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Madagascar
Back to the Future on the road to sustained and balanced growth

Country Economic Memorandum

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ACRONYMS AND ABREVIATIONS

ANGAP	National Association for the Management of Protected Areas or *Association Nationale pour la Gestion des Aires Protégées*
APB	Professional Association of Banks or *Association Professionnelle des Banques*
APTH	Professional Association of Hydrocarbon Transporters or *Association Professionnelle des Transporteurs d'Hydrocarbures*
APTR	Professional Association of Trucking Companies or *Association Professionnelle des Transporteurs Routiers*
ATT	Road Transport Agency or *Agence des Transports Terrestres*
BAD	African Development Bank – AfDB or *Banque Africaine de Développement*
BAMEX	Business and Marketing Expansion
BCM	Central Bank of Madagascar or *Banque Centrale de Madagascar*
BEI	European Investment Bank or *Banque Européenne pour l'Investissement*
BEP	Technical School Certificate or *Brevet d'Enseignement Professionnel*
BIANCO	Independent Anti-Corruption Bureau or *Bureau Indépendant Anti Corruption*
BIT	International Labor Organization or *Bureau International du Travail*
BSC	Cargo Monitoring Note or *Bordereau de Suivi de Cargaison*
CAD	Registered Customs Agent or *Commissionnaire Agréé en Douane*
CAEP	Learning Center for Productive Work or *Centre d'Apprentissage à l'Emploi Productif*
CAP	Vocational Training Certificate or *Certificat d'Aptitude Professionnelle*
CBP	Protein, coactivator
CCIFM	France-Madagascar Chamber of Commerce and Industry or *Chambre de Commerce et d'Industrie France – Madagascar*
CCPREAS	Coordination Unit for Economic Recovery and Social Actions or *Cellule de Coordination pour la Relance Economique et Actions Sociales*
CCTV	Customs Declaration System or *Système Déclaration en Douane*
CDD	Fixed Term Contract or *Contrat de travail à Durée Déterminée*
CEFOR	Credit Exchange Training or *Crédit Echange Formation*
CEM	Country Economic Memorandum
CERDIC	Regional Center for the Development of Industries and Commerce or *Centre Regional de Développement des Industries et Commerce*
CNaPS	National Social Contingency Fund or *Caisse Nationale de Prévoyance Sociale*
CNT	National Labor Committee or *Conseil National du Travail*
CNUCED	United Nations Conference on Trade and Development or *Conférence des Nations Unies sur le Commerce et le Développement*

COCPO	Oil, Gas and Mining Policy Division, World Bank
CODEX	Food Norms defined by the FAO and the WHO
COMESA	Common Market for Southern and Eastern Africa
CPIA	Country Policy and Institutional Assessment
CREAM	Center for Research, Study and Support to Economic Analysis or *Centre de Recherche, d'Etude et d'Appui à l'Analyse Economique*
CRIF	Land Titling Resource and Information Center or *Centre de Ressources et d'Informations Foncières*
CSI	Committee for Integrity Safeguard or *Comité pour la Sauvegarde de l'Intégrité*
CSLCC	High Council for the Fight against Corruption or *Conseil Supérieur pour la Lutte Contre la Corruption*
CT	Labor Laws or *Code du Travail*
CYCI	Commonwealth Youth Credit Initiative
DAU	Single Administrative Document or *Document Administratif Unique*
CEO	Chief Executive Officer or *Directeur Général - DG*
DGD	Customs Directorate General or *Direction Générale des Douanes*
DGI	Tax Directorate General or *Direction Générale des Impôts*
DT	Dwell Time
DVS	Value and Selectivity Division or *Division Valeur et Sélectivité*
EDBM	Economic Development Board of Madagascar
EITI	Extractive Industries Transparency Initiative
EPIN	CPIA, Country Policy and Institutional Assessment
EPZ	Export Processing Zone
EVP	Twenty Feet Equivalent or *Equivalent Vingt Pieds*
FENU	United Nations Equipment Funds or *Fond d'Equipement des Nations Unies*
FER	Road Maintenance Funds or *Fonds d'Entretien Routier*
FHORM	Hotel and Restaurant Federation of Madagascar or *Fédération des Hôtels et Restaurants de Madagascar*
FIAS	Foreign Investment Climate Advisory Service
FIATA	International Federation of Freight Forwarders Associations or *Fédération Internationale des Associations de Transitaires et Assimilés*
FID	Intervention Funds for Development or *Fonds d'Investissement pour le Développement*
FIDA	International Agricultural Development Funds or *Fonds International de Développement Agricole*
IMF	International Monetary Fund
FOB	Free on Board
FONDEF	Technical Learning and Vocational Training Development Funds or *Fonds de Développement de l'Enseignement Technique et de la Formation Professionnelle*
FPC	Continous Professional Training or *Formation Professionnelle Continue*
FRE	Extractive Revenue Funds or *Fonds de Recette Extractive*
FSAP	Financial Sector Assessment Program
FTU	Fort Dauphin

GEFP	Professional Export Processing Zone Group or *Groupement des Entreprises Franches Professionnelles*
GIPA	Interprofessional Craftsmen Group or *Groupement Interprofessionnel des Artisans*
GPCAD	Professional Registered Customs Agent Group or *Groupement des Professionnels des Commissionnaires Agréés en Douane*
GVS	Gate Validation System
HACCP	Hazard Analysis Critical Control Point (Norme Sécurité des aliments)
HIMO	High Man Labor Intensity or *Haute Intensité de Main d'œuvre*
ICT	Information and Communication Technology
IDE	Direct Foreign Investment or *Investissement Direct Etranger*
IFC	International Finance Corporation
INSTAT	National Stastics Institute or *Institut National de la Statistique*
JIRAMA	Jiro sy Rano Malagasy
KFW	Kreditanstalt für Wiederaufbau
KRAOMA	Kraomita Malagasy
LGIM	Law on Large Mining Investments or *Loi sur les Grands Investissements Miniers*
MAEP	Ministry of Agriculture Livestock and Fishing or *Ministère de l'Agriculture de l'Elevage et de la Pêche*
MAP	Madagascar Action Plan
MCA	Millenium Challenge Account
MECI	Ministry of Economy, Trade and Industry or *Ministère de l'Economie, du Commerce et de l'Industrie*
MEM	Ministry of Energy and Mining or *Ministère de l'Energie et des Mines*
MENRS	Ministry of National Education and of Scientific Research or *Ministère de l'Education Nationale et de la Recherche Scientifique*
MFB	Minsitry of Finance and Budget or *Ministère des Finances et du Budget*
MFPTLS	Ministry of Civil Service, Work and Social Laws or *Ministère de la Fonction Publique, du Travail et des Lois Sociales*
MICTSL	Madagascar International Container Terminal Service Ltd
NOS	Nosy Be
NICT	New Information and Communications Technology
OECD	Organization for Economic Cooperation and Development
OIE	World Animal Health Organization or *Organisation Mondiale de la Santé Animale*
OMD	Millenium Development Objectives or *Objectifs Millenium de Développement*
OMEF	Malagasy Research Observatory for Employment and Professional Training or *Observatoire Malgache de l'Emploi et de la Formation Professionnelle*
OMNIS	National Office for Mining and Strategic Industries or *Office des Mines National et des Industries Stratégiques*
NGO	Non Governmental Organization
ONN	National Office for Nutrition or *Office National pour la Nutrition*

ONPE	National Office To Promote Employment or *Office National de la Promotion de l'Emploi*
ONT	National Tourism Office or *Office National du Tourisme*
ONUDI	United Nations for Industrial Development Organization or *Organisation des Nations Unies pour le Développement Industriel*
OPCAEF	Fund Collector Joint Organization for Profesional Training or *Organisme Paritaire Collecteurs de Fonds pour la Formation Professionnelle*
OPCI	Public Intercommunal Cooperation Organization or *Organisme Public de Coopération Intercommunale*
ORT	Regional Tourism Office or *Office Régional du Tourisme*
PEFA	Public Expanditure and Financial Accountability
PER	Employment Promotion Program or *Programme de Promotion à l'Emploi*
PGRM	Mining Reserouce Governance Project or *Projet de Gouvernance des Ressources Minières*
GDP	Gross Domestic Products
PIC	Integrated Growth Pole or *Pôle Intégré de Croissance*
SME	Small and Medium-sized Enterprises
PNUD	United Nations Development Program or *Programme des Nations Unies pour le Développement*
PPP	Public Private Partnership or *Partenariat Public Privé*
PRSM	Mining Sector Restructuration Project or *Projet de Restructuration du Secteur Minier*
PSI	Pre-Shipment Inspection
PTAC	Gross Weight or *Poids Total Autorisé en Charge*
QMM	Qit Madagascar Minerals
RFT	Tourism Land Reserves or *Réserves Foncières Touristiques*
SADC	Southern African Development Community
SFI	International Financial Society or *Société Financière Internationale*
SG	Secretary General
AIDS	Acquired Immune Deficiency Syndrome
SNIE	National Employment Information System or *Système National de l'Information sur l'Emploi*
SPAT	Agri-food and Tourism Productive System or *Système Productif Agroalimentaire et Touristique*
SPS	Sanitary and Phytosanitary Standards or *Standards Sanitaires et Phytosanitaires*
SQAMT	Standardisation Quality Assurance, Metrology and Testing
TELMA	Telecom Malagasy
TOT	Terms of Trade
TTI/TTA	Itinerant or Traveling Terriers or *Terriers Itinérants ou Ambulants*
VAT	Value Added Tax
EU	European Union
UK	United Kingdom
USAID	United States Agency for International Development

VAE	Validation of Experience Assets or *des Acquis de l'Expérience*
VATSI	Malagasy Office for the Promotion of Employment for All or *Office Malagasy de Promotion pour l'Emploi pour tous*
WTO	World Trade Organization (OMC)

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TABLE OF CONTENTS

LIST OF BOXES

LIST OF TABLES

FIGURES

ACKNOWLEDGEMENTS

This study is the result of a joint effort between the World Bank and the Malagasy Government during the January-September 2008 period.

The World Bank Team, led by Jacques Morisset, was composed of Noro Aina Andriamihaja, Laza Razafiarison, Renaud Seligmann, Stefano Paternostro, Ian Gillson Ellena Rabeson, Tiana Rakotondraibe and Hanta Rajoharison (Consultant). The team could rely on the support of experts Michael Jensen (World Bank, Trade and Standards); Remi Pelon (World Bank, Mining); Pierre Graftieaux (World Bank, Transport); Peter Ladeergard, Laurent Corthay, Xavier Forneris (SFI/FIAS, Administrative Procedures); Marcelo Olarreaga (University of Geneva, Trade and Poverty); Olivier Cadot (University of Lausanne, Trade and Logistics); André Kirchenberger (Consultant, Labor Market); Ganesh Rasagam, Josiane Raveloarison (Private Sector); Olivier Jammes (Consultant, Trade) and Solohery Rakotovao Andriankova, Adrien Rajoelina, Mahefa Razafinimanana. It benefited from the advice of the following World Bank experts: Robert Blake, Iradj Alikhani, Vincent Palmade, and Jean-Pierre Chauffour.

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To reinforce the participatory spirit and capture the multidimensional nature of the study, the World Bank and the government team were able to benefit from the support of a consultative committee made up of private sector, civil society, development partners and Government representatives and experts.

EXECUTIVE SUMMARY

> *If we [Madagascar] want to succeed, we have to catch up to Asia and Europe fast. If we do not catch up, we will always be far behind. But how can you catch up when Asia and the West have such a big advantage? In the age of globalization there are winners and there are losers. Many African countries are losers. How can you win when you are not prepared to play the game, or when others are in charge of the rules? […]We must prove to others that we are credible. We must manage our image. We must show creativity and imagination.* [1]
>
> *President, Marc Ravalomanana, 2007*

i. The President of Madagascar emphasizes the creativity and inspiration that are at the core of life in his country. Not only does Madagascar distinguish itself with its flora and its fauna, but it also does so through the dexterity of its craftsmen and the rhythm of its music. This message constitutes the central point of the Madagascar Action Plan (MAP), based on the « *Madagascar Naturally* » vision around which the Government has built its objectives up to 2012. Yet, international experience has also demonstrated that, to succeed, the most important thing is to not repeat the mistakes of the past and to draw inspiration from the countries that have had a successful transition toward emergence. This dual requirement is at the center of the message included in this study.

ii. Madagascar's development is on the move. Growth has materialized, with a rate of over 5% since 2002 and the maintenance of macroeconomic equilibriums. Development partners and foreign investors have responded to these progresses since foreign capital inflows have jumped from 2-3% of the GDP in 2000 to nearly 15% today. These inflows are both an opportunity and a risk for Malagasy policy makers. It is an opportunity because a two-digit growth is no longer utopia for Madagascar, but it represents a risk since foreign capital centered growth implies challenges in terms of economic management and good governance.

iii. At the request of Malagasy authorities, this World Bank study has paid attention to three fundamental objectives of the development strategy currently followed in Madagascar: (i) the need to adopt budgetary and monetary policies that are appropriate to manage capital inflows and minimize their possible negative impact on the competitiveness of Malagasy exports; (ii) the need to promote private sector development as the engine of growth, and (iii) the creation of opportunities for all or the sharing of the fruits of growth. The ability to manage these three areas

[1] *Si Madagascar veut réussir, nous devons rattraper rapidement l'Asie et l'Europe. Si nous ne les rattrapons pas, nous resterons toujours à la traîne. Mais comment rattraper ces pays quand ils ont un tel avantage sur nous ? A l'heure de la globalisation il y a des gagnants et des perdants. La majorité des pays africains sont des perdants. Comment peut-on gagner quand on ne s'apprête pas à jouer le jeu, ou quand les autres peuvent imposer leurs règles? […] Nous devons prouver aux autres que nous sommes crédibles. Nous devons améliorer notre image. Nous devons faire preuve de créativité et d'inspiration.* Speech of the President of the Republic during the debates on the establishment of an African Union Government, at the International Conference Centre in Accra, on July 3rd, 2007.

has been at the root of the success of countries like Chile, Malaysia and Mauritius by generating a virtuous circle for economic growth embedded on the gradual increase of domestic savings and investment capacities and on a transfer of technologies emanating from the synergies between national businesses and foreign markets.

iv. The scope of the study was purposely limited to these three areas. At the onset, one must recognize that they do not constitute an exhaustive list of the efforts that need to be undertaken for Madagascar to have a successful transition toward economic emergence. It is of course necessary to put in place infrastructure and social service (education, health) policies to make up for the inadequacies in terms of roads, ports, power supply and education. Preserving the environment and modernizing agriculture also represent major challenges that the authorities need to address. Fortunately, these challenges are already acknowledged by the Government and benefit from the analytical and financial support of development partners. For this reason, they will here only be dealt with from the perspective of the afore-mentioned three aspects in this study. For instance, the issue of education will be approached through its link with the need to improve workers' productivity, which is required to develop private businesses. In other words, this study aims at complementing the efforts of the Government in implementing the MAP. .

The need to make up for lost time

v. The results reached by the Malagasy economy as well as the constraints that still impede its expansion cannot be summarized in a few words. In an effort to transmit a direct message to policy makers, we will highlight three major conclusions drawn from the analysis presented in this study. These three conclusions serve to illustrate our main message that can be summarized as follows: « *Though Madagascar's economic performance has been encouraging these last few years, it is nonetheless insufficient to make up for lost time* ». Indeed, at the current pace of growth, it would take close to 25 years for Madagascar to reach a 1,000 US dollar per capita income, i.e. the current level in Nicaragua or Cameroon. The Government must therefore do more and better, notably in terms of adopting the appropriate economic policies, of promoting the domestic private sector and of creating opportunities for the vulnerable groups.

vi. *An encouraging but fragile economic performance.* This first conclusion stems from the preponderant role of foreign capital, which has financed the boom in public investments (growing 11 times faster than the GDP) and the construction activities around the mining sites whose initial productions are expected in 2009 and 2010. It is well known that the availability of foreign capital allows temporarily offsetting limited local savings and investment capacities. Yet, their benefits will only exist in the longer-term to the extent they are able to generate synergies with the local economy. To do this, the authorities must be capable of managing the impact of those capital inflows on the real exchange rate so as not to reduce the competitiveness of Malagasy exports – the famous Dutch Disease. They must also develop the capacity to generate and manage the revenues derived from existing and potential foreign investments concentrated in the mining sector by implementing transparent budgetary mechanisms. Finally, international experience has shown, notably in South-East Asian countries, that foreign firms must contribute to the development of the local economy through three main channels: (i) the training of the local workforce; (ii) the sharing of infrastructures; and (iii) the upgrading of local production to international quality standards so that local enterprises are able to integrate world financial and commercial networks.

vii. Since the need to rapidly capitalize on foreign capital inflows must be at the heart of the strategy pursued by the Malagasy authorities, a number of economic policy recommendations will be developed in this study. The well-known volatility of foreign investment flows, in addition to the very uncertain world financial environment, further strengthens the urgency for the Malagasy Government to maximize the spillovers derived from current capital inflows.

viii. *A timid reaction from the local private sector*. Our second conclusion is that the private sector has responded weakly to the ambitions displayed by the Government and to the acknowledgement in the MAP that it should become the relay for economic growth in the years to come. This response asserted itself with the arrival (or the return) of foreign firms in the mining and textile sectors, but remains uncertain in priority sectors such as tourism and agriculture. As a result, private investment continues to only represent 40% of total domestic investment and the export growth rate remains inferior to that of the economy, in spite of acceleration over these last three years. Given the numerous studies (nearly 300 since 2005) that have identified the obstacles to private sector development and whose conclusions nearly all converge, this finding does not come as a surprise. Beyond natural obstacles, such as the distance from world markets, and those that require far-reaching actions including improvements in the infrastructure and human resource capital stocks, Madagascar continues to distinguish itself by a weak performance in man-made policy areas: an unattractive business climate, a costly logistic apparatus and a labor productivity which is far behind that of emerging countries.

ix. This study highlights that most Malagasy firms are confronted with excessive costs in terms of connectivity with domestic and foreign markets. Because of high customs tariffs (three times higher than those applied in Mauritius) and of logistics costs that easily reach 10% of the value of the goods in the Tananarive-Tamatave corridor where close to 80% of trade in Madagascar transits, it is expensive for them to import capital goods. These costs also deter their willingness to export, particularly since there is no export promotion policy to help them identify foreign markets and, most of all, to upgrade their production to the quality and hygiene standards increasingly imposed by consumers in industrialized countries. Moreover, the willingness of investors to expand is often inhibited due to complex administrative procedures. Services are hardly effective, being both costly and a source of considerable delays. For example, Madagascar only ranks 141st in the world in the World Bank « Doing Business » publication. This complexity is mostly obvious in the purchase of operator licenses (issued at the central and local levels) and in the difficulty in securing a title deed. In spite of its potential and of the interest shown by foreign investors, Madagascar still has not been able to materialize a project with a major international firm in the tourism sector. Finally, if Madagascar is characterized by an abundant cheap workforce, with wages in line with those observed in Asia, its lack of productivity harms its competitiveness. Weak qualifications, the marginal support of professional and vocational training programs, strengthened by stringent labor regulations that are applied unequally, and finally the precarious conditions on workplaces are all factors explaining this lack of productivity.

x. Our argument is that private sector's growth and diversification in Madagascar cannot happen unless: (i) the movement of goods and services is promoted by an optimal tariff policy, by a policy aiming at bringing down logistics costs and by an efficient and coordinated export promotion effort; (ii) the development of relationships with the State develop based on mutual trust, notably through the rationalization of existing complex administrative procedures, and (iii) the improvement in labor productivity high to ensure competitive unit labor production costs in high labor intensity sectors, such as services, agriculture and the manufacturing industry.

xi. *Growth that does not benefit everyone*. Finally, our third conclusion is that existing growth has not created many opportunities in Madagascar considering that 2/3 of households still live under the poverty line, i.e. about the same percentage than in 2001. This is unfortunate since sharing growth is a crucial element for the success of the strategy based on integrated growth poles that aims at privileging the emergence of returns of scale both within companies and in the value chains through agglomeration effects in specific regions. However, this World Bank-supported project imposes the capacity to create opportunities for all the populations concerned that go beyond the large investment projects around which these regions were identified. International experience reminds us that the Malagasy authorities must not remain inactive if they want to stimulate those opportunities. They ought to support the training of the local labor force, to help upgrade existing firms, and to improve the business climate in order to encourage the development of small and medium enterprises. In parallel, it is indispensable to preserve the interregional balance (and not convergence) so that social, political and economic conflicts be minimized throughout the country. Several recommendations in that sense will be proposed in our reform agenda.

xii. Integrating vulnerable groups is also a decisive element for successful extractive industries investments as well as the trade liberalization policies. The direct contribution of the mining sector to the country's economic growth is narrow given that this sector only employs a limited number of local workers and that its production is nearly completely turned towards foreign markets. Its contribution mainly materializes through the sharing of infrastructures, such as in the case of Fort Dauphin where the mining company is participating in the construction of the port, and through taxes paid to the State. The transparent management of these funds, and their alignment with the MAP, is one of the major challenges for the Malagasy authorities. Finally, the opening of the Malagasy economy is a reality even though it might increase the vulnerability of the most fragile groups to outside shocks, such as price variations in world markets, increased exposure of local firms to international competition and exacerbate the need to upgrade their production to international standards.

Adopting an action plan to address the competitiveness agenda

xiii. This study includes an action plan articulated around 5 main pillars (a summary is presented in the table below). Before describing its content, it is useful to mention that its genesis rested on a constant dialogue between the World Bank and the working group composed of Government representatives, under the leadership of the Minister of Economy, Trade and Industry. This dialogue also continued through interactions between this working group and a consultative group that included members of the private sector, civil society and development partners. This participative approach enabled not only to improve the quality of the reform agenda but also to promote its ownership which will in turn facilitate its implementation.

Table 1: Overall reform agenda

Objectives/Instruments	*Recommendations/Actions/Reforms*	*Examples*
Pillar 1: To maximize the contribution of foreign capital flows		
To pursue a conservative monetary policy	1. To monitor the total amounts of foreign capitals injected into the economy with the help of four basic indicators 2. To continue the sterilization policy while monitoring the crowding-out effect on the private sector and the evolution of prices, including in the regions	
To ensure a sound and transparent management of tax revenues from extractive industries	3. To integrate revenues into transparent budgetary mechanisms 4. To allocate revenues according to the MAP's priorities	
To encourage the intra-sectoral and inter-sectoral synergies with the local economy	5. To promote knowledge transfers through vocational training programs 6. To encourage shared infrastructures 7. To set up programs to support and upgrade local suppliers and distributors	Malaysia, Tunisia, Gambia, Jamaica
Pillar 2: To promote trade		
To adopt a tariff policy encouraging investment	8. To cap tariffs on capital goods at 5% 9. To facilitate the VAT repayment mechanisms	Mauritius, Chile
To lower logistics costs	10. To consolidate the customs administration reforms 11. To encourage transparency in the forwarder market 12. To strengthen the intra- and inter-sectoral competition of domestic transport	Argentina, Mexico
To set up a coordinated export promotion	13. To establish an export promotion agency 14. To help exporters identify and target new markets and prospective products 15. To support the establishment of a coherent SPS strategy	Mauritius, Chile
Pillar 3: To promote employment		
To strengthen the institutional framework around the labor market	16. To reorganize the Ministry of Labor through an audit and a functional organizational chart 17. To improve interministerial and inter-agency coordination	
To promote the workers' qualification	18. To encourage the formalization of traditional learning 19. To streamline and develop vocational training programs	Kenya, Senegal, Malaysia
To facilitate workers' mobility	20. To make the labor regulatory framework more flexible 21. To secure governance within existing employment promotion programs and extend them to most vulnerable groups	
To improve conditions in the workplace	22. To increase resources allocated to health and safety administrations 23. To update the implementation texts associated to the sanitary and hygiene conditions and those related to social dialogue with enterprises 24. To develop private-public partnership for	

Objectives/Instruments	*Recommendations/Actions/Reforms*	*Examples*
	developing health care inside companies 25. To strengthen the National Labor Committee (or *Conseil National du Travail* - CNT)	
Pillar 4: To promote business development.		
To consolidate the streamlining of administrative procedures	26. To consolidate the streamlining of administrative procedures faced firms at entry during their operations.	Kenya, Zambia
To integrate the effort to simplify procedures in the general State reforms	27. To motivate civil servants with an incentive and sanction policy 28. To coordinate administrative streamlining efforts with the decentralization policy of public services 29. To target initiatives on growth poles to maximize the demonstration effect of successful reforms	France, Latvia
To simplify access to land	30. To facilitate access to land for SMEs through partnerships, including with local authorities 31. To encourage land development in favor of vulnerable groups in urban areas 32. To set up a land title deed transfer system that takes into account the customary law	Cameroon, Namibia, Mali
Pillar 5: To protect vulnerable groups		
To protect vulnerable groups from external shocks	33. To encourage local production through sectoral strategies for agriculture and energy 34. To facilitate inter-regional trade that will ensure an arbitration of local rice prices throughout regions 35. Tax reliefs on rice and kerosene mostly consumed by poorest households	
To develop Youth Employment Programmes	36. To improve the management of the existing labor promotion programs targeted to vulnerable groups (i.e., youth) 37. To increase budgetary resources allocated to labor intensive public works programmes and those that integrate training and microcredits	India, Kenya, Uganda
To ensure inter-regional balance through improved connectivity	38. To reduce the distance factor through infrastructure development and information dissemination rather than through resorting to incentives 39. To use a redistributive tax policy which emphasizes support to people (mobile factor)	Brazil

xiv. The five pillars included in the proposed reform agenda rests on the acknowledgement that mobilizing the private sector and sharing economic growth in Madagascar are imperative. They aim at: (i) maximizing the contribution of foreign capital flows; (ii) promoting the take-off and the diversification of trade; (iii) encouraging the job creation; (iv) favoring the establishment and the expansion of businesses, including small- and medium-sized enterprises (SMEs); and (v) facilitating the integration of vulnerable groups in the growth mechanisms.

xv. The reform agenda purposely emphasizes 39 actions that could rapidly be implemented and therefore influence the behavior of economic agents operating in the country in the short to medium term. Those actions will accompany, not take the place of, the efforts underway to implement the MAP, particularly the second challenge of commitment number 6 (to stimulate private investment). They will complement the progresses made in the areas of infrastructure and education that are essential to lead Madagascar to economic emergence. By virtue of its short-term focus, this agenda seeks to demonstrate that concrete reforms are really taking place in order to reassure and convince both national and foreign investors. Since most proposed actions are cross-cutting, having a simultaneous influence on all economic activities, their implementation should play a central role in the development of priority sectors such as agriculture, textile, mining, and tourism. Finally, the implementation of the action plan should rely on the same institutional framework that has been established around the MAP. This framework enables to reach all the ministries and the agencies concerned and give a special role to the Ministry of Economy, Trade and Industry, as well as to the Ministry of Finance and Budget that is justified in view of the economic and financial nature associated with the vast majority of the proposed reforms.

Pillar 1: To maximize the contribution of foreign capital

xvi. By emphasizing the need to manage the impact associated to foreign capital inflows, our reform agenda seek to reconcile several objectives. First, its aims at keeping in check the eventual appreciation of the real exchange rate that is generated by massive capital inflows, leading to competitiveness losses for exporting firms, by following a sensible and well-managed monetary policy. Second, to the extent to these capitals will mainly take the form of foreign direct investments in the mining sector, it emphasizes the need to manage the tax revenues derived from these activities and thus create externalities that are positive for the Malagasy economy. Finally, the establishment of foreign investors, notably in the growth poles, should lead to the emergence of synergies with local enterprises and workers, including through the training of the labor force, the sharing of structuring infrastructure (roads, health centers, etc.) and the building of suppliers and distributors networks.

xvii. Monetary policy remains the privileged instrument to minimize the pernicious effects that a massive inflow of foreign capital can produce on the local economy to via an appreciation of the real exchange rate. Our proposal is to align the monetary policy on a series of indicators, suggested by international experience, which will allow the authorities to modulate their interventions, notably their sterilization policy while accounting for costs and benefits on the local economy.

xviii. The contribution of foreign direct investments in the extractive industry depends on the Government's capacity to mobilize and manage the tax revenues derived from these activities. Lessons drawn from experience indicate that these revenues must be incorporated in public finance management, with an emphasis give to their allocation as well as monitoring and evaluation mechanisms. It is also important to clearly identify regional distribution mechanisms of these funds that take into account the absorption capacities of local collectivities and governments.

xix. Foreign investors are considered a privileged vector to transmit new knowledge and technologies to local firms as well as to develop local infrastructure and logistic networks. Yet, these transmission mechanisms are not automatic or remain sub-optimal, without proactive public policies. Within this vision, our recommendations emphasize the need to encourage vocational training programs, not only for the employees of foreign firms but also for those who have involved in upstream and downstream activities. Promoting the transmission of quality and sanitary standards is also a priority through the development of information sharing and incentive systems between foreign and domestic businesses. The emergence of – intra- and inter-sectoral – synergies is not only essential for the success of the development strategy in Madagascar, but it is also a key element to ensure the success of the integrated growth poles approach as well as the sustainable expansion of the tourism and agriculture sectors.

Pillar 2: To promote the take-off and the diversification of trade

xx. Private sector development in Madagascar is strongly linked to the capacity of local firms to become competitive in global markets. Indeed, the limited size of the local market impedes the self-centered growth of businesses that must turn to the world outside, not only for their sales but also to purchase equipments and materials.

xxi. Our first recommendation strives to facilitate the purchase of imported capital goods by proposing a reduction of tariffs, which are currently 3 times higher than those noted in Mauritius. The costs related to international transactions are still encumbered, sometimes up to the equivalent of 10% of the value of merchandises, by charges paid to carriers and forwarders, as the result of the lack of competition in these markets. Our second recommendation is therefore to provide greater transparency by: (i) supporting administrative reforms at the level of customs; (ii) making the tariffs and services offered by forwarders readily available and disseminating them and giving support to SMEs; and (iii) reducing haulage costs through the elimination of blocks at the entrance of the city of Tananarive and of the Tamatave port (where 70% of imports and exports transit) while ensuring there is more competition through information on the carriers' margins and through the development of alternative means of transport, such as rail or the gradual move of export companies to the port of Tamatave.

xxii. Finally, our third recommendation is to develop a coordinated export promotion effort.. The Government should coordinate this effort around one single agency that operates according to principles drawn from successful experiences in emerging countries such as Chile and Mauritius. This agency should focus on exporters that are « already on the move » and on access to new markets since the country only exploits 3% of its export potential (against 20% for countries like Korea and South Africa). Considering that a large part of (potential) exports are food items, it becomes a priority to support of the dissemination and the adoption of the sanitary standards and norms that are in force in Madagascar's main trade partners. However, the implementation of such a policy must take into account the costs and benefits that will not negligible for both the private and public sectors.

Pillars 3: To encourage job creation

xxiii. The success of a development policy, in particular one which is based on private sector-led growth, will be measured by the number of (decent) jobs created and secured for the majority of the working population. This pillar includes three series of actions that aim at generating an increase in workers' productivity and, consequently, in more employment over time. .

xxiv. The first series of actions target qualifications of workers who are outside of the schooling system, either because they have dropped out or because they are already professionally active, i.e. the majority of the active population in Madagascar. In this context, our proposal is to develop the formalization and the supervision of traditional learning that remains the privileged instrument to transmit skills in a country like Madagascar. In parallel, vocational training programs need to be strengthened, through public-private partnerships and a special emphasis on workers operating in small- and medium-sized enterprises, including those that are in the informal sector, that do not have sufficient financial resources. Considering that these actions must complement those proposed in the reform of the post-primary schooling system, their implementation should be coordinated by the Ministry of Labor and Vocational Training and that of Education.

xxv. The second series of actions seeks to increase workers' mobility in order to ensure their optimal allocation within the Malagasy economy and thus to optimize productivity gains. The rationalization of the labor regulatory framework is needed, notably through the adoption of the numerous missing implementation decrees, which would greatly decrease existing uncertainties regarding hiring rules, thus promoting the transition from the informal to the formal sector. It is also recommended to further relax fixed-term contracts and overtime regulations that are restrictive when compared to international standards. Workers' mobility will also be encouraged through direct intervention on the labor supply side by helping young people to find their first jobs and by assisting micro-businesses (see Pillar 5 below for further details).

xxvi. The third series of actions is to promote decent conditions in the workplace in terms of safety and hygiene as well as social dialogue. The underlying principle is that decent conditions improve workers' motivation and output, helping promote social peace within firms. Not only must the numerous missing implementation decrees implemented (or updated), but also the resources allocated to the Occupational Health and Safety Administration must be increased since they are currently greatly insufficient to guarantee compliance of existing regulations. The development of public-private partnerships should be sought, for example to set up health centers within companies, with the objective to reduce the loss of working days caused by malaria (4 days a month on average).

