

An Inventory of Initiatives/Activities and Legislation Pertaining to Ecosystem Service Payment Schemes (PES) in MADAGASCAR.

*Compiled
and*

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EXECUTIVE SUMMARY

The Payment of the Ecosystem Service is not fully well-known in Madagascar yet, even though the State government has already passed a decree concerning the Environment Investments in December 15, 1999 and reviewed in February 3, 2004 by the Decree N° 2004-167. This document commonly called “ la Mise en Comptabilité des Investissements avec l’ Environnement” or (MECIE) is the record of all the rules that are related to the exploitation of the ecosystem in Madagascar. Both private and public sectors have to use the MECIE in cooperation with institutions that are settled especially for the management of the ecosystem such as the National Office of the Environment (ONE), l’ Autorité Nationale de l’ Eau et de l’ Assainissement (ANDEA). However, the application of the laws is still a big question that needs be answered.

Recently, the carbon market is officially open in collaboration with the State government to help the management of the environment. In addition to the allocations of different institutions such as the Office Malagasy des Hydrocarbures (OMH), for example, that gives a percentage to the government along with the tree planting sessions that they organize every year in the country so as to help ONE maintain a sustainable environment; STAR Brasserie also does the same contribution with in addition some environmental sensitizations for the workers and updates of the machines in the factory to manage the pollution; The Vohitra Environment project is also working in this frame of carbon management by sensitizing the local government, researchers and the public to pass and apply the law that will help the management of the waste “déchets”, the Conservation International (CI) and the Wildlife Conservation Society (WCS) are now teaming up with the Ministry of the Environment, Water and Forests (MEEF) to proceed to the marketing of the carbon sequestered from different forests in the northeastern part of the country. These forests are mainly Makira and Mantadia

The water exploiters are also concerned about the protection of the environment. They also give some allowance to the State government or the local authorities to help the environmental protection efforts. The Jiro sy Rano Malagasy (JIRAMA) for example, they offer a percentage to the ANDEA, the office in charge of the regulation of the water for the environmental maintenance. The Eau Vive exploitation also gives a percentage to the Community of Andranovelona to take care of the sources. However, the feedback of these allowances is not actually known afterwards. So there are about 386,000 hectares of contiguous lowland and mid altitude rainforest to protect and develop carbon-financing options. Adding to this, the AQUAMAR initiative by the Canadians is also an incentive that is actually helping different levels of population and the State Government with the payments it is doing with the water exploitation and export from the Mananara river. Thanks to some preliminary studies done by WWF Madagascar, we can also note the potentialities that can be exploited around the Haute Matsiatra river and the Alaotra Lake where various development incentives linked to conservation should be considered.

For the Biodiversity, NGOs are trying to settle the system of payment of the ecosystem by different sensitizations to the local populations, the industrial exploiters, and to the State government. Many initiatives mainly on agriculture around conservation areas or at least linked to conservation are emerging. There are for examples, the Green Energy Madagascar Company

that is helping out the local population with the Green Energy and sensitize them to use land for jatropha cultivation. The Conservation Cotton Initiative carried out by WCS is also one of those initiatives that are ground to new agricultural farming in the country that is actually helping develop an environmentally responsible attitude to the people while helping them earn their living in a healthier and more economic ways.

The payment of the ecosystem is rather a system that is still unknown to most public and private sectors in Madagascar, even if the laws and the decrees concerning relatively most of the ecosystem services exist. Or at least some big exploiters know about the environmental share they have to pay to the government and to the environment Department from their taxes but they actually do not know whether these allowances actually go to the protection of the environment. Neither a national feedback is given about the question. Therefore, the market of the ecosystem is not yet a fully developed area in Madagascar, so that the three or four types of market mentioned in the inventory document cannot actually be identified and developed in full in the frame of this inventory work of the payment of the services of the ecosystem. Only the integration of the private sectors that are now economically boosting the development of the country and direct implication of the Communities, along with the adoption of a coherent and applied policy to the PES are the way out to give its real value to the PES in Madagascar.



ACRONYMS

ANDEA	Autorité Nationale de l'Eau et de l'Assainissement
ANAE	Association Nationale d'Actions Environnementales
ANGAP	Association Nationale pour la Gestion des Aires Protégées
BDA	Bureau de Développement Antananarivo
BEVELAC	Bassins Versants du Lac Alaotra
CHE	Cosmétique Haute Efficacité
CI	Conservation International
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CUA	Commune Urbaine d'Antananarivo
DIC	Delegation Intercooperation Suisse Madagascar
DURRELL	Durrell Wildlife Conservation Trust
EIE	Etude d'Impact Environnemental
ING	Information Not Given
INSTAT	Institut National de la Statistique
FFA	Fanatsarana ny Farimpiainan' ny Ambanivohitra (Association for the Farmers' Livelihood Improvement)
FTV	Fikambanana Tantsaha Vonona (Association of Motivated farmers)
GEM	Green Energy Madagascar Sarl
JICA	Japan International Cooperation Agency
JIRAMA	Jiro sy Rano Malagasy (Malagasy Electricity and WaterCompany)
LTF	Lova Tsara Fototra (Association Well based Fortune)
MCC	Makira Carbon Company
MECIE	Mise en Compte en Comptabilité des Investissements avec l'Environnement
MEEF	Ministère de l'Environnement, des Eaux et Forêts
MINAGRI	Ministère de l'Agriculture
NGO	Non Governmental Organizations
ODER	Association pour le Développement de l' Economie Rurale de Port Bergé
OMH	Office Malagasy des Hydrocarbures
ONE	Office National pour l'Environnement
ONFI	Office National des Forêts Internationales

PDD
SOREA
TAFITA
WCS
WWF

Project Design Document
Organisme Régulateur du Service Public de l'Eau et de l'Assainissement
Taratry ny Fivoaran' ny Tantsaha (Association Farmers' Development Sign)
Wildlife Conservation Society
World Wide Fund For Nature

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Step 1: Ecosystem Service payments, markets, and Mechanisms currently operating in Madagascar

