka, funded by WWF [Madagascar]. But its very small size is indicative of the insufficient nature of compensation.

GoodPlanet/Etc Terra state that in the future they hope to rely on a network of local farming extension workers, capable of transmitting new practices within their immediate circles.

On a broader level, initiating new systems with poor peasant farmers requires:

- “investment, a seed grant;
- “the raising of public awareness;



WWF Madagascar have set up a nursery in central Ifotaka (pictured). But its very small size is indicative of the insufficient nature of compensation. The lack of regular monitoring and assistance given to local inhabitants in order to establish alternative practices to slash-and-burn agriculture makes it impossible to halt deforestation in the spiny forests.

- training: “The WWF [Madagascar] should help us to set up new projects, such as beekeeping, market gardening, breeding chickens,” insists the Mayor of Ifotaka, who has specifically asked for training in methods of market gardening;
- follow-up: “The WWF [Madagascar] should guide us through these projects”. On this issue, GoodPlanet and Etc Terra have assured that they wish to “sign up for the long term”.
- agricultural materials, especially water pumps: “We are asking them to supply us with water pumps to enable us to farm on the banks of the river, and therefore provide an alternative to land clearing”; “We would even be able to grow rice if we had a motor-pump”.
- a system for maintaining and servicing these investments.

It is impossible to consider conservation measures without crop diversification or the development of the remaining lowlands. It is essential that we find a way to connect the funding for development and conservation strategies. Conservation will never work if we do not provide alternatives to current practices.

**4.2.3 Reforestation projects with short-terms benefits (monetary or alimentary). But then what?**

Within the local associations responsible for the transfer of management of forest resources, there are certain members responsible for reboisement familial, family reforestation. These members take a census of households to ensure an annual plantation rate of 20ft of native trees per household.

According to WWF Madagascar, on a national level, “reforestation consists of planting exotic wood species, and restoration consists of planting native wood species to provide the local populations with firewood and to re-establish the natural forest. More than 2,275 hectares of land have been reforested and 22,676 hectares have been restored.”

Restoration costs 460 euros per hectare, and reforestation 300 euros per hectare.

These activities are supervised by the local association and are carried out by the villagers. WWF Madagascar also has people on the ground.

“The WWF [Madagascar] helped us with the reforestation of the ocotillo, which we use to build our houses. There are many areas that have been reforested”, states a guide for the protected forest.

The Chef de Cantonnement confirms that it is essentially the ocotillo, a native tree used for construction, and several species of ground cover plants, that have been replanted in the area under investigation. There are many things at stake here.

“The aim of this reforestation is to rehabilitate the forest and the ground cover. As well as to provide wood for construction and fuel.”

The villagers who carry out the reforestation and restoration of the degraded forest receive food in exchange. This is what is known as a food-for-work project, financed by the World Food Programme. The amount of food allocated varies according to witness accounts.

“In the village of Morafeno, individuals receive 1kg of sorghum or 1kg of rice per day for 20ft of reforestation, plus a litre a oil every two weeks.”

“Reforestation means 7 cups of rice per person per day.”

The Chef de Cantonnement points out that villagers are sometime paid for their work.

“People cultivate 20ft of land per household and receive a small payment. This can be cash, or it can be food.”

The Chef de Cantonnement is delighted with the progress of reforestation, which is “growing well”. He estimates that the mortality rate is 5%. But other people questioned estimated the survival rate to be 5%! Villagers stated:

“Some plants are dead, some are alive. It’s not great. It’s because of the sun: it’s really hot. And there are lots of animals coming through, like goats, sheep or zebu cattle, who collapse and die in the heat.”

On this issue GoodPlanet/Etc Terra have expressed the following point of view: “The level of regrowth is obviously a good deal better in the moist forest which of course offers better growing conditions. Given the droughts experienced over the last couple of years in the region of the spiny forests, even if the results vary greatly from one section to another, we are nevertheless satisfied with the average level of regrowth measured.” They estimate that the level of regrowth after plantation is 66%.

Reforestation and restoration are carried out for the most part by members of the COBA. Villagers who are not members of the COBA would also like to benefit from the food-for-work project.

“We are happy to reforest here in exchange for food.”



The villagers who carry out the reforestation and restoration of the degraded forest receive food in exchange. This is what is known as a food-for-assets project, financed by the World Food Programme.

Furthermore, until now WWF Madagascar has taken a ‘community-based approach’ in their facilitation of these initiatives. But as a representative for the NGO (Antananarivo, 2013) acknowledged, this approach does not correspond with the practices of local inhabitants. “When we reforest, this approach works, but when it comes to following up and sharing revenue, we always encounter difficulties. So during phase II we are going to choose individual rather than collective reforestation.” This observation could be extended to other ‘alternative practices’ proposed such as cooperatives and associations, which are not in keeping with village customs. A more ‘individual’ or ‘familial’ approach should be favoured.

**4.3 Social tensions caused by projects**

**4.3.1 Aerial surveillance**

WWF Madagascar, in partnership with Aviation sans Frontières – Belgique and the System of Protected Areas of Madagascar (SPAM), has set up a project to maintain aerial surveillance of protected areas with the goal of reducing slash-and-burn agriculture. This aerial surveillance can provide a clear picture of deforestation by facilitating the calculation of the size and location of

the clearings, as well as the rate of forest clearance.

It will help guide community forest-monitoring patrols on the ground and will enable farmers to better evaluate the impact of land clearing.

The sight of aircraft passing overhead could also act as a deterrent to land clearers whose activities are normally hidden. According to WWF Madagascar, this surveillance will “decrease suspicions of betrayal” and improve “village cohesion”. WWF Madagascar claims that this technology is “inexpensive” and is financed by NORAD (Norwegian Agency for Development Cooperation) and WWF US.