Pillar 4: To promote the creation of firms

xxvii. Among the obstacles to private sector development, administrative red tape that occurs at the start and during the operations of a business is a top concern by firms in Madagascar. Several recent studies have highlighted that these procedures can cause significant delays; discouraging investors or pushing them to move to more welcoming countries. These delays are also at the root of corruption, since they create rent situations within the administration, and they can only be shortened by businesses who can afford to, thus penalizing small- and medium-sized enterprises in a disproportionate manner.

xxviii. Our recommendations stress the need to integrate the effort to streamline administrative procedures with ongoing general reforms initiated in the public sector. Because the reasons for these delays often originate beyond these procedures, a reform of the civil service or at least the implementation of actions that provide incentives to civil servants must be considered simultaneously. Also, this streamlining effort must account for the decentralization policy that the authorities are pursuing. Indeed, part of the formalities happen where the firm is located under the responsibility of local authorities, which must then be able to rely on capacity building programs and on access to financial resources, allowing to compensate for potential revenue losses caused by the administrative reforms. Finally, in Madagascar, streamlining procedures should focus on the regions favored by the integrated growth pole approach. The facilitation of the entry of businesses is indeed indispensable to create returns of scale both within companies themselves and in the entire production and distribution chains within the agricultural, halieutic and tourist sectors in the regions of Fort Dauphin, Nosy Be and Tananarive/Antsirabe.

xxix. A special emphasis should be given to the issue of access to land and to its development. This issue has already received the attention from the authorities, notably through the proposed revision of the Land Code and the setting up of initiatives generally with the support of development partners, such as the "*guichets fonciers*". To support these efforts whose progress is still very fragile, our proposal is to complement them with pilot projects that take into account the specific characteristics of each region. Indeed, though the land problem exists on the whole Malagasy territory, its nature varies according to regions as described in the text of the main body of the study. Our concrete propositions, based on international experience, emphasize the need to (i) facilitate access to land for SMEs and informal businesses; (ii) encourage access to land for underprivileged groups; and (iii) secure transfers of land deeds in the presence of several reference systems, including customary law.

Pillar 5: To protect vulnerable groups.

xxx. The sharing of the fruits of growth occupies a central position in our reform agenda since creating opportunities will lead to improved savings and investment capacities, generating in turn a virtuous circle of growth.. This objective has already been integrated into the actions formulated around the four first pillars. For example, job creation aims at providing revenues to Malagasy households and thus to help them come out of poverty. The same objective is sought through our recommendation to create synergies between foreign investments and local industries. The risk, however, is that some groups are marginalized from the mechanisms of growth or remain vulnerable to exogenous shocks, such as high and volatile prices in global markets. Our recommendations highlight: (i) the need to reduce the vulnerability of the poorest households to exogenous shocks in international markets; (ii) the need to assist the youth and women in finding jobs; and (iii) the need to control the development gaps that could emerge between regions, notably under the impetus of the integrated growth pole approach.

xxxi. Reducing the vulnerability of the poorest households to price fluctuations in international markets must hold the attention of Malagasy decision makers, notably with regard to rice and oil that account for an significant share of their consumer basket. The policy response must bear jointly on stimulating supply while minimizing shocks on demand. On the supply side, actions that aim at increasing local rice and electricity production must be activated, as defined in their respective sectoral strategies. On the demand side, it is a matter of taking a set of measures that first include the extension of assistance aimed at the most vulnerable groups from labor intensive public works programs and the distribution of food aid in schools. However, it must be recognized that these programs have a limited coverage (around 25,000 direct beneficiaries), which is still a far cry from the real need to mitigate the effects of the food crisis on the population, though these one-off actions would be welcome. This is why they must accompanied by tax relief measures, preferably with the elimination of VAT on rice and kerosene, whose tax losses can be controlled and that have a more than proportional impact on the income of the poorest households.

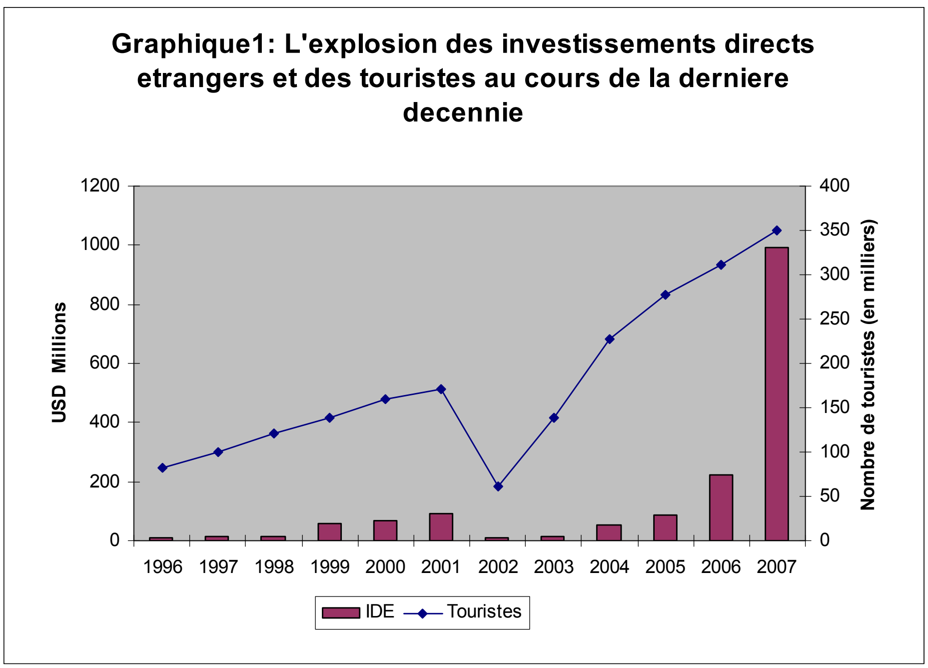
xxxii. Access to jobs is difficult for the vast majority of Malagasy workers, even in a context of accelerated growth. This challenge is nearly insurmountable for young people looking for a first job or for women in rural communities. Our first recommendation is therefore to expand the active programs in support of employment, that currently only use 1.5% of the Government's budget, far from international standards. Such an extension should be nonetheless preceded by improvements in the governance, coordination and monitoring of existing programs. As an illustration, while otherwise equal, if Madagascar dedicated, in proportion with its national income, as many resources as Sweden, the number of workers covered could go up to 250,000 against around 25,000 today. It must however be reminded that not just any employment program is adapted to an economy like that of Madagascar. International experience in developing countries has shown that labor intensive public works programs and on those that provide simultaneously training and micro-credits to well targeted population groups (the youth and women) are most likely to achieve positive results. This financial effort must be supported by donors most of whom have neglected direct support to employment in their assistance strategies in Madagascar.

xxxiii. The privileged role given to the growth poles approach by the Malagasy Government in its MAP is justified for creating economies of scale but might lead to imbalances between regions. These imbalances, if inherent to the chosen approach, must be managed to avoid social and economic conflicts that might be exacerbated by ethnic tensions and the exclusion of large pockets of poverty. The first proposed action is to reduce the « distance » factor between regions in order to promote population and business migratory flows toward the growth poles. In that context, the development of transport and communication networks between the regions must be accompanied by short-term measures including the dissemination of information regarding regional development opportunities as experimented in Poland. This option is preferable to the use of non-financial and financial incentives that are hardly efficient to influence migration decision and costly in terms of public finance. Secondly, fiscal policy should be used to minimize the transition costs caused by unequal development between regions. As international experience reminds us, the Government should assist people (mobile factor) rather than infrastructure or physical capital (fixed production factors) in the disadvantaged regions. Support to education in the disadvantaged regions in Brazil, for instance, has borne its fruits since not only are better-educated people more likely to emigrate toward the most favorable regions but they are also better able to adapt to new conditions.

INTRODUCTION

1. The human mind tends to compare what is with what could have been. It is tempting to do such a comparison for Madagascar, showing that if this country could have grown at 5% annual these last 40 years, today it would have reached US$3000 per capita income, i.e. close to Thailand, Tunisia or Peru. Unfortunately, reality reminds us that the per capita income in 2007 was around US$330, making Madagascar one of the poorest countries in the world (196th out of 209).[2]

2. These last few years, Madagascar has appeared on the international scene riding a brand new wave. Long both geographically and politically isolated, the country has opted for an open economic policy, which translates into a growing interest from development partners who have extended their financial assistance. Foreign investors and tourists have also been attracted by the still-unexploited natural wealth that the country has in abundance. Figures do not lie: foreign aid has increased from 1.1% of the GDP during the years 1998-2003 to nearly 9% of the GDP in 2004-06; foreign direct investments have gone from 1% to close to 5% of the GDP in 2006 and are estimated to reach more than 10 % of the GDP between 2007 and 2009; finally, the number of tourists has been multiplied by 5 over this last decade. (Figure 1).



Source: Central Bank and Ministry of Tourism

[2] Source: World Bank Atlas, 2008.

3. The ambition of the Malagasy Government is to *catch up the lost time* and to take advantage of this ratchet effect from abroad to halve poverty by 2015. To do this, the Madagascar Action Plan (MAP) was established in 2006 around the following axes: (i) reforming public finance; (ii) boosting private investment, an engine of growth; (iii) setting-up the « green revolution » ingredients; (iv) transforming public security; (v) generating measures aiming at upgrading family planning and health; and (vi) improving the legal system.

4. Malagasy authorities have not remained inactive. On the one hand, they have pursued an active and expansive fiscal policy, mostly supported by development partners, to build solid foundations for a structuring growth, through the financing of physical and human capital infrastructure projects. On the other, they have launched a certain number of major projects to promote the exploitation of natural resources and promote international trade and finance. In this context, the Malagasy authorities have voluntarily targeted specific zones and sectors that take into account the country's geographical, social and political characteristics, notably the unequal population distribution, the complexity of travel exacerbated by a difficult topography and the diversity of local powers that reflects the multiplicity of ethnic groups. In concrete terms, the approach was initiated in 2005 with the integrated growth poles project around the regions of Fort Dauphin, Nosy Be and the Tananarive-Antsirabe[3] axis and has favored access to natural resources and sites (tourism and mining); the development of access infrastructures to foreign markets (roads, airports and ports) and the agglomeration effects generated by the current concentration of population and businesses around urban centers.

5. The objective of this study is to accompany Malagasy authorities in their transition towards economic emergence. If the contribution of foreign capital and the abundance of natural resources should help the Malagasy economy escape from the poverty trap by increasing its domestic savings and investment capacities, as well as its technological capacities. International experience reminds us that this transition is far from being automatic. Indeed, there are more examples of countries that have failed than of those who have succeeded. The successes of Chile, Tunisia, Malaysia, Mauritius and Botswana can inspire the Malagasy policy makers while showing them which economic policy choices become imperative.

6. In light of international experience, this study will focus on three main issues that are challenging for Madagascar's policy makers:

- To reduce the fragility of economic growth through sound and efficient macroeconomic management;
- To promote and diversify the sources of growth for the private sector that must become the engine over the next few years;
- To generate the distribution of the fruits of growth, notably those relating to large projects and to the efforts of trade and financial liberalization toward the outside world.

[3] For a description, cf. World Bank, Integrated Growth Pole Projects, 2005.

7. The choice of these three issues asserted itself because their resolution gives rise to questionings, not only from the policy makers in Madagascar, but also for the Malagasy population and for foreign observers. Yet, they do not claim to cover all the challenges Madagascar will have to face in the coming years.

8. It is important to stress at this point that this study does not have the ambition to cover all the priorities of the Malagasy economy outlined in the MAP. Parallel efforts that are well on their way exist, they are related to the development of basic infrastructure (from roads to communication and power supply networks), to the improvement of social services of education and health and to the promotion of social welfare. A series of initiatives has also been initiated at sectoral level, notably agriculture and tourism. The resolution of these challenges is important for Madagascar which, consequently, enjoys the analytical and financial support of the World Bank. For this reason, those initiative will not be directly tackled in this study even though linkages will be indirectly woven by the treatment of the three above-mentioned issues. Thus, the issue of private sector development will compel us to examine access to land in detail, a central element for the development of the agricultural and tourism sectors. Equally, the solutions proposed to improve labor productivity will be connected to the education system reform. We believe however that by limiting the scope of the study to the three major issues, we will be able to tackle them in depth and, most of all, to propose an agenda of priority actions that can be implemented in the short- and medium-terms.

The plan of the study

9. This study is divided into four parts. The first part begins with an analysis of Madagascar's economic performance, trying to recall its fragility in spite of the good results recorded over these last few years. This fragility will be highlighted through the relatively narrow basis of the economic growth that has greatly relied on foreign capital inflows, putting the need to follow an adequate foreign exchange management policy at the center of the agenda and, thus, minimize its possible negative impact on exports.

10. The second part will focus on the issue of private sector promotion. Recent diagnoses of Madagascar's economy and the strategy adopted by Malagasy authorities (with the support of its development partners) have shown that to be sustained and shared out over time, economic growth will have to rely on a dynamic and competitive private sector. We will not challenge the validity of this conclusion, but rather stress the need to accompany the authorities in their efforts. We will emphasize the need to facilitate access to markets, both domestic and foreign, through the development of simple procedures to set up and to manage an enterprise, the use of a trade policy to limit rent seeking behaviors, facilitate transfers of technologies though suppliers' and distributors' networks, and encourage the upgrade of local workforce skills through the development of public-private partnerships.

11. The third part is dedicated to sharing the fruits of economic growth by giving a special emphasis to the distribution of the benefits related to the large mining and tourism investment projects within the population. These large projects represent a unique opportunity for Madagascar's development but also undoubtedly a danger if they do not allow the emergence of spillover effects among the local businesses and labor force. We

will focus on three concrete transmission channels, including the management of tax revenues derived from these projects, the development of linkages with the local economy through shared infrastructures, and the extension of training programs to local workers. We will also examine the impact of the trade liberalization policy on the most vulnerable groups both at the consumer and the producer levels, to define actions that need to be carried out to better protect them against external shocks.

12. Finally, the fourth and final part proposes an agenda of economic reforms. Our ambition is not to formulate a patchy list of proposals, but rather to propose a series of options that will help address the issues of competitiveness and shared growth that are central to the success of the current strategy followed by the Malagasy authorities.

Synergies with the Government and the other partners

13. The alignment of the issues addressed in this study with the priorities put forward by the Government in its MAP explains the latter's interest and active participation. The leader or « champion » on the Malagasy Government side has been the Minister in charge of the Economy, Trade and Industry; illustrating the Government's commitment at the highest level of the decision process. His participation has enabled to make sure the objectives of the study are not only in line with the Madagascar Action Plan (MAP) priorities, but also to promote the dissemination and ownership of its results and recommendations by the country's policy makers as a whole.

14. With the concern of facilitating the consultation process between the Government teams and that of the World Bank, the establishment of a working group led by the Secretary General of the Ministry of Economy, Trade and Industry was decisive. It was composed of specialists from several key ministries or agencies such as that of Economy, Finance, Civil Service, the Central Bank, the EDBM and the CREAM. This dialogue was further encouraged by the setting-up of a consultative group that included representatives of development partners, government agencies, private sector and civil society. This allowed to extend the debate while ensuring the promotion of alliances between the various stakeholders.

15. Finally, it is worth recalling that this study has included commitments by the World Bank Group at three levels: (i) an intense analytical effort that brought together experts from the entire World Bank group, including the International Financial Corporation and the World Bank Institute; (ii) the willingness to transform this effort into a concrete agenda of actions for Malagasy policy makers; and (iii) the mobilization of our Management to financially support the main reforms proposed in the action agenda. In other words, this study should not be seen only as an analytical effort but also as the starting point for the implementation of joint concrete actions whose results will have to be measured over time.

PART I: THE MALAGASY ECONOMY IN LIGHT OF RECENT DEVELOPMENTS

1. The Malagasy economy is faring better. Since the resolution of the 2002 political crisis, the economic growth rate has settled around 5 % per year, by keeping budget and foreign balance. This positive diagnosis has been recognized by the international community. Therefore Madagascar made significant progress in the World Bank's CPIA ranking going from a 3.3 score in 2003 to 3.7 in 2007, and has stayed in line with IMF programs these past years. The evaluations produced by non-governmental organizations such as *Transparency International* or the *Fraser Institute,* that measure progress made in terms of the fight against corruption or of institutional reinforcement, lead to the same positive assessment.

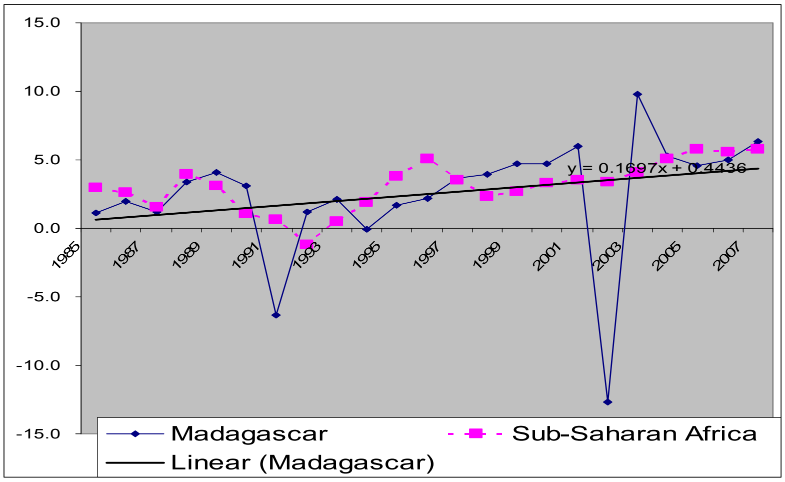
2. The stake in this first part is to refine this diagnosis of the current state of the Malagasy economy. Indeed, though Madagascar's economic performance is encouraging these past years, nonetheless its foundation remains fragile. It rests both on an expansive fiscal policy, mostly funded by official aid, and on the expansion of a limited number of economic sectors characterized by the arrival of foreign investors who do not always provide jobs or that do not generate ratchet effects within the local economy. We will argue that this fragility imposes a diversification of the sources of growth, notably through private sector emergence and development, and a wider distribution of the fruits of growth to allow a sustainable reduction of poverty. These two themes will be broached in the next parts of this study.

3. This first part will be a reminder that the Malagasy economy's dependency on foreign capitals represents an opportunity as well as a challenge for Malagasy policy makers. It is an opportunity because it enables to make up for weak domestic savings and investment capacity and as a result helps the country break out of the trap of poverty it has remained in these last decades. However, this dependency imposes a sound macroeconomic management, notably the use and the absorption of budgetary resources, and its effect on the real exchange rate that could generate the famous "Dutch Disease" on export and thus slow down private sector expansion.

I.1 AN ENCOURAGING BUT FRAGILE MACROECONOMIC PERFORMANCE

4. Madagascar's macroeconomic performance these last few years has been encouraging, since its growth rate has overtaken the Sub-Saharan Africa's,, which has

Figure 2: Economic growth in Madagascar and in Africa

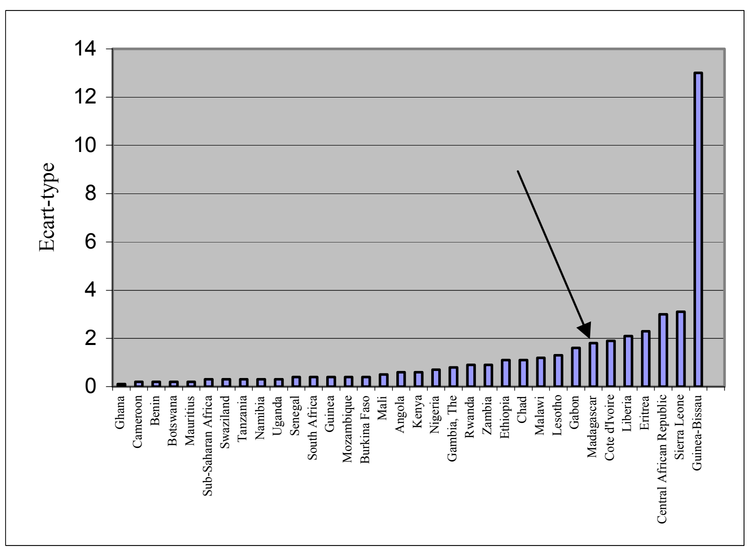


Source: World Development Indicators

also known a satisfactory growth from a historical perspective (cf. figure 2). These macroeconomic results are so well-known that there is no need to linger over them (Annex 1 offers a summary of the macroeconomic results for the 2000-2007 period).[4]

5. Our intent here is mainly to highlight the fragility of Madagascar's economic performance as illustrated by the volatility of economic growth during the last decade. It seems higher than in most African countries that are characterized by their stability, far behind Ghana or Tanzania (figure 3). This high volatility is prejudicial to Madagascar's economic development, because it hinders investment-related physical and human capital decisions that depend a lot on the degree of uncertainty in the local economy. It is also strongly inequitable since the poorest groups are generally those who are the most exposed to economic hazards.[5]

Figure 3: The volatile nature of growth in Madagascar within an African perspective, 1995-2005



Source: Mission's own calculations

[4] Cf. in particular the last IMF reports (namely article IV of June 2007).

[5] For a recent overview of the negative effects linked to the volatility of growth, cf. N. Laoyza et al., *Macroeconomic volatility and welfare in Developing countries: an introduction*, The World Bank

6. The volatility of the Malagasy economic performance is generally explained by the fragility of the political environment. Indeed, the 2002 political crisis led not only to close to a 10% drop of the GDP, but also to permanent perverse effects which explains why the per capita income returned to its 2001 level only today. The second explanation is linked to the preponderance of the primary sector and its vulnerability to the numerous climate shocks in the region, particularly cyclones that devastate part of the country yearly. If one excludes the primary sector, the volatility of the GDP is greatly reduced (from 1984 to 2007, the standard GDP gap in constant prices is 68 against 50 billion Ariary without the primary sector, i.e. an 18 billion Ariary difference).

7. Beyond these traditional explanatory factors, the volatility of Madagascar's economic growth is a result of its strong dependency on foreign capitals. Not only do the latter tend to fluctuate over time, but they have financed a limited number of the country's economic activities.

8. The fragility of economic growth in Madagascar will be demonstrated below through a triple vulnerability: (i) the strong dependency on the fiscal policy; (ii) the weak sectoral diversification, and (iii) the lack of geographical coverage. We will argue that the lack of diversification of sources of growth should be complemented by the establishment of economic policies that should promote the emergence and the development of private sector and wealth redistribution driven activities in order to reduce the poverty level and stimulate the savings and investment capacities within the local economy.

A. THE FRAGILE FOUNDATION OF ECONOMIC GROWTH

9. The narrow basis on which Malagasy growth relies is demonstrated by the central role played by the fiscal policy, which in turn is essentially financed by foreign capital inflows. A simple accounting breakdown of the overall demand these last few years (table 2) illustrates that public expenditure contributed close to 100% of the GDP growth during the 2003-2007 period, whereas its weight only equaled 15%. The explosion of public investments, which increased 11 times faster than the GDP, is particularly striking. It translated the authorities' will to offset delayed basic infrastructure development (transport, communication and energy) and to build the indispensable foundations for private sector expansion.[6]

10. As noted above, public expenditure expansion was financed by foreign aid inflows rather than by an increase in domestic resources. Aid flows went from under 2% of the GDP in 1998-2003 to practically 9% in 2006-07. This percentage is still far from the dependency rate in many African countries (for example, in Mozambique the weight of foreign aid is higher than 15% of the GDP). However, this increased dependency underlines the need to increase domestic resources, which do not exceed 12 % of the GDP, far behind the Sub-Saharan Africa average (around 15% of the GDP) or other

Economic Review, vol. 21, n.3, 2007. It shows that these effects are enhanced in a poor economy and with weak institutions since it becomes more difficult to follow a counter-cyclical fiscal policy.

[6] The analysis of the fiscal policy pursued by the Malagasy authorities has already received particular attention from several recent World Bank and IMF publications. For example, the Public Expenditure Review published by the World Bank in 2007.

countries like Senegal (more than 20% of its GDP). In fact, this urgent need to increase domestic resources has drawn the authorities' attention, with the support of the IMF and the World Bank, and led them to implement a certain number of reforms that aim at improving their tax collection performance.[7]

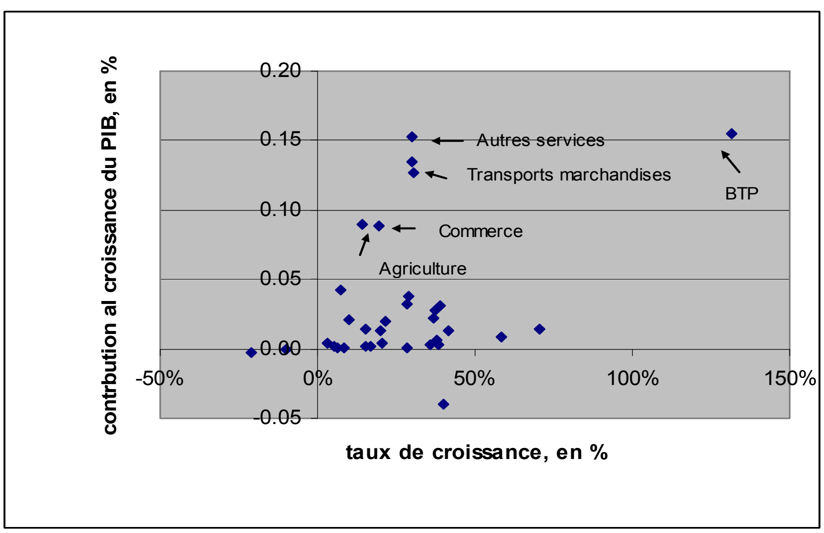
Table 2: The sources of Malagasy economic growth, 2003-2007

	Contribution to growth	Growth rate per year
GDP	100.0%	5.7%
Private Consumption	59.7%	3.8%
Public Consumption	26.3%	12.77%
Public Investment	100.2%	67.2%
Private Investment	29.9%	25.7%
Exports	45.6%	10.4%
Imports	-161.8%	22.3%

Source: National accounts and World Bank calculations

11. The breaking down of overall growth highlights that the private sector has only feebly contributed to economic growth during the years 2003-07. On the one hand, private consumption growth was weaker than the economic growth in general. On the other, the share of private investment in the Malagasy economy only reached 10.3 % of the GDP or 41% of total investments during the 2003-07 period. These ratios, lower than those observed in emerging countries and the Sub-Saharan Africa average, explain that in spite of a noticeable increase in private investment since 2003, its contribution to growth has only been peripheral in Madagascar. They also reflect the concentration of these investments around mining and tourism activities rather than a generalized trend within the Malagasy economy. The lack of private investment diversification is also obvious in the breakdown of foreign direct investment which remained highly concentrated in extractive activities (2/3 of the total in 2005-06 and nearly 90% in 2007). Finally, the weak contribution of the private sector is reflected in the limited export expansion growing by 2.6% per year between 2000 and 2007. The acceleration of

Figure 4: Growth is driven by a limited number of sectors, 2003-07



[7] See the IMF's documents and the latest World Bank public expenditure reviews.

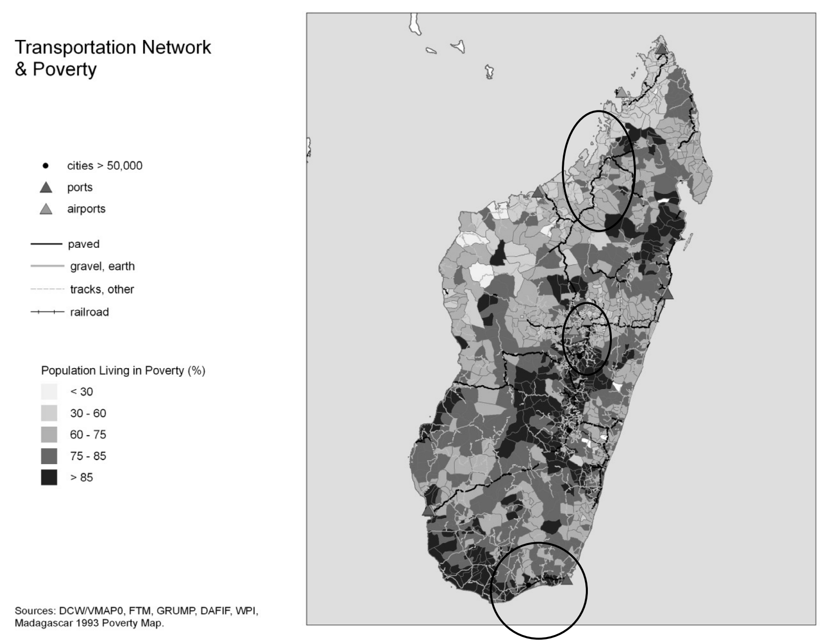
export since 2003 is at the core of the Malagasy authorities’ preoccupations and will be examined in the second part of this study.

12. The fragility of Madagascar’s economic performance, as well as the lack of diversification of foreign capital inflows is further confirmed by the concentration of economic growth around a limited number of economic sectors or activities. Figure 4 illustrates that five sectors have contributed to two thirds of GDP growth

during the 2003-07 period. It must be noted that the contribution of agriculture and commerce is explained by their respective weights in the Malagasy economy and not by their rapid expansion.

13. In addition to its concentration in a limited number of sectors, Malagasy economic growth also depends on some localized projects in specific regions rather than on a uniformly distributed wave over the entire territory (figure 5). Unfortunately, because of insufficient statistics, it is difficult for us to capture these regional variations in the country’s development in terms of national account though it can be strongly presumed that growth is concentrated around the city of Tananarive (Antsirabe) and the Nosy Be and Fort Dauphin regions. We will come back to this geographic aspect of growth in the third part of this study when we seek to assess the integrated growth pole-based strategy’s success.

Figure 5: Many of the poor live outside of the growth poles



14. The double concentration of the sources of economic growth, both at sectoral and geographical levels, helps explain why there has been little poverty reduction in Madagascar these past years. The rate of households living under the poverty line has stagnated around 68% between 2001 and 2005, even if a 75% peak was reached in 2002 during the political crisis.[8] This quasi-stagnation is partly due to the lack of agricultural expansion, whereas 80% of the population still reports an activity in the primary sector

[8] Nicola Amendola and Giovanni Vecchi, *Growth, Inequality, and Poverty in Madagascar, 2001-2005*, the World Bank, September 2007.

(agriculture, livestock and fishing) as its main occupation. Under the impetus of regional projects in Fort Dauphin and Nosy Be and of the expansion of the city of Tananarive, growth has left aside a considerable portion of the vulnerable groups. This exclusion is illustrated in the map above, which shows that the regions with the largest concentration of households living under the poverty line are located outside of the integrated growth poles. This can only be a matter of concern and will be examined in further details in the third part of this study.

B. THE CHALLENGES AND RISKS RELATED TO FOREIGN CAPITAL DRIVEN GROWTH

15. Analyzing the sources of growth of the Malagasy economy reveals two major challenges for the Government. First, it must accelerate the economic growth rate these past years because, at the current 5-6% growth rate, it would take more than 23 years for Madagascar to reach a per capita income of around US $1000, i.e. the current level in Nicaragua or Cameroon. Secondly, fruits of this growth must reach both the employment driven sector and the underprivileged regions to lead to a generalized poverty reduction, which in turn could stimulate an accelerate economic growth. In short, these two challenges have to be addressed to establish a virtuous circle for economic development in Madagascar.

16. At this stage, it is useful to just formalize the growth model followed by the Malagasy authorities (cf. box 1). This model relies on foreign capital inflow that serves not only to increase the country's savings and investment capacities but also to improve its productivity. Therefore, an increase in foreign financing from 4.9% of the GDP to over 16% of the GDP between the 2001-06 and 2007-10 periods is expected in the MAP macroeconomic framework. Consequently, this will lead to rising investments and productivity as well as to an annual economic growth of around 10% (or 7% per capita). The rationale of this model rests on the traditional arguments of Rosen-Rosenstein, Rostow and Chenery, just after the Second World War and on more recent explanations which underline the importance of the spillovers these capitals can generate on the local private sector, notably in terms of transfer of know-how, of technology and access to foreign markets by setting up networks.[9] This is why, today, experts agree that Madagascar must resort to foreign capitals to facilitate its transition toward economic emergence.

17. Nevertheless, the beneficial effects of foreign capitals are not automatic as witnessed by the sad experience of many countries these last few decades. To succeed, it is indispensable to continue to increase savings capacities and productivity within the local economy. To grasp what the stake is, we have conducted two simulation exercises with the help of our economic growth model, and they show rapid drops of the growth rate if the domestic savings rate (s) or if the productivity level (A) does not manage to maintain itself at the level desired by the authorities. The GDP per capita growth rate would not exceed 5% per year and, most importantly, would remain highly dependent on

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Opinions converge, though not completely yet. Cf. J. Sachs, *Ending the Poverty Trap*, 2004, P. Collier, 2007 or World Bank, *Challenges of African Growth*, 2007, for a reminder of the arguments that justify resorting to foreign financing for the economy of Africa to take off.

the amount of foreign financing the country receives, which has historically remained volatile.

Box 1: A simple macro-economic accounting exercise

In order to illustrate the growth model followed by the Malagasy authorities, it is worth referring to the simple exercise suggested by J. Sachs [2004] and his co-authors shoingw that the resort to foreign capitals can help an economy such as Madagascar's escape the vicious circle of a sub-optimal growth. This vicious circle is perpetrated because of the weak internal savings, and thus investment, capacities, of the high population growth rate and of the weak productivity associated to the existing capital stock.

In the simplified framework suggested by Harrod-Domar, the per capita income (q) can be written as a function of the capital stock (k), q = Ak, allowing us to write the growth rate as:

(1) $\gamma = (l/q)dq/dt = (s+f)A-(n+d)$

where y represents the per capita income growth rate, s the savings rate, f the foreign financing rate, A the total productivity gain associated with the k production factor, n the population growth rate and d the capital stock depreciation rate.

The growth path is only positive if the first term (s+f)A is superior to the second (n+d). In this simplified framework, one easily shows that the foreign capital inflow, which should reach 16% of the GDP during the 2007-10 period according to IMF projections, should theoretically allow the Malagasy economy to move onto an accelerated growth path, particularly if this inflow is supported by a productivity growth of around 20% thanks to skills and technology transfers. In these conditions, the GDP growth rate per capita could reach nearly 7% during the 2007-10 period.