<p><i>(Current Ecosystem Service Payment or Market</i></p> <p><i>List specific in-country ecosystem service projects under each of the categories below.</i></p>	<p><i>Who is the Buyer?</i></p> <p><i>List name(s) of both key contact people and government agencies, companies, etc.</i></p>	<p><i>Who is the Seller?</i></p> <p><i>List both name(s) of people and/or community organizations</i></p>	<p><i>a) Where is the Project located?</i></p> <p><i>(b) How much area involved in agreed deal (hectares)?</i></p> <p><i>Include name of village and/or province</i></p>	<p><i>(A) How is the deal structured?</i></p> <p><i>Is the deal:</i></p> <p><i>(A) A gov't payment?</i></p> <p><i>(B) A private deal?</i></p> <p><i>(C) Open trading?</i></p> <p><i>(b) What conservation management practices required?</i></p>	<p><i>How do Payments flow from the Buyer to the seller?</i></p> <p><i>Provide a brief explanation.</i></p>	<p><i>What are the roles of the Institutions Engaged in Payment Scheme?</i></p> <p><i>List all institutions involved (including intermediaries) and briefly explain roles.</i></p>		<p><i>Current Status?</i></p> <p><i>State if in operation, in planning phase, etc., and whether payments made.</i></p>
<p>Project1: Makira Conservation</p>	<p>The Mitsubishi Group, the rock group Pearl Jam, the World Bank, USAID, Japan, NAVTEQ, and many others:</p>	<p>MEEF and the Makira Carbon Company (MCC) established by WCS and local communities where the site is implemented, and the local government</p>	<p>A-Makira , B-over 300.000 hectares of C-primary forest in the northeastern part of Madagascar, Maroantsetra</p>	<p>A-Investors in the Makira forests Project market the carbon benefits. So, it is more of a private deal between the investors and the buyers. But all sales target mostly principals, brokers,dealers and other intermediaries in the US and abroad who wish to purchase high-quality emissions profitable to both environment and economy B- Forest management, and Conservation of Protected Area and habitats, stabilization of land-use are under way.</p>	<p>There is a contract between the investors and the buyers depending on the emissions, but it is mostly channeled by the Ministry of Environment, Water and Forest of and the World Bank</p>	<p>Ensure the Air and Water purification, ensure the environmental Conservation on the global scale, reduce the global warming and changes, increase development incentives among the producer.</p> <p>Environmental NGOs are the first involved in to sensitize all Institutions to consider the significance of PES, adding the Government of Madagascar since the official signature of the contract in June 2008, all industries and sectors that are directly or indirectly resort to the services of ecosystem play a significant role in the promotion of PES not to waste the ecosystem products.</p>	<p>December 2005, June 2008</p>	<p>Payments ongoing</p>
<p>Project2: Mantadia Conservation</p>	<p>Foreign countries</p>	<p>CI, the local government along with the World Bank and the Global Environmental Facility</p>	<p>A- Mantadia B- 5.000 ha C- Eastern part of Madagascar, Andasibe.</p>	<p>A- It is actually a private deal between investors but the local State Government must have its share in the trading. However, this information is not yet available at this stage of draft 1. B- Forests managements, protection of the area</p>	<p>Same as above</p>	<p>Same as above</p>		<p>Ongoing payment</p>
<p>Project3: Ankotrofotsy Afforestation</p>	<p>3C Factor Negotiation ongoing</p>	<p>Tany Meva Foundation ; Local and community association : TAFITA, LTF, FTV</p>	<p>a) in the western part of Madagascar. - Three villages : Ankotrofotsy – Antsoha – Mangarivotra in the Commune Ankotrofotsy, District</p>	<p>a) It is a private deal between investors. Besides, communities will get a share of environmental profits. However we don't have</p>	<p>It would be a contract between the investors and the buyers depending on the emissions. And the most share of the money would</p>	<p>* Fondation Tany Meva : financial support of plantation activities and carbon offset manager * Délégation Intercooperation (DIC) : marketing et financial support of PDD conception</p>		<p>- plants production and plantation activities have been started - we are finalizing PDD now - In negotiation and planning phase with buyer and some partners like DIC</p>

			Miandrivazo ; Région Menabe b) 979 hectares on a wooded savannah	enough information yet on the share for Government. b) the area where are planted will be managed by local community and they could enjoy secondary products. However trees should be kept during agreement period (25 to 30 years)	be for community to improve income and to support any development projects	* FFA association : technical and organizational support on the field (all plantation activities)		
Project4: Antanetikely Afforestation	Potential buyer : GRT one of "Gaz de France" subsidiary	Tany Meva Foundation who represent Local and community	a) in the high land of Madagascar; Two villages in the Commune Antanetikely, District atsimondrano, Région Analamanga b) 500 hectares	a) Same as above. b) The area where are planted will be managed by local community. Management plan will be done especially for the quarter of the plantation. Trees should be kept also during agreement period (30 years)	Same as above.	* Fondation Tany Meva : financial offset manager * ONF International : technical support * GRT : co-backer		- feasibility study achieved by ONFI - PIN is elaborated - we are finalizing PDD now - In negotiation and planning phase with buyer and ONFI
Biodiversity (in biodiversity, Madagascar has the assets of having so many hotspots, however, the time limit of the investigation in the frame of this PES first draft is too short to list it all; Therefore, the following enumerations are only but illustrations of the rich biodiversity of the country)								
Mantadia-Andasibe	Tourists, researchers, other environmental organizations that resort to this product of the ecosystem	The local community, and the Malagasy State government, and investors such as CI, ANGAP	A-Mantadia-Andasibe, B- 5,000 ha C- Eastern part of Madagascar, Andasibe	The ANGAP works in close cooperation with the State Government to manage the PES here, so it is more of a governmental payment	Entrance fees to the parks or the Protected area	Ensure sustainable development and sustainable environment, Multiplication of conservation initiatives and incentives		In operation
Masoala National Park	The buyers are mostly tourists, researchers, the exploiters of this product of the ecosystem	The local community, WCS, ecotour operators, ANGAP	A- Makira, Masoala B-350,000ha C- in the northeastern part of Madagascar, Maroantsetra	It is the same case as the Mantadia-Andasibe	Entrance fees to the protected area and the park	Same as above		In operation