Several of the villagers confirm that they have seen the plane. But it acts as far more than a deterrent; this flyover causes fear amongst them.

Generally, following this flyover a summons is issued to come to the town hall.

“The Mayor shows us photos of the clearing and reminds us of the penalties that can be imposed if we clear land. The WWF [Madagascar] agent is there and tells us that we must protect the forest”.

Stripped of some of their land, without necessarily receiving adequate compensation, villagers, whether they clear land or not, are all under surveillance from the air and on the ground.

#### 4.3.2 The Forest police: from fines to prison

In addition to air surveillance, there is also a surveillance committee or "Forest Police" (Polisin'Ala) within each local association in charge of the management transfer. Their role is to control access to resources, to support the Chef de Cantonnement in matters relating to forest law enforcement and to report any infractions to the local association.

A statement from a former patrol officer:

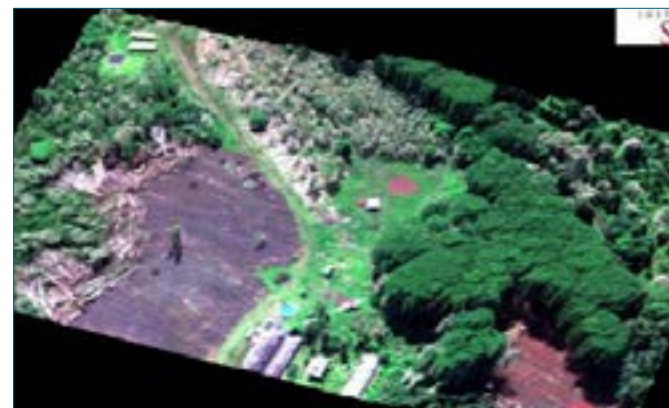
"The work consists of pursuing those who clear land. We tell them that they are not permitted to clear land and we alert the COBA."

The Dina is a traditional Malagasy social contract designed to manage potential sources of social conflict and used by local associations to reduce deforestation. "The challenge is not only to penalize but to inform", insists the local administration.

Amongst the various infractions registered, the most serious are land clearing followed by burning, as well as bush fires.

The amount of the fine varies depending on the severity of the offence. The most frequently imposed fine is 60,000 ariary (21 euros) and one zebu cow. Other fines have been set at 160,000 ariary (56 euros), and 800,000 ariary (280 euros).

But the average monthly income in Madagascar is 100,000 ariary (35 euros) and a zebu cow can be worth anything from 400,000 ariary (140 euros) to 1,000,000 ariary (350 euros!).



Example of a 3D image obtained using LIDAR technology ('Light Detection and Ranging', a remote sensing technology using an airborne laser). "Afterwards we try to match these images against field surveys, in order to determine different forest formations," states a member of the Holistic Conservation Programme for Forests (Antananarivo, May 2013).

Criminal sanctions can also be applied: "For infractions involving land clearing this can mean up to six months in prison and land clearing followed by burning can lead to a year's imprisonment," reports the Chef de Cantonnement.

There are a lot of rumours going round the villages concerning how many people have been punished and imprisoned ("75 people have been caught"). Since 2010, the Chef de Cantonnement counts two arrests (with prosecutions) and eight applications of the Dina.

A monitoring committee to follow up on applications of the Dina has been set up in areas where the transfer of management has also taken place.

The Chef de Cantonnement states: "When someone doesn't want to pay the Dina, this committee goes into the field to observe the real situation. There is a grace period of 3 to 4 months for paying the fine. At the end of this period, the police are called in to make an arrest."



Zebu herdsmen, like forest patrollers, are often armed with lefone, a sort of iron lance. This weapon is also a way for them to protect themselves against dahalo, a Malagasy word for cattle rustlers who are thriving in rural areas in the south of the country, where the security forces are unable to arrest them.

If the fine is paid then the person will be released. However, if the person refuses to acknowledge the crime then they face prosecution in the criminal court.

#### 4.3.3 Sanctions: a cause of fear but difficult to apply

For the villagers, the threat of sanctions is a source both of fear and of many rumours.

"These are legal sanctions. They can be serious. Even leading to imprisonment."

"There is a risk of prison if I don't want to pay. We're frightened so we don't touch the forest there. Even to feed our children. It's really hard: where can we get 800,000 ariary if we are caught clearing land?"

The Dina is also considered a constraint by certain villagers.

"Even if we don't like the idea of a protected area, they force us to accept it by threatening us with fines. I don't like the ideas of WWF [Madagascar] if they are imposed on us."

The Chef de Cantonnement explains, "when a violation is discovered, the members of the management committee find it difficult to apply the Dina because offenders refuse to pay. Members of the COBA cannot force people to pay the Dina. So they ask us to intervene to enforce the law."

It appears that fewer and fewer arrests are being made although illegal clearing continues to take place.

"Nobody tells the president of the Fokontany when there is clearing going on."

Why is it becoming increasingly difficult to apply the Dina? There are many reasons. Firstly, it comes with a very high fine.

According to the Mayor of central Ifotaka: "The problem is that many of those caught cannot pay the fine. Even I could not pay if I was caught. That's the problem. That is why the patrols do not denounce offenders. They catch them, they bring them in, but the people caught cannot pay the Dina."

"When the policeman knows that the offender won't be able to pay, he lets him go."

In addition to the heavy fine there is the embarrassment caused by the arrest: the villagers who act as forest police very often know the person they are dealing with.

According to the Mayor: "Lots of people catch others in the act of land clearing but they don't enforce the law because they are ashamed to denounce their own families."

Some patrol officers maintain that they are nevertheless ready to denounce their own families because "the

COBA association is there to protect the forest and ensure that the law is enforced."

Therefore, when used as a tool for forest management, it would appear that the Dina is a source of tension and conflict within the community. Over the years, this tool is becoming less and less effective.