Projected growth for Madagascar

	Savings rate (domestic and foreign) (s+f)	Population growth rate (n)	Capital stock depreciation rate (d) 1/	Total productivity (A) 2/	Projected growth of per capita income
2001-06	14.3	3	3.3	0.33	-1.5
2007-2010	33	3	3.3	0.40	6.9

Notes:
1/ We have kept the value suggested by Sachs (2004) for all Africa
2/ This ratio is generally used in economic literature. It assumes that the capital stock is equal to one- third of the income

This simplified framework allows showing that the increase in economic growth depends on two key factors. The projected growth rate would therefore noticeably decrease if the domestic savings rate (s) did not increase as much as expected and/or that the productivity gains (A) were a long time coming within the Malagasy economy. For example, the per capita growth rate would be reduced to 4% (instead of 7%) if the domestic savings rate only increased up to 12% of the GDP (instead of 16%) during the 2007-10 period. Similarly, a stagnant productivity would only allow a 4.7% rise of the growth of per capita income instead of the projected 6.9%. Madagascar's passage to an accelerated growth path is thus strongly reliant on the local economy's capacity to increase its savings and investment rates and to create productivity gains over time.

Source: Jeffrey Sachs: *Ending the Poverty Trap,* Brooking Paper, 2004

18. Only a few countries have known a successful transition, like the South-East Asian countries, Chile and Mauritius. These countries have managed to sustain the positive effects associated to foreign capital inflows on their savings and their productivity by combining three factors: (i) appropriate macroeconomic management; (ii) local private sector emergence as an engine of economic growth; and (iii) the inclusion of underprivileged groups in the distribution of the fruits of growth.

19. We suggest to successively go back to these three factors, starting in the next chapter with the need to adopt appropriate monetary and fiscal policies to control the possible pressure that foreign capital inflows can exert on the real exchange rate.

I.2 MANAGING CAPITAL INFLOWS THROUGH EXCHANGE RATE MANAGEMENT

20 Foreign capital inflows offer Madagascar an opportunity to successfully make the transition to a path of accelerated growth. This success commands that the budgetary and monetary policies are suited to the massive injection of foreign capitals into the local economy. The budgetary policy should: (i) respect the maintenance of a budgetary equilibrium over time; and (ii) improve the efficient and operational allocation of public expenditure. In other words, the State must not spend more than it receives and what is spent must be spent to reach the targeted users and services in the very shortest time. Respect of these principles has not left the Malagasy authorities impervious. They receive technical assistance from development partners, and from the IMF and the World Bank in particular,.[10]

21. A second risk will retain our attention. These last few months, the monetary authorities have started intervening on the exchange market to minimize a possible excessive appreciation of the real exchange rate resulting from the massive foreign capital inflows. The monetary authorities want to avoid an overly strong appreciation of the real exchange rate leading to a loss of competitiveness and a drop in exports with the emergence of the Dutch disease, which could stop the momentum of the private sector and thus challenge the validity of the approach described in the previous chapter.[11]

22. This chapter is organized to successively answer the three following questions: (i) How has the real exchange rate evolved these last few years? (ii) What are the reasons for this evolution? and (iii) What monetary policy did the authorities pursue? The answers to these three questions and a comparison with international practices will enable us to draw recommendations that will be formulated in the final part of this study.

[10] The World Bank has put in place a technical assistance which is supported through its public expenditure reviews and through a series of exercises that include the PEFA and the funding of experts within the concerned Ministries.

[11] A recent look at the literature relating to the relationship between the exchange rate and economic growth, cf. S. Johnson. J. Ostry, and A. Subramanian, *The Prospects for Sustained Growth in Africa*, IMF working paper, 07/52, March 2007.

A. EVOLUTION OF THE REAL EXCHANGE RATE

23. The competitiveness of the Malagasy economy in international markets is often captured through real exchange rate variations since it measures the change of prices of tradable good compared to those of non-tradable goods. (P_T/P_{NT}).[12] Thus, a decline of the real exchange rate, i.e. an appreciation, reflects a loss of competitiveness since it entices to produce non-tradable goods to the detriment of tradable goods, which leads to decreasing exports. We will take the same approach here even if it is relatively difficult to measure the evolution of the real exchange rate in a country like Madagascar because accurate price indexes are not enough. Indeed, only one domestic price index (the consumer price index) is available monthly.

24. Taking this statistical limitation into account, we have measured the evolution of the real exchange rate with the help of three complementary approaches that are briefly described hereafter:

- *The real bilateral exchange rate* in which the evolution of the relative prices of Malagasy exports and imports is measured against two main destination markets, i.e. the European Union and the United-States. In addition, to measure changes in the competitiveness of Malagasy exports compared with a competitor country (notably for textile), we have measured the real bilateral exchange rate with China. We used the consumer price indexes in Madagascar and in these countries as well as the nominal bilateral exchange rate with the respective countries for all these measures.

- *The real multilateral exchange rate* takes all of Madagascar's commercial partners into account by first using the fixed weight used by the Central Bank, then a variable weight derived from the annual change of trade flows between Madagascar and the rest of the world. We have alternately used an arithmetic and a geometric mean without it having a major impact on the results. The evolution of domestic prices was measured with the consumer price index.

- *The real exchange rate based on the breakdown of the consumer price index.* Based on information provided by the Central Bank, it is possible to break the consumer price index down into tradable and non-tradable goods. This breakdown can be done by sector – by separating the tradable and non-tradable ones – or by spending category.[13] Though this exercise is necessarily subjective and does not allow excluding the margins collected by intermediaries and by local market sellers, however it measures directly the change of relative prices in Madagascar.

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[12] Cf. for example Sebastian Edwards [1989], *Real Exchange Rate in Developing Countries: Concepts and Measurement,* NBER Working Papers 2950, National Bureau of Economic Research, Inc.

[13] The breakdown of the consumer price index in Madagascar follows the method proposed by Goujon [2007] that allows him to classify goods as those that are tradable and those that are non-tradable. His first breakdown is done based on categories of spending, whereas the second one is sector-based.

Table 3: Evolution of the Real Exchange Rate (2003-3rd quarter of 2008)

	Bilateral			Multilateral		Decomposing the price index	
	US	Euro	China	Fixed weights1/	Variable weights2/	Expenditure categories	Sectors
Max. Value	117.1	100.0	102.6	100.0	100.0	111.1	107.8
Min. Value	58.6	51.7	57.9	52.2	53.9	83.1	94.8
Average	88.8	75.4	84.9	76.5	78.8	93.2	102.1
2003 I	100.0	99.1	101.0	99.3	99.4	99.8	98.0
2003 II	100.1	93.7	100.8	94.5	95.9	105.0	95.5
2003 III	98.4	93.2	100.0	93.9	95.0	110.2	97.3
2003 IV	100.9	90.1	100.9	90.8	93.3	108.0	98.5
2004 I	90.9	77.4	90.9	78.3	81.5	103.3	99.8
2004 II	65.4	58.1	64.9	58.6	60.4	98.4	99.7
2004 III	67.7	59.4	66.7	60.1	62.0	92.8	100.6
2004 IV	76.1	62.8	76.3	63.7	66.9	87.7	98.6
2005 I	83.6	68.5	83.8	69.6	72.4	85.7	95.8
2005 II	77.1	66.1	77.4	67.0	69.0	91.9	98.7
2005 III	77.4	69.0	76.5	69.9	71.4	84.5	100.2
2005 IV	76.0	69.6	76.1	70.4	71.6	84.0	104.3
2006 I	76.3	69.3	76.1	70.2	71.3	86.1	105.5
2006 II	75.3	65.8	75.1	66.9	68.4	88.9	106.5
2006 III	78.3	67.7	77.5	68.8	70.5	93.8	107.0
2006 IV	85.0	71.9	82.5	73.2	75.3	91.9	104.8
2007 I	90.7	76.1	87.0	77.6	80.0	88.3	103.4
2007 II	96.3	79.0	91.0	80.8	83.6	90.3	104.9
2007 III	97.0	78.1	87.9	80.0	83.0	93.3	105.9
2007 IV	98.8	76.8	89.1	78.9	82.3	90.1	105.7
2008 I	106.1	78.3	90.4	80.3	84.0	87.5	101.9
2008 II	113.1	80.2	94.6	82.4	86.9	90.1	106.5
2008 III	115.8	83.6	94.9	85.7	89.8	92.1	106.8
Variations							
More recent/Max	0.3%	-8.4%	-7.8%	-21.1%	-17.7%	-16.7%	-1.1%
More recent /Min	99.2%	68.6%	63.4%	51.0%	52.8%	11.2%	12.3%
More recent /Average	32.3%	17.4%	11.7%	4.4%	6.2%	-0.7%	4.3%
Last 12 months	20.7%	11.2%	6.9%	8.9%	11.0%	-0.7%	0.9%
Last 6 months	9%	-1.7%	0.3%	-2.3%	-1.4%	-6.4%	-9.6%

Notes:
1/ Geometric average weighted by the weight of each partner in the trade balance with Madagascar set according to the Central Bank.
2/ Geometric average weighted by the weight of each partner in the trade balance with Madagascar according to annual data. We have adjusted it using a Laspeyres index.

25. The results obtained with these three approaches of the exchange rate are presented in table 3, and showcase a certain number of trends that can be summarized as follows:

- The real exchange rate has tended toward an appreciation since the second quarter of 2004. Its magnitude varies between 11 and 99% according to the reference indicator, but is around 50% for the real exchange rate which takes all the trade partners into account;

- The appreciation of the real exchange rate is not uniform, notably these last 12 months. It varies from 20.7% against the dollar and 11.2% against the Euro and remains limited to 6.9% with China, assuming that the loss of competitiveness of Malagasy exports is not uniform in all the markets;

- The speed of the appreciation has tended to slow down starting from the second half of 2007. It even reversed against the Euro in the last 6 months (-1.7%), which could partly reflect a change in the monetary authorities' behavior.

26. The appreciation of the real exchange rate, though undeniable since 2004, remains relatively low in light of two explanations. First, the evolution of the price ratio of non-tradable goods compared to tradable goods indicated that the appreciation would be under 1 % these last 12 months, assuming that exchange rate variations have partly been neutralized by rising international transaction costs, notably rising shipping costs, which therefore caused a price hike of tradable goods compared to non-tradable goods (cf. explanations in box 2).

27. The second explanation which makes us doubt that the appreciation of the real exchange rate is substantial is that the real exchange rate value is still lower than the one that prevailed in 2003 or is not far from its average value during the 2003-07 period (cf. table 3). We chose to do a comparison based on these historical values rather than to refer to an equilibrium value that is defined according to the evolution of fundamental economic variables (the flows of foreign capital, trade openness, the terms of trade, or the fiscal policy). In Madagascar's case, this exercise seemed futile, even perilous, to us since it is difficult to identify these variables and their impact on the real exchange rate with the structural changes taking place in the economy. [14] In other words, the historical correlations one could get with an econometric exercise are only of limited usefulness to anticipate the future equilibrium exchange rate value.

[14] For arguments in that sense, cf. Rodrik [2006]. Nevertheless, a recent IMF effort tried to measure the equilibrium exchange rate value in Madagascar with the help of the purchasing power parity concept during the 1995-2008 period. The gap between this concept and the current exchange rate shows that it would slightly appreciate by 10% in the beginning of 2008.

Box 2: The trade liberalization index based on the decomposition of the price index between tradable and non-tradable goods

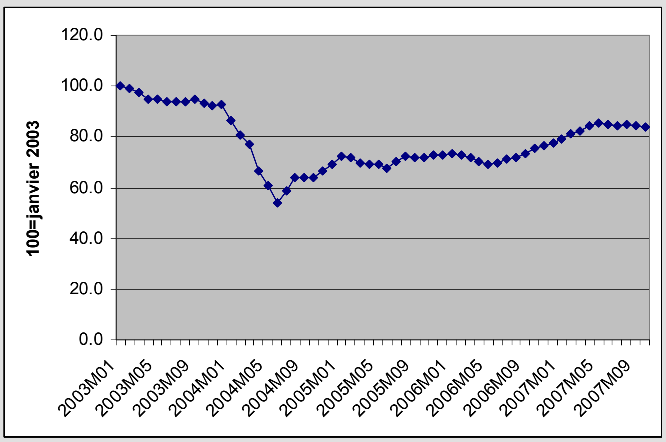
The trade liberalization index reflects the divergence between the price of tradable goods in Madagascar and in the rest of the world due to the costs of international business transactions. By using the approach suggested by Milner and McKay [1996] in the case of Mauritius, the evolution of the costs related to business transactions can be measured as:

$$\vartheta = [\frac{eP}{P*}][\frac{P_t}{P_{nt}}]^{\alpha}$$

with P being equal to the consumer price index in Madagascar, P* the price index of Madagascar's trading partners, α the weight of non-tradable goods in index P, and e the nominal exchange rate.

The figure below illustrates the evolution of this trade liberalization index over the 2003-2007 period.

Figure 6: Trade liberalization index, 2003-2007



The main lesson is that the trade liberalization index strongly improved at the beginning of 2004 when tariffs on capital goods were significantly lowered. This improved index explains why the depreciation of the local currency – as measured by bilateral and multilateral rates – is not reflected in the non-tradable goods against tradable goods price ratio. Since this improvement, the index deteriorated under the influence of two phenomena. The first one is that import tariffs gradually increased (as the second part of this study will show), notably with the decision of international shipping carriers to no longer stop at the Tamatave port forcing Malagasy business operators to transit through Mauritius.

Sources: M. Goujon: Real exchange rate measures: the case of Madagascar (or *Les mesures du Taux de change reel : le cas de Madagascar),* CERSUR, October 2007 and C. Milner and A. McKay, Real Exchange Rate Measures of Trade Liberalization: Some Evidence for Mauritius, Journal of African Economics, 5, 1996

B. THE REASONS BEHIND THE EVOLUTION OF THE REAL EXCHANGE RATE

28. The low appreciation of the real exchange rate in Madagascar is never surprising in view of the explanatory factors that are presented hereafter. Indeed, it is the dollar's loss in value in international markets explains the recent evolution more than traditional

factors like the shocks on the terms of trade (TOT) or the massive arrival of foreign capitals. The origin of the appreciation of the real exchange rate this last year is mostly due to the depreciation of the US dollar against the Euro. Though this phenomenon is independent from the situation in Madagascar, it influences the local exchange rate because Europe and the USA are its two main trading partners. As an illustration, with the prevailing January 2006 dollar against Euro parity , the real appreciation measured by the multilateral exchange rate in Madagascar would only have been of 5% rather than of 11% during these last 12 months.

29. On the other hand, it is more difficult to find a correlation free of ambiguity between the variations of the TOTs and those of the real exchange rate these past years. Thus, the TOT index greatly deteriorated with a 57% drop between 2004 and 2006, which, in principle, should have led to a real exchange rate depreciation while otherwise remaining equal, so that it is the reverse evolution that actually took place. Even if it is not easy to isolate the relationship between the TOTs and the real exchange rate in the presence of multiple factors, it is therefore difficult to conclude that the TOTs have guided the evolution of the real exchange rate these past years in Madagascar.

30. Similarly, the increase in official aid certainly played a marginal role on the evolution of the exchange rate in Madagascar. This absence of a significant link can be found in several other African countries like Ghana, Uganda, Ethiopia and Mozambique.[15] Three combined elements explain this result: (i) the increase of official aid inflows only occurred gradually since 2003 (cf. table 4); (ii) these capitals were not automatically spent by the Malagasy authorities, notably because of lack of absorbptive capacity of the public administration; and (iii) when they were spent, their vast majority served to finance imported goods, the services of foreign consultants, or left the country again in the form of flight of capital.

31. The arrival of private capital, in the form of foreign direct investments (FDI), started from 2003 but the effects on the real exchange rate have only been limited to date. The first reason is that these flows were not as considerable as planned if one looks at the bank deposits that have barely increased in 2007. The commercial banks' behavior enables to highlight that FDI mining projects'deposits in foreign currency are only concentrated in a single local bank, which saw a 50% increase of its foreign currency deposits in 2007, whereas all the other commercial banks saw their foreign currency deposits diminish, notably those in US dollars since their clients preferred to adjust their portfolios.[16] The bank which received the FDI deposits used this increase to purchase security placements abroad rather than to increase credits for local operators, which translates a conservative policy and a position of excess liquidities.

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[15] International Monetary Fund, *The Macroeconomics of Managing Increased Aid Inflows: Experiences of Low-Income Countries and Policy Implications*, Policy.

[16] There are nonetheless indirect effects on the deposits in other banks through the payment of local suppliers and providers leading to increased local currency deposits.

Table 4: The foreign capital inflows received by Madagascar, (in millions US$)

	2004	2005	2006	2007	2008	2009	2010
Official aid (net)	*321.4*	*288.8*	*656.2*	*600.0*	*674.0*	*716.3*	*770.2*
Official aid (gross)	1866.1	426.2	2843.1	621.7	712.5	757.1	815.4
Grants	1564.1	160.5	2575.4	317.7	331.0	357.0	393.7
Project Loans	227.7	186.0	190.5	247.9	318.4	332.0	346.6
Budget supports	74.4	79.7	77.1	55.9	63.0	68.0	74.9
Interest paid	-60.1	-48.5	-26.9	-9.4	-18.0	-19.4	-21.2
Reserve	-1484.4	-89.0	-2159.7	-12.3	-20.4	-21.4	-24.0
Net inflow of private capitals	*-2.7*	*40.5*	*61.7*	*865.1*	*1438.9*	*927.4*	*-990.7*
Gross private capital inflows	31.3	94.0	144.3	955.3	1541.8	1066.3	341.1
Direct investments	52.9	85.7	221.4	991.3	1586.4	1055.5	379.8
Portfolio investment	0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Private sector	-4.3	13.0	-11.8	-5.6	0.0	0.0	0.0
Banks (net)	-17.5	-4.6	-65.3	-30.4	-44.4	10.8	-38.7
Payment of interests	-33.9	-53.5	-82.7	-90.1	-102.9	-138.9	-1331.8

Source: IMF

32. The fact that these inflows went out again immediately to finance the purchase of material and equipment abroad explains the low impact of FDIs on the local financial market. This behavior is visible for the two mining projects, representing nearly 95% of current FDI inflows, which dedicated over 80% of their foreign currencies to purchases abroad. In fact, their local spending consists in paying taxes and fees to the State, rents and for services from local providers. However, it is noted that the influence of private capitals on the real exchange rate could become more pronounced in the coming years. The amounts injected into the local economy by the two mining companies should markedly increase in 2008 and 2009, since they should reach over 500 and 250 million US$, or respectively 5 and 2.5 times more than in 2007. The Malagasy authorities should take this increase into account.

C. THE REACTION OF THE MONETARY AUTHORITIES

33. We should begin by recalling that the monetary authorities must take a series of decisions with the arrival of foreign capitals. With the risk of simplifying matters, their first decision is to let foreign capitals enter the exchange market freely or, on the contrary, to absorb them through an increase of reserves at the Central Bank. The first option results in the appreciation of the nominal exchange rate, whereas the second leads to an increase of reserves, which can rise domestic inflation via a monetary expansion. In general, monetary authorities combine both options. The second option, which is partly a result of the first, is for the monetary authorities to decide to intervene in the exchange market by neutralizing the possible increase of foreign reserves by selling domestic

assets, i.e. to carry out a sterilization policy. The costs and benefits related to each of these decisions are summarized in table 5 below.

Table 5: Costs and benefits related to fiscal policy options in view of capital inflow

Policies	*Benefits*	**Costs**
1. Variation of the nominal exchange rate	• Eliminates the short term inflationary pressures	• Reduces the short term competitiveness of exports • Increases vulnerability if capital inflows are reversed
2. Reserve increase	• Neutralizes the effect on the short term nominal exchange rate	• Generates excess monetary creation which can exacerbate the weakness of the financial system and lead to inflationary pressures
3. Sterilization policy	• Neutralizes the short term inflationary effects	• Increases the quasi-fiscal cost with highyield assets being substituted for lowyield ones in the Central Bank's balance sheet • If increase of bank reserve ratio, it can curb the expansion of credits to private sector, notably through rising interest rates

34. To capture the decisions made by the Malagasy monetary authorities, we have used two indicators proposed by economic literature. The first indicator is called the monetary authorities' resistance index to the pressure of the nominal exchange rate, whereas the second (the sterilization index) aims at measuring the magnitude with which the monetary authorities have neutralized the impact of the foreign reserves increase on the liquidity supply by contracting their domestic assets (cf. box 3 for a description of the methodology).

Box 3: The resilience and sterilization indexes

The resistance index

For country i during year t the pressure index on the foreign exchange market can be written as the weighted average of two elements: (1) the change of nominal exchange rate ($\Delta\%er_{i,t}$) and (2) the change of foreign reserve represented by the reserve money ($\Delta res_{i,t}$). The weights are equal to the reverse standard deviations of these two elements, which makes it possible for us to write the index as:

$EMP_{i,t} = (1/\sigma\Delta\ \%e_{i,t})\ \Delta\%e_{i,t}\ \ + (1/\ \sigma\Delta res_{i,t})\ \Delta res_{i,t}$

We can then deduct a resistance index (RI) to foreign exchange market pressure which is written as:

$RI = 1 - (\Delta\%e_{i,t} /(\ \sigma\Delta\ \%e_{i,}\ EMP_{i,}))$

The higher the RI ratio, the more it means that the authorities tried to resist foreign exchange rate variations in view of an increased pressure on the exchange rate.

The sterilization index

For country i at t data, the sterilization index is equal to the β coefficient derived from the following regression (by using 12 monthly observations):

$\Delta NDA_{i,t,m} = \alpha_{i,t} + \beta_{i,t}\ \Delta NFA_{i,t,m} + u_{i,t,m}$,

With $\Delta NDA_{i,t,m}$ equal to the monthly change of domestic assets of the Central Bank during month m of year t. The Central Bank's effort to sterilize the impact of the foreign reserves increase on the reserve money is measured by the index, by reducing the domestic assets stock. When coefficient β is lower than or equal to -1 it means that the Central Bank is making an effort to sterilize; when coefficient β is equal to 0 it means that there is no sterilization.

A broadened sterilization index can also be estimated to capture the Central Bank's effort to restrain an excessive growth of the broad money. This effort is generally made by increasing the legal reserve ratio applied to commercial banks, thus reducing the money multiplier. For year t, this broadened index is equal to the coefficient δ in the annual regression based on 12 monthly observations:

$\Delta M2_{i,t,m} = \alpha_{i,t} + \delta_{i,t}\ \Delta NFA_{i,t,m} + u_{i,t,m}$,

With $\Delta M2_{i,t,m}$ equal to the monthly variation in country i of the broad money (defined as M2) during month m of year t. When δ is equal to 0, it means that there is a complete sterilization of the broad money, when δ is equal to 1, it means that there is no sterilization.

Source: IMF, *Managing Large Capital Inflows, 2007*

35. The application of the two indicators in Madagascar reveals that the exchange market gradually grew during the 2003-07 period and that the monetary authorities sought to resist by accumulating foreign reserves rather than by letting the nominal exchange rate appreciate, as reflected by the rise of the resistance index over time (table 6). It should be noted that the fluctuations were relatively significant from one quarter to the other, thus reflecting the number and the magnitude of the shocks on the economy. This result is corroborated by the (net) purchases of foreign currencies by the Central Bank, which are multiplied by 4 between 2006 and 2007, notably in Euros contrary to the (net) purchases of dollars which decreased from one year to the next. Resistance of the monetary authorities is a generalized behavior in most countries that have been subject to an episode of capital inflows in recent years. Thus, according to the IMF, the resistance index in OECD countries has gradually risen since the beginning of the 2000s to settle around 0.6- 0.8 in 2007. The exception seems to be found in Asian countries that tend, notably these last three years, to accept a certain appreciation of their local currency (their resistance index was around 0.4 in 2007).

Table 6: The behavior of the monetary authorities on the foreign exchange market

2003-07

	2003	*2004*	*2005*	*2006*	**2007**
Pressure on the exchange market (EMP)	0.9	32.9	4.9	18.7	46.9
Resilience index (IR)	0.90	0.01	0.45	0.05	0.73
Sterilization index (β)	-0.87	-0.90	-0.85	-0.95	-0.71
Sterilization index (δ)	-0.10	-0.04	0.11	-0.05	-0.81

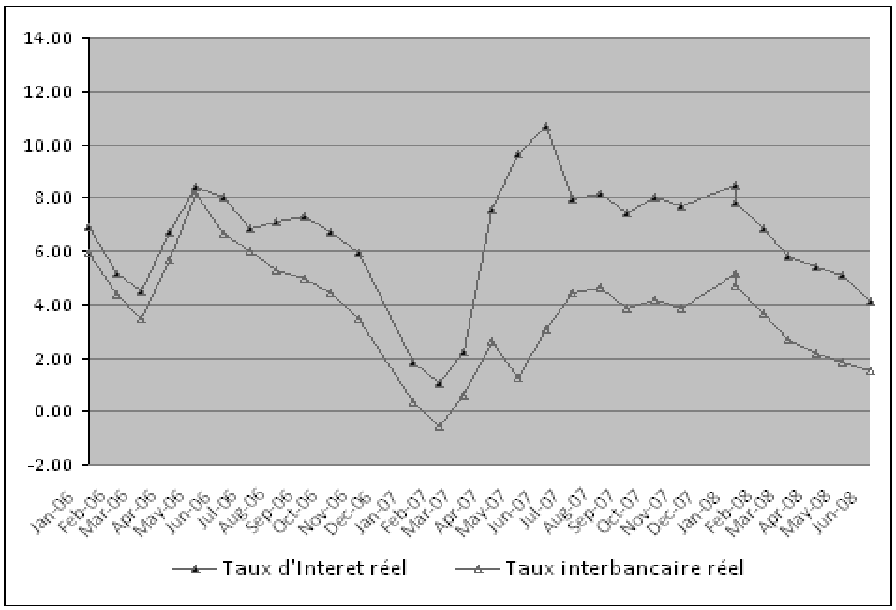
Source: World Bank, own calculations

36. The evolution of the sterilization index indicates a near-perfect negative correlation between the changes of foreign reserve and the level of domestic assets held by the Central Bank during the 2003-07 period; which assumes that the Central Bank sterilizes the variations of its foreign currency reserves amount on the reserve money (coefficient b varies between 0.71 and 0.95 during the period considered). The result related to coefficient d also indicates there is no close link between the evolution of foreign reserves and broad money (M2), thus translating a conservative behavior both of the Central Bank and of the commercial banks in Madagascar in the face of foreign capital inflows. Starting from May 2007, the Central Bank started intervening through open-market operations, after a long period of inactivity since its last operation dated back to end of 2007, which were concentrated in May and June (nearly half of the total amount) and reached 377 million during the 8 first months of 2008. On an annual basis, the Central Bank proved itself less active in 2007 than in 2003 and 2004 when open market operations had respectively reached 356 and 482 million dollars. Needless to say that the pace picked up in 2008.[17]

[17] We note that the monetary authorities also adopted several measures aiming at reducing local currency demand (i) by extending the period (non-EPZ) exporters have to repatriate their foreign currency receipts

37. Contrary to the decision to absorb the arrival of foreign currencies through an increase of reserves that is widespread among a majority of central banks, the adoption of the sterilization policy varies at the international level. If it enjoyed a certain fervor up to the end of the 90s, the trend has reversed since because of the costs that revealed themselves over time, notably in terms of a rising domestic interest rate which harms credit and private investment expansion and of quasi-fiscal costs it can impose on the Central Bank. In Madagascar's case, these costs still seem reduced since the real interest rates have even gone down in the last few months (cf. figure 7). This drop is due in part to the surplus liquidity position most commercial banks in Madagascar are in, which is emphasized by their conservative credit policy toward local businesses. On the other hand, the quasi-fiscal costs are beginning to materialize since the Central Bank reported 67 billion Ariary losses during the first 8 months of 2008.

Figure 7: Real interest rate (2006-08) in %



Sources: Central Bank of Madagascar

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38. It is useful to close this chapter with a reference to the fiscal policy which remains one of the privileged instruments to mitigate the pressure on the exchange rate or on the inflation rate. The adoption of a counter-cyclical fiscal policy would serve to neutralize the positive impact of foreign capital inflows on the overall demand and thus to reduce inflationary pressures in case of a delayed or incomplete reaction of the overall supply. Yet, a review of international experience reminds us that authorities seldom immediately resort to such a policy, in any case not before the sterilization policy costs are felt on the interest rate. Indeed, the establishment of a restrictive fiscal policy imposes difficult

from 90 to 180 days (May 2007) and (ii) by increasing the ceiling of the foreign currencies position credit institutions can set (from 10 to 20 %).

choices, such as freezing civil service salaries or slowing-down public investments which can delay the set-up of basic physical and human capital infrastructures, thus stopping supply structural adjustment. The Malagasy authorities have clearly shown their will not to resort to such a policy, or only as a last resort, at a time when they have initiated an ambitious physical and human infrastructure investment policy.

I.3 CONCLUSION

39. This first part has reminded that although the Malagasy economic performance has been encouraging these past years, it remains fragile. Not only is it linked to a stable political environment and to controlling climate shocks on the agricultural sector, it is also reliant on the quality of the authorities' macroeconomic management, notably their ability to maximize the impact of foreign capital inflows on the local economy.

40. International experience has shown how important it is to successfully stimulate domestic savings and investment capacities and promote skill and technology transfers from the inflows of foreign capitals. Yet, these effects are not automatic and mostly tend to wane over time. The success of countries such as Chile and the Asian Tigers reminds us that it is crucial to manage fiscal and monetary policies to reduce the risks of a real exchange rate over-appreciation and to minimize the loss in competitiveness of export companies. By analyzing the recent real exchange rate movements in Madagascar, as well as the review of the monetary policy conducted by the authorities, we were able to bring out a certain number of conclusions that serve to infer several recommendations that will be developed in the reform agenda proposed in the final part of this study.

41. In the meantime, Madagascar's successful emergence will not depend solely on adopting sound macroeconomic policies and on controlling the real exchange rate. Though necessary they are certainly not sufficient to generate an accelerated and a shared growth over time. We will therefore argue that private sector development and the sharing of the fruits of growth are two indispensable elements for Madagascar's economic emergence to succeed in the two next parts of this study.

PART II: PROMOTION OF THE PRIVATE SECTOR AS A GUARANTEE OF ECONOMIC GROWTH

1. Foreign capital inflows, which witness the support of development partners and the foreign investors, offer Madagascar a unique opportunity. In principle, it should allow it to escape from the trap of poverty, enabling it to increase its savings and physical and human capital investments capacities, and to create synergies with the local economy.

2. The authorities have understood that access to foreign capitals is not enough if it does not come with the take-off of the local private sector. The importance of this challenge has not gone unnoticed, justifying the central position it has been given in the MAP resting on two pillars. The first one is to encourage private sector expansion by reducing (and even eliminating) the constraints the latter faces while facilitating its access to markets, notably foreign ones, insofar that the narrowness of the local market be a bottleneck in the short- and mid-terms. The second pillar takes the country's geographical and human characteristics into account, making it possible to facilitate the targeting of specific actions and the emergence of agglomeration effects that will reduce costs for firms operating in Madagascar.

3. The objective of this second part is to accompany the authorities as they implement this double strategy. In spite of the government's declared ambition to promote the take-off of the private sector, we have to recognize that there are still numerous obstacles to the development of local or foreign private companies in Madagascar. The country is certainly at a disadvantage because of its distance from international markets and of its narrow local market, but is also suffers from delays in areas that are influenced by economic policies. Thus, Madagascar is still far behind performing countries in the quality of its business climate, in its trade logistics performance and in its technological development (table 7). The success of countries like Mauritius mostly rests on its capacity to upgrade these business climate aspects with appropriate policies and actions.

Table 7: Madagascar's delay in setting up an environment favorable for private sector development

Indicator	*Madagascar's last ranking*	**Source**
Business climate quality	144 out of 181 countries	Doing Business (World Bank)
Trade logistic performance	120 out of 150 countries	Logistic Index (World Bank)
Knowledge economy quality	132 out of 132 countries	Knowledge economy Index (World Bank)
Competitiveness of the economy	21 out of 25 African countries	Growth Competitiveness (World Economic Forum)

4. The second part of this study begins with a reminder of the conclusions of numerous studies that sought to identify the constraints private companies are confronted with in Madagascar. There is today a consensus on the nature of the main constraints which hinder private sector expansion. The point now is not really to define « what to do » but rather « how to do it ». In this context, Malagasy authorities have made concrete

efforts, most often with the support of development partners, to remedy these constraints. These efforts mainly focus on access to infrastructure, with sectoral strategies for transport, communication and energy, as well as access to financing for small- and medium-sized enterprises.

5. The rest of this second part will be dedicated to a detailed review of the three business climate elements both the private sector and the Government in Madagascar perceive as particularly important and have not received sustained attention yet:

- Difficult access to markets, notably international, because of high logistics costs that range from the tariff policy to high transport costs;

- The weight of administrative procedures businesses must face when they want to register and work in the country, such as the procedures to secure land or to get an operating permit;

- Low labor productivity which makes it impossible to exploit the comparative advantage in terms of wages or to create jobs.

6. It is justified to emphasize these three elements because one cannot argue that a dynamic private sector can emerge as long as the movement of goods and services is crippled by excessive costs, that administrative relationships between companies and the State does not rest on mutual trust, and that worker productivity remains low because of a lack of skill reinforcement. Improving these three aspects will aim at complementing the Government's infrastructural efforts and financial market development. Furthermore, these three aspects tackle cross-cutting constraints which affect the MAP's priority sectors. Therefore, the administrative difficulty in securing and developing land hinders development both in the agricultural and the tourism sectors. It is also now important for companies in the textile, ICT, tourism, fishing and agricultural sectors to have access to global markets because their suppliers and their clients reside abroad. The role of the labor market is obvious since nearly all the activities for which Madagascar has a comparative advantage (with the notable exception of the mining sector) are labor intensive.