Conservation Cotton Initiative	Byers are Edun live, Organic Exchange, Hard Rock café and other organic interested markets in the United States	Local Communities working with WCS in the Southern part of Madagascar and ODER organization in the North	The project is located mainly in the Southern region of Madagascar in Toliara with around 50 hectares for the first year and some are also developed in the Northern Madagascar, Port Bergé with 20 hectares of organic cotton	This is more of an open trade and private deal. As it is first of all an initiative created for conservation of the protected area (Mikea Forest in the South), the farming is purely organic i.e. no use of bio pesticides and other chemical products, and no slash and burn practices. Then , it will require more conservation practices with the sensitization to more tree planting and environmental responsible attitude adoption.	Some of the the buyers are funding the campaign from the project start and some are buying at the finished product, i.e. T shirt. But WCS serves as intermediary between the seller who are the farmers themselves to the buyers	Byers are paying an additional percentage of the cotton as it is organic and conservation related cotton to WCS who is managing the payment for the conservation of the area' s protected areas and species. The farmers are engaged in preserving the forest by adopting an environmentally responsible manners and attitude.	2007	In operation in the North and in trial in the South
Water								
JIRAMA	The community, and the Malagasy State	JIRAMA	<p>I.A-Andekaleka B-Exploitation extended on 65 sectors C-the project covers the whole country</p> <p>II. A. Haute Matsiatra B. C. Extended in the Fianarantsoa area</p> <p>III. Lac Alaotra</p>	<p>A- governmental payment (ANDEA, which is the Department of Water is settled especially for this regulation of the payments) B- Water flows regulation; Water and flows treatment; Systematic tree planting around the flows.</p> <p>A- Same structure as above with ANDEA except that it is only in its exploratory phase, and initiatives for conservation are to be developed and created along with the structuring as there is no link between this potentiality and the conservation incentive yet</p> <p>This is Community based management along with different partners and NGOs that are implemented in the area such as DURELL, CIRAD, BEVELAC, JICA...</p>	<p>Rent (a percentage, loan) paid to ANDEA as defined in the decree and in the Water Code</p> <p>Is still to be defined with the structure</p> <p>Many activities such as agriculture and fisheries are fully developed in this area with a more community based management with the help of the partners intervening in the area</p>	<p>Water debits regulation, nature upkeep JIRAMA is first involved in the exploitation and the regulations of the water, ANDEA is in charge of the payment of the service of water, SOREA is in charge of the management of the distribution of the water to families and institutions</p> <p>The same engagement with the same institution and mainly the JIRAMA will be surely encountered with the different stakeholders that are intervening in this area</p> <p>There is currently the planning of an implementation of a Protected Area given the degradation of the environment in the surrounding of this potential area</p>		<p>In operation</p> <p>In exploration</p> <p>In planning for the implementation of the Protected Area but in operation for the payment of ecosystem services even if it is understood and collected under the form of taxes and loan for almost al activities</p>

EAU VIVE	The Community of Andranovelona	Company STAR	A-the project is settled at Andranovelona B- Eau Vive exploits three sources of mineral water	A- Private deal B-Treatment of the sources; use of new and high technology	A percentage or loan paid to the Communal Authority of Andranovelona	Sources regulation and upkeep		In planning phase of a legal text
AQUAMAR	The Persian Gulf countries are the buyers The Community of Mananara, the Ministry of Water, ANDEA, the Aquamar Company	The Canadian Company AQUAMAR with the Mananara area and the State government of Madagascar	a. In the Mananara area in the province of Tamatave in the eastern region b. 230.000 m3 per day for 25 years	A-Private deal with the Canadians B- As for conservation management practices, the Company is engaged in environmental contract with the local communities and the State government along with socio development incentives to also help conservation	The Canadian AQUAMAR is exporting the water by boat from the Mananara river directly to the Persian Gulf to get the water treated and sold	AQUAMAR and the Arabic countries Support financial and in infrastructure building mainly from the taxes and their own engagement to the communities	Mid 2007	In operation
Others								
Hydrocarbure	The local users of fuel	OMH	The project headquarter is in Antananarivo, but the distribution is all over Madagascar through many companies	A-Government payment mixed with private deal as the companies of distribution are private institutions B-Management of the fuel pollution	State loan	Upkeep of the marine and terrestrial environment, reduce the risks of pollution		In operation
Firms (TIKO-STAR)	The local people	TIKO	The project covers the six provinces of Madagascar	A-Private deal B-		Reduce the pollution and the waste toxicity		In planning phase
Vohitra environnement		Vohitra Environnement	The project is settled in Antananarivo	A-Private deal B- Pollution and waste management	There is a close relationship between private, Public and government institutions	Waste and pollution management in different households and to extended institutions		In operation and becoming institutionalized
CHE	Cosmetics interested institutions and individuals	CHE Company	The CHE has its representative in Antananarivo	As a cosmetic Co. CHE is structured as an open trade that has its numerous buyers. The CHE contribution to conservation as it's using more of the natural resources for its raw materials is to engage in different environmental actions such as tree planting and environmental education to the citizens through contribution to events and written sensitisations	An allocation is to be deduced from each bottle of sold CHE product and used in these environmental events they are contributing in for the CHE environment and for the citizens, and the researches carried out within the Universities and research institutions	Upkeep of the natural resources and the medical species		In operation and handled by the Company itself
MINING SECTOR	Mining sector	AMBATOVY	In the Tamavate area	The mining sector is more of private deal but in close	As the case for all businesses that have direct or indirect	Environmental restoration by tree planting initiatives and many supports to		In operation

		QMM	In Fort -Dauphin	collaboration with the State government. Its contribution to the environment exists however one should wonder on how fair that contribution is versus the big exploitation that are done.	impact on the environment the laws exist with the taxes and allocations that they are paying to the State Government that is taking care of its management afterwards	researches. Here the Marine conservation is mainly at stake with the environmental engagement of the project		In operation
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Step 2: Review Country-level Legal, Regulatory, & Administrative Context for Ecosystem Service Payments