#### 4.3.4 The impact on women

Many women living in the CAZ corridor, home to the project led by NGO Conservation International, have testified to the impact of patrols on their daily lives.

The president of the Women's Association of Didy explains: "Women suffer in their husbands' absence, when they are away on patrol. That's why we created an association for women. Conservation measures aim to protect the forest but they disregard our homes and families and the men who work in the forests. Conservation must take into consideration women and children as well."

One of the women encountered notes that "it is becoming increasingly difficult to get wood from the forest because there are areas where we cannot collect it."

The women questioned want to receive aid to help support agriculture and livestock farming. This would come in the form of granaries as well as the allocation of tools and materials such as ploughs.

#### 4.3.5 Who benefits from the profits?

The local association manages the revenue from:

- "timber harvesting permits within the protected area (3,000 ariary to build a hut, 5,000 ariary to build a cattle enclosure);
- "access rights to the protected area (10,000 ariary for tourists, 5,000 ariary for the Malagasy), which generate the highest amount of revenue;
- "the Dina (financial sanctions against land clearing), the amount of the fine continues to decrease, for reasons stated above.

This money is used firstly to fund the patrols. But patrol officers judge their salary to be insufficient.

According to the Mayor: "For a two- to three-day trip, the officer is paid 3,000 ariary. 1,000 ariary are paid by the COBA and 2,000 by the WWF [Madagascar]."

This amount varies according to different accounts, but sometimes it is as high as 10,000 ariary per day.

Certain patrol officers bemoan the fact that they sometimes receive only two days' salary when they have been away for three days.

"We leave our homes and our work. 3,000 ariary a day is not enough for a patrol officer."

Members of the local association, whatever their responsibilities, assure us that they are not paid. They simply receive a per diem, for example when they take part in training.

A member of the association explains:

"We also spend money on supplies and general upkeep (for the office, desks, paper, receipts, pens, and wages for cleaning ladies: 3,000 ariary a month). Each household gives 100 ariary a month to the village fund. When we gather together, we use 10,000 ariary to buy coffee."

Once the money has been allocated to the patrols, members of the COBA make sure that any remaining funds are transferred to the bank in Fort Dauphin with a view to funding social and economic development plans. But nothing ever comes of these funds.



"The establishment of the new protected areas has really eased our work load, there were only two of us acting as agents for the entire district," stated a Chef de Cantonnement (pictured). His role is to represent the forest administration within the district. In particular, he is responsible for training and monitoring the forest management committees, as well as supervising the forest police.

The villagers interviewed say that WWF Madagascar does not maintain a presence locally to observe how the money is spent. Some suspect members of the COBA of embezzlement.

"Perhaps the COBA get something from the WWF [Madagascar] but not the villagers. I've never been chosen to be part of the COBA and I don't know what goes on within it."

"Perhaps the Forest Police get backhanders."

Members of the COBA deny any corruption.

"We have a monthly meeting with the villagers to go over the accounts."

The Chef de Cantonnement says that he has received no reports of corruption.

In addition to implementing the necessary reform to the Dina, it seems clear that members of the COBA "acquire" the income generated by the transfer of management. At a national level, power in Madagascar has long been in the hands of elite groups who monopolise the country's economic and political revenue, now we see this same phenomenon being reproduced at a local level in the management of the new protected areas. Further study is needed to determine the character of the COBA members.



The establishment of new protected areas has a direct impact on women who are responsible for collecting firewood and participate in agricultural activities. Certain areas of farmland have been integrated into conservation areas, several women say they now have to go to the towns to buy food.



As part of the COGESFOR project, CIRAD are developing recycling procedures for forest products. For example, they have just constructed a building in the commune of Didy (north east Madagascar) to house a cogeneration unit, which will produce electricity either from agricultural waste or sawmill waste. 70% of the Malagasy population currently lives in isolation.

## 05

## The HCPF Project: an example of the risks and limitations of REDD+

### 5.1 Too much attention given to carbon storage, and higher transaction costs

Despite the fact that deforestation is above all a social and economic issue, the HCPF seems to be focused primarily on the consequences of the process, namely measuring forest carbon stores. One of the essential aims of the Holistic Conservation Programme for Forests is to calculate the level of carbon stored in the forests as well to reduce the volume of CO<sub>2</sub> emissions. How? By measuring the biomass and the tree density of the forest based on ground and aerial surveys using LIDAR ('Light Detection and Ranging', a remote sensing technology using an airborne laser). The methodology for Project HCPF has been approved by the Verified Carbon Standard (VCS).

These surveys completed, HCPF project members produced allometric formulas to measure the relationship between the dry biomass, the diameter at breast height (DBH) and the height of each species of tree. These formulas have been calculated according to species, according to ecosystem and on a national level for Madagascar, with increasing degrees of uncertainty.

By processing the raw data, scientists can build up a picture of the carbon density of a given area, rather than the more commonly produced study of the trees that make up the forest. We can't see the wood for the carbon, rather than the trees .

As the aim of the study is to measure carbon stores, both the study, and the forest, can be reduced to a single figure. In this case, in April 2013, the resulting scientific analysis estimated the potential reduction of CO<sub>2</sub> emissions to be 35 billion tonnes over 20 years.

GoodPlanet states that its aim in phase II is to evaluate "knowledge of Carbon component from phase I in order to generate carbon credits and extra outcome for local communities" . In the light of this information, one might question the motivation for measuring carbon in phase I of the project. In December 2010, WWF France and GoodPlanet claimed that the project was "an environment investment programme (aiming to) advance scientific knowledge of forest carbon [...] This project will not generate any carbon credits".