7. Finally, we believe that a targeted approach will enable to lead to concrete recommendations, notably for the short-term, and therefore reassure local and foreign investors of the Malagasy policy makers' will and reform capacity.

II.1 AN OVERVIEW OF THE CONSTRAINTS TO PRIVATE SECTOR EXPANSION

8. The importance of the constraints related to private sector development in Madagascar has long been recognized, both by development partners[18] and by the Government and the private sector. It has led to numerous studies and technical and

[18] The World Bank (an assessment of the business climate), the European Union, the African Development Bank, the French Embassy and USAID.

financial support in favor of the adoption of reforms and projects aiming at improving the business environment.

9. This chapter proposes a dual objective preview: first to remind that the main constraints that hinder private sector expansion have already been identified by many studies and then to describe the different efforts underway to mitigate and even eliminate them. This preview will enable us to justify the approach adopted in the other chapters of this study which focus on three specific business climate areas.

A. A REMINDER OF THE MAIN CONSTRAINTS TO PRIVATE SECTOR DEVELOPMENT

10. An inventory of the studies on the private sector[19] has listed 289 publications these last five years. These publications are general, on the business climate, as well as specific to value chains and industries. They were conducted by the Government, development partners (sometimes together), the private sector and local and international research institutions. This inventory enabled to highlight that nearly all the obstacles have been examined with the support of alternative approaches that range from field surveys with companies, surveys of specific constraints in light of economic theories or of the analysis of government strategies.

11. These studies have allowed identifying the general, sectoral or regional obstacles that burden private businesses in Madagascar. Generally, there is a consensus on the nature of these obstacles and even on their order of importance. For this reason, we will limit ourselves to summarizing their outlines, since these studies are listed in Annex. We propose to present the constraints by distinguishing between those that are (i) general or common to all the companies, (ii) specific to some sectors (notably those that are priorities in the MAP); and finally, (iii) specific spatial and/or regional constraints.

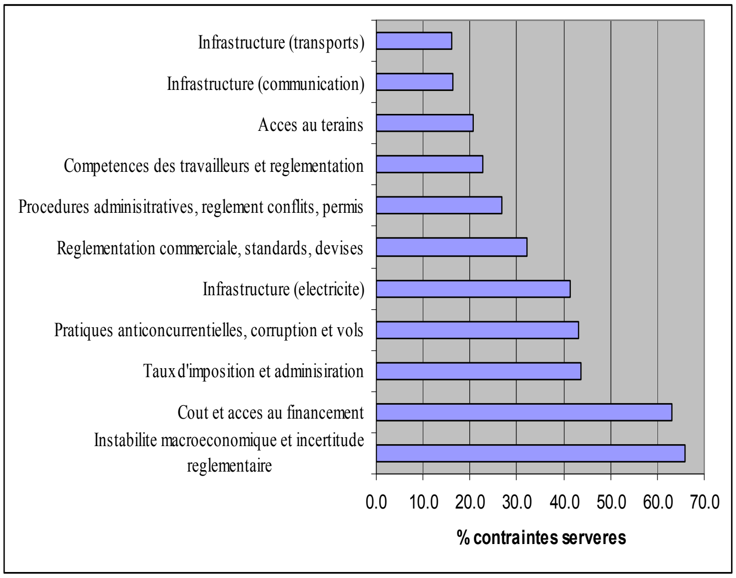
12. There is very little difference between the general constraints which burden all the Malagasy businesses and those revealed on the African continent. This is not surprising since the environment and the economic development do not vary markedly from one country to the other. Malagasy firms complain about macroeconomic instability, the cost of and the difficult access to credit, high taxation levels, the use of non-competitive practices and corruption, under-developed basic infrastructures. The weight of these constraints is presented in figure 1 with a ranking proposed by the study on the business climate,[20] whereas the details of the problems encountered by companies are summarized in the table 8 presented at the end of the chapter.

[19] ATW consultants: Inventory of the reports on investment opportunities in Madagascar (or « *Inventaire des rapports sur les opportunités d'investissement à Madagascar* »), EDBM, IFC, December 2007.

[20] We note in passing that a new assessment of the business climate is underway, therefore the order of priority we have kept could change.

13. When reading figure 1, it appears that the lack of basic infrastructure development does not rank highest among the heaviest constraints. If difficult access to energy and lack of road infrastructures are often mentioned, only 1/3 of the companies questioned rank them as severe constraints, i.e. less than access to financing, corruption or the cumbersome tax administration. Of course, the above results must be interpreted cautiously since they only reflect the opinions of a few businessmen. Constraints caused by lack of basic infrastructure (electricity, roads, etc.…) generally burden foreign companies and/or exporting ones more because they contribute to increasing costs – and this increase cannot be passed on to consumers.

Figure 8: The general constraints burdening Malagasy companies



Source : ICA

14. A considerable number of studies have closely examined the constraints on the key Malagasy sectors like textile and apparel, agri-business, tourism, NICTs and mining. The lesson drawn from table 2 summarizing sectoral constraints is that the hierarchy of constraints varies from one sector to the next. Therefore, access to land and the land issue are central for the agricultural sector and agri-business activities but much less for the textile or industry sector. For the latter, the most constraining factor is lack of access to energy. These variations suggest the need to adopt specific approaches for each sector.

15. Because of the attention paid to economic development in some regions (notably the integrated growth poles),[21] Madagascar stands out with the number of studies that have taken an interest in regional constraints. Though we go back further to the growth poles approach on in our study, it seems important to at the onset note that the importance of the constraints vary on a region level. These variations are explained, on the one hand, because of the sectors are different according to the regions, and on the other, because of the unequal administrative and economic development according to the regions. An overview of the main constraints as perceived in the three regions targeted by the growth poles is presented at the end of this chapter in table 8.

[21] The regional dimension of constraints related to private sector development gives rise to an increasing interest from the authorities and their development partners. The World Bank should initiate a new survey on the business climate in Madagascar which will also highlight the regional dimension of the obstacles thereto by questioning companies located in several regions of the country. The findings of this survey should be available during the first half of 2009, and will allow refining the analysis.

B. THE EFFORTS UNDERWAY TO RELIEVE THE CONSTRAINTS

16. The numerous studies dedicated to constraints of private sector development in Madagascar have led to efforts both from the Government and from development partners to undertake actions aimed at mitigating them. These efforts, numerous but not always coordinated, are summarized in the third and fourth columns of table 8 presented at the end of this chapter.

17. With an overview of the efforts underway, we can highlight that the efforts are strongly concentrated around three constraints:

- *Lack of basic infrastructure, notably transport.* There are today a lot of projects that aim at developing the transport network; this is welcome given the lack of basic infrastructure in Madagascar. This priority is visible in the State budget allocation, in the priority given by the MAP and in the commitment of donors like the World Bank (PST, AGETIPA...), the European Union, the AfDB and Japan.

- *Macroeconomic instability and pursuance of the fiscal policy*. These aspects are covered by the IMF-supported program and play a central role in the World Bank, EU and AfDB budget support. Tax reforms, as well at the economic policy as at the administrative level, have benefited from the contribution of numerous partners, therefore contributing to a better treatment of this constraint for a large number of businesses.

- *Under*-developed *financial market*. Donors paid particular attention to access to financing, both from an analytical standpoint through a joint IMF-World Bank diagnosis, followed by several technical assistance missions within the government, notably the Central Bank of Madagascar, and from the support of other partners (IFC, AFD), through commercial banks to guarantee project funding, and finally from support to micro-financing activities. Furthermore, though the liberalization of the financial sector is done by privatizing some State-owned banks, the government is pursuing its efforts to reform the financial system with well-defined action plans. It must be noted that the PPP approach is favored, notably by strengthening the significant roles commercial banks play in the success of this strategy.

18. Because the efforts are concentrated, some only receive limited attention. Among these, we can mention: (i) the legal framework and administrative procedures, (ii) trade regulations and logistics; (iii) labor qualification and regulation; and (iv) access to land. Though these constraints have received some attention but less so than the one paid to the above-mentioned constraints. In addition, efforts are not always coordinated as illustrated by the following example. Streamlining the administrative procedures companies are confronted with is covered by a few initiatives funded by development partners (WB, IFC); but they involve different ministries and agencies (EDBM, Ministry of Finance,

Customs, DGI, local administration, etc.) that do not always work together whereas a global and concerted approach would help bring about concrete results.

19. There are multiple reasons for this inequality of efforts. But we can mention that interventions in infrastructure are visible, require financial resources, and are often favored by development partners. Interventions in areas relating to workforce regulation or qualification are often perceived as being second generation, i.e., they come after the macroeconomic framework stabilization and basic infrastructure set-up.

C. THE LESSONS FOR THE REST OF THE STUDY

20. This chapter highlights that numerous studies have been dedicated to the constraints on private sector development in Madagascar. Selected studies have shown us that though approaches and diagnoses differ, conclusions on the constraints converge from one study to the next. Moreover, we have also shown the government's will to move the reforms forward, with the development partners' support, materialized through several projects supporting the private sector in general or projects or programs that support specific sectors. However, these efforts mainly concentrate on support to basic infrastructure, on macroeconomic framework and budgetary framework stabilization, and on financial sector development.

21. This wave of reforms and of investment projects is beginning to bear fruits, with road construction, macroeconomic context stabilization and the emergence of new financial institutions, an undeniable reality in Madagascar. But, relieving these constraints is not sufficient because simultaneous obstacles keep hampering the efforts of private businesses, including the lack of qualification of the labor force and the difficulty of moving goods and services because of logistic problems. Furthermore, the effects of these efforts on the infrastructure are long-term – since the construction of a road or a port takes time, and impacts on the private sector are not always immediate. If there is no visible progress in the short term, the risk is that private investors get discouraged and question the development strategy followed by the authorities. Our conclusion is therefore that the authorities (and partners) should pay attention to the constraints to private sector development whose elimination could be decisive in the short term. It would also be primordial to accompany the efforts underway to develop infrastructure and access to financing whose effects will mostly materialize in the short term.

22. Based on this, we propose to concentrate the analysis on the following obstacles: (i) facilitating trade procedures and the logistic network to support importers and exporters; (ii) streamlining the administrative formalities businesses are faced with in relation with the State; and (iii) upgrading labor productivity. Not only are these obstacles among the companies' main concerns but they also have not been supported by partners, at least not compared to other areas. Moreover, these constraints are particularly visible in the MAP priority sectors. Thus, if trade facilitation plays a central role in the textile and agricultural sectors, labor productivity is essential in ICTs and textile.

Table 8: A summary of the main constraints and of the efforts underway

Constraint affecting the activity levels in general	***Comments/ notes***	***Reforms underway***	**Ministry, agencies or partners involved**
GENERAL CONSTRAINTS			
Macroeconomic instability and price uncertainty	Particularly the exchange rate and inflation	Macroeconomic management reform	Ministry of Finance, World Bank, PRGF of the IMF, PRSC of the World
		Public finance management reform (Computerization, training, one-off or permanent technical assistance missions, budgetary support joint mission)	Ministry of Finance, Sectoral Ministries, IMF, World Bank, European Union, France, Germany, United States of America
		Foreign Exchange code reform	Ministry of Finance, Central Bank, IMF
High cost of financing and low access to credit	Less than 5% of the total population has access to credit; very high, if not unavailable, financing cost notably for SMEs	Financial system reform	Central Bank of Madagascar, Ministry of Finance, IMF, World Bank, IFC, MCA, French Cooperation, APB
		Development of Micro-Finance Institutions	Ministry of Finance, Micro-Finance Support Project, AGPMF, FENU, French Cooperation, IFC, World Bank Ministry of Finance, APB
		Creation of the Guarantee Fund	Ministry of Finance, BCM, KFW, South Africa
		Creation of a development bank	
High taxation rate and tax services	The taxation rate (VAT, IBS and the IRCM) is higher than that of other countries at the same development level than Madagascar	Establishment of the steering committee	MFB, Government Tax Administration
		Reorganization of the Tax Administration	MFB, DGI, IMF, France
		Simplification of the tax system	MFB, DGI, IMF, French Cooperation, EDBM, PIC, Private sector
		Improvement of the regulatory and legislative framework of special regimes: EPZ, ETI, EPIB	
		Implementation of the law on Large Investments	MFB, DGI, EDBM
Competitive or informal practices		Set-up of trade courts and administrative courts	Ministry of Justice, MECI, BAD, World Bank,
Crime, theft, social unrest and Corruption		Heightened security	Ministry of Justice, Ministry of National Defense, France
		Set-up of the CSLCC that became the CSI and of the BIANCO	Malagasy Government, World Bank, UNDP, Norway
		Justice system reform	Malagasy Government, World Bank, UNDP, Norway, European Union, BAD
Infrastructure Power supply	Uncertainty (frequent power cuts) and insufficiency of supply, higher cost than in all the other SSA countries (except for Senegal)	Financial recovery and management reform of the national utility company (JIRAMA)	Malagasy State, Ministry of Energy, JIRAMA, BAD, AFD, BEI, World Bank,

Constraint affecting the activity levels in general	***Comments/ notes***	***Reforms underway***	**Ministry, agencies or partners involved**
		Liberalization of the electricity sector Set-up of a task force and of a multiparty committee, to examine the energy issue and the reforms in the electricity sector.	President's Office, MEM, MECI, JIRAMA
		Implementation of a program to strengthen energy sources: Construction of power stations in 12 rural communes and set-up of local turbine manufacturing units	UNIDO
Customs and trade regulations	Procedural red tape and excessive transshipment volumes, excessive use of inspection aggravated by slow administrative formalities	Reorganization of Government Customs Administration	MFB, DGD, IMF
		Set-up of:(i) a one-stop-shop in the main ports; (ii) Single Customs Document	MFB, DGD
		Computerization of the customs offices, operationalizing of SYDONIA++ to manage customs data since 2005	MFB, DGD, World Bank, BAD, UNCTAD
		Partnership with SGS-TRADENET	MFB, DGD, IMF, WCO
		Simplification of customs tariffs: reduced number of import duties from 4 to 2 and rate cut of 7 to 4.	MFB, DGD, IMF, EDBM
Administrative red tape and heavy procedures	Business development, issuance of visas for foreigners, granting of work permits for foreign employees, approval export processing zone companies are among the most burdensome procedures	Set-up of the GUIDE (providing information, advice, directing investors, simplification of administrative procedures	MECI, EDBM
		Decentralization of GUIDE services to strategic cities (Toamasina, Nosy Be, …)	
Workers' skills, labor regulation and Obtaining of licenses and work permits	Low labor productivity, twice lower than India and 4 times lower than China: low educational level of workers, no technical training centers, low number of managers in the market	Set up of training and capacity building center	Ministry of Education, PIC, French Cooperation
		Set-up of CERDIC (Regional Industrial and Business Development Centers or *Centres Régionaux de Développement Industriel et Commercial*)	MECI
		Implementation of the human capacity building program	MECI, UNIDO
Access to land	Significant delay to register land	Application of the law on land (giving access to foreigners)	Ministry of Land Development
	Difficult access to land for foreigners	Implementation of the National Land Program: Single *Guichet foncier* in the communes, land titling effort Validation of the land policy statement Working-out an urban development master plan to	Ministry of Land Development, MCA, French Cooperation, FIDA

Constraint affecting the activity levels in general	*Comments/ notes*	*Reforms underway*	**Ministry, agencies or partners involved**
		modernize land services: computerization of departments for state-owned land and cadastres Establishment of the Tourism Land Reserves (or *Réserves Foncières Touristiques* - RFT) and agricultural investment areas	Ministry of Land Development, EDBM, PIC
Telecommunications	Mobile telephony competitiveness for local communications, but lack of competitiveness for international communications and particularly the Internet	Installation of the national backbone with an underwater cable connection Support to NICT companies	Ministry of Communication, TELMA, World Bank (ICT) Ministry of Communication PIC
Road, air and sea infrastructure	Sector mostly dominated by the informal one, high cost of kilometer Lack of port infrastructure Low availability and high cost of air freight	Construction of the Ehoala and Nosy Be port, rehabilitation of the former port (FTU and NOS) Extension of rural and urban road construction activities, perpetuation of the Road Maintenance Funds (or *Fonds d'entretien routier*) Far-reaching policy for urban road and national road construction as well as that of strategic bridges	PPP through QMM and the PIC Ministry of Transport, PST, FER, AGETIPA UE, AfDB, Japan
SECTORAL CONSTRAINTS			
Textile and clothing	(i) Electricity (ii) Low workforce qualification (iii) Difficult sourcing of raw materials (iv) Delay on the VAT repayment (v) Environment – lack of infrastructure for waste water	Training and capacity building program Set-up of steering committee to monitor tax reforms Set-up of industrial areas, measures relating purely to land titling, pilot area project in Tamatave	MECI, CCIFM, Text'ile Mada (AFD) and PEP'Export (SFI)
Agribusiness	(i) Scarcity of arable lands, particularly of large surfaces suitable for cultivation (ii) Land, lack of transparency notably in rural environment (iii) Inadequate infrastructure (electricity, water, transport) in rural environment (iv) Ageing plantations (v) Lack of agricultural inputs and workforce supervision (vi) Access to credit (vii) Inexistent cold chain, high cost of packaging (viii) Under-use of production units (ix) Competition from imported products (x) Difficulty in recruiting Malagasy agricultural engineers in remote areas	Extension of the One Village, One Product approach National land programme, issuing of title deeds in some regions Set-up of a sectoral food-processing industry plan: including a national system for certification and for the creation of an analysis laboratory Technical assistance program in refrigeration, recuperation and recycling Setting up agri-business complex (*agro technopole*)	MECI, PNSP II MAEP, MECI, MCA, French Cooperation MECI, UNIDO UNIDO MECI, PIC

Constraint affecting the activity levels in general	***Comments/ notes***	***Reforms underway***	**Ministry, agencies or partners involved**
Fishing	(i) Energy (ii) Cold chain (international standards) (iii) Phytosanitary standards (traditional fishing) (iv) Access to credit (v) Absence of a regulation market, a lot of intermediaries	Implementation of the fishing value chain strategy in Fort Dauphin, building fishermen's capacities, support access to financing, support equipment purchasing, set-up of a cold store, support to the public sector for statistics collection and study on fish seasonality	PIC, UNIDO
Tourism	(i) Low infrastructure availability	Set-up of the Tourism National Office and Regional Offices	Ministry of Tourism, Ministry of Transport, French Cooperation
	(ii) Low competition in the air space	Opening up the air space	Ministry of Transport
	(iii) Lack of advertizing	Promotion of the Go To Madagascar campaign	Ministry of Tourism, AFD
	(iv) Lack of professionalism	Road rehabilitation, tourist access trails	Ministry of Transport, PIC
	(v) Land, an investors' concern, low promotion of RFT access	Land reforms centered on tourism (or *Réformes foncières axées au tourisme* - RFT)	Ministry of Tourism, Ministry of Land Development, EDBM, PIC, MCA
		Privatization of commercial activities around protected areas	Ministry of Environment, ANGAP, BAMEX, AFD
NICT	(i) Low availability of infrastructures and of underground telecommunication systems	Installation of national backbone with an underwater cable connection	Ministry of Communication, TELMA, World Bank (ICT)
	(ii) Restriction of low frequency connection (VoIP) (iii) High cost of telephone calls	Support to NICT companies	Ministry of Communication, PIC
	(iv) Lack of skilled workforce in the IC field	Training program, creation of a ICT business park in Antananarivo	PIC
Mines and hydrocarbons	(i) Lack of organization at the resource management level in the large mining sites	Establishment of the law on large mining investments	Ministry of Energy and Mining, EDBM
	(ii) Non-application of the law on mining resource management	Set-up of the mining land registry office	Ministry of Energy and Mining, PGRM
	(iii) Lack of skilled workforce for the large mining projects	Recent adherence of Madagascar to the EITI initiative	Presidency, ministry of energy and mining, Norway
	(iv) Problem of Governance	Close collaboration between the Madagascar Economic Development Committee (or *Conseil de Développement Economique de Madagascar* - CDEM) and mining and oil technicians	CDEM, Presidency, OMNIS
		OMNIS agent training and capacity building program	OMNIS, Norway
			PGRM, USA, France, China,

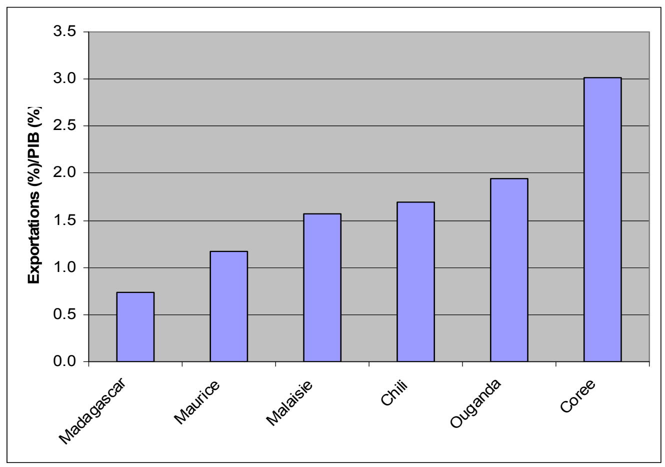
Constraint affecting the activity levels in general	*Comments/ notes*	*Reforms underway*	**Ministry, agencies or partners involved**
		Training of mining and PGRM agent and capacity building program	South Africa
		PPP, training program with universities	SHERITT, Ministry of National Education and Scientific Research
REGIONAL CONSTRAINTS			
Antananarivo-Antsirabe (Industrial Export Processing Zones, textile, NICT, agribusiness)	Land problem: reluctance of investors over unregistered land.	Land reform program in the Vakinakaratra region	Ministry of Land Development, MCA
	Uncertain and insufficient energy sources	Power station construction project	Ministry of Energy JIRAMA, PIC
	Very demanding tax system, notably for SMEs	Tax system reform, permanent technical assistance, one-off technical assistance at DGI level,	Ministry of Finance, DGI, IMF, French Cooperation
	Burdensome customs procedures (IEPZ, export companies)	Customs administration reform, set-up of special customs clearance counter for these export processing zones	DGD, IMF, World Bank, AGOA, GEFP
	Access to credit		
	Lack of labor qualification	Training program	PIC
	Transport infrastructure: low capacity and dilapidated the aerodrome, under-used rail network, bypass		
	Low coverage of ICT infrastructures	Creation of an Antananarivo ICT business park	Ministry of Telecommunications, PIC, GOTICOM
Nosy Be (Tourism)	Land plots are not available on the Nosy Be littoral	Nosy Be tourism sector support project, development of a urbanization plan	Ministry of Tourism, Nosy Be tourism sector support part of the PIC project, SFI, ANGAP
	Lack of attractive tax policy for tourism, favoring the development of the informal sector		
	Supply of electricity,		
	Access to water and sanitation, health care for population	Partnership with the JIRAMA, Partnership with a NGO to supply potable water to the community, support the Nosy Be hospital	JIRAMA, PIC
	Administrative red tape and corruption	Support to the business environment, commune capacity building	
	Insecurity at the port level		
	Shortcoming at the activity level of the chamber of commerce	Support to the chamber of commerce	
	Insufficient level of training	Training center to strengthen the local workforce	
	Dilapidated port infrastructures	Rehabilitation of the port	
	Insufficient road infrastructure giving access to the most attractive tourist sites	Construction of community roads and tourist trails	
	Mediocre communication infrastructures		

II.2 THE DIFFICULT MARKET ACCESS

23. Promoting market access in the sense of facilitating the movement of goods and services is essential for private companies to expand. They must be connected with their suppliers as well as with their clients. Furthermore, in an economy like Madagascar's, the circulation of goods and services must often include access to international markets because of the local population's limited purchasing power and of the unavailability of capital goods and new technologies. Access facilitation to international markets is at the core of the success of South-East Asian countries, Chile and Mauritius.

24. The opening of Malagasy companies to the outside world is already a reality since around 0.60 cent of every dollar they spend serves to finance the purchase of goods and services abroad. On the other hand, we cannot find the same dynamism at the level of exports that increased at a slower pace than the rest of the economy during the 2000-2007 period. If exports accelerated since 2003, for the well-known reason that the new mining projects will start production in 2009,[22] export growth is still lagging behind the rates noted in emerging countries (figure 9). As an example, Korea or even Uganda has seen its exports increase twice as fast as its economy over relatively long periods these past decades.

Figure 9: Exports are growing more slowly in Madagascar than in emerging countries



Source: UNCOMTRADE and TRAINS

25. A quick overview reminds us that there are numerous constraints that make access to domestic and foreign markets difficult for firms in Madagascar. First of all, the lack of basic infrastructure development is a limiting factor. The absence of roads, the difficult access to electricity or communication networks harms business expansion and the circulation of goods and services. Today we no longer have to reiterate the need to modernize ports which, in their current state, contribute to further isolating Madagascar from the rest of the world or the need to build roads to connect regions among themselves. Fortunately, these constraints and the urgent need to correct them have been

[22] During the 2003-07 periods, exports increased 1.8 faster than the GDP but this acceleration partly captures the catching up that took place after the 2002 political crisis that greatly weakened manufacturing exports (textile).

understood by the Malagasy authorities that have initiated considerable efforts in this area as recalled in the previous chapter.

26. Therefore, this chapter now pays attention to the factors that contribute to making the movement of goods and services more expensive in Madagascar, beyond the lack of basic infrastructure. We will successively show that these movements are negatively influenced by the following three aspects:

- *The tariff policy* because of its relative instability and of high tariffs on capital goods penalize companies which want to import capital goods and adapt to technological progress.

- *The logistics costs on the national territory* because of: (i) complexity of customs procedures; (ii) forwarding operation costs, and (iii) the costs of land-transport of goods. These costs, identified as cumbersome for a company from the moment the goods exit the factory to the port, can represent up to 10% of the export value (taking expenses and delays into account) and therefore become a major source of loss of return.

- *The lack of information and coordination* since there is no coordinated export promotion in Madagascar. As demonstrated by international experience, this shortcoming is prejudicial notably to small- and medium-sized enterprises and to those about to export, that do not have the means to explore new markets and adapt to the quality of their sanitary norms and standards.

27. However these three aspects do not capture all the actions the Malagasy authorities could undertake to facilitate the movement of goods and services. As previously explained, infrastructure plays a crucial role, but access to foreign markets also depends on the trade policies of the other countries. Madagascar is still reliant on the trade practices adopted not only by competing countries, but also on the restrictions imposed by importing countries at the option of their requirements. In that sense, the policy consisting in joining regional agreements and with partners like the European Union will remain a cornerstone of the Malagasy trade policy, notably since the multilateral agreements promulgated by the World Trade Organization have made no decisive progress .

II. 2.1 THE TARIFF POLICY HARMS INVESTMENT AND EXPORTS[23]

28. Most firms working in Madagascar have to import their investment and equipment goods because they simply are unavailable on the local market. This is particularly true for export companies that, subject to foreign competition, must count on modern goods with a certain degree of technological development. In the first part of this study, we mentioned that the mining companies settling in Madagascar import more than

[23] This chapter benefited from the assistance of Olivier Jammes and uses an analysis prepared by Ian Gillson and Ellena Rabeson on tariff removal in Madagascar, January 31st, 2008.

80% of their equipment goods. In this context, it is primordial to minimize the transaction costs related to capital goods imports.

29. In this chapter, we will argue that the tariff policy followed by the authorities is twice penalizing. On the one hand, it is characterized by chronic instability, with frequent changes both in terms of rates and of customs classifications, and this contributes to rising uncertainty and also to delayed investment decisions. On the other, high customs tariffs on equipment goods make imports more expensive and discourage companies from adopting technological progress.

A. THE CHRONIC INSTABILITY OF THE TARIFF POLICY

30. It is difficult for a company who wants to invest in Madagascar by importing capital and equipment goods to provide for the costs related to the tariff policy. These costs vary according to the type and origin of the product and have significantly changed over the years. As an example, light bulbs have seen their tariff vary from 15 % in 1995 to 0% in 2001, to go back up to 10% again in 2005 then to 20% in 2006 and to finally drop back down to 5% since 2007.

31. More generally, table 3 shows the customs classification changes and the tariffs applied during the 1995-2008 period. It emerges that less than 1% of tariff lines (53 out of 6381 lines at the HS8-digit level of classification) remained at the same rate in the last decade. These tariffs would be even more unstable if the preferential regimes were taken into account, since they vary according to the origin of the import and to the sector of activity. One must acknowledge that part of the tariff changes reflects the reforms that have been launched during this period and that they must be interpreted positively. Undeniably, the customs regime has improved, notably through the tariff consolidation (from 8 in 1995 to 3 since 2006), the removal of quantitative restrictions starting from 2000 and the underlying drop of the average tariff from 16.2% in 2005 to 13.6% in 2006 and 12.9% in 2007.

Table 9: Evolution of the tariff lines and rates, 1995-2008

	2008	2007	2006	2005	2001	1995
Variations in the classification (HS 8)						
% of tariff lines with a 0% rate	2	2	2	24	40	30
% of tariff lines with a 5% rate	22	22	12	4	40	31
% of tariff lines with a 10% rate	34	34	43	36	12	26
% of tariff lines with a 15% rate	0	0	0	0	2	3
% of tariff lines with a 20% rate	42	42	44	9	6	3
% of tariff lines with a 25% rate or more	0	0	0	27	0	8
Variations in the average rate						
Average rate	12.9	12.9	13.6	16.2	4.7	7.3
Average rate (capital goods)	10.4	10.5	10.9	6.9	4.3	7.3
Average rate (raw materials)	12.4	12.4	12.1	15.8	2.5	3.3
Average rate (intermediate goods)	9.2	9.2	12	9.1	2.2	6.4
Average rate (consumer goods)	16.6	16.8	17.4	18.4	8.8	9.8

Source: UNCOMTRADE and TRAINS

Note: This relates to statutory tariffs and we have kept COMESA's definitions for the categories of goods. To simplify things, we have not taken into account other taxes collected on imports before the consolidation carried out since 2005.

32. The progress made by the Malagasy authorities over time must not be minimized, but it should just be noted that tariff instability persisted in Madagascar in the absence of customs regime reforms. Since 2005, only one tariff line out of 5 was not modified at least once. In addition, most of these changes have led to rising tariffs on capital goods since in 2008, only 1/3 of the products report a rate that is lower than in 2005. Indeed, the instability of the tariff policy reflects more the reactions of the Malagasy authorities to the pressures of some private sector groups or even of donors than the implementation of a consistent policy. From time to time, some rates are lowered with the adoption of special regimes; others are raised to protect operators who are perhaps subject to outside competition. Finally, reforms are not always decided to preserve the balance between trade liberalization and the maintenance of the government revenues. For instance, the tariff exemption applied on capital goods between September 2003 and September 2005 was not fiscally sustainable, which led the IMF to challenge it, thus adding an extra degree of uncertainty into the system.

33. Obviously, such instability penalizes both private sector operators and the customs administration. On the private sector side, according to economic literature, a rising uncertainty produces perverse effects on investment decisions, often more penalizing than the capital cost itself.[24] Local firms prefer to postpone, even cancel, their investment decisions, whereas international firms choose to settle in a country where the economic policy environment is more stable. On the customs administration side, instability makes information more difficult to get, particularly from distant customs posts without an electronic connection to the General Directorate. Lack of access to information often opens the door to tampering and corruption.

B. HIGH TAX EXPENSES PENALIZE INVESTMENT

34. Though there has been tremendous progress in the tariff policy pursued by the Malagasy authorities this last decade, including the reduction of average rates and the tariff consolidation with non-tariff measures, Madagascar is still lagging far behind international best practices with regard to the pricing of capital and equipment goods. This discrepancy is obvious when one considers that the average customs duty on capital goods in Madagascar equals 10.4 % in 2008, with over ¾ of products that have a rate equal to or higher than 10%, whereas it does not exceed 2 % in Mauritius and is under 8% in countries like Mozambique and Tanzania (table 10). One notes that the pricing policy followed by Madagascar for other categories of goods corresponds to that of the other countries. For example, the average rate for consumer goods in Madagascar is not far from that of Tanzania and Mozambique.

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[24] Serven, Luis, 1997. *Uncertainty, instability, and irreversible investment: theory, evidence, and lessons for Africa*, Policy Research Working Paper Series 1722, The World Bank

Table 10: An international comparison of tariffs on different categories of goods

	Madagascar	*Mozambique*	*Tanzania*	*Mauritius*	**Chile**
% lines with a 0 % rate	2	2	36	84	1
% lines with a rate between 0 and 10%	22	63	0	0	99
% lines with a rate between 10 and 20%	76	0	23	8	
% lines with a rate higher than 20%	0	35	56	8	
Total average rate	12.9	12.1	12.8	3.3	6.0
Average rate on capital goods	10.4	7.3	4.8	2.0	5.9
Average rate on raw materials	12.4	12.3	13.9	3.5	5.9
Average rate on intermediate goods	9.2	8.8	10.3	0.9	5.9
Average rate on consumer goods	16.6	18.6	20.0	6.9	6.0

Source: UNCOMTRADE and TRAINS

35. If one considers the VAT applied to the customs line, the weight of taxation on capital goods imports is even more cumbersome in Madagascar than in the other countries. The VAT rate reaches 20% in 2008, whereas it equals 15% in Mauritius or 17 % in Mozambique. Calculating the cumulative effects of fiscal charges on Malagasy imports show that they reach at least 30% for at least ¾ of the products (table 11). Thus, both for equipment goods like the machines used by the textile industry on which a 20% (customs) tariff and a 20% VAT rate are collected, the actual total rate the importer will have to pay equals 44%, whereas it would only be of 17.3% if the same importer resided in Mauritius, i.e. three times less.[25] These rates are particularly penalizing for a country with high transport costs caused both by distance and lack of infrastructure.