*See also the Appendix on the sources related to legal texts

Ecosystem Services				
	Carbon	Biodiversity	Water	Others
<p>DO NATIONAL LAWS, REGULATIONS, AND ADMINISTRATIVE RULES SUPPORT /HELP WITH SALES OF THIS ECOSYSTEM SERVICE?</p> <p>(if yes, please specify)</p> <p>Law n° 90-033 of 21.12.90 Environment Charter Law 99-021 of 19. 08.99</p> <p>MECIE Decree. n° 2004-167 of 03.02.04)</p>	<p>Actually, the law exists in the MECIE Decree but does not explicitly address the problem of carbon emissions , but the newly signed contract of carbon emission marketing that has been signed between the Government and NGO WCS, has open a new initiative towards the implementation of legal frame for this potentiality</p>	<p>Yes; legal texts support the sale of this ecosystem service as follows: Decree .n ° 2004-167 of 03.02.04 Decree n°2005-013 of 11.01.05 arranging the application of the law n° 2001-005 of 11.02.03 related to the Management Code of the Protected Areas Decree n°83-116 of 31.03.83 related to the Safeguarding, Protection and Conservation of the national heritage</p>	<p>Yes, legal texts support the sale of this ecosystem service as follows: Law n° 98-029 of 20.01.99 related to the Water Code Decree n° 2005-502 of 19.07.05 related to the organization, tasks and the function of ANDEA</p>	<p>Waste Mines Agricultural Exploitations. (these are all included in MECIE Decree)</p>
<p>DO LAWS, REGULATIONS, AND ADMINISTRATIVE RULES SERVE AS OBSTACLES TO SALES OF THIS ECOSYSTEM SERVICE?</p> <p>(if yes, please specify)</p>	<p>Perhaps, the lack of the application of the law and loose discipline and lack of sensitizations are the biggest and relevant factors of this obstacle that unfortunately exist in the sale</p>	<p>In fact, given the illicit exploitation and traffic on natural resources, the institutions that are in charge of the administrative regulation of the selling for those who own selling or export permit are made so complicated or even denied in some areas.</p>	<p>Information not available yet</p>	<p>The laws themselves are not fully known and obviously not applied at different levels</p>
<p>DO LANDOWNERS HAVE A CLEAR, LEGAL RIGHT TO SELL ECOSYSTEM SERVICES?</p> <p>(PLEASE SPECIFY WHAT LAWS RELATED TO THIS ISSUE)</p>	<p>It is always organized in the community and the Co or NGOs in charge of the conservation management, so even if there is passed a law on the right to sell as landowner it is always to be grouped with the selling of the community product</p>	<p>It might be possible, but in general these areas are mostly that of the State government or the community. Therefore, it is not really appropriate to that a private landowner could sell this ecosystem service. (further detail would be given in the next update of the present inventory)</p>	<p>Yes, and it is called “property caution” (as defined in MECIE Decree)</p>	
<p>DO COMMUNITY ORGANIZATIONS HAVE LEGAL RIGHTS TO: -SELL? -TO APPROVE / REJECT DEALS?</p> <p>(PLEASE SPECIFY LAWS)</p>	<p>So far, the deal is contracted between Government and NGOs in charge but in the incentive to develop the Community, so the Community is somehow supported in its activities and selling</p>	<p>Yes, since the community has full authority of the development incentive in the region (in MECIE) but cannot go beyond the existing rules and laws if passed</p>	<p>Yes, as in the case of the Community of Andranovelona. The community sells it to Eau Vive so as to reinforce the development efforts of the community.</p>	
<p>ARE THERE GOVERNMENT</p>	<p>EIE, ONE, OMH, DGEF, and should take care of it, but it is</p>	<p>MEEF, ONE, ANGAP, EIE,</p>	<p>ANDEA, SOREA</p>	

AGENCIES THAT EXIST TO REGULATE AND MANAGE THE ECOSYSTEM SERVICES (E.G. CARBON OFFICE, EIA OFFICE, ETC.)? <i>(IF SO, PLEASE SPECIFY)</i>	still on the way to be promoted			
IS THERE ANY INVOLVEMENT OF GOVERNMENT IN DECREASING RISKS ASSOCIATED WITH PAYMENTS FOR ECOSYSTEM SERVICES (E.G. GOV'T BACKED INSURANCE, GUARANTEES, ETC.)? <i>(IF YES, PLEASE SPECIFY)</i>	Yes, Insurance that is taken from the OMH, however, the payment to the environment is not actually guaranteed	Insurance, tax that the park visitors and direct exploiters of the natural resources are paying	Allocation from the users that is afterwards managed by ANDEA	Tax, Insurance,
ARE THERE ANY RELEVANT GOVERNMENT STANDARDS / GUIDELINES RELATED TO ECOSYSTEM SERVICES SALES? <i>(IF YES, PLEASE SPECIFY)</i>	Application of the law, definition of the tax, sensitization of both the community and the exploiters on the advantages and drawbacks of their environmental responsible attitudes through environmental education tools and programmes in different institutions such as schools and offices	Application of the law, definition of the tax, sensitization of both the community and the exploiters	Application of the law, definition of the tax, sensitization of both the community and the exploiters	For the Mining sector there are laws which the exploiters conform to

STEP 3: Document Existence of and Need for Supporting Institutions

ECOSYSTEM SERVICES				
	Carbon	Biodiversity	Water	Others
ARE THERE ANY INSTITUTIONS THAT SUPPORT / HELP WITH SALES OF THIS ECOSYSTEM SERVICE? if yes, please specify by: Government Agencies? -Private Companies / Consultancies? -NGOs?	The World Bank, the Global Environmental Facility, major environmental agencies and more support the sales of this ecosystem service. There are also the DIC	Conservation NGOs, World Bank, ANGAP and more investors work together to sale this ecosystem service	ANDEA, SOREA, TIKO, STAR, and private initiatives as AQUAMAR along with the State government help with the sales of this ecosystem service	Many Private initiatives , mainly investors in mining sector, agriculture, Bioprospection,...
IF ANY, WHAT OTHER INSTITUTIONS ARE NEEDED TO SUPPORT / HELP WITH SALES OF THIS ECOSYSTEM SERVICE?	Yes , all sectors of activities that resort to the services of the ecosystem are needed to help with the sales of this ecosystem service	Yes , villagers associations, more involvement of the authorities, health based organizations, associations caring for young people, and all different kinds of NGOs are all needed to	Private firms, community authorities, associations of the local populations, health based organizations and NGOs	More integration of the private sectors and the support from the government from the implementation or the adoption of very considerate and relevant law to the environmental services