When questioned about the change to their stated aims, GoodPlanet/Etc Terra explained: "In terms of the carbon accounting aspect of HCPF, our intention first and foremost was to advance our knowledge in the field before considering any trading of carbon credits. Based on what we have learned on the subject, we think that phase II of the project could indeed lead us in this direction but nothing has changed since we published our right to reply in Rue 89: the HCPF (phase I) has not generated any carbon credits and Air France has not compensated (and will not compensate) for any of its emissions through the HCPF; Air France, much to its credit, having stated from the project's outset that it would renounce any possible carbon credits generated by the HCPF. We therefore stand firmly by our initial statement: the HCPF (phase I) was purely an environmental investment programme faithful to the spirit of the REDD+ call for pilot project proposals sent out by the international community at the Bali Climate Change Conference (the Bali Action Plan, 2007)".

GoodPlanet/Etc Terra have also stated: "What sets our project (and our general approach) apart from the vast majority of other REDD+ projects developed around the world, as well working towards receiving both VCS and CCBA Certifications, is our intention to publish the key results from our work in leading scientific journals and therefore to submit our findings for review by our peers. Our future carbon credits will no doubt be the most transparent on the market because, may we remind you, the project document that we will submit to the CCBA will be, like all the others, open to public comment for several weeks on their website: <http://www.climate-standards.org/category/projects/>."

It seems doubtful that anyone from the local Malagasy communities will visit the site to make a comment...

According to Pierre Caussade, who led the programme for Air France: "Our programme helps advance scientific knowledge and from the beginning we have been committed to ensuring that it remains a research and development project. If there are to be benefits one day, if our actions result in the generation of carbon credits, let us be clear, this is not a compensation programme. We have renounced carbon credits, or rather any possible carbon credits that might be generated. We want to be sure that the reduction in emissions has lasting and beneficial results for the Malagasy population."

Another figure arising from the study: the moist forests of Madagascar contain around 90 tonnes of carbon per hectare and the dry, spiny forests of the south around 15 tonnes of carbon per hectare. As phase II is getting under way but with a potentially decreased level of funding from Air France, "one of the strategic directions of phase II is to concentrate efforts on fewer

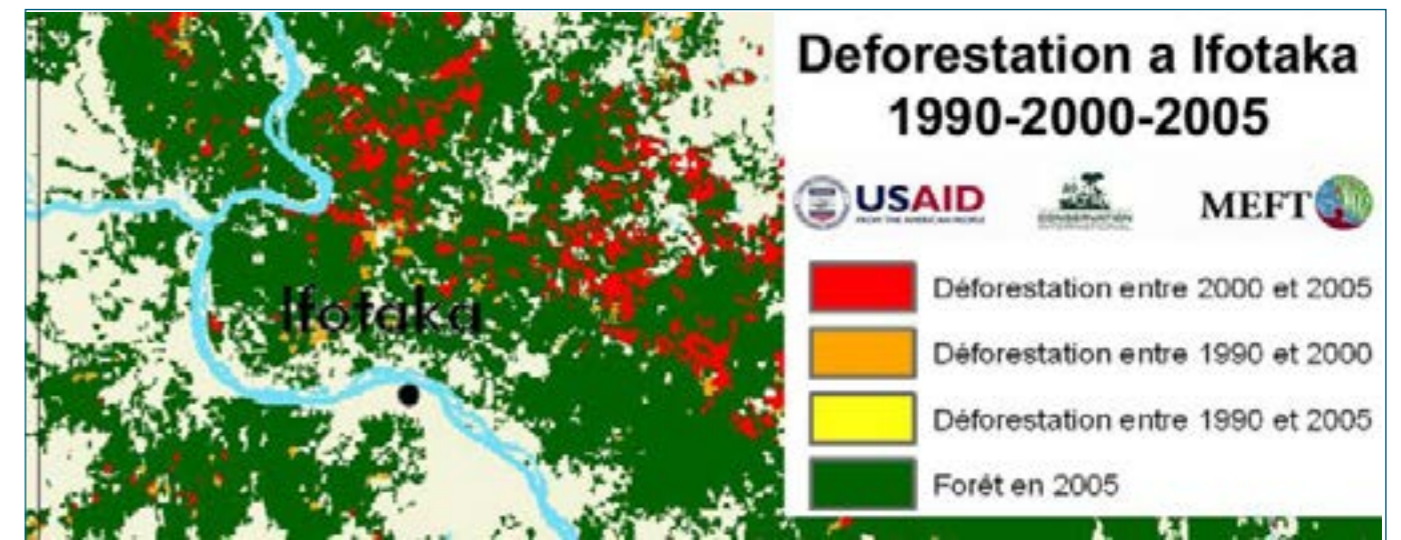
sites," explains Pierre Caussade. According to a project member, the developers are considering focusing their efforts in the moist forests where more carbon is captured, in order to generate greater carbon stores, which could then contribute to funding the protection of the spiny forests.

As GoodPlanet/Etc Terra explain: "It seems logical that the forests which represent the greatest potential for emission reduction are those included in the REDD+ process. The same logic applies for the preservation of biodiversity: we are preserving biodiversity hotspots rather than suburban areas or shopping centres..."

Does this mean to say that the spiny forests, and the local communities who depend on them don't require protection? Is it not a terrible regression to limit a forest to the function of a carbon store when that forest, be it moist or dry, is essential to the lives of local communities? Does this not make those local communities that depend on the spiny forests the greatest losers to a REDD+ mechanism connected with carbon finance?

On this issue, GoodPlanet/Etc Terra state: "According to the distribution of funding currently under discussion in Madagascar, 50% of carbon revenue should be returned to local communities." What about the distribution of the remaining 50%? And how much will be returned to communities living in the spiny forests?

Pierre Caussade, of Air France, explains: "The carbon stakes are indeed lower in the spiny forests. The stunted vegetation to be found there contains less carbon. Nevertheless, we hope to continue developing alternative agricultural practices in these zones such as market gardening or micro-irrigation."