Table 11: Weight of taxation at customs line on imported goods

	2007	2006
Distribution of tariff lines		
% of tariff lines with a 0% rate	1.4	1.2
% of tariff lines with a 5% rate	0.7	0.5
% of tariff lines with a rate between 5 and 20%	0.8	2.6
% of tariff lines with a rate between 20 and 30%	55.4	52.9
% of tariff lines with a rate above 40%	41.7	42.8
Tax charges per category of goods		
Average rate	34.4	34.8
Average rate on capital goods	30.4	30
Average rate on raw materials	32.8	32.7
Average rate on intermediate goods	28.8	30.8
Average rate on consumer goods	39.2	39.4

Source: UNCOMTRADE and TRAINS

[25] Most textile companies are governed by the free exporting zone regime granting them full customs duties and VAT exoneration.

II.2.2 LOGISTICS COSTS[26]

36. Malagasy businessmen, whether importers or exporters, are confronted with a whole series of intermediate transactions between the factory outing and the arrival at the port/airport, generating additional costs. These costs can exceed the tariff weights or even that of international freight and thus greatly impact corporate decisions.[27] They are particularly sensitive in sectors that are subject to international competition where speedy reaction-time and flexibility – for instance in the clothing sector where large-scale retail windows of opportunities only last a few weeks – can prove to be decisive advantages in view of tough global competition, with powerful Asian producers enjoying far-superior transit and logistic conditions.

37. To capture the scope of the logistics costs borne by business operators in Madagascar, we propose to sort three types of costs, i.e.: (i) costs related to customs procedures; (ii) costs related to forwarding activities; and (iii) domestic transport costs. But, we will see that these costs are interrelated and that acting on one can have repercussions on the others. Thus, the service range offered by forwarders varies according to the quality of the customs administration. If the latter is corrupted and unpredictable, using a well-connected intermediary is indispensable to reduce delays.

38. At the onset, it is important to say that Madagascar is in a positive dynamic in the sense that the reforms undertaken these last few years, notably through the streamlining of customs procedures, are beginning to bear fruits. We will however show that though costs borne by firms tend to decrease, they are still far behind international best practices.

A. THE COSTS RELATED TO CUSTOMS PROCEDURES

39. The publication of the World Bank's *Doing Business* contributed to placing streamlining customs procedures at the core of a lot of developing countries' reform programs, Madagascar included. We will therefore start by describing the wave of reforms and then assess their implications on costs in monetary terms and on the delays borne by business operators.

40. It started with the serious effort to improve the management of the container terminal in Tamatave (Madagascar's largest port where close to 80% of Malagasy imports transit), which now seems to operate according to industry standards, if one considers the income level and the size of the country and of the port itself. Since 2005, the terminal is managed by a Philippine company, MICTSL, which, in collaboration with the port authorities, the SPAT, utterly modernized its operations. Cargo management is

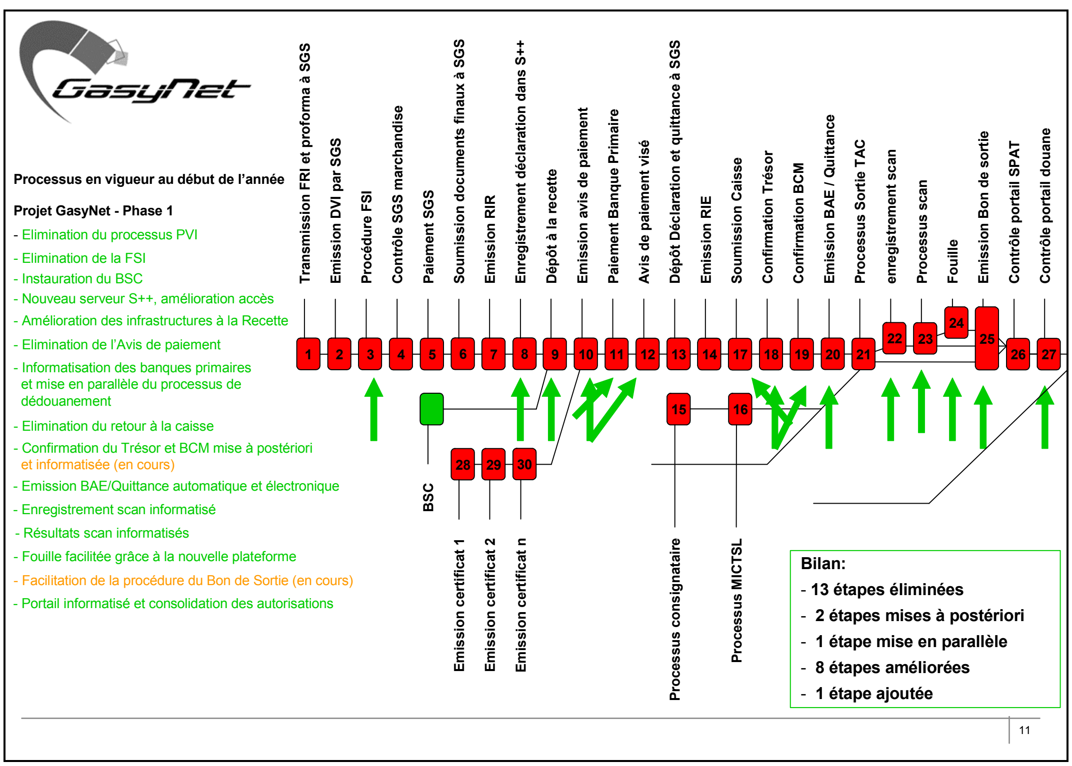
[26] This chapter uses the analysis prepared for this CEM by Olivier Cadot, "What is happening between the ship and the factory? The transit performance in the Tananarive-Tamatave Corridor", May 2008 (or "*Que se passe-t'il entre le bateau et l'usine ? La performance du transit sur le Corridor Tananarive-Tamatave"*, mai 2008.)

[27] For empirical evidence of logistic costs in Africa, cf. B. Eiferrt, A Geld and V. Ramachandran, *Business Environment and Comparative Advantage in Africa*: *Evidence from the Investment Climate Data*, World Bank, 2005 or S. Djankov and al, *Trading on Time*, World Bank, 2007.

fully computerized, using the SPARK software common to most large ports that enables the port to know which containers to unload long before the cargo arrives. On-site container management is also computerized, using the GVS (Gate Validation System) software. The container terminal receives the manifests of ships berthing in Tamatave as early as boarding, and they appear on the terminal's screens 36 hours before the ship arrives, allowing terminal optimal space management according to the collections that are planned.

41. Customs authorities have accompanied the modernization of the port management by adapting the customs legal framework up to the international standards recommended by the World Customs Organization. They have carried out direct actions aiming at simplifying the procedures the importers have to face at customs. A summary of the measures adopted emphasizes the elimination of redundant procedures (with formalities reduced from 30 to 18). A central element of this streamlining effort was the replacement in April 2007 of pre-shipment inspections (better known by its English acronym PSI) with the BSC (Cargo Monitoring Note or *Bordereau de Suivi des Cargaisons*), a system specific to Madagascar. Customs clearance itself is done by a Registered Customs Agent (or *Commissionnaire Agrée en Douane* - CAD) chosen by the importer who must provide a limited amount of documents (cf. box1).

Figure 10: The streamlining of import procedures



Source: UNCOMTRADE and TRAINS

Box 4: The Cargo Monitoring Note

The exporter or his representative has to open the BSC (or *Bordereau de Suivi de Cargaison*) as soon as the cargo is loaded. To do so, he goes through the following process:

He accesses the BSC module through the Internet.

He creates his account (by attaching an abstract of his Chamber of Commerce registration certificate) if he is not yet registered in the database, or goes into the system by using his account if he already has one.

He records the BSC elements, i.e.:

- The identity of the importer in Madagascar.
- The identity of the forwarder.
- The shipment details (goods and means of transport).

Finally he attaches the required scanned final documents which are the final invoice, the waybill and the export customs declaration.

Once these formalities are done and after the DVS (Value and Selectivity Division or *Division Valeur et Sélectivité*) verification, the open BSC becomes admissible. Any cargo that has not been the subject of an admissible BSC will not be able to be cleared through customs. However, some imports are not subject to this rule:

- Personal travelers' effects and/or personal objects and effects of moves.
- Shipments of air freights and parcel posts whose FOB value does not exceed 100 Euros.
- Shipment of documents or samples.
- Weapons, ammunition, war instruments intended for national defense purposes.
- Banknotes for the BCM.
- Donations to the government.
- Diplomatic pouches.
- Donations in cases of natural disaster.

The DVS examines the CMSs sent one by one and checks the related documents. The most-noted cases of discrepancies and anomalies pertain most often to the identity of the parties, incomplete or missing documents and/or to a discrepancy between the merchandise description in the BSC and in the documents.

The DVS simultaneously checks the risk level. If it detects one, it sends a message to the concerned customs office, allowing it to take the necessary measures to minimize the risk of underestimating the customs value of the imports.

42. The introduction of the ASYCUDA++ customs management system has enabled air and shipping carriers to file their manifest electronically and the declarants to directly enter and record declarations in the customs offices. Entering and recording customs declarations can be done directly from the CAD offices equipped with ASYCUDA++ terminals. The documents as well as the Single Administrative Document (or DAU - *Document Administratif Unique*) are then printed and physically dropped off at Customs. In the long term, all the documentation should become electronic. To date, ASYCUDA++ is operational in eleven customs offices and covers 91% of import operations and 80% of export operations. One of the rare weaknesses of the system is that the official filing of manifests in the ASYCUDA++ customs management system is only currently done after unloading, which slows down procedures since declarations can only be filled in by the forwarders once the manifest is filed.

43. Based on the statistical risk analysis criteria (« profiling » the importer-exporter pair and the product),[28] each declaration is allocated one of the following four « circuits »: red for systematic scanning (24% of the declarations, 30% of which will then be subject to a physical inspection), yellow for document verification, blue for ex post control, and green for risk-free declarations. Customs can reclassify declarations in the red circuit based on indications from the system and do so for 3% of the declarations, which brings the total up to 27%. Physical inspections therefore concern 8% of imported containers (30% of 27%).

44. To accelerate payments, the *Tradenet* system set up by *Gasynet*- a joint Malagasy Government and SGS firm – has started to be operational during the second half of 2007.[29] This system adopts ingredients that have functioned well in Singapore and more recently in Ghana[30] by putting commercial banks, the Treasury, the Central Bank, Customs (via ASYCUDA) and forwarders in touch, so that duties are paid electronically and payments immediately recorded. The duty and tax payment process can be summed up as follows: (i) payment by the declarant in a commercial bank which issues confirmation to the customs office in return; and (ii) transfer order from the commercial bank to the BCM that issues a credit notice to the Treasury on behalf of the concerned customs office. In principle, with this system customs clearance delays for the green circuit are practically nil, with the exception of the issuance of the customs clearance slip that takes about a day (it then becomes a problem of client/carrier logistics, not of customs clearance). Currently, the Treasury and the BCM are only connected to the system in Tananarive. Moreover, today the system operates transaction by transaction, which is not adapted to the importance of the charges put on these administrations, and efforts are ongoing to enable approval of these procedures by batches.

45. The reforms set up by the customs authorities have borne their fruits since the costs to business operators have been significantly reduced in the last two years, notably in the last 12 months. Today, it is estimated that there is practically no waiting period for cargo in Tamatave harbor because of little traffic, and once alongside quay, unloading is very fast – around one hour – which makes it up to standard of two hours for a large 4,000 to 4,500 EVP container ship in the most effective ports.[31] The container ships which call at Tamatave are small (2,000 EVP) and not all their cargo is unloaded, which explains the very fast unloading time.

46. Dwell time (DT) [32] is also shortened as highlighted in the table below which breaks customs clearance procedures down into three main components. The first

[28] According to the interviews carried out by the mission, this practice still seems *ad hoc*, but the general consensus is that the Directorate General of Customs is working energetically toward their modernization and to reform the regrettable work methods that characterized Malagasy customs under the former regime.
[29] It was officially inaugurated on the 25th of January 2008.
[30] Luc de Wulf, *Tradenet in Ghana: Best Practice of the Use of Information Technology*, 2004
[31] Equivalent to 20 feet, standard measure of a container ship capacity.
[32] « Dwell time » means the time spent by a container in the terminal. It is generally included in what is called in English customs clearance time. If the latter is done when the container is stored in the terminal and that the client (or the forwarder, as the case may be) is ready to collect as soon as the clearance formalities are done, the two are more or less equal. If the clearance requires scanning ("the red line" in

component is time (in days) spent between the recording of the customs declaration (the beginning of the customs clearance procedure) and its clearance (the end of customs control procedures). It depends mostly, but not only, on the efficiency of customs procedures. Indeed, declarations are recorded from the forwarders' office, and a study has shown that the latter spend about half a day filing documents with customs. If the goods are in the red circuit, this time also includes scanning, which means a truck must be available to transport the container from the terminal to the scanner. The second component is the time spent between clearance and the issuance of the customs clearance slip. This includes payment operations which depend on the financial circuits between the declarant's bank and the Treasury, and it is the beneficiary of the upgrade brought by the Tradenet communication system. Finally, the third component corresponds to the time spent between the issuance of the customs clearance slip and when the goods physically exit the port. This delay depends more on the clients' and their carriers' logistics. Late collection by clients, either because of delayed trucks or for organizational reasons, seems to be frequent and explains in large part the variation of this component.

47. During the first half of 2008, it appeared that the average customs clearance time was around five days at the Tamatave port and half a day at the Tananarive airport (table 12). Because of the strong variations of customs statistics, it is preferable to refer to the median delay (the one a standard company is confronted with)[33] which is of around 3.5 days at the port and a few hours at the airport. Delays vary according to the inspection circuit. The delay imposed by scanning - without a physical inspection – which is included in the first customs clearance time component is in itself of three to four hours (the time needed to get the results; scanning itself only takes a few minutes). The delay imposed by a physical inspection is unpredictable since it depends on the customs working hours (a physical inspection imposed shortly before closing time, for instance, means that the truck will have to spend the night at the port. Because, though the port is open 24 hours/day but customs are not). It must also be noted that there can be delays because technicians or competent personnel are absent (for example, there is only one authorized veterinarian in Tamatave to control sanitary standards).

Tamatave, see section above on the procedures) then the clearance time exceeds the DT, since the container leaves the terminal to go through the scanner and, possibly, for the following physical inspection.

[33] The median of a distribution is the point at which half the observations are higher and half are lower.

Table 12: Descriptive statistics of customs clearance period, per component

(a) Tamatave

	Obs	Moyenne	Médiane	Ecart-type	Min	Max
Enregistrement-liquidation	2'437	2.47	1.30	3.66	0	74.90
Liquidation-bon de sortie	2'437	1.87	0.90	4.44	0	128.30
Bon de sortie-sortie	2'437	0.89	0.30	4.08	0	149.30
Temps de dédouanement (total)	2'437	5.24	3.50	7.50	0.1	163.30

(b) Ivato

	Obs	Moyenne	Médiane	Ecart-type	Min	Max
Enregistrement-liquidation	2'888	1.09	0.30	3.64	0	163.20
Liquidation-bon de sortie	2'888	0.26	0.00	0.51	0	4.40
Bon de sortie-sortie	2'888	0.00	0.00	0.03	0	0.90
Temps de dédouanement (total)	2'888	0.42	0.00	3.42	0	163.40

Source: Gasynet-SGS, Staff calculations

48. The reduction of customs clearance delays is encouraging both from a historical and from an international perspective. It reveals a strong improvement compared to the delays reported in *Doing Business* in 2007 since the average delay seems to have been shortened by 19 days (even if the comparison is made difficult because of the methodological differences). At the regional level, customs clearance delay at the Tamatave port seems markedly better than that reported in other African ports, like Mombasa (13 days according to Arvis [2007]), and today puts Madagascar at the same level of customs efficiency than Mauritius in 2007. However, Madagascar's performance is not comparable with that of Ghana yet, who also banked on the set-up of the Tradenet system, and that can therefore serve as a reference.[34] Indeed, it is estimated that around 44% of goods go through the port of Tema (Ghana) in two days, whereas only 20% of transactions in the port of Tamatave do. Also, the likelihood of container survival in the port indicates that at day 7, i.e. when the storage exemption expires, 80% of the containers are collected in Madagascar, whereas this survival time is of only 4 days in Ghana. The differences between the two airports seem to be the same.

49. A lot of countries that seek to promote their international transactions have put customs facilitation procedures in place. The objective is to reduce transaction costs and delays for those companies, exporters for instance, that repeat these operations recurrently. The Malagasy Customs Code (or *Code des douanes*) proposes a series of regimes in line with best international practices (table 13). Yet, these are hardly used by Malagasy companies most of which prefer resorting to the export processing zone regime (for the textile sector) or to the mining regime to enjoy a customs duties exemption. With the elimination of the export processing zone regime increasingly under discussion (notably announced in the 2007 Finance Law), the implementation of these special regimes must become a preoccupation of Malagasy authorities since it will allow to reduce transaction delays and costs for private companies.

[34] Cf. L. de Wulf, op. cit.

Table 13: The special regimes at customs in Madagascar

Arrangement	Description
Bonded warehouse.	Storing of merchandise under customs control in suspension of duties and taxes.
Industrial warehouse.	Applicable to export companies; suspension of duties and taxes.
Temporary admission (without or with inward processing).	Merchandise destined to be re-exported; suspension of duties and taxes.
Temporary export (without or with inward processing).	Merchandise destined to be re-imported; suspension of duties and taxes.
Bonded-processing under the authority of Customs.	Merchandise destined to be processed; suspension of rights and taxes.

Sources: World Bank

B. THE COSTS RELATED TO THE FORWARDERS' ACTIVITIES

50. The mission of a forwarder is to organize the link between the different carriers of goods and to accompany companies in carrying out customs procedures as quickly as possible. The importance of his/her role varies according to markets, products and to the capacity of companies to manage their logistics functions themselves. However, it is not excessive to say that forwarders are present in most international transactions, whereas their role is often overlooked by international trade experts and policy makers. This lack of interest is not an exception in Madagascar (there is no study dedicated to them in the inventory presented in chapter II.1).

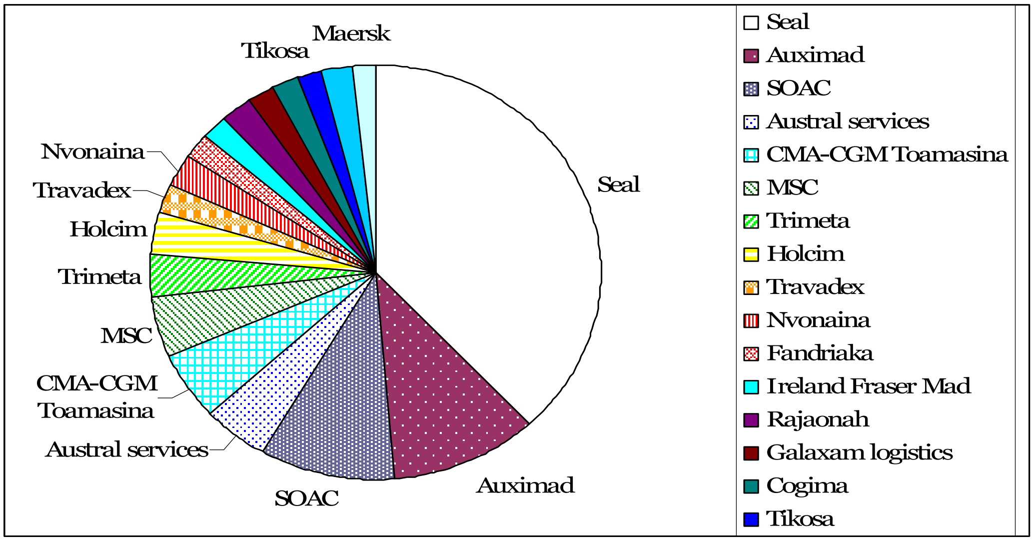
51. The Malagasy forwarding sector (forwarders proper and customs agents) is made up of two main types of agents: captive agents, who are simply administrative units of large importing and exporting companies, and independent agents. Forwarders do not have an association in Madagascar, but Customs Agents are organized in the Professional Association of Registered Customs Agents (or *Groupement Professionnel des Commissionnaires Agréés en Douane* - GPCAD) which has thus become the *de facto* professional forwarders association. Its separation with the International Federation of Freight Forwarders Associations (or *Fédération Internationale des Associations de Transitaires et Assimilés* (FIATA) since the mid-80s had unfortunate consequences on its public image as well as on access to information given the rapid development of literature, procedures and standards in a profession that, like others, is affected by their proliferation (environmental, on the transport of hazardous goods, etc.) However, some forwarders have chosen to maintain or to get the status of associate member.

52. It is difficult, today, to collect precise information on forwarders activities in Madagascar, whether regarding the amounts of their transactions or the concentration of their activities. The distribution of transactions per forwarder is reported below (unfortunately the amounts per transaction are not available) from the Tradenet system during 2007.[35] In spite of this limitation, we can still show that the independent forwarders sector is fragmented and in large part dominated by Seal who controls 38% of the market (figure 4). Its activity is concentrated on import, where it has established a

[35] Indeed, major forwarding companies like SEAL or the CMA probably concentrate on larger volumes of transactions whereas small companies tend to specialize in niches.

stable clientele since its establishment in 1972. Seal's dominating position is largely due to the historical particularities of the Malagasy forwarding market but tends to decrease over time.[36]

Figure 11: Market shares per forwarder /CAD, 2007
(in % of the number of transactions)



Source: Ministry of Industry.

53. The tariffs practiced by forwarders in Madagascar are not easy to grasp for lack of data and even the associations hesitate to publish them or to share them on the Internet. However, the disengagement of the State since 2002, improved customs procedures, and the arrival of new forwarders connected to the new investors (mostly the mining ones), have gradually increased competition in the forwarding sector and pulled prices downwards. As an illustration, the fees paid to forwarders by a standard textile company in Madagascar are illustrated by the import of a 20 foot container with goods (pieces of fabric for assembly in an export processing zone company in Tananarive) worth 25,000 € (table 14). All the costs are of 1.3 to 1.8% of the value of the goods, depending on the

[36] It was established during the decades when imports were severely restricted and political support was indispensable for business. At that time, only Seal had the sufficient « surface » to give clients a certain service reliability, and this acted like a barrier to market entry, thus strengthening the concentration of the sector and making acquired positions inaccessible. Furthermore, up to its elimination by the 2007 Budget Law, Malagasy customs practiced a so-called « customs credit » system according to which the *droits de porte [Note: groups together Customs Laws or/and Tax Laws*] and the VAT were payable within 60 days. In practice, to benefit from this system, the forwarder (not the client) had to provide customs with a banking authorization, which the Seal could obtain more easily than its smaller competitors because of its size and financial base. Also, until now the Seal had a bonded warehouse where containers could be stored before clearance without being hit by storage costs (see above). The space of this warehouse was rented to the SPAT, but its existence probably required support within the administration only the Seal could get. At a time when clearance procedure time was unpredictable and affected by endemic corruption within customs, this warehouse gave the client a decisive advantage. But, given the Malagasy environment, it was more an advantage of seniority and size than strictly speaking an anti-competitive practice.

customs clearance delay and the services provided. Since most of the companies working in the Tananarive/Antsirabe area will import their goods to re-export them after processing, the fees they pay represent approximately 3.5% of the merchandise value.

54. The calculation of fees paid to forwarders is illustrative and does not take into account the possibility of goods being retained by customs for a prolonged inspection (red line). In that case, inspection costs (for the report and the visit) up to 0.8% of the value of the goods must be added, which would bring the total costs up to the equivalent of 4.3% of the merchandise value.

55. Also, the forwarders' margin, estimated at 0.5% of the merchandise value in the example shown in table 14, is liable to vary according to the type of transaction and to the identity of the forwarders involved. If the transaction is complicated and requires particular attention from the forwarder, his/her fees will be higher. Several observers have also told us that the lack of transparency regarding the tariffs practiced and the relative concentration of forwarders gave the latter the possibility of increasing their income, which meant that total fees could go up to 5 % of merchandise value.[37]

Table 14: Fees associated to the unloading of an EVP at the port of Tamatave

Tous conteneurs	Ar.	Euros		
Dwell time		*5*	*10*	*15*
Frais de débarquement (MICTSL)	292'000	117	117	117
Livraison sur camion	78'000	31	31	31
Réception conteneur	41'000	16	16	16
Redevance 1	21'000	8	8	8
Redevance 2 (flux maritime)	42'000	17	17	17
Droit de port sur marchandise	34'000	14	14	14
Commune urbaine de Tamatave	10'000	4	4	4
Région	10'000	4	4	4
Magasinage: DT jours @ 36'534		0	0.0	117
Honoraire transitaire @ 0.5% val.	312'500	125	125	125
Ligne rouge seulement				
Frais constat	35'000	14	14	14
Frais de visite	400'000	160	160	160
Total	*1'275'500*	*336*	*336*	*453*
En pourcent valeur marchandise		*1.3*	*1.3*	*1.8*

Notes: For a 25,000 € value
Source: Ministry of Industry

56. Finally, it is fitting to further underline that the fees paid to forwarders vary according to the scope and the quality of the services that are provided. They are partly related to the client's needs and to the complexity of the transaction. Moreover, they can include international assistance, when the goods depart or arrive. Service quality can in

[37] Source: Value Chain analysis in the textile sector, 2007.

fact be influenced by the forwarder's relationship with the customs administration, but also with the land and shipping carriers.

C. THE COSTS OF DOMESTIC TRANSPORT IN THE TANANARIVE-TAMATAVE CORRIDOR

57. Since Madagascar is an island, the authorities have paid attention to the need of bringing down the cost of maritime travel, particularly since most of the « large » ships no longer stop in Tamatave because of its shallow draft. The connection is now done through Mauritius, which lengthens transport time and increases costs for Malagasy operators. Modernizing the Tamatave and Nosy Be ports and constructing the port in Fort Dauphin have become priorities. But, this urgency must not hide the fact that the vast majority of Malagasy companies are located inland, mostly in the Tananarive-Antsirabe axis, and must therefore use the 365 km-long road/rail corridor up to the port of Tamatave to trade with the outside world. It is estimated today that close to 80% of international trade transactions follow this corridor and use the carrier services, particularly hauliers, which today seem faster than rail.[38]

58. On the one hand, it is fitting to recall that Malagasy trucking companies are organized within two professional associations: the APTH (Professional Association of Hydrocarbon Carriers or *Association Professionnelle des Transporteurs d'Hydrocarbures*) which regroups companies that operate tankers, and the APTR (Professional Association of Trucking companies or *Association Professionnelle des Transporteurs Routiers*) which regroups companies that convey goods. Members of both associations represent 80% of hydrocarbon conveyance and 80% of the transport of ordinary goods. However, the role of these associations is limited to the traditional functions of professional organizations, i.e., among others, lobbying with the authorities for issues of common interest for the trade, in particular issues of taxation.[39]

59. There is a fleet of 1,500 trucks with 350 tankers and 400 container carriers for the entire Malagasy road network, in the formal sector, to which one should add around one thousand trucks in the informal sector, for an overall total of 2,500 trucks. However, it appears there are only thirteen trailer trucks with six axles able to transport 40' containers (the standard in the textile sector). The low number of these « tridems » contributes to, but is not the only reason for, a chronic overloading of trucks in spite of the will displayed by public authorities to control overloading. The vehicles are 15 years old on average, which is at the top of the average age range in Sub-Saharan Africa.[40] However an effort to rejuvenate and increase the capacity is underway. Eighty trucks have been imported in 2007, i.e. 5% of the formal fleet of 1,500 trucks, and authorities have now banned the import of trucks over 15 years of age.

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[38] We will come back to rail transport in part IV of this study since its development will be one of the axes of the reforms we will propose.

[39] They are calling for fuel (diesel and GPL) cost deductibility from the VAT base for trucks over 4 tons. They are also protesting against the haulage and parking taxes imposed by the Malagasy local collectivities by virtue of the regulations established in the mid-90s but not implemented.

[40] Arvis, Jean-François; G. Raballand and J.-F. Marteau (2007), *The Cost of Being Landlocked: Logistics Costs and Supply Chain Reliability*; World Bank Policy Research Working Paper 4258.

60. The breakdown of operating costs (variable and fixed) for a 10 y.o. second-hand truck based on the utilization of the vehicle - one to three Tananarive-Tamatave round trip a week - is presented in table 15 below.[41] Variable costs are per kilometer, fixed costs per day, and both are reconciled in the last three columns. A weekly round trip is the standard utilization rate and implies a 37,230km yearly mileage, which is relatively low as we will see further down. Land transport costs in Madagascar seem slightly lower than those noted in Central Africa and nearly 40% lower than those in West-Africa (table 16). On the other hand, they are nearly 20% higher than those observed in Eastern Africa. They are comparable to those noted in France even if the weight of fixed and variable costs seems differentiated, notably because of high wage bills in France, and of the much higher mileage per truck that enables to better distribute costs.

Table 15: Operating costs of trucking in Ariary

	Par km	Par jour	Rotations/semaine a/ 1	2	3
Coûts variables					
Carburant	1'422				
Pneus	341				
Autres b/	443				
Sous-total CV	2'206				
Coûts fixes					
Assurance c/		3'611			
Amortissement d/		27'579			
Chauffeurs		14'950			
Autres e/		12'204			
Sous-total CF		58'344			
Coût total					
Par veh/km					
Ar.			2'605	2'405	2'339
Euros			1.04	0.96	0.94
Par tonne/km f/					
Ar.			163	150	146
Euros			0.07	0.06	0.06

Sources: APTR/APH, ARVIS ET Al (2007), Staff calculations

Notes:

a/ Round trips per week: Number of RT Tananarive-Tamatave (730 km RT). The most frequently mentioned figure is 1 round trip per week, sometimes 2.

b/ Repairs (49%), brake linings (12%), greasing and lubricating (motor, axle and gearbox oil), filters.

c/ Insurance costs for the standard container carrier represents 800,000 Ar/year for the RC and 500,000 Ar/year for goods (sector data). Insurance costs are much higher (84,000 Ar/day) for a

[41] This relates to the costs of a 35,000 liter tanker (the corresponding analysis for a container carrier was not done by the trade). In the following analysis, they are extrapolated based on indications provided by the APTR/ATH, for a container carrier able to transport a 30 ton-payload (34 tons counting the weight of the container, or a 46 ton-PTAC which, however, is illegal). Based on indications given by the industry, maintenance fees were reduced by one third (since the maintenance of tankers is expensive). Diesel consumption (50 liter to 100 km) has not changed, a load of 35,000 liters of hydrocarbons weighing 27,750 tons (one liter of hydrocarbons weighs 850 grams).

tanker, but these costly insurances are imposed by petroleum companies. Because of this difference, the average values calculated for an entire fleet largely overestimate the insurance costs actually incurred by goods hauliers and give an upward bias to the fixed/variable costs ratio.
d/ Oddly, the cost documents provided by the APTR exclude the depreciation of the rolling stocks. With a 20% annual depreciation rate (figure given by the operators in the sector), depreciation costs for a 10 y.o. truck should be 27,579 Ar daily. The table is corrected on this basis.
e/ Inspection and license tag (35%) and logistics (5%).
f/ Based on the average 16 ton live load (a 40' container of 24 tons climbing towards Tananarive and of 8 tons of freight going down towards Tamatave (or a container every 3 trips, in line with the 75/25 proportion of container movements).

Table 16: Compared transport costs, dollars per vehicle-km a/

	Variable	Fixe	Total	Diff. % b/
Afrique de l'est	0.98	0.35	1.33	-17.7
France	0.72	0.87	1.59	1.6
Madagascar	1.37	0.25	1.62	0.0
Afrique du sud	1.54	0.32	1.86	15.2
Afrique centrale	1.30	0.57	1.87	15.8
Afrique de l'ouest	1.67	0.62	2.29	41.8

Notes:
a/ Based on a weekly round trip; exchange rate used: \$1.55/€. Values in Euros: variable 0.88€; fixed 0.16€; total 1.04€.
b/ In percentage of Malagasy costs.
Source: APTR/APTH, Arvis et al. (2007), mission's calculations

61. Beyond the weight of fuel (55% of the total costs), the relatively high costs of road transport in Madagascar and, generally in Western and Central Africa, is due to the lack of round trips possible. Indeed, the mileage of a truck does not exceed 40,000 km (the annual mileage traveled by a Malagasy truck is around 35,000 km for a container carrier and 45,000 km for a tanker), thus limiting the returns of scale. The standard in South Africa and in industrial countries is of 120,000 km/year. If the number of weekly round trips went from 1 to 2, the costs for Malagasy trucking companies would automatically go down 10% (cf. table 15). There is an underuse of the road fleet in spite of the surplus demand that seems to exist in the Tananarive-Tamatave corridor, but it is common to African countries, because of very low speed, in turn due to the deficient quality of roads and the waiting loading and unloading period (the line when arriving in Tamatave can reach 3 km, over 12 hour-wait).[42]

62. Despite the relatively high costs, Malagasy hauliers can impose tariffs for their services that enable them to make a substantial margin. According to the information provided by the industries, these margins can reach up to 70% for the Tananarive/Tamatave section (cf. box 2 for the details of the calculation). Such a margin, equal to the one observed in several African countries, is three times higher than the one

[42] A very large number of trucks are stationary on the Tananarive-Tamatave road going to the capital. Most of these trucks set off between 16:30 and 17:00. According to the explanations given by the trade, the drivers calculate their arrival in Tananarive to avoid the ban on traffic during the day between 06:00 and 20:00. Be that as it may, the effect of the existing regulation is that it provokes a rush-hour traffic of trucks when children come out of school, an unfortunate coincidence for the latter's safety.

noted in South Africa, which suggests an agreement between the main trucking companies (table 17). It is undoubtedly excessive since it enables a 40% to 50% return on investment, i.e. a truck is written-off within two to three years; representing a generous risk premium in the Malagasy context which is characterized by relative stability and where transport does not imply border crossings as it is the case for the corridors in Central Africa.