<p>if yes, please specify by: -Government Agencies? - Private Companies / Consultancies? - NGOs? - QUANGOs</p>		support the sales of this ecosystem service		
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Step 4: Assess Local Involvement in Payments for Ecosystem Services

CURRENT ECOSYSTEM SERVICE PAYMENT OR MARKET	(A) DOES THE PROJECT SITE HAVE LOCAL ORGANIZATIONS AND PARTICIPATORY DEVELOPMENT PROGRAMS IN PLACE? (B) IF YES, HOW LONG HAVE THEY BEEN IN PLACE? (C) IF YES, HOW ARE THESE ORG'S ENGAGED IN PAYMENTS FOR ECOSYSTEM SERVICES	HAVE COMMUNITY REPRESENTATIVES BEEN SELECTED AND AUTHORIZED TO NEGOTIATE WITH OUTSIDERS	DO LOCAL PEOPLE DECIDE HOW INCOMING ECOSYSTEM SERVICES FUNDS WILL BE SPENT? (IF SO, WHAT IS THE PROCESS AND WHO IS INVOLVED?)	ARE LOCAL PEOPLE— INCLUDING WOMEN— PARTICIPATING IN THE ENTIRE PROJECT LIFECYCLE? (INCLUDING, DESIGN, IMPLEMENTATION, MONITORING, AND FINANCIAL BENEFIT ACCRUAL)	ARE THERE ANY EXISTING ANALYSES ON LOCAL BENEFITS FROM PROJECT? (SUCH AS: CONTRIBUTIONS TO: HOUSEHOLD INCOME, LOCAL ORGANIZATIONS, ETC .) (IF YES, PLEASE SPECIFY)	(A) HAS A FINANCIAL ANALYSIS OF THE PROGRAM BEEN CONDUCTED? (B) HAVE ASSESSMENTS BEEN MADE OF RISKS AT A LOCAL LEVEL ASSOCIATED WITH PROJECT? (IF YES, PLEASE SPECIFY)
Carbon						
Makira	A- Yes, the local population is sensitized to act for conservation in the frame of a participatory development (job opportunities for the local people in the conservation tasks, healthy and families programs, security)	Information not available	Information not available	May be for a small portion of the population, but not everyone in the society, and might be less for the women	Information not available	A- Surely, by the NGO in charge of the program B- Information not available
Mantadia	A- Yes, the local population is sensitized to act for conservation in the frame of a participatory development (job opportunities for the local people in the conservation tasks, healthy families programs, security).	Same as above	Same as above	Same as above	Same as above	Same as above
Biodiversity	For the biodiversity, the local sites really offer opportunities for the local populations because the sites can offer opportunities of employments for most people, the sites are also promoting their area that development incentives are likely to be realized in the future.					
Water						
JIRAMA	A. YES and it is called the Association of the Water Users (AUE) that are paying	It is possible however the information is not given	In most area the allocation that each community member or user	Women are not excluded as most of the time and especially in rural areas , women are	Yes, more families and communities have access to drinking water	A. Yes, for an adjustment of the price B. Yes in rural areas the risks assessment is are underway.

	allocation for the water they get from the public fountain to take care of these resources.		is paying for the water one is using is spent on the basis of the agreement that has been decided within the local authority on the maintenance of the fountain and to the area around it.	the ones who go fetch the water.		Contrarily to this in urban areas, the interviewee always insisted on the perfect effectiveness of the project
AQUAMAR	The Project is “profiting at different levels of the population and the country” as the ANDEA director says it. For this exploitation, taxes and allocation are paid to the State Government but the project is also engaged in socio-development projects such as school and hospital building, water adduction and electricity exploitation as they are also engaged in environmental improvement	The project is contracted within the State government but the region where the project is implemented in Mananara itself also has its share in the decisions that are made for this business.	Information not available	Information not available but as previously mentioned the project is profiting all levels of the population, so women could not be excluded	Yes, ANDEA has carried out a benefit analyses on the project already in 2006	Yes , associated with the benefit analyses , the risks analyses have also been carried out by the ANDEA and the Company itself
EAU VIVE	A. Yes B. Until the settlement of the project C.	The communal authority represents the local populations and serve as negotiators, spokes person between the State authority, the population The local authority also collects the tax or the tribute of the project for some development projects of the Andranovelona region.	No, the Communal responsible take the decisions concerning the expenses that are spent out off funding that the community got from PES	No, not really, the firm workers are mostly men	Yes, as the project offers an important amount of money to the commune every month so as to better integrate and encourage the development initiatives of the region and enhance the livelihoods of the inhabitants.	A. Surely by the firm itself B. No, to the extent that Eau Vive exploitation needs the use of chemical products to treat the mineral sources, so this has to have an impact on the water that the local population is using in the everyday life.