The spiny forests are those most severely affected by deforestation over the course of the two periods [chosen for study by the report]: there has been no reduction in the rate of deforestation" (source: MEFT, USAID, Conservation International, Evolution de la couverture naturelle des forêts à Madagascar, 1990-2000-2005).

Another issue is the relatively high cost of carbon accounting. For example, the cost for mapping a hectare of forest is 0.15 euros. 2.4 million hectares of forest have been covered by the HCPF study. This means a budget of 360,000 euros (funded partly by other research organisations). The decision to generate carbon credits during the second phase of the project will considerably increase the cost again, adding the registration and certification fees to be paid to international standards awarding bodies.

Despite repeated written requests, GoodPlanet/Etc Terra did not wish to discuss budget details, in particular the relative allocation of funds between the scientific, the monitoring and the development components of the project. We sent them a copy of this report prior to publication and only on its reception did they finally send us a very rough overall budget. This budget, dated 2008, only concerns the first phase of the project and is difficult to interpret. There is no entry that clearly specifies development action for local communities which appears to account for only a very small part of the available funds.

Pierre Caussade of Air France provides further information: "For example, although we are closely following action on the ground, in the matter of the allocation of funding between the development and the scientific aspects of the project, Air France trusts its partners GoodPlanet and the WWF. A steering committee meets twice a year." He estimates that 500,000 euros have been granted to the scientific side of the project. He adds: "As soon as we made it clear that we were not hoping for a return on our investment in this programme, there was a knock-on effect, which led to other partners, particularly universities, offering their backing. All in all, this meant the scientific component benefitted from far greater resources than those set out in the initial budget."

One thing is certain, all carbon accounting projects were initially relying on high carbon prices. But the market has collapsed in the last few months, whilst the cost of carbon accounting remains very high. The expenses relating to these studies represent money that could have been spent on taking grassroots action and putting in place real incentives for the local population. In any case, it is clear that members of the local communities have not really understood the process for measuring carbon stores. "Carbon is the paper that we use in the typewriter," confided one person. The REDD+ mechanism, as currently put in practice by the developers of the HCPF, is a top-down

process, contrary to the hopes of local communities that it would work bottom-up.

## 5.2 Is there any real benefit to the environment?

As explained in part one, one of the most controversial and debated topics within climate negotiations is the risk that the REDD mechanism could lead to the issue of fictitious carbon credits on the market. In real terms, this would mean that a company or a country could buy REDD carbon credits generated by a project such as the HCPF rather than reduce their fossil fuel emissions. Instead of providing a solution for climate change, REDD projects could actually speed up the process and by giving the illusion, moreover, that the international community was resolving the issue.

We now propose to explain how the potential REDD carbon credits that the HCPF hopes to generate pose the same problems as those offered by other pilot projects around the world.

### 5.2.1 Is it possible to predict the future? The impossibility of drawing up a truly scientific baseline scenario

In order to generate REDD carbon credits, a project must draw up a baseline scenario, which means predicting how the rate of deforestation would continue in the absence of the project. Then the project developers must explain how their project would reduce the rate of deforestation. The difference between the level of deforestation predicted by the baseline scenario and the development in real time to be observed over the years corresponds to the number of carbon credits the project will be able to generate. Claiming that it is possible to draw up a reliable baseline scenario is the same as saying it is possible to predict the future, which is of course impossible. This is the main reason why Europe currently refuses to integrate REDD carbon credits into its carbon market, the EU Emissions Trading System (EU ETS), and why international negotiations on REDD have ground to a halt. Regarding this issue, however, GoodPlanet/Etc Terra were quick to respond: "It is entirely incorrect to say that it is 'impossible to draw up a truly scientific baseline scenario' because we have just proved the opposite." The crystal ball in which GoodPlanet/Etc Terra claim to have seen the scenario was apparently drawn up with help from CIRAD "with vital support from Ghislain Vieillement who works in the same CIRAD unit as Alain Karsenty". GoodPlanet/Etc Terra acknowledge that it is difficult to draw up this kind of model but maintain nevertheless that conditions

are different in the area of operations for the HCPF in Madagascar: "That doesn't mean we think the exercise is an easy one. For example, our models are less reliable for the spiny forests than for the moist forests. Moreover, in certain contexts elsewhere in the world, deforestation factors (connected with international speculation, such as palm oil or soya) are more difficult to understand and model than in Madagascar where the intensity of deforestation (particularly in the moist forests) can be explained almost entirely by population density and growth (Gorenflo et al. 2011, Agarwal et al. 2005). In fact, these forests, situated on very high ground, are so difficult to reach that it would be impossible to develop agricultural, forestry or industrial projects there. Of course, mining operations could pose a serious threat but the location of deposits used for industrial purposes have already been identified (a small part of the economy of Madagascar is based on mining but its potential is well defined) and the surface area that could be taken up by artisanal mines is limited. Lastly, the illegal logging of rosewood is currently contributing to the degradation of the forests but very rarely to deforestation."

We sent the response from GoodPlanet/Etc Terra to Alain Karsenty who sent us the following comments: "[This baseline scenario] is a model which takes into account (i) demographics, (ii) the distance to roads and navigable rivers, (iii) altitude, (iv) hills, but it doesn't account for soil quality" ... "this scenario assumes a rate of population growth that remains constant over time (no demographic transitions). But demographers very often make mistakes about the occurrence of these transitions, sometimes predicting them too early, sometimes not seeing them at all. In this case, the project does not consider there will be any such transition" ... "The implicit hypothesis that the time land is left fallow is always the same is problematic: with the increase in population density, fallow times are getting shorter, then the fallow periods disappear altogether" ... "We cannot predict migration flows or rural population change" ... "We don't know how various factors will develop: the price of rice (trade liberalisation? crisis and restriction of Indian exports? etc.), the price of livestock (insecurity? etc.), natural disasters causing population displacements, and other types of agricultural production which affect deforestation."