Box 5: The calculation of margins in the road sector

Margins are calculated as the difference between the tariffs and the costs set around 7 cents to the Euro per ton/km. To define the rates, the textile operators told us that the price from Tamatave to Tananarive is of 1.75 million Ar (700€) for a trailer truck loaded with a 40' container, and of 1 million Ar (400€) for a 20' container. In the other direction, it is of 1 million Ar (400€) for a 40' container and of 600 000 Ar (230€) for a 20' container. The price is higher in the import direction (Tamatave towards Tananarive) due to the larger quantity of freight in this direction. If we do a weighted average of these two directions with a 3/4 weight going up and an 8/32 weight going down (taking costs into account), the average price is 12 cents to the Euro per ton-km. This 12 centimes to the Euro average rate is at the top of the range, i.e. 3 times more expensive than in countries like Pakistan or Iran (1 cent to the Euro). At the other end, we find the 20 cent to the Euro rate observed in Chad. We note however that this rate includes costs imposed by political risks, border crossings (increasing corruption) and the fact that Chad is a country without direct access to a sea port. In short, an average cost of 7 cents to the Euro per ton-km and an average price (import and export) of 12 cents to the Euro on a "weighted return trip" imply a 71% margin for a trucking company operating on the Tananarive/Tamatave corridor.

Table 17: Comparison of profit margins in the corridors

Région	Corridor	Marge (%)
Sud	Lusaka-Johannesbourg	18
Centrale	Douala-N'Djaména	68
Est	Tananarive-Tamatave	71
Ouest	Ouagadougou-Accra	79
Ouest	Accra-Bamako	80
Centrale	Doula-Bangui	84
Est	Mombasa-Kampala	89
Centrale	N'gaoundéré-N'Djaména	119
Centrale	N'gaoundéré-Moundou	163

Source: World Bank (2007), Staff calculations

63. The agreement between the main trucking companies is confirmed by the relatively concentrated market structure. Today, the Malagasy road transport sector is formally quite fragmented, but the concentration is higher in the Tananarive-Tamatave corridor, where five companies (Leong, Leong SIW, Salone, SST, and TRD) control nearly all the traffic. This relative concentration exists in spite of the legal framework which strives to guarantee "the principle of fair and open competition that governs the

activity of land transport" (article 6 of law 2004-053 of January 28, 2005).[43] It is favored by the presence of high fixed costs which is a natural barrier to market entry, and limit the arrival of new competitors. The utilization of excessive tariffs also comes from the excessive demand situation, fed by the mining boom, making it easier for hauliers to impose their conditions on companies that use their services.[44] Finally, from a theoretical perspective, it can be demonstrated that without such an agreement, because the fleet is underused, the rates practiced would drop significantly, not allowing a return in capital in keeping with the risk premium expected in an emerging market.[45]

64. The question Malagasy policy makers must therefore think about is to reduce the companies' margin since its level contributes to increasing logistics costs for Malagasy importers and exporters. As an illustration, by taking the tariffs reported above again, the domestic transport cost accounts for at least 2% of the merchandise value for an importer/exporter in the Tananarive-Tamatave corridor. The absence of competition in the domestic transport market translates not only in excessive rates but also in maintaining the *status quo* for the quality of services offered. The "old" truck remains the optimal vehicle in an environment where there are few if no investment incentives.

II.2.3 THE ABSENCE OF A COORDINATED EXPORT PROMOTION STRATEGY

65. Contrary to most countries that have based their development strategy on export expansion, Madagascar does not have a promotion institution that provides a certain number of services to its exporters. They are penalized since they have difficulties exploring new markets and diversifying their activities. New exporters, particularly small- and medium-sized enterprises with limited resources and experience, do not have the indispensable information and networks to operate efficiently in global markets.

66. This chapter proposes to quickly go back to the limitation of the current situation in Madagascar and to the need to create an agency for exports promotion of in light of international experience. We will then examine the activities this promotion agency

[43] Just like everywhere else, the creation of trucking companies is subject to public authorization and to a certain number of steps: request for approval from the ATT (Road Transport Agency or *Agence des Transports Terrestres*, established in November 2007), receipt of the vehicles (if imported) by Gasynet, inspection of the said vehicles by the Directorate General of Road Safety (or *Direction Générale de la Sécurité Routière*), request for an authorization to put the vehicle on the road (purple card or *carte violette*) with the Ministry of Interior, and business registration with the Ministry of Commerce.

[44] The trucks used by mining companies are often different from those used by manufacturing sector companies (mining companies use relatively few container carriers) but the tractors are the same, hence the bottleneck. This situation could last for the duration of the construction of the mines, moreover affecting the traffic uphill (Tamatave-Tananarive) naturally more congested due to the Malagasy trade imbalance.

[45] A basic equation links price, marginal cost, number of competitors and price-flexibility of demand. A second equation enabled to establish the return on investment rate implied by a given profit margin. By combining these two equations, we can see that with only two competitors, the return rate on capital would drop, with the current capital utilization at 5%. Such a return could not cover the premium risk and is even under the normal return on capital in industrial countries (of 15%). Thus, only an increased utilization rate of the trucking fleet could enable viable competition.

should develop to maximize its results and thus convince the private sector and policy makers. Finally, we will conclude by paying particular attention to the need to assist Malagasy operators in adopting the norms and standards that are increasingly required by Madagascar's trade partners.

A. WHY CREATE A PROMOTION AGENCY?

67. Both the experience of emerging countries that achieved a successful transition by accelerating their exports and the theoretical arguments presented in economic literature allow justifying the set-up of a promotion agency. East-Asian countries (Malaysia for example with the Malaysian Trade Development Board), Chile (*Fundacion Chile*) or Mauritius (Mauritius Industrial Development Authority) have all relied on an export promotion agency. A recent World Bank study of nearly 90 countries found that for each dollar spent by a promotion agency, exports increase approximately by 40-60 US dollars.[46] A double warning is however necessary; first of all, not every agency is effective; then, the agency is able to accompany a coherent export strategy but cannot replace it, as the failed promotion agencies of the 80s remind us since they were set up in countries that favor protectionist policies.[47]

68. On a theoretical level, setting up a promotion agency is justified to reduce information asymmetries and market gaps that prevent maximizing a country's export potential.[48] Information on international markets is difficult to collect and to interpret for individual exporters, particularly small- and medium-sized enterprises with no representation abroad. In addition, when firms make efforts in that sense, the temptation is great to withold this information from their competitors, potentially damaging export expansion and diversification. An agency not only makes it possible to reduce the costs of collecting information but also to ensure its sharing, and thus maximizes the externalities for all the country's exporters.

69. Despite the success of several emerging countries and theoretical arguments, Madagascar distinguishes itself with the absence of a harmonized institutional framework that stops it from carrying out functions generally attributed to an efficient export promotion. Expert opinions converge to say that export promotion must be structured around the four following functions:

- Building the country's public image (organization of promotional events, advertising campaigns);

- Export support services (training, technical assistance for the implementation of regulatory frameworks, customs procedures, product pricing, …);

[46] D. Lederman, M. Olarreaga, and L. Payton*, Export Promotion Agencies: What Works and What Doesn't*, World Bank Policy Research Paper, N. 4044, March 2007.
[47] For further details, cf. P. Hogan, D. Keesing and A. Singer [1991]. *The Role of Support Services in Expanding manufactured Exports in Developing countries*, Economic Development Institute.
[48] For further details, cf. D. Rodrik and R. Hausmann [2003], *Economic Development as Self-Discovery*, Journal of Development Economics, 72(2), 603-33.

- Marketing promotional activities (fairs, missions to the markets, monitoring services by the embassies abroad);

- Information and research (general, potential sectors, foreign importing companies, publications that encourage operators to export, databases with the useful contacts, etc.).

70. Currently, Madagascar's promotion effort is scattered within several private and public entities sometimes funded by development partners. Among these efforts, the Ministry in charge of Trade offers *an export promotion service*. However, in spite of its ambitions, this service is barely operational because of a meager budget (merged into the Ministry's overall budget). However it provides information on possible participation in international trade fairs, serves as a relay for the offers received by the Ministry of Foreign Affairs, and disseminates statistical data on the evolution of world prices for Madagascar's main exports. It can rely on the support of the Secretariat for the trade integrated framework when it comes to support and research activities.

71. In parallel, the new investment promotion agency, the *Economic Development Board of Madagascar* (EDBM), has started its promotion activities, some of which will also be useful to exporters. They emphasize promoting the country's public image abroad and its tourism potential, the expansion of agricultural, textile and mining products, and services like ICTs. In addition to this function of image promotion, the government asked the EDBM to study the set-up of a one-stop-shop for exporters, with a view to streamlining their transaction costs and delays. There is a synergy between the EDBM's activities and the functions allotted to an export promotion agency.

72. The private sector has also developed initiatives, of which the *Chambre de Commerce* that offers a few services that aim at building export capacities by making the legacarta software (with the ITC's collaboration) on multilateral trade agreements, and access to the ITC websites on trade analysis tools available. A certain number of initiatives, generally supported by one or several donors, aim at promoting trade relations with Madagascar and/or propose the exchange of targeted information/training. Among these initiatives, we can mention *Cap'Export,* a program of the *Chambre de Commerce internationale France Madagascar*, and the IFC and AFD supported *PepExport* program for textile and craft exporting companies.

73. Finally, and this is worth emphasizing, export promotion activities are barely developed within Ministries or sectoral agencies like fishing, agriculture and mining. The exception seems to be the tourism sector with the National Tourism Office (or *Office national du tourisme*) that implemented a promotion campaign to position Madagascar as a high-end ecotourism destination by strengthening the ties with professionals and the general public (organization of and participation in trade fairs, press trips, etc.). We can note that the Hotel and Restaurant Federation of Madagascar (or *Fédération des Hôtels et Restaurateurs de Madagascar* - FHORM) is also active and put its directory at the disposal of all of its members, created a FHORM film presenting the association and its members and participated in several international tourism trade fairs.

74. This quick overview shows that support to exporters is scattered within several agencies which do not always work together and do not enjoy enough support or visibility to ensure the implementation of an export promotion strategy. We will recommend the creation of an export promotion agency whose characteristics will be discussed in the reform agenda proposed in the final part of this study. All that is needed here is to say that international experience made it possible to identify a certain number of principles relating to the operations and the organization of such an agency, and they will be examined in the Malagasy context.

B. CHOOSING WHICH PRODUCTS AND MARKETS TO PROMOTE: A NECESSARY EVIL?[49]

75. One of the major challenges for Malagasy authorities, including those responsible for the promotion agency, is to support the sectors and the companies most likely to generate increased exports. Targeting the activities of an export promotion agency is nothing new and has led to a rich and diverse trend in economic literature, that range from the need to pursue industrial policies to non-interventionism. Yet, it is increasingly recognized that authorities need to concentrate part of their activities to have a tangible impact on private sector behavior, particularly to avoid any risk of their support getting diverted. This need to target is also imposed by the Government's limited resources and by the need to produce concrete results in a relatively short time and thus create a virtuous circle in support of policy makers and private sector operators.

76. With this vision, we will propose parts of the answers that can guide the authorities in prioritizing the interventions of the export promotion agency, with regards to the services it will have to provide exporters or the analytical tools it will have to develop. Our objective is to provide avenues to consider the products and markets that seem to present the most expansion potential by using one of the principles recently raised by Haussmann, Rodrik and Sabel [2007][50]. These authors argue that State intervention can take place at two levels. The first (« in the large ») aims at leading a proactive promotion policy by identifying the sectors and products which, could emerge as winners over time. This policy can turn out to be particularly profitable if it is the right one as was the case of salmon in Chile or India's « back office » activities. However, it requires substantial resources and a level of (institutional and technological) development Madagascar has not reached yet.

77. The second level rests on the common sense principle « that the sectors, products and markets that are already fast-moving are the ones to push » (or « *qu'il faut pousser les secteurs, les produits et les marchés qui bougent déjà* »). Most of the times, these movements provide relevant indications on private sector trends and on export expansion and diversification potential. Applying this principle seems fully justified for Madagascar since there are indeed numerous barriers that stop emerging exporters from taking

[49] This section is based on the analysis prepared for this CEM by Ian Gillson, *Prospects for future growth of Madagascar exports: The contribution of the extensive and intensive margins*, mimeo, World Bank, April 2008.

[50] R. Hausmann, D. Rodrik and C. Sabel, *Reconfiguring Industrial Policy: A framework with an application to South Africa*, August 2007.

advantage of current opportunities and reaching new markets. Above, we have shown that most companies find access to information difficult and logistics costs remain high because of the country's isolation. The role of the promotion agency would therefore be to accompany the private sector's movements by supporting the approaches of these exporters, by coordinating their interventions and reducing their entry costs with the appropriate and targeted services.

78. To capture what has been « fast-moving » in Madagascar these last few years, we have used the method proposed by Brenton and Newfarmer [2007].[51] This methodology differentiates a country's export growth as: (i) the *extensive margin* which is equal to new export or new market development; and (ii) the *intensive margin* captures the intensification of traditional exports or the existing bilateral trade flows (cf. box 6 for a detailed explanation of the methodology).[52]

Box 6: The breakdown of Malagasy sources of export growth

According to the methodology suggested by Brenton and Newfarmer [2007] the sources of export growth can be broken down into intensive and extensive margins.

The intensive margin (ΔI) is divided into 3 elements:

A = increase of the existing products X in the current markets (A)
B = decline in the existing products X in the current markets
C = disappearance of the existing products X in the current markets

The extensive margin (ΔE) is divided into 3 elements:

D = value of existing products X towards new markets
E = value of new products X towards existing markets
F = the value of new products X towards new markets

The analysis was carried out for Malagasy exports with a sample of 177 countries during the 1991-2006 period. The data was taken from the UN COMTRADE database (via WITS) by using an HS 1988 classification with a desegregation level per HS-6l products. We note that Madagascar exported 3,260 different products over this period, however with relatively strong variations over time.

Source: P. Brenton and R. Newfarmer, op. cit.

79. Applying this methodology to Madagascar for the 2003-06 period (cf. table 18) demonstrates that export growth was carried more by the extension of the extensive margin, which translates a contribution more or less equivalent to the expansion toward new markets (Jordan, Rwanda and Angola) than by new products (polypropylene, pajamas, apparel, denim, ready-made meals and rice). But this result is partly misleading

[51] P. Brenton and R. Newfarmer, "*Watching More Than The Discovery Channel: Export Cycles and Diversification in Development*" , World Bank Policy Research Paper, 2007-
[52] For further details, cf. Ian Gillson*, op. cit.*

since the reduced weight of the intensive margin is due to the combination of two opposing effects. On the one hand, there was a strengthening of traditional exports toward their historical markets, in particular some apparel goods and fishing products toward the United-States and the European Union. On the other, there was a significant loss for some products like vanilla (60% loss), that found themselves facing strong international competition.

80. At the global level, the explanatory factors of Madagascar's export growth distinguish themselves with the negative weight of the intensive margin. An equivalent loss of traditional markets can only be found in Mauritius and still, not as intensely as in Madagascar. The strength of countries like Chile and South Africa was precisely their ability to preserve (even extend) their market shares for traditional exports. Conversely, we can also note the dynamic nature of Malagasy exports with the appearance of new markets (70%) and new products (26%), which is higher than in Malawi, South Africa and even Chile. Madagascar's propensity to export existing products toward new markets seems lower than the one observed in Tanzania and Mauritius.

Table 18: Contributions of intensive and extensive margins to the growth of exports, 2003-06

	Intensive margin			***Extensive margin***			
	Increase of existing products	Drop or disappearance of existing products	Total	Increase of existing products towards new markets	Increase of new products towards existing markets	Increase of new products towards new markets	Total
Madagascar	428%	-523%	-196%	70%	26%	0%	96%
Tanzania	77%	-115%-	-41%	133%	8%	0%	141%
Mauritius	153%	-176%-	-23%	98%	20%	5%	123%
Malawi	188%	-132%	56%	17%	26%	0%	44%
South Africa	116%	-33%	83%	17%	0%	0%	17%
Chile	100%	-6%-	95%	5%	0%	0%	5%

Source: Gillson [2008]

81. Breaking down the intensive and the extensive margins to company level would have been relevant to judge their internal ability to respond to trends in international demand. Indeed, identifying export companies and the evolution of their exports (in terms of products and markets) would have allowed enriching the analysis and guiding the Malagasy authorities' export promotion efforts. However, such a research would require statistical information at the company level which is currently unavailable in Madagascar.[53]

82. Despite the above limitation, breaking down the sources of growth for Malagasy exports offers three potential directions the export promotion agency could concentrate its efforts on in the coming years:

[53] For examples of such an analysis at the business level, cf. Eaton, Eslava, Kugler and Tybout, « *The Margins of Entry into Export markets: Evidence from Colombia* », published in E. Helpman, D. marin and T. Verdier, *The Oganization of Firms in Global Economy*, Harvard University Press.

- The first direction is to try and protect the market shares of traditional products which have lost their competitiveness these past years;

- The second direction is to try and promote the export of new products toward potential new markets to catch up with the ability of countries like Mauritius or Tanzania to diversify their export markets; and,

- The third direction is to accompany the sale of emerging products in the markets where Madagascar already built networks and a reputation by taking advantage of economies of scale.

83. It is useful to go back to the second pillar in light of how little Madagascar exploits its export potential. According to the methodology proposed in box 7, it seems that Malagasy exporters are not really trying to diversify since they only make use of 3 % of their potential export markets. This penetration rate is far behind the one reached by countries like Indonesia, Singapore, Korea or even South Africa (at least 20%) and translates the concentration of Malagasy exports on two markets, the UE and the United-States. Potential markets like South-East Asian countries or the Arabian peninsula, which are at a relatively limited distance from Madagascar, are still unexploited by Malagasy exporters.

Box 7: Measuring foreign market penetration

The penetration index of the export market is defined as:

$E_j = \frac{\sum Z_{ijk}}{\sum Y_{ik}}$ *for products i exported by Madagascar*

With:

X_{ijk} *is equal to the value of exports from country j for product i towards the importing country k.*

M_{ik} *is equal to the value of imports from the whole world towards country k for product i.*

Z_{ijk} *=1 where* $X_{ijk} > 0$ *otherwise* Z_{ijk} *=0.*

Y_{ik} *=1 where* $M_{ik} > 0$ *otherwise* Y_{ik} *=0.*

Source: Brenton and Newfarmer [2007], op.cit.

84. Since implementing efforts in these three directions will have to be integrated into the risk of wasting limited resources, we propose the adoption of some criteria which will be illustrated by several concrete examples in the reform agenda developed in the final part of this study.

C. THE ABSENCE OF A COHERENT STRATEGY FOR THE ADOPTION OF NORMS AND STANDARDS[54]

85. One of the characteristics demonstrated by Malagasy exports is the predominance of processed and halieutic products. And yet, access to foreign markets, namely those of industrialized countries for these products is often subject to sanitary and phytosanitary norms and standards (SPS). In the last decades, trade liberalization came with a multiplication of private sanitary and phytosanitary regulations and norms. The absence of a major effort by producers to adapt to these new requirements risks, in the long term, to bring about two watertight circuits: an export circuit for high value added products toward more demanding consumers, and a sale circuit for second-quality products either in the local market or in less-demanding markets. The result could then be a « poverty trap » for second circuit producers. This all the more true for the trade of fresh perishable goods that represents a growing part of developing countries'exports, including Madagascar.

86. The Malagasy authorities noted this development and, with the support of the European Union, conducted a series of studies aiming at reinforcing the legal and institutional framework as well as at the adaptation of standards by Malagasy exporters. Particular attention was paid to the shrimp value chain which was nearly penalized by the European Union in 2006, leading to the set-up of a regulatory and institutional framework, which most of the actors involved in this value chain today deem satisfactory.[55] Yet, the example of the shrimp value chain is more an exception than the rule in the current Malagasy context. The vast majority of sectors only enjoy limited access to information on international requirements and meager resources for their efforts to adapt.

87. The current situation in Madagascar is characterized by the absence of a well-defined SPS strategy. Efforts have been sporadic, not always coordinated, and most of all reactive to emergency situations. As a reminder, the elements that make up a SPS strategy are summarized in box 8 herewith, underlining what is needed in terms of financing and close collaboration with the private and public sectors and with the general public to be efficient over time.

[54] This section is based on a study prepared for the CEM by Olivier Cadot et al. "Bringing food-processing value chains up-to-standard: the lessons of international experience » *(« Mise aux normes des filières agro-alimentaires: leçons de l'expérience internationale »)*, and on the contribution of Michael Jensen to the UE studies on the issue of norms and standards in Madagascar.

[55] They since led to a working schedule, with the support of the UE, that aims at strengthening support structures within the Malagasy economy, notably in the food item sector, and at defining the elements of such a strategy.

Box 8: The elements of a SPS strategy

The legislative and institutional framework

- *Establishment of a transparent legal framework, aligned on international regulations*
- *Reform of the institutions responsible for enforcing these regulations*

The infrastructures

- *Improvement of the monitoring, control and inspection services*
- *Development of compliance, certification, quality assurance, laboratory test, accreditation services*

Staff training

- *Training program in certification systems, accreditations*
- *Training of WTO, OIE, CODEX, regional focal points*
- *Upgrade of the production line according to regulations*

The restructuring of the production line, investment in physical structures

- *Improvement of production, harvesting and product processing techniques: CBP*
- *Modification of quality management systems: HACCP*

Information dissemination

- *Information availability for all the players, policy makers, administrative staff, producers, exporters, consumers*
- *Organization of seminars and workshops, SPS Standards and trade, Quality System…*
- *Regional and international cooperation*
- *Creation of communication networks with regional partners, mutual acknowledgment of the systems*
- *Participation in the process of standard definition at the international level, OIE, CODEX*

88. The elaboration of a national strategy does not mean blindly adopting a « master plan » which directly copies practices in other countries but a precise assessment case by case of the costs of implementing institutions and practices that can facilitate the adoption of standards and regulations compatible with international buyers' requirements by local exporters. This supposes precisely assessing the institutions in charge of disseminating information, training programs for the players, joint-management authorities which bring together producers, distributors, buyers and public authorities, and facilitating access to credit to finance the investments needed to become up-to-standard once the latter have been clearly identified by actors and buyers.

89. Upgrading the exporters' international standards generates costs that need to be assessed according to potential benefits. International experience reminds us that these costs are generally substantial, both for the entire economy (legislation, infrastructures, control systems, etc.…), and for businesses (changes in the production systems, HACCP, certification costs, etc.…). As an example, costs to bring the grape production value chain in India up-to-standard with European requirements were estimated at a yearly 1.5 million U.S. dollars.[56] In Laos, the cost of a five-year program to develop local SPS capacities, distributed between the public and the private sectors, reached close to 10 million US dollars. As to benefits, they are seldom assessed in practice since, the subject

[56] Cf. World Bank, 2006

of numerous uncertainties, they tend to only appear after several years. However, they can be considerable as we are reminded by the Kenyan example where massive investments made to improve infrastructures, train staff and establish quality product management systems, led to the multiplication eightfold of the value of fresh vegetable exports and ninefold of flower exports between 1995 and 2006.

90. The above examples serve to illustrate that implementing a SPS strategy is not a done deal. If investing to get the reputation of being a country with low sanitary risk prove to not only benefit the given sector but the entire country in the mid-term, the adjustment costs often remain prohibitive for small operators and for governments with limited resources. To guide the Malagasy authorities in setting up a coherent SPS strategy, we will propose a certain number of actions in our reform agenda which aims at selecting intervention instruments and at developing a coherent strategy over time.

II.3 CUMBERSOME ADMINISTRATIVE PROCEDURES

91. The difficulty for a private investor of settling and working in Africa is often translated into unacceptable delays to carry out administrative procedures. A company can have to wait over two years before it can start operations and, unfortunately, Madagascar does not stray from this rule.

92. This chapter proposes to answer the following two questions: (i) Are administrative procedures an obstacle to private sector development in Madagascar? (ii) What are the most-constraining procedures? This approach will let us identify the actions the authorities should conduct to streamline the administrative environment around companies and thus facilitate private sector expansion.

A. ADMINISTRATIVE PROCEDURES ARE AN OBSTACLE TO INVESTMENT

93. In Madagascar, administrative red tape is a concern. It is not only visible daily when registering a business or getting numerous permits, but converging opinions collected during the survey conducted with the private sector also confirms it, in particular the recent analysis done by the FIAS, the study on the business climate and the results of the World Bank *Doing Business* publication. The Malagasy authorities took an interest in this administrative red tape but progress has been slow, except in specific areas like business registration that has significantly been reduced between 2002 and 2007, and the customs administration (cf. below).

94. According to the ranking published by Doing Business, Madagascar is one of the developing countries where private companies declare they are considerably hampered by administrative red tape.[57] This ranking indicates that Madagascar was 144th out of 181 countries according to the aggregate indicator proposed by this paper. This mediocre ranking barely varies throughout the components, except for company registration that now takes about 7 days, and investor protection (53rd). Among the main administrative

[57] For a description of the methodology and its limitations, cf. www. Doingbusiness.org.

obstacles, the difficulty of obtaining bank credit (172nd), of conducting international transactions (109th), of registering land (145th) should be highlighted. Beyond the current mediocre ranking, the progress made these last few years has been disappointing since the delays reported by Madagascar do not seem to have been noticeably shortened between 2005 and 2007. Table 19 hereunder illustrates that an investor spent around 409 days in 2007 to register his/her company against around 440 days in 2005, or a minimum gain under 10%.

Table 19: The delays caused by administrative procedures in Madagascar

Delays (days)	2005	2006	2007	2008
At creation				
Registration	38	21	7	7
Licenses	268	268	268	N/A
To purchase property	134	134	134	251
During operations				
Tax payment (hours)	304	304	238	238
Exports	48	48	28	23
Imports	48	48	49	27
To secure a contract	871	871	871	871
Work permit	N/A	N/A	N/A	N/A

Source: Doing Business

95. The 2005 survey with a sample of the Malagasy private sector revealed that administrative procedures were a severe constraint for approximately 1/3 of the companies. Again, this result underestimated reality since a large number of the companies questioned worked under the free exporting zone regime which simplifies numerous formalities. The recent FIAS study, in close collaboration with the EDBM, not only underlines the excessive number of procedures required from a company, but also the fragmented responsibility for them within more than 50 agencies both at central and local levels.[58] This fragmentation makes it even more difficult for companies to carry out formalities within a respectable amount of time.

96. Before we go back to identifying the most severe administrative constraints for companies working in Madagascar, one needs to specify that their negative influence is exerted unevenly on the whole private sector. The following distinctions should be made:

- *Existing companies/new companies*: Entry procedures burden new companies, whereas they protect those already in place. The latter have possibly also learned to make do with operational procedures, and they no longer represent a major obstacle to their operations.

- *Local companies/foreign companies*: Administrative red tape leads to differentiated behavior according to the company's origin. Foreign investors always have the possibility of settling elsewhere, whereas local companies must

[58] A precursory study was done by the FIAS in 1996, cf. "The investor's course" (*Le parcours de l'investisseur*).

generally suffer the delay or incorporate the costs of these formalities into their decisions. Regardless, it can be argued that local companies are better informed and understand the administrative system in force in the country.

- *Large companies/small companies*: An investor's ability to adapt to administrative procedures depends vastly on his/her human and financial resources. In the case of a large company, a unit is generally responsible for dealing with the administration or it resorts to the services of a specialized agency (notary office, accounting firm). Small investors do not generally have these options and have to take care of the procedures themselves. They are therefore much more penalized by administrative red tape.

97. The complex effects related to administrative red tape explains why it is difficult to find an ambiguity-free statistical relation with private firms' investment decision. The only seemingly strong result according to literature is that these barriers deter the creation of SMEs since the latter do not have the means to circumvent or to make with these additional costs.[59]

98. However, it is easy to show that the administrative red tape promotes corruption, which in turn harms private sector development. Countries that show considerable administrative delays generally report high levels of corruption. This result is not surprising since it indicates that investors are ready to pay civil servants to circumvent these procedures. Moreover, a recent study sought to quantify these payments that can reach 2,000 US dollars in Senegal and 1,500 US dollars in Ghana per procedure.[60] In that case, it is not surprising that investors hesitate to invest in the long-term in countries with excessive administrative procedures.

99. All these results show why it is relevant to pay attention to the issues of administrative procedures. Administrative obstacles contribute enough to increasing business operating costs, notably SMEs, to reduce their activities and investments, and encourage corruption, which introduces perverse mechanisms both in public administration and in the relationship between the latter and the private sector.

B. WHICH PROCEDURES ARE THE MOST CUMBERSOME?

100. Even though, overall, procedures influence private sector decisions, we will reiterate that they do not influence all the firms the same way. Also, formalities certainly do not all have the same impact on the decisions of private investors. Below, we propose to distinguish between three categories of procedures, i.e. those related to (i) creating a company; (ii) getting sectoral licenses; and (iii) having access to land and construction. We are deliberately setting aside operational procedures related to the customs administration and the hiring of workers, since they receive special attention in chapters II.2 and II.4 of this study.

[59] For a recent econometric study, cf. M. Bruhn, 2007.

[60] J. Morisset and O. Lumenganeso, 2002, *Administrative Costs in Developing Countries*, Transnational Corporations, August.

101. The result of this quick overview is unequivocal and shows that administrative red tape is quasi-generalized, since it can be found both at the entry and during sectoral formalities. The administrative complexity of land purchase will be confirmed by recalling that this procedure implies at least 5 stages and submission to a cabinet meeting and a council of government.

(i) The general procedures to create a business

102. Entry procedures are important since they have to be completed by practically every company – local and foreign – who wants to settle in Madagascar. The information compiled by the FIAS is an indication of the main formalities a standard investor has to carry out but this does not mean all of them must imperatively be completed (table 20). For example, the environmental permit or land purchase authorization is not indispensable for all the investors.

103. Completing the set of entry formalities requires a 149 hour estimated delay, or around 19 working days (with the postulate that they cannot be done simultaneously).[61] The longest delays are linked to the land purchase authorization (which however remains optional for a business wishing to rent land), the demurrage charge, obtaining the *droit de place* for reserved locations [*Note: Right paid by producers according to the surface occupied on the public highway*], and residence visas (for foreigners). Table 20 also highlights strong variations according to the municipalities.

Table 20: The general procedures on entry

Name of License	*License number*	*Sub-sector*	*Delays (Hours)*	*Direct costs (in thousands of Ar.)*
Extract of deposit of Charter of Company (business creation)	GN 1	Business creation and taxes taxable to any commercial business	16.0	336
Land Purchase Authorization	GN 2	Land Purchase	31.0	0
Certificate of Existence		Certificate of Existence	5.0	20
Demurrage charge [Tamatave]	GL 187	Local taxes	19.0	255
Notice of a Request to Open a Business [Nosy Be]	GL 192	Local taxes	15.0	180
Droit de place for reserved locations [Tana]	GL 130	Local taxes	22.0	50
Parking right [Antsirabe]	SL 117	Local taxes	23.0	24

[61] This delay is different from the one reported by Doing Business because (i) the procedures considered are not the same (they are more exhaustive in the FIAS inventory which includes formalities related to local taxes), and (ii) the methodology used to capture the administrative delays is different. For details, cf. FIAS/PEP (2008). Source: FIAS (forthcoming), *Preliminary estimates of compliance costs related to business licensing in Madagascar - A Standard Cost Model approach.*

Name of License	*License number*	*Sub-sector*	*Delays (Hours)*	*Direct costs (in thousands of Ar.)*
Parking and roadside occupation [Antsirabe]	GL 113	Local taxes	17.0	6
Port nuisance tax [Tamatave]	GL 189	Local taxes	14.0	770
Residence tax [Tamatave]	GL 188	Local taxes	15.0	12
Water transfer tax [Nosy Be]	GL 190	Local taxes	13.0	5
Environmental permit through the Environmental Impact Assessment procedure	GN 8	Environmental permit	14.0	7,500
Granting of long term visa	GN 150	Visa	17.0	175
Granting loading visa	GN 149	Visa	18.0	0
TOTAL 1/			149.0	9068

Note: The total is calculated for the procedures taking place in the town of Tamatave. In the town of Tananarive, the delay is estimated at around 123 hours.

104. Not only do delays seem longer, but the direct monetary costs are significant notably for SMEs. It is estimated that completing all the formalities leads to costs estimated at 9.3 million Ariary, or around US$5,600, if the activity requires an environmental permit. Even without this last formality, the total fees that need to be paid are still of US$1,000, which is considerable considering the 300 dollar per capita income and that 95% of Malagasy companies are informal and have fewer than 10 staff members. Costs associated to the formal creation of a company are a sufficient obstacle to discourage from doing it.

(ii) the sectoral procedures related to obtaining licenses

105. Once the general entry formalities are done, the company must acquire a license so that it can start operations in compliance with sectoral requirements. These procedures vary according to the sectors, and the delays as well as the costs are illustrated for a certain number of priority sectors in Madagascar (table 21). Average delays vary between 375 hours in the mining sector and 75 hours for agriculture. Costs are within an 800 to 1,000 dollar range.