Step 5: Examine Market Information Flow and Payment for Ecosystem Services expertise

ECOSYSTEM SERVICES				
	Carbon	Biodiversity	Water	Others
<p>HAS A NATIONAL ASSESSMENT OF POTENTIAL, FUTURE SITES FOR ECOSYSTEM SERVICE DEALS BEEN CONDUCTED?</p> <p><i>(IF YES, PLEASE PROVIDE DETAILS.)</i></p>	<p>YES with the Makira and Mantadia projects and other sites that are surely favored by the multiplication of protected areas in the country</p>	<p>YES, surely by environmental NGOs, ANGAP. The multiplication of Protected Areas initiatives indicate this clearly. It also has to be mentioned that many initiatives as the Conservation Cotton i.e. cotton farming organized around protected areas.</p>	<p>YES, (Systematic Regulation and Upkeep of debits and sources, creation of new sites of exploitation. Here we should mention the newly found market that has been contracted between the government of Madagascar and the Canadian AQUAMAR Company on the exportation of 230.000 m3 water per day from the Mananara river to the Persian Gulf area for 25 years</p>	<p>Mainly in the mining sector is this proven. Ambatovy and QMM where and many other mining projects are relevant examples</p>
<p>HAS A NATIONAL ASSESSMENT OF BUYERS BEEN CONDUCTED?</p> <p><i>(IF YES, PLEASE PROVIDE DETAILS.)</i></p>	<p>So far, the buyers are mainly outsiders</p>	<p>Information not available</p>	<p>YES, the INSTAT Surveys could tell more on the opinion polls even if cannot be considered as a pure national monitoring , there is also the consumers complaints at the JIRAMA</p>	<p>The buyers are mainly outsiders</p>
<p><i>Is there a place that buyers and investors can go to / call about ecosystem services deals & prices?</i></p>	<p>CUA, ANAE, ONE, ... Ministries, Conservation NGOs</p>	<p>MEEF, ONE, ANGAP, Conservation NGOs...</p>	<p>ANDEA, SOREA, MEEF, JIRAMA, AUE (association of water users)</p>	<p>Ministry of Mining, Agriculture,</p>
<p>ARE THERE TRAINING AND EDUCATION RESOURCES RELATED TO ECOSYSTEM SERVICES AND PAYMENTS</p>	<p>Not yet until the PES and carbon fund are made available to everyone and a real PES frame with its legal structure is described and adopted for Madagascar. This requires the integration of the private and public sectors mainly with a coherent policy</p>	<p>YES by NGOs in charge of the programs, and partners such as ONE, ANGAP et MEEF through environmental education program, events, tools, and tours</p>	<p>NO</p>	<p>Integrated in the environmental component of each development project, which is one of the implementation engagement of each project that is doing its business in the country even if it is not fully developed</p>
<p>IS THERE ANY INFORMATION AVAILABLE ON RISKS AND/OR RISK MANAGEMENT ASSOCIATED WITH PAYMENTS FOR ECOSYSTEM SERVICES (IF SO, WHERE? HOW CAN IT BE OBTAINED?)</p>	<p>A relatively little information has been obtained from the exploiters, the ministries, and involved NGOs</p>	<p>YES, and may be a bit more information compared to the case of the Carbon, all different environmental institutions can help.</p>	<p>Yes, but a bit too little information, that has been obtained from ANDEA</p>	<p>Not available so far</p>
<p>ARE THERE EXPERTS IN ECOSYSTEM SERVICE MONITORING & EVALUATION IN-</p>	<p>NGOs working on environmental services and conservation finance are meant to have the know-how</p>	<p>YES</p>	<p>Information not available</p>	<p>Can be picked from the environmental monitors within the projects if required</p>

COUNTRY?				
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STEP 6: List Available Technical Assistance (such as, training, ongoing advising / support, in-service programs, etc.)

ECOSYSTEM SERVICES				
	Carbon	Biodiversity	Water	Others
IS THERE ANY CURRENT TECHNICAL ASSISTANCE IN IDENTIFYING AND ESTABLISHING ECOSYSTEM SERVICE PAYMENTS AND MARKETS? (e.g., training, ongoing advising / support, etc.)	YES, suggestion of a legal text (law), negotiations with the most involved exploiters	YES, (training, permanent support from NGOs, tree planting, awareness of the local population, national and community environmental education incentive of the community and at the national level. There is also the training given on the organic farming linked to conservation with the organic cotton initiative that is carried out in the Southern part and the Northern part of Madagascar to help the incentive to development and conservation at the same time	YES, (Implementation of new machines, debits treatment, repair of old machines, sensitization of the buyers to manage the consumption well.) but mostly identifications of new potential grounds as WWF has done for Haute Matsiatra mentioned previously. The AQUAMAR Company mentioned above surely some structure but the information on this is still not available.	So far the potentialities are identified while the exploitations of the resources are running but the real tools or the technical assistance in establishing PES and markets are still a big deal that will hopefully be brought to light through and after the implementation and adoption of the legal framework of PES in Madagascar. It should be noted that this "others" section integrate most of the biggest exploitations like mining in the country.
<i>IF YES, SPECIFY:</i>	Same as above	Same	Same	
TYPES OF TECHNICAL ASSISTANCE				
providers (Contact names & organizations) *	WCS (tel:22 597 89) CI (tel:22 609 79), Tany Meva Fondation	ONE ANGAP WCS, WWF, CI, Tany Meva Fondation	JIRAMA Eau Vive STAR	
who pays (buyers, sellers, government)	Buyer and seller pay	Seller pays	Buyer, consumer and the government pay	Buyer and exploiters
who has access (who uses, where, how often, etc.)	Both the country producer and the buyers have access to this service of ecosystem	Exploiters, the local communities, educators of different domains and different levels.	Consumers, the exploitation staff (eg, at the JIRAMA, the workers are provided a two fold training all along the year)	

* The contacts are provided in the Appendix at the end of the inventory

STEP 7: IDENTIFY ALL POTENTIAL SOURCES OF FINANCING (such as, loans, grants, subsidies, in-kind payments, etc.)

	Carbon	Biodiversity	Water	Others
WHAT TYPE AND SOURCE OF FINANCING IS AVAILABLE FOR ECOSYSTEM SERVICE PAYMENT / MARKET: -PROJECT PLANNING? -TRANSACTIONS? -TECHNICAL ASSISTANCE? -BUSINESS PLANNING? -OPERATIONS? - RISK MANAGEMENT? -OTHER? <i>IF YES, SPECIFY FOR</i>	The financing of this ecosystem service is under way, along with its marketing	For this ecosystem service, the payment is in operation if we consider the allocation that is given to the environment through park visits and grants and many other but still need clear and coherent structure to be adopted for all situations. As for technical assistance, Risks management each environmental institutions and NGOs are doing its best to cope with them.	The water service is paid through, Transaction, technical assistance, risks management, and especially the business around it	Needs to be considered after the PES legal frame is settled

<i>EACH AREA OF AVAILABLE FINANCING:</i>				
<i>WHERE / FROM WHOM</i>				
	NO, at the Ministry level YES, at the level of the private exploiters (e.g. STAR)	Information not available	Information not available	
What is needed to qualify?	Establish the legal framework	See MECIE decree	Respect the law	Establish the legal framework for each sector
How much? (upward limit to support)	Information not available	See MECIE decree	Rent from the Jirama Eau VIVE, gives an allowance worth 20-30millions FMG per month to the Commune of Andranovelona	allocation and taxes are depending on the size and the duration of each project as decided and defined by the State Government
Contact information	See Appendices at the end	Same	Same	

STEP 8A: Detail Project-by-Project Support services for market actors
(including, existence of in-country providers and their availability (e.g., country-wide, capital city only, etc.)