So the baseline scenario for the HCPF project has, in fact, the same limitations as those proposed by other projects. It is, at best, a model with which to test hypotheses and to better understand the dynamics of the situation, but using it as a means for predicting

the future of deforestation is quite another matter. If the HCPF project were to generate REDD carbon credits, a certain amount would not correspond to a real reduction in emissions, but we cannot know the exact proportion (as we can never know what would have happened in the absence of the project). Leaving the problem of permanence to one side, an initial decrease but subsequent increase in deforestation would mean the associated carbon credits would have allowed carbon emissions elsewhere in the world. It would be impossible to claim these credits had been 'neutralised' by the Madagascar project.

### 5.2.2 The difficulty of accounting for the effects of leakage

According to the Chef de Cantonement, land clearing in the region of Ifotaka where WWF Madagascar operates has been reduced by 30 to 40% over ten years. "Damage to the forest has been greatly reduced".

However a report published in 2009 (MEFT, USAID, CI) shows, on the contrary, that land clearing has increased in recent years in the spiny forests.

"The spiny forests are those most severely affected by deforestation over the two periods [chosen for study by the report]: there has been no reduction in the rate of deforestation."

At national level, "in 2005, the rate of loss in the spiny forests was around 1.2%, of the remaining surface area."

GoodPlanet/Etc Terra hopes to put the results of this report in perspective, considering that it is "extremely difficult to draw any conclusions about the ecosystem as a whole". The project developers nevertheless acknowledge that "it is indeed more difficult to stop deforestation in the spiny forests, for a variety of reasons:

- climate change is already severely affecting the area: as noted by all the local farmers, the rainy season has got much shorter and has a tendency to shift from year to year (it arrives either early, or late). As might be expected, this causes major disruption to the cultural calendar;
- the alternatives to slash-and-burn agriculture are far fewer than in moist regions and taking into account the previous point, these alternatives are also more difficult to develop and transmit;
- the high level of local insecurity has caused set-backs for cattle farming and has obliged us to reduce our staff on the ground twice,



for a period of several months. The funds of a number COBAs (communautés de base) have been stolen, as has material belonging to certain associations of producers.”

On the ground, several people confirm that “land clearing is still going on but in secret.”

One villager said:

“I act as a guide for the WWF [Madagascar] staff. They don't come often: two or three times a year. I am told in advance that the staff will be coming. When they come here, I only take them into the unspoiled forest, not to areas of the forest that have been cleared. I'm scared to take them where the forest has been cleared.”

The practice of hatsake – slash-and-burn agriculture continues, but in remote areas far from accessible roads (by motorbike or car).

“Land clearers come in groups of four or five to make sure the clearing is quick and that they avoid the patrol officers. They chose to go into the heart of the forest so that no one will see them.”

Sometimes clearing takes place a long way from the villages, and some villagers are wrongly accused.

“The Mayor summons us when the patrol officers notice an area of cleared land. But it's not necessarily people from our village who cleared the land.”

It should also be noted that a third party will sometimes pay others to clear land for them.

Given this state of affairs, it appears that the establishment of a protected area has led to leakage. These leaks mean there is a geographical shift in emissions arising from the reduction of emissions in a specific area. In the case of deforestation, a conservation project in an endangered forest can cause the threat of deforestation in another forest. According to eyewitness accounts, this is exactly what is currently happening in the protected areas of south west Ifotaka.

Leakage is one of the major obstacles to issuing carbon credits into the market. In effect, if a company from the Northern-hemisphere countries compensates its carbon emissions by buying carbon credits generated by the HCPF project but deforestation has simply been displaced to another area, the impact on the climate is twice as bad. Neither the carbon emissions in the North, nor deforestation in Madagascar has been reduced.

Regarding this problem, GoodPlanet/Etc Terra insist that “for the moment there is no leakage on the site of the moist forests surveyed [...] The local communities who

have committed to reducing the pressure on their forests through the transfer of management are cultivating their fallow land more quickly (new growth following cultivation using slash-and-burn practices), which allows them, for now, to stop clearing land. Obviously this situation will not last if alternative agricultural practices are not diffused and adopted in the countryside. Thus our desire to strengthen the ‘agricultural development’ aspect of the project in phase II by recruiting, via a call for proposals, an organisation specialised in rural development, for example, GRET (Professionals for Fair Development) or AVSF (Agronomes et Vétérinaires Sans Frontières).

The problem of leakage however is still present in the spiny forests, and yet, as we have seen, little or no agricultural alternatives have been put in place.

### 5.3 Carbon offsetting: a socially unjust scheme

Enthusiasm for REDD projects is inspired largely by the fact that they are considered to be a low-cost means of significantly reducing carbon emissions. This argument is based on the theory of opportunity costs: how much would you have to pay someone to change their methods and therefore stop deforestation? Two reports published by influential economists at the time when discussions about REDD were just beginning strongly influenced the direction of those discussions. The Stern report (2005) estimated that it would take 5 billion dollars a year to stop 70% of all deforestation. The Eliasch report (2008) judged that the opportunity costs required to half the level of deforestation would amount to 7 billion dollars. This relatively low figure is based on the debatable hypothesis that a large part of deforestation can be accounted for by poor farmers using slash-and-burn agriculture and collecting firewood for cooking. As the profit these farmers gain from such practices is so modest, hardly providing them with the means to survive, it would cost very little to compensate them for their loss in exchange for their cooperation in changing those practices. Thus, according to this theory, rather than investing a given sum to reduce emissions by a tonne of carbon dioxide in Europe, it would be better to invest that same sum towards changing the practices of farmers in poor countries, which would lead to a greater reduction in the emission of greenhouse gases.