Table 21: The procedures to obtain licenses

Name of License	Nbr of license	Sub-sector	Delays (Hrs)	Total cost (thousands of Ar)
AGRICULTURE				
Phytosanitary approval	SN 61	Phytosanitary	14.0	142
Phytosanitary import permit	SN 60	Phytosanitary	15.0	145
Authorization relating to the creation of rice processing and hulling factory	SN 145	Rice processing factory	17.0	87
Total			*75.0*	*661.0*
FISHING				
Authorization for small scale commercial fishing under a foreign flag	SN 106	Small scale commercial fishing	18.0	342
Authorization for small scale commercial fishing under the Malagasy flag	SN 184	Small scale commercial fishing	18.0	66
Authorization for industrial commercial fishing under a foreign flag	SN 185	Industrial commercial fishing	18.0	342
Authorization for industrial commercial fishing under the Malagasy flag	SN 186	Industrial commercial fishing	18.0	66
Scientific fishing authorization	SN 168	Scientific fishing	16.0	48
Total			*160.0*	*1679.0*
TOURISM				
Authorization to open travel and tourism service companies	SN 101	Agency	30.0	90
Authorization to open and classification request for camping grounds	SN 70	Camping	22.0	66
Preliminary notice for the construction, development and/or extension of accommodations and/or catering business projects.	SN 42	Construction	18	342
Approval for the job of tourist guide	SN 102	Guide	16.0	48
Authorization for the opening and classification of accommodations and catering businesses	SN 43	Accommodation / Catering	21.0	351
Total			*193.0*	*1443.0*
MINING				
Authorization for run-off, flow, discharges, direct or indirect deposits in superficial or ground-waters	SN	Water	15.0	45
Water withdrawal authorization	SN 105	Water	24.0	72
Drilling authorization to look for water	SN 175	Mineral water	15.0	45
Mining permit	SL 9	Exploitation	42.0	196
Small developer permit	SL 10	Exploitation	42.0	196
Scientific extraction permit	SR 5	Extraction	15.0	45
Authorization for exclusive reservation of a perimeter	SL 12	Prospecting	15.0	67
Mining research permit	SN 187	Research	39.0	187
Total			*375.0*	*1517.4*

Source: FIAS (forthcoming), *Preliminary estimates of compliance costs related to business licensing in Madagascar - A Standard Cost Model approach*.

(iii) The procedures related to access to land and construction

106. Though not all companies need to purchase land and build a building, these formalities are always required from investors interested in the priority sectors of the Malagasy economy like tourism, agriculture and textile. This is why they enjoy particular attention as mentioned below. In addition, there is only a limited quantity of private sector-owned developed lands and they are concentrated in the Tananarive/Antsirabe region.

107. The FIAS inventory shows that purchasing a title deed represents a painstaking course for any investor in Madagascar. Once the land is identified, which is not easy given the under-development of the land register in most regions and of complex interactions with local authorities (for further details on these steps, cf. the next part of the study will be dedicated to the integrated growth poles), the investor must still go through at least five stages, themselves divided into numerous formalities. Under these circumstances, it is hardly surprising that the delays incurred are lengthy and uncertain, thus strongly discouraging investors.

108. Not only is purchasing land a laborious administrative exercise, but its development is also subject to numerous authorizations that contribute to lengthening delays. An overview of these authorizations is presented in table 22 below, and indicates that the delays accumulated can reach up to 7 days for a financial cost of US$240, but they vary strongly according to the municipalities.

Diagram 1: The administrative steps to obtain a title-deed

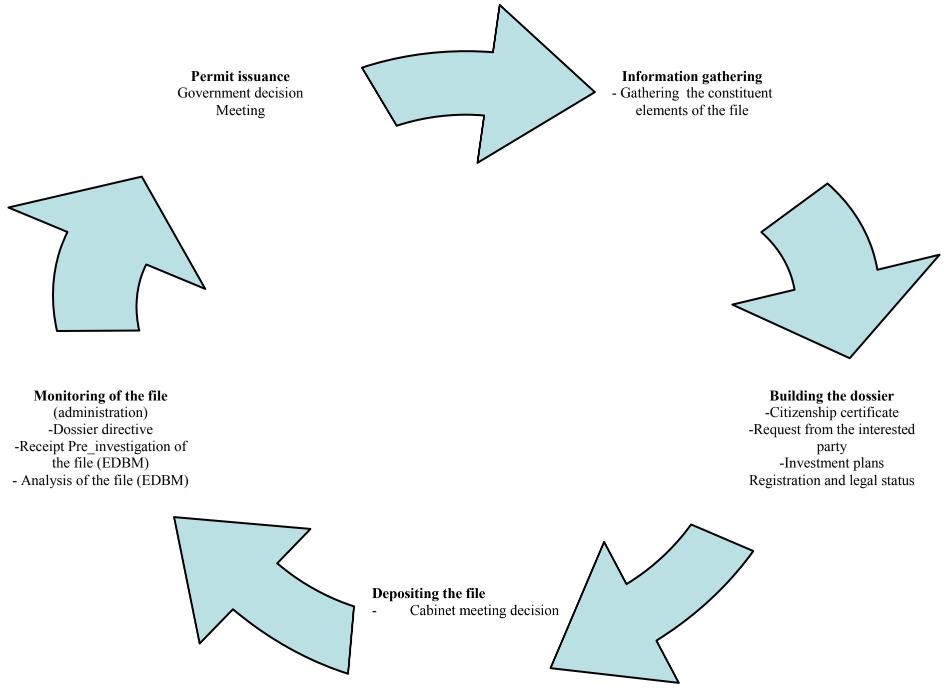


Table 22: The administrative procedures that need to be filled up to build a building

Name of License		Delays (hours)	Costs (thousands of Ariary)
Construction, extension, rehabilitation, light or semi-light repair authorization [Tamatave]	GL 134	19.0	401
Compliance certificate [Antsirabe]	GL 118	14.0	0
Hard enclosure construction permit [Tamatave]	GL 132	19.0	1
Building construction permit [Antsirabe]	GL 112	22.0	265
Housing permit [Tamatave]	GL 133	13.0	0
Road (public location) occupation authorization for construction [Tana]	GL 146	32.0	325
Construction permit [Nosy Be]	GL 191	23.0	259
Housing site permit [Tana]	GL 147	14.0	25
TOTAL 1/		51.0	403.0

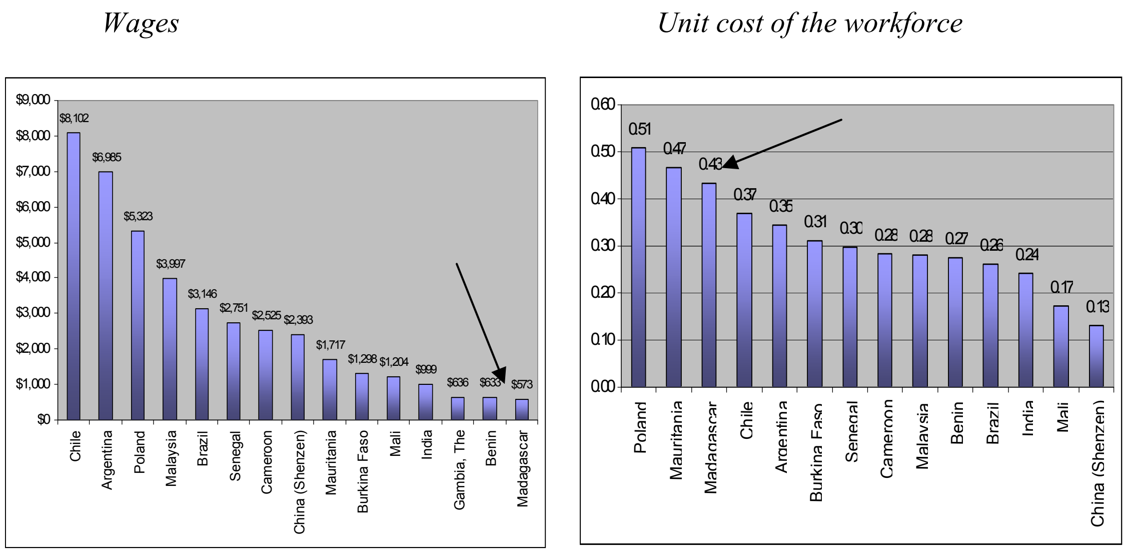
Source: FIAS (forthcoming), *Preliminary estimates of compliance costs related to business licensing in Madagascar - A Standard Cost Model approach.*
Note: The total is calculated for the town of Tamatave.

II.4 THE LACK OF LABOR PRODUCTIVITY[62]

109. Madagascar's appeal partly lies in the availability of its inexpensive workforce. Indeed, wages practiced are among the lowest of the African continent and are competitive with those observed in China and India. However, Madagascar no longer stands out when one considers labor unit costs, which take both the level of wages and that of productivity into account (figure 12). This comparison highlights the need to upgrade labor productivity, if Madagascar wants to continue attracting foreign firms and developing local companies in labor intensive sectors like textile and agribusiness, which are among the priorities of the MAP.

Figure 12: **International comparison of salaries and labor unit cost**

Wages in Madagascar are amongst the lowest in the world but weak productivity contributes to reducing labor competitiveness as measured by its unit cost.



Source: World Bank.

110. In this chapter, we will focus the analysis on three aspects that are perceived as playing an important role in the lack of workforce productivity in Madagascar. First, it is a question of lack of skills, due to the failings of the school system but also to the absence

62 This chapter relies on the World Bank's effort these past years, under the leadership of Stefano Paternostro, to analyze and better understand how the labor market in Madagascar works. The reader may find it useful to refer to the following studies: (i) *Assessing Labor Market Conditions in Madagascar, 2001-2005*, David Stifel, Faly Hery Rakotomanana and Elena Celada, June 2007; (ii) *Developing the workforce, shaping the future: Transformation of Madagascar's Post basic Education*, June 2008; (iii*) Madagascar, The role of employment and earnings for shared growth*, November 2007; (iv) *Madagascar: Labor Markets, the Non-Farm Economy and Household Livelihood Strategies in Rural Madagascar Africa Region,* Working Paper Series No. 112, March 2008; (v) *Madagascar: De jure labor regulations and actual investment climate constraints*, Gaëlle Pierre, April 2008; and (vi) *Madagascar: Employment, institutions, and policies*, Andre Kirchenberger, July 2008.

of support to school drop-outs and to the under-development of vocational training programs. We will then look at the obstacles to entry onto the formal job market and the lack of active support to the most underprivileged groups. Finally, we will examine conditions in the workplace, in particular the dichotomy between generous regulations and the reality in force in most Malagasy companies.

111. Focusing on these three aspects of the labor market is justified because it is difficult to increase labor productivity without increasing skills, securing employment and access to acceptable working conditions both in terms of hygiene and safety. However, one must not forget the link between workers' productivity and numerous factors which have their origins both within and outside of the labor market. For example, a worker's productivity is influenced by the quality of the machines at his/her disposal and by the quality of the company's management context. Our analysis will not directly take these factors into account, but that does not mean the Malagasy policy makers can neglect them either.

A. THE MARGINALIZATION OF THE EFFORTS TO UPGRADE THE SKILLS OF WORKERS

112. In Madagascar, as nearly everywhere else, there is an undeniably close link between a worker's productivity and his/her qualification level. An econometric study has confirmed that the return rate from basic training with an additional year of study is estimated at around 6 % and can go up to 13% for tertiary education.[63] It was noted that most Malagasy workers have not gone to school or then only for a few years (the average schooling level is around 4 years and only 1 worker out of 10 reports having followed secondary or higher education levels). Since their lack of schooling has not given them the opportunity to acquire knowledge, they cannot possibly improve their productivity.

113. This result is now well-known and justified the efforts underway to improve the coverage and the quality of Madagascar's education system. If the emphasis was first put on the primary level, recent studies directed at improving secondary education have led to the development of a new strategy whose main elements are in box 9 hereafter.[64]

[63] For more details, cf. *Assessing Labor Market Conditions in Madagascar, 2001-2005*, David Stifel, Faly Hery Rakotomanana and Elena Celada" June 2007.
[64] World Bank, *Developing the workforce, shaping the future: Transformation of Madagascar's Post basic Education*, June 2008

Box 9: The reform proposals for the post-elementary school system

The reform of the secondary (high-school) system must rely on two pillars. The first one consists in adapting the school curriculum to labor market requirements, notably through collaboration with the private sector and teacher training. The second pillar is the introduction of new types of secondary schools, which take into account the region and student characteristics as well as those of the labor market. This new type of school could include the extension of technical high schools and the development of private schools and long distance training programs.

Tertiary education should also be reformed by emphasizing adapting the curriculum to shortened courses and to those more in line with labor market needs, as well as looking for partnerships with foreign schools. An incentive policy favoring research should be set up in priority fields, in close collaboration with the private sector.

These reforms at the secondary and tertiary education levels will have to come with actions that aim at the improved use of budgetary resources (notably through a reform of grants allocation) and regional distribution. Finally, strengthening governance in the sector is recommended, through greater visibility and improved coordination within the Ministry of Education as well as with other partners involved in the sector.

Source: World Bank, Developing the workforce, shaping the future: Transformation of Madagascar's Post basic Education, June 2008

114. Our purpose here is not to repeat the need to modernize and adapt the Malagasy school system but rather to remind that this effort must come with complementary actions. Thus, we propose to pay attention to the elements that are outside of the basic education system, but contribute to influencing the workers' education level and skills, i.e.: (i) those who, along the way, have been voluntarily or involuntarily excluded from the traditional education system; and (ii) those who have a job and who are looking for continuous vocational training.

Those excluded from the education system

115. The Malagasy workers' lack of skills is in mainly due to their exclusion from the post-primary school system. The vast majority of Malagasy adolescents quickly find themselves outside of the basic school system since it is estimated that only 1 pupil out of 3 reaches the intermediate level and 1 out of 10 the higher level of secondary education. These rates are lower than those reported in Africa, and, still worse, they have only marginally risen in the last two decades.

116. Even when students get to the *baccalauréat* [*Note: high school diploma*], they have often repeated their grades. The success rate for the *baccalauréat* is also relatively low, under 50% in 2005, however with significant disparities between the different regions. In terms of orientation, it is well-known that most students often ignore scientific courses, attracting just over one third of boys compared to girls for the entire country in 2005. The vast majority of students follow general secondary education with a literary or legal emphasis, which is in contradiction with the labor market and business demand. The exclusion of students in the course of secondary education largely explains the nearly

insignificant rate of students enrolled in the tertiary level, under 3%, with a notorious drop-out rate during the first year in college.[65]

117. Once the above is noted, it appears that over 1.3 million students (in the 11-18 y.o. age groups) in Madagascar are excluded from the schooling system, beyond primary level, or 50 times more than those who pass the *baccalauréat* every year. Most of these youngsters find themselves in the informal labor market, living day to day off "odd jobs" without any genuine social and professional integration perspective.

118. The first strategy is obviously to first try and catch those who are « excluded » with a more attractive schooling system and a certain number of proposals have been made in that sense in the recent World Bank study (cf. box 9). These proposals are a priority and should hold the authorities' attention. But they are insufficient if they are not completed with measures such as incorporating traditional learning in the overall vocational training. These measures will be examined in our reform agenda.

The lack of scope of vocational training programs

119. Vocational training plays a considerable role in developing workers' skills in numerous countries, notably in East Asian and Latin American emerging countries (cf. box 10).[66] This role is confirmed in Madagascar by several recent studies which highlighted the strong positive correlation between vocational training and labor return gains. Thus, according to the 2005 World Bank study on the Business Climate done, it was estimated that workers who benefit from vocational training could generate a 10% salary gain compared to the rest of the workforce.

Box 10: Vocational training as a tool to promote skills

Recent experience indicates that in-house training allows a significant increase of workers' productivity. For example, productivity gains as high as 25% were reported in companies which provide their employees with continuous training in Colombia and Malaysia. These gains seem even greater in the poorest countries like Nicaragua and Indonesia where they reached up to 45%.

The gains associated to continuous training are strongly tied to the quality of the classes, which is systematically better when there is competition between trainers and when they are open to the private sector. When classes are only given by centralized public institutions, productivity gains tend to disappear.

120. Despite the evidence that vocational training leads to substantial productivity gains for workers, and as a ricochet effect, for the employers one can only note that these programs remain relatively marginal. This lack of scope is partly explained by the, mostly small, private companies' lack of resources which stops them from providing

[65] Only half of the students that pass their *baccalauréat* continue their studies, and nearly 40% of them drop out after the first year in college.
[66] For quantitative evidence of the role played by continuous training in companies, cf.; L. *itish Panel Data*, Oxford Bulletin of Economics and Statistics, N. 68, 2006.

continuous training to their employees or even paying for it. Furthermore, there are few private sector incentives because of the risk their employees leave once they are trained (a typical example of under-investment in the “public good”).[67]

121. The Government sought to set up a new vocational training policy, composed of several initiatives two of which are described below. The first one comes within the « Integrated Growth Poles » (or *Pôles intégrés de croissance* - PIC) and aims at supporting continuous training in the tourism sector and the hotel industry, in crafts, textile and NICTs. One particular dimension of these training programs was the development of partnerships with the private sector through the establishment of perennial and quality training structures. The results seem encouraging, with close to 2000 training beneficiaries in 2006-2007 in fields as diverse as the training of guides, of mining operators, of accountants and even training interventions for municipal agents and supervisors.

122. The second initiative is linked to export processing zone companies. A voluntary mechanism - the OPCAEF – Parity Organization for the Collection of Funds for Vocational Training or *Organisme Paritaire Collecteurs de Fonds pour la Formation Professionnelle*) -, was implemented at the initiative of 8 firms (which employ around 8000 workers) in agreement with the trade unions. Companies pay a contribution equivalent to 1% of their total payroll to this « Fund », 0.9% of which is “earmarked” for the concerned company and stays mutualized between the companies.

123. These two initiatives deserve particular attention since they contain the ingredients to develop national programs. By looking for public-private partnerships as well as by mutualizing individual company efforts, there are economies of scale and efficiency gains that will be further examined in the recommendations we are proposing at the end of this chapter. However, they also demonstrate the absence of a structured and sustained approach at the general level of the economy.

124. This lack of coherence first reflects that the avowed objectives and the resources available are mismatched. For example, the Vocational Training Service (or *Service de la Formation Professionnelle*) directly linked to the Director for Employment and Training (or *Directeur de l’Emploi et de la Formation*) only consists of 3 people in total. The Malagasy Observatory for Employment and Continuous and Corporate Vocational Training (or *Observatoire Malgache de l’Emploi et de la Formation Professionnelle continue et entrepreneuriale*), created in 2007, can only rely on very limited budgetary resources. For example, in the Anosy Region, this service only has a Department Head (a Health and Safety Controller or *Contrôleur de Travail*) and two secretaries. It does not have any computers and has a 4 million Ariary operating budget, or the equivalent of around US$2500.

[67] About half the « large » companies in the formal sector declare that they provide continuous training to their employees, which is within the standard observed in Sub-Saharan Africa. For a description, cf. ICA [2005] or G. Pierre [2008], op. cit.

125. Then, the deeply ambiguous relationships between the MFPTLS and the Ministry of National Education and Scientific Research (or *Ministère de l'Education Nationale et de la Recherche Scientifique* - MENRS) add to the confusion. A priori, it is justified that these two ministries be concerned and involved in elaborating and implementing the vocational training strategy. The MFPTLS's responsibility in the area of vocational training is not open to debate. On the other hand, the MENRS's initial vocational training intervention is strong– particularly with the 38 Vocational Training Centers (or *Centres de formation professionnelle*) which regroup close to 9000 students in 3-year trainings leading to a Vocational Training Certificate (or *Certificats d'Aptitude Professionnelle* - CAP) or to a Technical School Certificate (or *Brevets d'Enseignement Professionnel* - BEP) in a whole lot of sectors. The Ministry of Education also supervises 645 technical and vocational training institutions (51.9% are registered private institutions, 24.5% are unregistered private institutions or with registration underway and 1.2% is semi-public). Finally, this ministry has engaged a whole set of actions in fields as different as the establishment of the « Regional Training Scheme » (or *Plan de formation régional)* (the Analamanga Region Training Scheme or « *Plan de formation régional Analamanga »* for example) and the set-up of the National Training Authority (or *Autorité Nationale de Formation*). However, this quick description must not be misleading as to the importance of the Ministry of Education's vocational training activities since they only account for around 5% of its total budget.

126. The issue, therefore, is not the legitimacy of the participation of these two ministries' in implementing Madagascar's vocational training strategy, their lack of collaboration contributes to diminishing the effectiveness of their interventions. This partitioning between these two central administrations is detrimental since it prevents economies of scale (which would enable to salvage their limited resources) and leads to the creation of parallel initiatives. Should we not fear expensive overlaps between the *Observatoire malgache de l'emploi et de la formation professionnelle continue et entrepreneuriale* (OMEF) and the future *Autorité Nationale de Formation*? How, can we regulate learning (duration, certification, etc.) in the Labor Laws without putting in place the indispensable bridges with national Education? Consequently, it is more than urgent that all the topics relating to initial and continuous vocational and technical training between these two Ministries are consistent.

B. THE DIFFICULT ACCESS TO A DECENT JOB

127. For most Malagasy workers, securing a decent job is a pipe dream. They neither have a salary that enables them to survive above the poverty line, nor the social security coverage if they are ill or victims of an accident (cf. box 11).

Box 11: The obvious lack of job security in Madagascar

- A worker's average monthly salary is US$17.
- 99% of the working population does not enjoy formal social security coverage (less than 600,000 workers are registered with the Social Security Office).
- One worker out of four is employed part-time.
- 2/3 of the population old enough to work is under-employed or looking for a job.

Source: World Bank

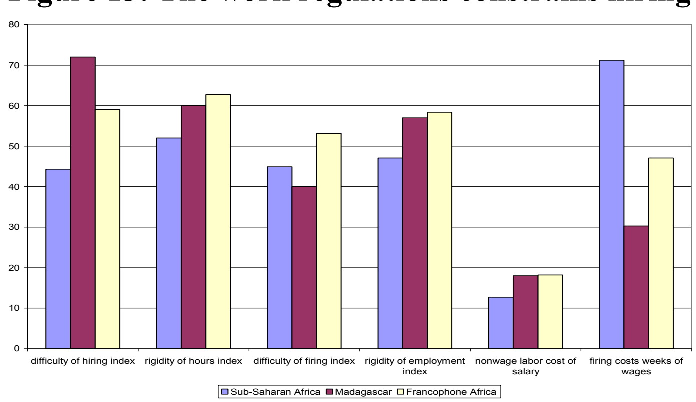
128. This insecurity partly reflects the precarious state of development of the Malagasy economy, with the companies' limited hiring demand. It also translates a certain number of regulatory and institutional deficiencies, that discourage worker mobility and harms productivity. Hereunder, we will emphasize the legal and regulatory barriers to formal hiring and the lack of scope of programs in support of employment, notably in favor of the most underprivileged.

The lack of flexibility of labor regulations

129. A priori, most Malagasy workers do not perceive the labor regulation as a major constraint to access to employment. Therefore, the Labor Laws only apply directly to the 520,000 workers registered with the National Social Contingency Fund (or *Caisse Nationale de Prévoyance Sociale* - CNaPS), 140,000 of whom work in export processing companies.

130. It would however be wrong to limit the analysis to this simple observation. Indeed, a significant number of informal workers are not in a position to secure a better job (in the sense of a better social protection) because labor regulations lack flexibility. Formal companies often give up hiring them because of the excessive legal constraints, or conversely, workers prefer staying in the informal sector because the costs of moving to the formal one is higher than the gains they can hope to get (social deductions are higher than future benefits). In Madagascar,

Figure 13: The work regulations constrains hiring



Source: Doing Business.

the labor laws seem to impede hiring for some categories of companies: (i) those that tend to be more dynamic and innovative; (ii) those that are registered; (iii) those with foreign capitals; and (iv) those that export.[68] These distortions are source of productivity losses which are difficult to quantify but significant since they prevent workers from getting optimal wages.

131. A review of the Labor Code underlines that the lack of flexibility of the legislation is first in the costs they impose on hiring, whereas the costs of firing are in line with international standards. This diagnosis is also confirmed by the *Doing Business* findings which show that the costs of hiring in Madagascar are far from best international practices (cf. figure 13). The OECD-proposed methodology arrives at the same result.[69]

132. Concretely, it appears that the Malagasy legislation lacks flexibility at two levels. First, the use of fixed-term work contracts (or *contrats de travail à durée déterminée* - CDD) seems restrictive when compared to international practices, in particular within the OECD. In Madagascar, these contracts cannot exceed 48 months, with the possibility of renewal, and can only relate to tasks that are not found in the normal scope of the company (Article 8). As a comparison, most OECD countries offer a longer period (even unlimited in the USA or Italy) or the possibility of unlimited renewal of CDD contracts (Sweden). Secondly, the setting of minimum wage (63,542 Ariary monthly, equivalent to 40 US dollars, for the non-agricultural sector and of 64,440 Ariary for the agricultural sector) seems over-ambitious considering the salary conditions prevailing in the country, so that it is barely complied with.

133. It must however be recognized that the Malagasy labor legislation's lack of flexibility comes more from the incomplete legal framework and its implementation than from the code itself. Today, the main problem lies in the numerous missing implementation decrees that make interpreting the laws difficult and unpredictable. Thus, we have identified the missing implementation texts (among others) in the following areas:

- The Decrees, in reference to Article 75 of the CT (Labor Laws or *Code du Travail*), which should, after approval of the CNT, determine the implementation modalities of legal working hours and possible dispensations, notably for overtime, by branch of activity and by professional category;

- The Decree, in reference to Article 80 of the CT, which should determine the implementation modalities concerning the dispensations relating to weekly days off;

- The Decree, in reference to Article 82, relating to the regulation of overtime and setting the salary surcharges for work at night, on Sunday and legal holidays.

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[68] G. Pierre, Madagascar*: De jure labor regulations and actual investment climate constraints*, April 2008. or MIGA, *Enterprises Benchmarking*, 2006

[69] Cf. OCDE*,* The prospects of employment *(Perspectives de l'emploi)*, 2004

134. Similarly, a legal vacuum is maintained for the women's work even if the Malagasy government has just ratified the international convention (Convention N° 171/89). Indeed, there is some confusion between legislative texts like the Law N° 2007-037 of January 14, 2007, on export processing zones and companies, relating to specific needs, but that are incompatible with international standards, and the Labor Code whose Article 85 stipulates that « *women without any distinction of age, cannot be employed at night in any industrial establishment of any type, public or private, secular or religious, nor in any outbuilding of one of these establishments even when these establishments are of a professional or charitable nature, except for establishments in which the employees are members of one family* ».[70]

135. In conclusion, it appears that the Malagasy lawmaker wanted to privilege worker protection by guaranteeing a relatively high minimum wage and guarantees for the duration of employment. In addition, the obstacles to hiring are accentuated by the numerous missing implementation decrees which make interpreting and implementing the Labor Code difficult and unpredictable.

The marginal nature of the active employment programs

136. Access to work is difficult since potential workers find themselves facing numerous obstacles. Information is not always available and lack of experience as well as of financial resources are the brakes young people often encounter when looking for a job. In these conditions, Government support is often sought. This is particularly true for OECD countries which dedicate an average of over 1 % of their national revenues to finance programs to promote employment (this percentage even reaches 2% in countries like Sweden and Finland).

137. International experience reveals that a Government has several other options to support job creation. Following the classification proposed by a recent World Bank study[71], we can successively distinguish the programs focusing on: (i) services providing information on job opportunities; (ii) the payment of subsidies on salaries to encourage employment; (iii) the development of labor intensive public works and (iv) the promotion of microcredits to assist new emerging businessmen. Several recent evaluations have shown that public works programs and those offering support through microcredits are the best to generate jobs among the most underprivileged categories, particularly youth and women (cf. table 23).

Table 23: Program impact – Lessons drawn from international experience

[70] The Convention between the mining company QMM and the State is also an example in which the vagueness of the Labor code prejudices worker protection, and should be remedied by adopting the implementation decrees. Indeed, the implementation of these contractual provisions, contrary to the very principle of the Labor code according to which the collective agreement must do better than the CT, leads to a financial loss for workers, precisely regarding the calculation of the overtime surcharge.

[71] Betcherman, Luinstra, and Ogawa, *Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Economies*, World Bank, 2004.

Intervention methods	Impact	Success
Employment and information service	Generally positive in industrialized countries and countries in transition, notably due to relatively low costs. There is little evidence from developing countries, but it tends to favor qualified workers that could have probably found a job without these services.	National Research Observatory for Employment and Qualifications (or *Observatoire nationale de L'emploi et des Qualifications* - Tunisia)
Subsidized salaries	Generally negative because tends to favor workers who would have found a job anyway. Expensive and sparsely used programs in developing countries.	
Public works	Mixed because they are capable of generating a lot of jobs but these are relatively costly and short term.	Expanded Public Works Programme (South Africa) AGETIP (Senegal)
Credits to micro-enterprises and self - employment	Positive if they come with services and strict controls on their use over time. Create distortions in SME markets.	Program for the Promotion of Children and Youth (Uganda) Farm Youth Development Program (Philippines) Entra 21 (Latin America)

Source: G. Betcherman, K. Olivas, and A. Dar. *Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Economies*, World Bank, 2004.

138. In Madagascar, the employment promotion policy remains embryonic. The support programs supply through the distribution of microcredits is very much limited to a few one-off initiatives. Among these, it is nonetheless interesting to bring out the Program for the Promotion of Employment and Income (or *Programme de Promotion de l'Emploi et des Revenus* - PER) which, though modest in nature, has attained encouraging results. With an annual budget of around US$500,000, it seems that close to 10,000 jobs have been created in 2006 and 2007 (half for women) in the rural areas of the country. In parallel, this program has carried out a training campaign that affected over 40,000 young people and women. With this success, the PER program has been renewed until 2011.[72]

139. Resorting to labor intensive public works programs (or *programmes des travaux publics à haute intensité de main d'œuvre* - HIMO) seems to be the exception, and have been the focus of the Malagasy authorities' efforts and the development partners. There are nearly 20 initiatives today, the most important of which are the HIMO programs of (i) the FID (funded by the World Bank), (ii) the CCPREAS (funded by the Malagasy State), (iii) the ONN (funded by the Malagasy State), and (iv) the ILO (funded by the NORAD).

[72] There are other programs like the FIREF and the CEFOR which try to promote employment for some categories of workers like young people, women and the disabled. The scope of these programs at national level remains modest even though they manage to help families and workers.

140. The performance of these HIMO programs has been assessed[73]. It showed that the scope of these programs remained relatively limited since, as a whole, they only affect 25,000 workers, or around 0.3% of the population of working age. This lack of scope is not surprising in light of the low amounts at stake, they do not exceed US$21 million per year, or 1.4% of the Malagasy State budget or proportionally 10 times less than in Scandinavian countries.

141. Furthermore, it seems that the internal efficiency of these programs varies considerably. The cost of a job created per person (and per day) fluctuates between 1,900 Ariary for the FID up to nearly 6,500 Ariary for the International Labor Organization funded program (table 24). These costs are much higher than the wages participants to these programs receive - between 1,500 Ariary and 3,000 Ariary according to the worker's qualification. These variations can partly reflect differences in the infrastructure works carried out, but also (i) excessive operating expenses; (ii) lack of coordination between these programs target the same beneficiaries; and (iii) the near-absence of ex-post monitoring and evaluation which would allow identifying the deficiencies and correcting them over time. This last shortcoming not only harms the efficiency of these programs but also their good governance, generating a vicious circle that defeats their expansion. Indeed, for lack of good governance and reliable results, it is difficult to mobilize the national budget and the donors to fund these programs, thus limiting their scope.

Table 24: Cost and job creation in the main HIMO programs, 2005-06

Agencies	Capital costs (in millions of Ariary) *(a)*	Number of Person-day (in thousands) *(b)*	Payroll (in millions of Ariary) *(c)*	Labor intensity *(d) = (c)/(a)*	Cost per Person-day (in Ariary) *(e) = (a)/(b)*
FID	9475	4 821,3	7 580,2	80%	1 965
ONN	6500	1 010,9	4 225,0	65%	6 430
CCPREAS	13018	4 280,3	9 192,9	71%	3 041
BIT	6725	1 037,9	2 450,5	36%	6 480

Source: Labor intensive public works (HIMO) for social welfare in Madagascar: problems and policy options, July 2008.

142. Finally, we would like to conclude this section by revealing the weakness of the information and data collection systems of the labor market and its development in Madagascar. This weakness is visible at the central level in spite of the OMEF's recent creation. It is even more present at the regional level. For instance, in the Anosy region, the OMEF branch is limited to one person who only has a motorbike to get around. There is no work schedule, no operating budget. Even though this branch is supposed to implement the MFPTLS's Annual Work Schedule, and notably collaborate with the National Information System on Employment (or *Système National de l'Information sur*

[73] « Labor intensive public works (HIMO) for social protection in Madagascar: problems and policy options », July 2008 (or *Travaux publics à haute intensité de main d'œuvre (HIMO) pour la protection sociale à Madagascar: problèmes et options de politique*, juillet 2008).

l'Emploi – SNIE), and the National Office for the Promotion of Employment (or *Office National de la Promotion de l'Emploi* – ONPE).