CURRENT ECOSYSTEM SERVICE PAYMENT OR MARKET	FINANCING	MEASUREMENT	MONITORING	VERIFICATION	BUSINESS ADVISORY SERVICES	REGISTRIES	CERTIFICATION	RISK MGMT	TRAINING & CAPACITY BUILDING
	(Provision of necessary capital / operating funds)	(Valuation of ecosystem service)	Regular collection & analysis of data to ensure accountability	(Process of review to ensure accuracy of information)	(Financial advice, legal services, mediation, technical assistance, marketing support, market information, land title services, water right services, etc)	(Collection & configuration of information in a database)	(Examination of an ecosystem service or product according to a set of guidelines)	(Addressing financial and other risks associated with engaging in PES)	(Increasing the pool of people interested in and able to act on PES)
Carbon									
Biodiversity									
Water									
Others									

Step 8B: Document NATIONALLY AVAILABLE Support services for market actors

ECOSYSTEM SERVICES				
	Carbon	Biodiversity	Water	Others
ARE THERE SPECIFIC SUPPORT SERVICE-RELATED PROBLEMS/CONSTRAINTS?	-ignorance or lack of legal texts -non application of the law -No rigorous rule on the payment of the services of the ecosystem. -lack of sensitization of all	ING	Same as Carbon information plus, lack of knowledge of the management of the rent that is paid by the JIRAMA -Monopole of decision	ING

	concerned entities such as enterprises, communities, the State government, ...			
WHAT IS NEEDED TO IMPROVE SUPPORT SERVICES?	-re define and apply the law -sensitize everyone to respect the law, to know about the management of carbon, the advantages and the drawbacks of the carbon sequestration -educate everyone to reinforce the carbon resources and therefore, protect the environment	Encourage the local population to better encounter their area including (i.e. the assets, advantages, and disadvantages of the lack of knowledge and the "laisser-aller"	-systematic improvement of the debits -Pass the law in collaboration with ANDEA, SOREA, and the other exploiters	-establish the legal framework of PES for both direct and indirect users of natural resources - More sensitization on the identification of potentialities and marketing
ARE ADDITIONAL SUPPORT SERVICES NEEDED?	-YES, all sectors of activity that resort to the services of the ecosystem (environmental, juridical, education, political sectors, and many others)	Same	YES, all sectors of activity that resort to the services of this ecosystem product.	Yes in fact still need to be created

Step 9 List Governmental & Non-Governmental Standards & Guidelines

(specifically in relation to eligibility, performance, equity, environmental impact, reporting requirements, community and public input requirements, public comment, labour regulations, etc.)

	Carbon	Biodiversity	Water	Others
DO ANY STANDARDS AND/OR GUIDELINES EXIST THAT GUIDE ECOSYSTEM SERVICE PAYMENTS AND MARKETS? (IF YES, PLEASE SPECIFY)	More or Less now following the official partnership of selling between the State Government, and WCS, CI	Under way to be created	YES, as highlighted in the Water Code, ANDEA	NO
ARE STANDARDS AND/OR GUIDELINES NEEDED FOR ECOSYSTEM SERVICE PAYMENTS / MARKETS? (IF YES, PLEASE SPECIFY)	YES such as fixation of rents, the payment system, the sanctions in case of non payment and mostly the sensitization of everyone about the existence of PES	YES such as regulations of the environmental share from the benefits the operators and users of this ecosystem service make	YES, apply the legal texts fully	YES,
Has the country set specific standards for carbon projects under the CDM? (IF YES, PLEASE SPECIFY AND STATE WHO WAS INVOLVED)	Under the Durban Vision, which has been settled by the President of Madagascar himself so as to face the global warming and the environmental degradation problems today			

Step 10: Assess Awareness of Ecosystem Service Values, Payments, and Markets

ECOSYSTEM SERVICES				
	Carbon	Biodiversity	Water	Others
WHAT IS THE LEVEL OF AWARENESS OF PES OPPORTUNITIES AMONG - NATIONAL BUSINESS	In general, the level of awareness of PES on national level is still very low. Most people and institutions do not care about it even if the legal	For the biodiversity, the level of awareness might be a bit higher compared to the carbon thanks to the number of sensitizations, trainings	The water case is still on exploration phase as it is not fully understood by the users even if relevant cases like the Alaotra Lake	Efforts need to be made and concentrated on this section

<p>COMMUNITY?</p> <ul style="list-style-type: none"> - GOVERNMENT AGENCIES? - COMMUNITY ORGANIZATIONS? - NATIONAL NGOS? - INTERNATIONAL NGOS? 	<p>texts existed long ago because most of the people do not actually know about the carbon sequestration yet. But since the implementation of the MCC for example around the Makira protected Area, the community is more concerned about the opportunities and the forest conservation</p>	<p>and opportunities that are made available for many people, communities and regions in many areas of Madagascar. The Government plan on the environmental engagements has actually helped improve the awareness level of business communities, NGOs, and Community</p>	<p>are proven on the opportunities it offers.</p>	
<p>WHAT, IF ANY, ARE THE SOURCES OF CURRENT, AVAILABLE INFORMATION ON ECOSYSTEM SERVICE PAYMENTS / MARKETS?</p>	<ul style="list-style-type: none"> - WCS - -CI 	<p>Environnemental NGOs</p>	<p>ANDEA, SOREA</p>	
<p>IF AVAILABLE INFORMATION, HOW ACCESSIBLE IS IT TO VARIOUS ACTORS?</p> <p>IN WHAT FORMAT DOES IT APPEAR?</p> <p>WHERE IS IT KEPT?</p>	<p>Interview of responsible at different departments. But the current project of WCS for example is to make that information available on the web.</p>	<p>Direct relations with organizations, documents consultation. The documents are either written books or brochures, and electronic documents are also available</p>	<p>Direct relations with organizations, documents consultation. The documents are either written books or brochures, and electronic documents are also available</p>	
<p>WHO IS CREATING AND DISSEMINATING THIS INFORMATION?</p>	<p>The section in charge of Conservation Finance</p>	<p>NGOs/ MEDIA/...</p>	<p>Information not available</p>	