This kind of carbon offsetting raises an important ethical problem: rather than changing the lifestyle of the most affluent members of society, who have an historic responsibility for climate change, the burden

falls to the poorest members of society who have very little scope with which to adapt. When, for example, a company offers its clients the opportunity to offset their carbon emissions by financing a project like the HCPF, it equates leisure activities (air travel for holidays, the purchase of a computer) with fundamental rights (feeding oneself using slash-and-burn agriculture to clear land).

# Conclusions & recommendations

By Friends of the Earth France

**F**armers whose land lies within the monitored areas appear to be the great losers in the conservation game. The challenges are considerable given that in 2013 the country has 22 million inhabitants and this figure could rise to a population of 40 million by 2030. Conservation initiatives can only be sustainable if we give local populations the means to ensure their food security and the right to develop their activities on their ancestral lands.

Ultimately, the HCPF project clearly demonstrates the problem posed by the majority of REDD projects currently under development: conceived above all as projects designed to generate carbon credits, a large proportion of the funding is used to measure carbon and protect the forests. There is little money left for local populations who are nonetheless obliged to make profound changes to their lifestyles.

Even though alternative practices have not been put in place, considerable means have been adopted to punish and control local communities, which is completely unacceptable for a project that wishes to benefit from official development assistance (ODA).

This is why a growing number of observers are recommending that we abandon placing too great an emphasis on carbon and concentrate firstly on the needs of communities. In concrete terms this means:

- developing action plans with local communities that will combat deforestation by identifying already existing subsistence alternatives as well as others that could be tested;
- organising training schemes and skill-exchange workshops to transmit alternative practices;
- resolving conflict over land ownership: clarifying land law in order to respect and legally acknowledge certain aspects of land rights. This would no doubt require a high level of investment but it is essential if we want to ensure long-term sustainability of investments;

- supporting an investment plan for agricultural practices which would both satisfy the needs of local communities and reduce deforestation.

By looking first to satisfy the needs of local communities, a reduction in deforestation would no longer be the primary aim but a natural consequence of REDD projects, making them both socially fairer and more efficient in the long term (less leakage). Without a link to the carbon market there would be no need to install an expensive system for evaluating and monitoring carbon stores, allowing that money to be redirected towards stabilising conflict over land ownership which, though a lengthy and costly process, is essential.

## Recommendations

To those responsible for the HCPF project (GoodPlanet/Etc Terra, WWF Madagascar, Air France) and to the AFD (Agence Française de Développement):

- publish the share of the budget which is set aside for local communities as well as the shares set aside for carbon accounting and surveillance measures;
- reverse the controversial decision to issue REDD+ carbon credits generated by the HCPF project, whether on the voluntary carbon market or the compliance market. These credits are in danger of compromising the environmental integrity of a future agreement on climate and are socially unjust because they place responsibility for the action to be taken and the associated constraints on the poorest members of society;
- redirect project funding into an action plan, to be developed in collaboration with local communities, which seeks first and foremost to satisfy the fundamental needs of those communities, such as food, with as a consequence the reduction of deforestation.

To the European Union:

- stop financing projects to combat deforestation focused on carbon and redirect aid to projects which are clearly designed to satisfy the fundamental needs of local communities and reduce deforestation;
- reject the proposal from the airline industry if it is based on the carbon market (potentially allowing airline companies the possibility of offsetting their emissions by buying REDD credits) and force the industry to reduce its emissions by other means (e.g. fuel taxation).

Document edited by Basta!  
and Friends of the Earth France  
Text and images: Sophie Chapelle and  
Sylvain Angerand  
Design: Alexis Desjeux - Desjeux Créations  
and Alter-médias  
Computer Graphics: Capucine Simon

### Appendix 1: Carbon market, Kyoto, clean development mechanism, European Union Emission Trading System: what do these things mean?

The carbon markets refer to all the markets where carbon assets can be traded.

There are two main types of market:

compliance markets, participants buy offsets in order to comply with regulated 'caps' on emissions as well as with certain national and international obligations set out in the Kyoto Protocol and;

voluntary markets, in which companies or individuals volunteer to offset their carbon emissions by buying carbon credits.

#### ➤ The Kyoto quotas, or assigned amount units (AAU)

Each developed country committed to the Kyoto Protocol receives a certain amount of AAUs, which correspond to levels of allowed greenhouse gas emissions. Countries can buy or sell between themselves and, if necessary, buy carbon credits generated by one of the flexibility mechanisms set out in the Kyoto Protocol.

#### ➤ European quotas

In order to put in place the Kyoto Protocol within its member states, Europe created the European Union Emissions Trading Scheme (EU ETS) or European carbon market. It has fixed a 'cap' on emissions, the allocation of quotas and trading rules for CO<sub>2</sub> emissions from over 11,000 European industrial sites in the sectors responsible for the highest emissions: energy production (heat and electricity, oil refineries), the mineral industries (cement, lime, glass, ceramics), the metalwork industries (steel, iron) and the paper industry. The airline industry is currently not involved in the European carbon market.

#### ➤ Carbon credits generated by flexibility mechanisms

The Kyoto Protocol intended these credits to be issued by Clean Development Mechanisms (CDM). This is a form of carbon offsetting officially recognised by the United Nations: for example, the emission of one tonne of fossil carbon into the atmosphere can be offset by funding a project in a Southern-hemisphere country which is supposed to avoid the emission of an equivalent tonne. Currently, carbon credits generated by REDD projects are not officially recognised by the flexibility mechanisms. Only credits generated by afforestation/reforestation are eligible but extremely controversial. The European Union Emissions Trading Scheme does not accept submissions of these credits.

#### ➤ Voluntary carbon credits or voluntary offsetting

This groups together all voluntary and private initiatives that generate carbon credits. The range and quality of these carbon credits is extremely variable and the certifications established to try and regulate these initiatives insufficient. Even if these voluntary carbon credits are not eligible for trading on the compliance markets, their use can strongly influence the regulatory frameworks currently being established. Projects that generate carbon credits can also work towards gaining official recognition and then, for example, produce CDM carbon credits.

### Appendix 2: The thorny problem of the baseline scenario

Excerpt from an article entitled 'What the (carbon) market cannot do...' by Alain Karsenty, published in the CIRAD revue Perspectives, 1 November 2009.

([http://hal.archives-ouvertes.fr/docs/00/72/58/34/ANNEX/Perspective\\_Karsenty\\_eng.pdf](http://hal.archives-ouvertes.fr/docs/00/72/58/34/ANNEX/Perspective_Karsenty_eng.pdf))

The choice of the reference period used to measure the reduction in deforestation is one of the thorniest issues regarding REDD. Should the deforestation level during the commitment period (probably 2013-2017) be compared with a past period, or with a projected business-as-usual scenario, possibly modified according to political and equity criteria? The method chosen will have different implications depending on the country. Countries that have seen high deforestation rates in the recent past and which have little forest cover will come out on top if a past period is taken into consideration. Conversely, countries whose deforestation rate was low in the past but is expected to rise due to investment in road infrastructure and the extension of agricultural areas are in favour of a business-as-usual scenario that takes into consideration their development needs. This was the proposal supported in negotiations by the Central African countries belonging to the COMIFAC (Commission for the Forests of Central Africa).

Referring to the past assumes that deforestation patterns will be constant over time. However, there is little reason to suppose this would be the case. Deforestation rates are linked to the level of development and to demographic transition, and they tend to slow as forests are depleted. In Malaysia and in several parts of Indonesia, the major lowland forests have been massively converted in the last 20 years into oil palm plantations and other agricultural activities. The major remaining forests are mainly found in mountainous or remote regions, which cost more to exploit and convert. Future reductions will thus be largely "mechanical", linked to the depletion of forests. In contrast, the Congo Basin countries have relatively low deforestation rates, not because of any "good governance", but because of the poor state of their infrastructure and the limited appeal of this region for major agricultural investments. In the immense Democratic Republic of the Congo, the annual deforestation rate is 0.21%, but there is no doubt that if the political situation stabilises, road infrastructure repairs and the return of private investment will result in a rise in deforestation, at least in the short term.

If we choose not to use past data alone, we must attempt to predict future deforestation based on the anticipated evolution of key variables. But deforestation rates are not only influenced by relatively predictable factors such as population size or road infrastructure. They are also affected by random events such as conflicts (which trigger migration), fluctuations in major agricultural commodity prices, changes in currency parity and climate variations (which reduce or increase the risks of large-scale fires and have a considerable impact on deforestation).

In Brazil, for example, deforestation varies greatly from one year to another. Fluctuations in the prices of agricultural products (beef, soy, etc.) are largely responsible for frequent reversals of the trend. While "predictive" models can more or less anticipate where the next deforestation will take place (usually close to roads), they are incapable of telling when they will occur: this depends particularly on agricultural prices – and, incidentally, on the price of wood – which vary according to global market speculation.

A number of proposals have been put forward to attempt to solve this problem, aimed at limiting the quantity of credits that can be acquired in order to limit the risk of producing

hot air, which seems to be in contradiction with the idea that strong financial incentives are needed to ensure States act. But no system makes it possible to tell whether payments will in fact correspond to additional reductions that can be attributed to the policies and actions implemented. The strategic behaviour of States will also have to be taken into account. For example, despite its very low deforestation rates to date, Guyana presented a baseline scenario in August 2009 that anticipated the conversion of 90% of its forests into industrial crops over the next 25 years; this was in order to maximise its chances of being paid for any deforestation rate below this figure. Another potential perverse effect is that a form of environmental blackmail may become widespread ("pay me or I will let my forests be destroyed"), quite the opposite of the government responsibility required on such a critical issue for the public good.

The risk with a cap-and-trade system based on "performances" (reducing deforestation relative to a baseline) is that it may remunerate the result of circumstances rather than efforts. If, however, a market mechanism is chosen, it is likely that this will contribute to introducing hot air, when the market is struggling to maintain a carbon price that is high enough to be dissuasive. By offering new ways out for high emissions-producing nations and companies, this solution further weakens the incentive system sought by the Kyoto Protocol.

Basta! is an independent news website about current social and environmental issues. By producing articles, reports, investigations, interviews and videos, we analyze the crises – economic, social, democratic, financial, and environmental – which plague our world today. Currently, 200,000 readers visit our website every month looking for original information with accompanying analysis, published by Basta! journalists and one hundred or so other contributors – NGO representatives, “whistleblowers”, researchers and academics, elected representatives, trade union officials, social movement activists, citizens’ collectives, community activists, partner networks in Southern-hemisphere countries... Edited by Alter-médias, Basta! brings to light civic action, social activism, solidarity movements and the alternatives they propose.

5 avenue Paul Langevin  
93100 Montreuil  
**basta!** Tél. : 09 52 83 22  
46 • Mail : [contact@bastamag.net](mailto:contact@bastamag.net)  
Site : [www.bastamag.net](http://www.bastamag.net)

The Federation of Friends of the Earth France is a non-profit environmental and human rights network, independent from any religious or political influence. Created in 1970, they helped build the French ecological movement and helped found the world’s largest grassroots environmental network - Friends of the Earth International – which unites 76 national member groups and has over 2 million members and supporters around the world. Friends of the Earth France forms a network gathering 30 autonomous local groups that act according to their own priorities and support the national and international campaigns with a shared vision for social and environmental justice.



2B, rue Jules Ferry  
93100 Montreuil  
Tél. : 01 48 51 32 22 •  
Fax : 01 48 51 95 12  
Mail : [france@amisdelaterre.org](mailto:france@amisdelaterre.org)



This report has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of Les Amis de la Terre and can under no circumstances be regarded as reflecting the position of the European Union.