APPENDICES

APPENDIX 1. SWOT ANALYSIS

Strong points: In the frame of PES; Madagascar has the assets of having legal texts that regulate the use of the ecosystem services. It means that, in Madagascar; the exploitation of these services that the ecosystem offers follows some rule to avoid the ecosystem running out of its resources. The richness of biodiversity of Madagascar is also a great advantage of the country because if it is exploited under the PES, it would be efficient stimuli for the development incentive of the country. The conviction of the President of Madagascar is also one of the significant assets that the country has. The President has made it a national priority to make people understand the significance of the protection, the conservation and the sensible exploitation of the environment, by adopting in the national policy the Durban Vision, so as to integrate the Malagasy people into this global challenge of global protection of the environment.

Weaknesses: No matter these strong points, weaknesses however exist. The lack of specialized institutions for different ecosystem problems is one of these weaknesses. Without these however, the level of information will remain relatively low. The lack of expertise is also a key problem for Madagascar. The integration of the private sector in the PES is also one of the big challenges that still need to be looked at in Madagascar. Not least of all, the non application of the laws remains the greatest problem in the country. However, without the respect of the law, there is a high risk of wasting the biodiversity from its illegal or over exploitation. Adding to all of this structuring that is actually the key of all is the clarification on where to go and the objective of the creation of PES to the technicians first and to the Communities after.

Opportunities: PES would reinforce and improve the environmental conservation efforts that are made by different institutions and the State Government, but also and mostly would help the sustainable development incentives of the country, if the objectives are set and the structure implemented.

APPENDIX 2 Map

APPENDIX 3: CONTACTS LIST

ANDEA, Monsieur Helison R. Razafindrakoto, Responsable de la Planification et de la Coordination, tél 24 261 90

BDA , Monsieur Fred Dronimann, Coordonateur Général, tél : 22 283 00,

EAU VIVE, Monsieur Daniel Rabemanantsoa, Responsable Exploitation Source, tél 00 261 20 24 263 97, é-mail : eau-vive@star.mg

JIRAMA, Madame Mavo Rasoazanajaona, Chef de Service Environnement, tél 22 644 38

MINAGRI, Bibliothèque Anosy, tél 22 281 16/ 22 247 10

MINENVEF, Madame Blandine R, Chef de Service Documentation, tél 033 12 101 91

OMH, Mr Ravanty Donnée, Responsable du Département Environnement, tél

ONE, Madame Faravololona R. , Juriste, 22 641 11

STAR, Monsieur Andry Andriamanantena, Adjoint au Responsable Qualité, UBG Andraharo, tél 22 658 57, é-mail : a.andriamanantena@star.mg

TIKO, Madame Odile R. , Responsable Administratif, tél 22 382 58

VOHITRA ENVIRONNEMENT, Madame Fara Rakotoarison, Gérante- Directrice Technique, tél 24 263 14/ 033 05 070 99, e-mail : fara@vohitra.com

Fondation TANY MEVA, M. Fenosoa Andriamahenina, Directeur Exécutif,

Tél 22 403 99, e-mail : f.andriamahenina@tanymeva.org.mg

Primature, Hanitrinala C. Andriamalala, e-mail : traniano@yahoo.fr

Tel : 22 678 58

Green Energy Madagascar, Nirina Randimby (Benitany), e-mail: benitany@gmail.com

Private Sector, Tina Andrianaivalomanampy, e-mail: tinaheriniaina@gmail.com

Région Sud Ouest, Samueline Raheliarisoa, e-mail: samuelinetul@yahoo.fr

Tel : 94 914 16

WCS, Lanto Andriamampianina, e-mail: lanto@wcs.org

Nafis Razafintsalama, e-mail : naf_raz@yahoo.fr

Tel : 22 597 89

WWF, Erik Reed, e-mail: EReed@wwf.mg

Joseph Rakotolahy, e-mail: jerakotolahy@wwf.mg

Tel: 22 304 20

INTERNET SOURCES:

-Cooperation in reducing greenhouse gas emissions:

http://www.expo2005.or.jp/en/eco/greenhouse_gas.html

-Climate Change: <http://www.conservation.org/xp/CIWEB/programs/climatechange>

-Conservation Carbon Project : <http://www.celb.org/>

-Carbon Finance at the World Bank : <http://www.carbonfinance.org/>

SOURCES RELATED TO LEGAL TEXTS

WATER

Law N° 98-029 of January 20th, 1998

Water Code

Publication :

Official Journal N° 2557 of 27 January 1999 page 735

COMPENSATION ON THE BIODIVERSITY USE

Decree N° 2003-984 of September 30th, 2003

On the adoption of the national strategy for the sustainable management of biodiversity

Publication :

Official Journal I N° 2886 of February 02nd, 2004 page 820

WATERSHED

Decree N° 2006-644 of September 05th, 2006

On the creation and institutionalization of the « Programme National Bassins Versants – Périmètres Irrigués (PNBV/PI) » or (National Program for Watershed and Irrigated Perimeters)

Publication :

Official Journal N° 3068 of November 20th, 2006 page 4809

CONCESSION POLICY IN NATURAL PARKS

Law N° 2001-005 of February 11th, 2003

On the Management Code of Protected Areas

Publication :

Official Journal N° 2829 of Avril 07th, 2003 page 1180