C. THE PRECARIOUS CONDITIONS IN THE WORKPLACE

143. Workers' productivity also depends on the conditions prevailing in the workplace. These include sanitary and hygiene conditions which, consequently, influence the employees' health status. For example, Malagasy workers lose 4 working days monthly on average in Madagascar because of malaria, therefore greatly reducing their productivity. These conditions also cover the social environment in the company and in the sector since obviously the presence of a healthy and transparent dialogue helps employees put more in their work, cooperate, and improve, to promote the economic efficiency of the company and of the entire Malagasy private sector.[74]

144. It is with this vision that the Malagasy lawmaker proposed an ambitious social welfare regarding the conditions in the workplace on the one hand, and the representativeness of the workers on the other. The Labor Laws imposes a certain number of conditions from the company so that the latter maintains the cleanness of its establishment, in particular cleaning and general hygiene, heating, lighting and individual workers' fittings (Article 110). There are also articles on the set-up of canteens (Articles 116-118), the protection against risks through safety standards (Articles 120-123), occupational and corporate medicine (Articles 134-135).

145. Social dialogue is central in the Malagasy Labor Code with the right to join a trade union, the respect of rights and liberties (Articles 136-151) and the establishment of workers' council (Articles 169-67). Beyond these rules of conduct within the company, channeling dialogue around the National Labor Council (or *Conseil National du Travail* - CNT) is also provided for (Articles 184-187).

146. One has to admit that the implementation of the legal framework is deficient. Only a few firms respect the hygiene and sanitary conditions imposed by the Labor Code. For example, there are only 27 inter-corporate medical services over the whole Malagasy territory whereas every employee should in principle enjoy medical and sanitary services. At the institutional level, the role of the *Conseil National du Travail* remains marginal. Though it is sometimes consulted for legislative amendments, it has not participated in the recent discussions on the national employment strategy or on the Law relating to export processing companies.

147. There are many different reasons behind this dichotomy between the legal framework and its implementation of the conditions in the workplace. First of all, the requirements seem disproportionate for a country like Madagascar where most employers cannot financially afford to comply with the rules. Setting up a canteen or a medical center is expensive. It is therefore not surprising that they try to circumvent the rules that are too costly.

[74] For arguments in that sense, see OCDE (2004), op. cit.

148. Secondly, the Malagasy authorities did not give themselves the means to enforce the implementation of legal conditions. Controlling the regulatory framework imposes considerable human and financial resources that are direly lacking in Madagascar today. The MFPTLS administration only has 350 civil servants and agents irrespective of category and status. The staffing of the Directorate for Labor (or *Direction du Travail*), in charge of implementing the Labor Laws, is insufficient with 70 inspectors (most carry out administrative chores and not inspections) for all the territory and half are concentrated in Tananarive. Their training level is also modest. With this level of human resources, the *Direction du Travail* cannot carry out controls, if only in the limited number of formal companies and of workers registered into the social security system. There is about 1 inspector for 8,000 (insured) workers whereas the ratio suggested by the ILO is of around 40 workers for developing countries. The CNT's marginal role also comes from its lack of resources since its operating budget in 2008 did not exceed 5 million Ariary, or barely US$2,500.[75]

149. Finally, the fact several implementation texts are missing aggravated the lack of respect of the Laws' regulations on conditions in the workplace. Thus, the Decree and the corresponding ministerial Order, in reference to Articles 134-135 of the Labor code, establishing an Interministerial Committee in charge of controlling hygiene, safety and environmental conditions before any establishment opens, refer to obsolete texts. Also, the general work hygiene and safety measures are still defined by an Order dating back to 1960. The trade union practice right still suffers from missing implementation texts (for example, for the modalities of collective agreements) or refers back to obsolete references dating back to the colonial period. This is the case for the dispute procedures whose legal instruments date from 1961; the same is true for those concerning the election mode and the status of staff representatives in businesses are of 1968.

II.5 CONCLUSION

150. Local private sector expansion must gradually become the engine of Malagasy growth. This imperative is not new and has given rise to a considerable number of studies (close to 300 in the last five years) which have led to the implementation of reforms and projects aiming at upgrading the conditions of the private sector. The overview proposed in this chapter has shown that these efforts tended to concentrate around three aspects: (i) reinforcing basic infrastructure (mainly transport); (ii) stabilizing the macroeconomic environment and modernizing the tax and customs administration; and (iii) developing the financial market, notably micro-credit.

151. Improving these three aspects will contribute to the emergence of a strong and dynamic private sector over time in Madagascar. However, it must be pointed out that although necessary, their success might not be sufficient. Recent diagnoses, including

[75] The deliberative authority is a General Assembly which has to meet twice a year. The CNT is chaired collectively by the Minister in charge of Labor and by two other Chairmen elected by the employer and worker Colleges. Meetings are effectively chaired through an annually revolving chairmanship of the representatives of each entity. The CNT has a permanent bureau, a technical secretariat and 4 standing Committees – each corresponding to one of the CNT's 4 missions.

surveys with companies, have shown that the constraints on Malagasy firms were more diverse, including the difficulty in moving goods and services, expensive administrative relations with the State and the lack of workforce qualification. Moreover, upgrading the infrastructure and developing the financial market also take time and their benefits for investors will mostly come over time. The risk is therefore that, with no immediate progress, the latter will challenge the State's will (or ability) to implement reforms to improve the business climate and reject the economic strategy pursued by the Government.

152. With this outlook, this chapter paid attention to three constraints which burden the Malagasy private sector's development and that have not received any interest or support. The idea is not to substitute the above-mentioned efforts but to complement them by identifying economic policy actions that can happen in the short term. The first constraint pertained to market access (domestic and international) which is limited by three obstacles: (i) the tariff policy remains unstable and penalizing for the import of capital goods; (ii) logistics costs go from administrative delays to amounts paid to forwarders and carriers; and (iii) the lack of a coordinated promotion strategy, notably with the absence of an export promotion agency and of coherent actions that aim at adopting the norms and standards which are more and more required by consumers in importing markets.

153. The second constraint aims at identifying the transaction costs the State imposes on businesses through its numerous and complex administrative procedures. These costs are both upon a company's entry and during its operations with the obtaining and the renewal of permits. Among these obstacles, access to land and its development has come out as a major concern because of the heaviness and the delays of these procedures and because of the costs they bring about. The political uncertainty related to completing these procedures, for example the dossier has to be approved by a Cabinet meeting, strengthens their negative role on investors' decision.

154. Finally, the third and final constraint is to improve labor productivity. Today, in spite of competitive wages, Madagascar's appeal is limited because of a relatively high labor unit cost. There are three major causes for the Malagasy workforce's lack of productivity. First of all, the average level of skills is reduced because the majority of the working population lacks schooling, it does not exceed 4 years. If the reform of the school system (particularly post-primary) is indispensable to motivate students to stay in school, it is imperative that this effort comes with mechanisms that promote learning among those excluded from the school system and the reinforcement of vocational and technical training. Secondly, workers' productivity is limited because they lack mobility, notably access to a formal job which is restricted by the lack of flexibility of the hiring rules and the lack of scope of the employment support programs put in place by the State and the development partners. Third, Malagasy workers lose numerous work days because of precarious conditions prevailing in the workplace in terms of hygiene and social dialogue. Though the legal framework is ambitious, certainly too ambitious considering the resources of the Malagasy State, it is only seldom applied in practice.

155. Currently, the emergence of the private sector in Madagascar is still constrained by the existence of numerous and various obstacles. The analysis proposed in this

chapter, whose outline was recalled above, emphasized some of them to complete the efforts underway and to successfully set up a positive dynamics of change both in the short- and in the medium-term. Several directions for reform and action will be defined in the reform agenda we are proposing in the final part of this study.

PART III: SHARING THE FRUITS OF GROWTH OR CREATING OPPORTUNITIES FOR ALL

1. The Malagasy Government owes it to itself to perpetuate the momentum provided by its ambitious public investment policy and by foreign capital inflow through economic growth. The Malagasy authorities understand these themes well. They are taken up in the previous parts of this study and constitute the MAP's pillars. Yet, good management of economic aggregates and private sector promotion are not sufficient without a broadened distribution of growth in Madagascar or the creation of opportunities for a growing part of the population. This is often acknowledged within the framework of social and equitable development, but it also has to be taken as an indispensable ingredient to establish an accelerated and sustainable economic growth over time.

2. The experience of numerous countries indeed shows that sharing growth and expanding opportunities are needed to reduce poverty and to create a virtuous circle for growth. Without poverty alleviation, the overall demand as well as domestic investment capacities will remain limited by the financial constraint that burdens the poor and which is not offset by access to financial credits since they are the first to be ousted from financial markets for obvious reasons of lack of collaterals and of risks (moral hazard). Also, the poor generally have fewer possibilities to invest in human capital (considered by economists as the main explanatory factor of long-term economic growth), therefore limiting their capacity to adapt and use new technologies (Kremer [1993]).[76] Finally, if the poor do not take part in economic growth, they might not support the economic policy followed by the Government, creating increasing political instability. [77] These factors illustrate that the Malagasy economy remains on the path of suboptimal growth over time.[78]

3. Our objective in this third part is therefore to pay attention to the importance of sharing the fruits of economic growth as an instrument of development for Madagascar. The first aspect we analyze will be the Malagasy authorities' strategy of spatial and geographical growth. Since 2005, they have favored three specific regions (the Tananarive/Antsirabe, Fort Dauphin and Nosy Be poles) to maximize their natural advantages and their market access to create agglomeration effects. We will see that this approach, though justified, rests on growth which is unequally distributed over all the Malagasy territory, and leaves vulnerable groups on the sidelines. This inequality represents a challenge that the Malagasy authorities have to take into account.

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[76] M. Kremer, *The O-Ring Theory of Economic Development*, Quarterly Journal of Economics, 1993.

[77] Cf. World Development Report, *Equity and Development*, 2006 for a telling reminder of this relationship between inequality and growth.

[78] To illustrate the scope of this phenomenon, the estimates obtained by Lopez and Serven [2005] on a large sample of the country during the 1960-2000 period suggest that the trend of the annual economic growth rate in Madagascar could have been 2 points higher than the one observed in 2003-2005 if its poverty level had been that of Senegal. With a poverty rate equal to that of Ghana or Uganda, it could possibly have reached 10%. Of course, these simulations are to be interpreted cautiously, but they give an order of magnitude for the harmful effects associated to the persistence of poverty on economic growth in Madagascar. H. Lopez and L. Serven*,* *Too Poor to grow*, World Bank 2005.

4. The second axis of the economic policy relates to the role the development of the mining sector will take in Madagascar. Taking advantage of still unexploited mining resources, the country has been able to attract colossal projects that will influence the country's economic structure. Indeed, it is estimated that the investment flows in this sector will exceed 4 billion between 2008 and 2009, with a higher potential growth in the coming years. However, this abundance of capitals does not automatically mean that the country, in particular its poor population will benefit since direct interactions between mining companies and the local economy are traditionally limited. One of the commonly-used channels to fight poverty is the redistribution of tax revenues paid by mining companies toward the priority sectors and regions. The management and the allocation of these resources in Madagascar will be analyzed through international experience.

5. Finally, the third and final axis of the economic policy stresses the link between the trade liberalization pursued by the authorities and the fight against poverty. The reduction of tariffs and non-tariff barriers has implications on supply and demand which in return affect the income of households and should be analyzed. Also, the barriers put up by importing countries are liable to disturb the growth of Malagasy exports and therefore the producers, particularly of food items (rice, fishing products, fruits and vegetables) who are mostly individual or small-scale businesses. Opening up to the outside world has led to greater vulnerability to external crises, as illustrated by the recent episode of soaring oil and food prices in international markets. We will examine the vulnerability of Malagasy households to these crises, by distinguishing between their income level and characteristics like their residence, its size or the sector of activity.

6. Through the analysis of these three axes, we will strive to establish the link between the issue of private sector development we have just dealt with and wealth distribution. This link is important but cannot cover all the instruments available to promote the sharing of the fruits of growth within the Malagasy population. The development of human capital remains the privileged channel since it allows increasing opportunities for individuals to come out of poverty. A better-educated or healthy worker will be more able to seize opportunities than another. However, analyzing this channel through human development goes beyond the context of this study.

III. 1 THE GROWTH POLES IN LIGHT OF THE DISTRIBUTION OF WEALTH

7. The development strategy followed by Malagasy authorities is partially based on the emergence of three growth poles around the region of Tananarive/Antsirabe, the mining project around Fort Dauphin and the development of the natural site of Nosy Be. There is no need to return to the arguments in favor of this strategic choice since they are presented in several documents relating both to Malagasy and international experience, including World Bank ones.[79] The emphasis will be put on the need to create conditions

[79] To promote the emergence of agglomeration effects, the Malagasy Government, inspiring itself from international experience, has structured its intervention around three regions: Fort Dauphin, Nosy Be and Tananarive/Antsirabe. These three regions were selected using a combination of the three following criteria: (i) the exploitation of their natural advantages (mining and the beauty of the site); (ii) their existing access and their domestic and international market potential; and (iii) the historical concentration of a

for growth that is shared within the poles, between them, as well as with the rest of the country to guarantee this strategy is successful.

8. This chapter is organized to show that the success of the growth poles will largely depend on their capacity to build synergies between investment projects and the rest of the local economy. It will also demonstrate that their sustainability will have to rest on preserving the balance (and not the convergence) between their development and that of other regions over time.

A. ECONOMIC GROWTH WITHIN THE POLES THROUGH THE EMERGENCE OF SYNERGIES

9. By choosing to encourage economic growth in three specific regions, the Malagasy authorities must make sure that growth materializes in these regions and that it will be sustained over time.

10. The Government emphasized foreign investment, to offset limited local financial and technological resources. This challenge is about to be met since transnational companies have responded with significant investments in the mining sector in Fort Dauphin and (at a smaller scale), in the tourism sector in Nosy Be and Fort Dauphin. We will show below for each pole however that the emergence of synergies between these investments and the local economy will be indispensable to guarantee that growth is maintained over time. More serious still, if they fail, their return could be questioned.

The Fort Dauphin pole

11. Our approach consists in assessing the costs and benefits expected from the investments in Fort Dauphin. To do this, we have selected a baseline scenario that takes up the assumptions used by the project managers during their mid-term assessment. We then have two alternative scenarios, which examine the sensitivity of the findings obtained to positive or negative changes in some of the accepted parameters.[80]

12. The first result standing out from this approach is that the profitability of the Fort Dauphin pole is linked to the QMM mining project that aims at mining ilmenite starting from 2009 (table 25). In the baseline scenario, the mining revenues represent around 40 billion Ariary for the 2005-30 periods. This result is not surprising since mining was the main argument to select this region as a growth pole.

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network of companies, workforce and consumers. For more details, cf. World Bank, Integrated Growth Poles Project, 2005 and World Bank, World Development Report, 2009 (Banque mondiale*, Projet des Pôles Intégrés de croissance*, 2005 et Banque mondiale, *Rapport de développement dans le monde*, 2009).

[80] For details on the assumptions selected to analyze costs and benefits around the three growth poles, cf. Synthesis report of the mid-term economic assessment of the PIC project, profitability analysis, new projects (*Rapport de Synthèse de l'évaluation économique à mi-parcours du projet PIC, analyse de rentabilité, nouveaux projets*).

Table 25: Income distribution per sector in Fort Dauphin, 2005-2030

(Net Present Value, in billions of Ariary)

Scenario	Base	Optimist1/	Pessimist2/
Mining income	39.4	41.9	38.4
Agricultural income	22.1	35.4	14.9
Tourism income	52.2	88.3	41.7
Port	-72.0	-60.2	-74.3
TOTAL	41.7	105.3	20.6
Economic return rate (in %)	8.5	12.8	7.0

Source: Mid-term economic assessment of the PIC project.

Note:

1/ The optimistic scenario: It is assumed that infrastructures as well as the business climate improve without delay. Most noticeably, the QMM funded power plant starts operating in 2009 and the JIRAMA investments in electricity and water are carried through. Roads and tracks that lead to tourist sites will also be built and maintained within the prescribed time, including investments related to the Ehoala port and road infrastructures.

2/ The pessimistic scenario: The set-up of electric and water supply connections are delayed, which will in turn slow down investments in hotel and mining infrastructures and therefore the arrival of tourists. This scenario also assumes the delayed completion of the ancillary rights-of-way at the port of Ehoala (sorting chain, cold room, etc.), which will halve agricultural income because of the regression of sisal, periwinkle and litchi markets which are extremely vulnerable to competition from South-East Asian countries.

13. However, it appears that the return of the pole will largely depend on the emergence of activities around the tourism and agricultural sectors (including fishing). Income projected by these two sectors is expected to respectively reach 52 and 22 billion Ariary. To better illustrate the importance of these two sectors, their disappearance would lead to a drastic drop in the return of the pole as a whole and it would then not exceed 3%.

14. The central role played by the tourism and agricultural sectors are further accentuated if the allocation of income among economic agents is taken into account (table 26). The mining income will remain concentrated in the hands of the State via the payment of taxes and fees since job creation and synergies with local companies will remain limited. On the other hand, the development of the tourism and agricultural sectors will directly affect local populations through the creation of jobs and value chains with local farms and service providers. For example, it is estimated that 90% of the tourism income would be in the form of salaries and income for small producers.

Table 26: Income distribution per beneficiary in Fort Dauphin (base scenario)

(Net Present Value, in billions of Ariary)

Income	STATE	Local communities	Jobs	SME/ producers
Mining income	27.0	5.2	5.7	4.1
Tourism income	48.1		3.0	37.1
Agricultural and fishing income				22.1
TOTAL	75.1	5.2	8.7	63.3

Source: Cost/benefit analysis of the PIC project.

15. The Malagasy Government has well understood the stake of extending the development of the Fort Dauphin growth pole beyond the mining sector. For this reason, it has emphasized the construction of common infrastructure, such as the port and power supply, at the heart of its strategy. Road construction should also facilitate intra- and inter-sectoral trade within the region.

16. However, these efforts could prove insufficient as we are reminded by international experience. Synergies do not emerge automatically and, often, require far more than making new infrastructures available. They have to come with measures which aim at bringing the skills of local businesses and workforce up to international standards. Improving the business climate also becomes primordial. These reforms will hold our attention in the next part of the study when we formulate specific recommendations to promote these synergies.

17. It must be noted that the analysis presented above draws a still-incomplete picture of the economic, social and cultural spillovers of the development around the Fort Dauphin pole. Thus, the expanding the urban infrastructure could accentuate the focus of trade between the town of Fort-Dauphin and its surroundings and therefore promote the emergence of new activities (construction companies, set-up of street vendors, increase of the number of city cabs, upgrade of service infrastructures, gas stations, banks). On the other hand, the risks related to the marginalization of some economic activities should also be included as should the presence of negative externalities such as prostitution (rising HIV/AIDS rate), price hikes (rent, food prices, …) and environmental degradation even if measures are now being taken by the authorities to mitigate them, in collaboration with the private sector and civil society.

The Nosy Be pole

18. We have carried out the same type of cost-benefit analysis as the one for the Fort Dauphin Pole for the Nosy Be pole. Overall, the results hardly differ, except that the main sector is tourism (not mining anymore, table 27). The sustained arrival of tourists and their accommodations in new hotels are at the center of the growth pole project in this region where the authorities want to capitalize on the natural beauty of the site. 90% of the total income projected for the next 30 years would come from tourism, followed by those derived from fishing (8%) and agricultural (2%) activities.

Table 27: Income distribution per sector in Nosy Be, 2005-2030

(Net Present Value, in billions of Ariary)

Scenario	Base	Optimistic1/	Pessimistic2/
Tourism income	67.2	97.8	44.6
Agricultural income	0.9	1.1	0.9
Fishing income	5.9	8.3	5.2
TOTAL	74.0	107.2	49.8
Economic return rate (in %)	15.7	21.4	11.7

Source: Cost/benefit analysis of the integrated growth poles.

Notes:
1/ The optimistic scenario: The JIRAMA increases its production capacity and the business climate improves thanks to easier access to land and to the securing of property rights
2/ The pessimistic scenario: Delays in the execution of road and electrification projects, notably JIRAMA's investments, delays in setting up tourism investments leading to a momentum which is weaker than expected in terms of agriculture and fishing.

19. The analysis highlights that the success of the Nosy Be pole imposes the need to go beyond simply building hotels by developing upstream and downstream intra-sectoral activities. To reach an acceptable return, close to half the tourism income should come from tourists spending when buying local crafts, food and using services like cabs and visiting parks. The State should essentially benefit from the boom of tourism activities thanks to taxes collected on hotels and site visits, whereas SMEs should gain from the expansion of restaurants and tour operators, which in return would stimulate the demand for fishing and agricultural products, including those from informal activities (table 28).

Table 28: Income distribution in Nosy Be (base scenario)

(Net Present Value, in billions of Ariary)

	State	*Local communities*	*Jobs*	**SME/ Producers**
Tourism income	32.1	2.9	5.9	26.9
Agricultural income				0.9
Fishing income				5.9
TOTAL	32.1	2.9	5.9	33.3

Source: Cost/benefit analysis of the PIC project.

20. As for the Fort Dauphin pole, the challenge for Malagasy authorities in Nosy Be is to create conditions allowing synergies with local partners to boom within tourism activities and to guide their extension to related activities such as the production of food items and crafts.

The Tananarive/Antsirabe pole

21. The Tananarive/Antsirabe pole was chosen because there is a strong concentration of population and industries, notably in the two textile and ICT priority sectors of the MAP. The strong population density, exceptional in Madagascar, offers a pool of labor with a potential productivity and guarantees domestic demand over time.[81] The Government's action consists in strengthening the business environment through institutional reforms, infrastructure development, the promotion of local workforce training, support to the reform and the simplification of the tax and regulatory framework, facilitation of access to financial services, and establishment of an agri-business complex (*agro technopole*) for fruit and vegetable packaging or processing companies.

[81] Population density in Madagascar is low, according to official statistics, it is around 22 inhabitants per km^2. The only region with a high population concentration is the one around the city of Tananarive (149 inhabitants/Km2) with an estimated 80% urbanization rate. The recent world development report suggests that agglomeration effects start manifesting themselves with an urbanization threshold higher than 50%.

22. The benefits expected for the 2005-30 period in the Tananarive/Antsirabe pole should be distributed between: (i) income from textile industries (wages, taxes and margins); (ii) income from NICT companies (wages, taxes and margins); (iii) income from the agri-business complex; and (iv) agricultural income from agricultural productions such as fruit (apple, peaches, plums and pears) and vegetable (potatoes, carrots, onions and tomatoes) farming. Details of the baseline, pessimistic and optimistic scenarios for this distribution are presented in table 29 below.

Table 29: Income per sector in Tananarive/Antsirabe, 2005-2030

(Net Present Value, in billions of Ariary)

Scenario	Base	Optimistic	Pessimistic
Textile income	31.5	55.7	0
ICT income	25.5	28.9	14.2
Agri-business complex income	2.3	3.4	1.0
Agricultural income	3.9	5.6	1.7
TOTAL	63.2	93.6	16.9
Economic return rate (in %)	11.1	12.5	<0

Source: Cost/benefit analysis of the integrated growth poles

23. The benefits generated in the textile and ICT sectors are dependent on internal and external factors. Among the internal factors, the speed at which local infrastructure works (roads, energy) are carried out and progress in terms of the quality of the business climate, notably access to labor with a relatively low unit cost, will be decisive. The competitiveness of these firms will also rely on the evolution of world market conditions, particularly in competing countries, that can have an influence on the mobility of transnational companies working in these sectors.

24. The main beneficiaries of the textile and ICT income will be the companies themselves and the local workforce (table 29). Agricultural income will be distributed among small producers and local communities. Revenues for the State will be limited to the taxes paid by textile and ICT companies, which vary according to the regulatory framework eventually put in place (notably the maintaining of the export processing zone regime with time), but are expected to be minimal.

Table 30: Income distribution in Tananarive/Antsirabe (base scenario)

(Net Present Value, in billions of Ariary)

	State	*Local communities*	*Jobs*	**SME/Producers**
Textile income	0.5		8.6	22.3
ICT income	2.0		9.0	14.5
Agri-business complex (*agro technopole*) income				
Agricultural income		3.9		2.3
TOTAL	2.5	3.9	17.6	39.1

Source: Cost/benefit analysis of the integrated growth poles and our own calculations

25. Once again, the main lesson drawn from this simulation exercise consists in showing that the success of the growth pole around Tananarive/Antsirabe depends on the capacity to promote private sector expansion by setting up incentive conditions and

implementing shared infrastructures. The State, through its economic policies and targeted interventions, will play a central role in creating an environment favorable to the take-off of the private sector, of which small producers and the informal sector.

26. To sum up, reaching an acceptable economic return rate in the integrated growth poles will depend on two parameters, which are greatly influenced by the State's interventions. The first parameter is the establishment of incentive conditions at the entry and the expansion of new economic activities, whereas the second one will be to trigger the development or intra- and inter-sectoral synergies from these activities. Only the latter expansion will allow guaranteeing sustainable growth but also a broadened sharing out of the benefits between the economic agents, including small- and medium-sized enterprises and the workers. However, the emergence of these synergies does not happen automatically and highly depends, and we will come back to this later, on the Government's capacity to: (i) promote economies of scale through infrastructure projects (roads, ports); encourage the response of local producers with a training and information policy; and (iii) create relationships between foreign investors and local companies both at purchasing and distribution levels.

B. THE NEED TO MAINTAIN AN INTER-REGIONAL BALANCE

27. The success of these growth poles will partly depend on the government's ability to generate growth distributed within the concerned regions. Yet, if their growth leads to profound imbalances with the other regions of the country, this could lead to social and economic frustrations, generating political instability over time. In Madagascar, this risk is exacerbated by ethnic tensions and because the vast majority of poor populations are on the sidelines of the growth poles. The latter currently only represent a quarter of the total population distributed throughout only 10% of the territory and set aside about ¾ of Malagasy households.

28. Yet, one must understand that a strategy based on targeting privileged regions is in essence inegalitarian. By choosing one or several geographical regions, the idea is to provoke returns of scale within and outside companies by putting consumer and producer networks and shared infrastructure in place. The regional imbalance of growth is therefore a natural side effect of this strategy the movement of businesses and population must gradually be offset. This logic prevailed in the take-off of China and the United-States, where populations were concentrated in limited areas of the national territories.[82]

29. In this context we have sought to answer the two following questions: (i) have growth and employment developed faster in the growth poles than in the rest of the country these past years? If so, (ii) have migratory movements toward the higher-growth regions started?[83]

[82] For a description of these experiences, cf. World Bank, World Development Report, 2008 (*Banque mondiale, Rapport du Développement dans le Monde, 2008*).
[83] To answer these questions, we used the surveys conducted in 1546 communes in 2001 then in 2007. These surveys represent a new source of information, but most of all they offer qualitative rather than quantitative information.

30. The answer to the first question is unambiguous in the sense that the three growth poles report higher economic growth and job creation than the other regions of the country. Responses to the commune surveys indicate that the new business creation has accelerated nearly 3 times faster there than in the other regions between 2001 and 2007 (table 31). This general acknowledgement is also observed at the sectoral level, for example tourism, a sector in which the number of visitors has multiplied 20 times faster in the Nosy Be and Fort Dauphin regions than anywhere else in the country.

Table 31: The median number of companies[1] per commune increased faster in the growth poles

	2007	2001	Difference
Tana/Antsirabe	45.0	27.0	18.0
Nosy Be	23.0	13.0	10.0
Fort Dauphin	7.0	4.0	3.0
Other regions	9.0	6.0	3.0
National	14.0	10.1	3.9

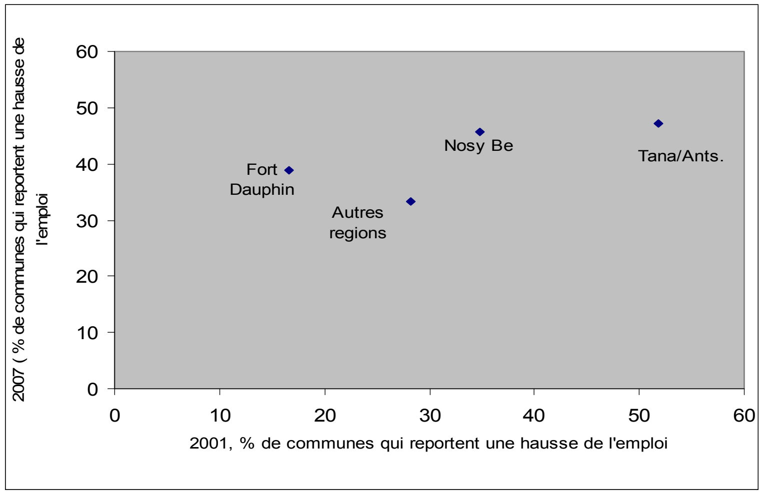
Source: Commune surveys, 2001 and 2007.
Note: For companies with more than 10 employees.

31. If the poles seem to have equally benefited from an accelerated growth, some differences should however be underlined. The Tananarive/Antsirabe pole presents a median number of companies per commune which is five times higher than the national average in 2007, confirming their concentration and the potential agglomeration in this region. In contrast, the median number of firms around the Fort Dauphin pole remains modest, though it has increased between 2001 and 2007. Finally, the increased number of firms per commune around Nosy Be is due to the arrival of relatively large companies (over 50 employees), whereas the emergence of SMEs remains relatively limited.

32. The creation of permanent jobs also seems to have increased faster in the poles than in the rest of the country. In 2007, the number of communes which reported a rise in permanent employment exceeds 40% in the regions where the poles are located, whereas it is around 30% in the rest of the country (figure 14). Rising employment seems even more dynamic in the districts concentrated around the poles (where more than 60% of the communes report an increase), suggesting a relatively high geographical concentration of growth. We note that this rise in employment in the communes of Fort Dauphin and Nosy Be is relatively new, since their communes declared a growth rate that was under the national average in 2001.[84]

[84] The exception again seems to be Nosy Be where job creation is concentrated in large enterprises (> 50 employees).

Figure 14: The employment growth is faster in the growth poles, 2001-2007



Source: Commune Census 2007

33. The growth poles therefore seem to report a dynamism, notably in terms of job creation, which is higher than the one observed in other regions. This trend still has not led to an immigration flow toward the poles, except toward Nosy Be. Table 32 below indicates that the percentage of communes reporting a rise in immigration in 2007 compared to 2001 is slightly lower than the national average (45% vs. 47%) around the poles. This slowdown is particularly striking in the Tananarive/Antsirabe pole (where only 38% of the communes report a rise) even if there are significant variations according to the districts.

Table 32: Evolution of immigration from 2001 to 2007

(% of communes per region)

Regions	Rise	Unchanged	Drop
Tana/Antsirabe	38	42	20
Nosy Be	56	16	28
Fort Dauphin	41	20	39
POLES TOTAL	45	26	29
Other regions	49	28	23
National	47	30	23

Source: Commune surveys, 2001 and 2007

34. The near-absence of acceleration of migratory flows toward the growth poles finds its origin in several simultaneous factors, but we will highlight the gap between economic performance and the decision to emigrate. The fastest growth detected around the poles is indeed recent to the extent that the projects only really started in 2005. Most of the infrastructure works is about to be completed and even the QMM project in Fort Dauphin will only be operational starting from the beginning of 2009. Not only is growth a recent event, but it also produces short-term perverse effects such as rising commodity and housing prices because of the shortage thereof in the zones around the poles.

35. The low migratory flows are also explained by the prevalence of information, infrastructure and social barriers. In a country like Madagascar, access to information is a privilege because of the deficient communication networks. It is difficult for isolated

populations to identify the promising economic results recorded in the poles. Moreover, movement from one region to another is made difficult by the quasi-absence of roads and means of transport. For example, the Fort Dauphin pole, South of the country, is practically enclosed since it takes 3 days by road, under difficult conditions, to get to Tananarive. In addition, population movements are sometimes curbed because of cultural (and ethnic) reasons like the attachment to ancestral land and family reunification.

36. All these reasons contribute to explaining the low migratory flows recorded toward the growth poles. In fact, when there are movements, they tend to concentrate within the region. Thus, we see that 80% of immigration in the communes located in the growth poles comes from the region or from neighboring regions.

37. The gap between the accelerated growth in the growth poles and the one observed in other regions, in addition to the near-absence of migrations toward these regions, must be of a concern for the Malagasy policy makers. If an egalitarian development over the entire Malagasy territory is both utopian and bad advice, however it is important to keep social, political and economic balance at the country's level. International experience has shown that the authorities can intervene with a direct and indirect influence on incentives for individuals and firms to move and/or with the set-up of a budgetary policy of financial adjustment between regions. These two options will be examined in depth in the final part of this study to derive concrete recommendations to guide the Malagasy authorities.

III. 2 MANAGEMENT OF THE TAX REVENUES FROM EXTRACTIVE INDUSTRIES

38. Madagascar's mining potential, rich in resources as diverse as gemstones, gold, ilmenite, nickel but also iron, bauxite or coal, is beginning to enter a large-scale mining phase. The Madagascar Action Plan (MAP) objective is to rapidly increase the contribution of mining activities to the Malagasy GDP in the coming years, to reach 20-30% of the GDP in 2011.[85] This rapid growth of the mining sector has significant repercussions on Madagascar's macroeconomic aggregates, notably in terms of exports.

39. However, the generalized criticism of the mining sector is that its direct benefits to the local economy are limited. This capital intensive sector only uses little local labor, presents limited technology transfer as well as decreasing relationships with local suppliers and providers once the construction phase is over. Furthermore, most of the sales and profits go back abroad. International experience has demonstrated that a country' development focused on the mining sector can only succeed through the emergence of externalities created from shared infrastructures (like a port in Fort Dauphin or road construction for instance) and the sound and efficient management of the revenues obtained by the State.

40. This chapter proposes to pay attention to the second aspect. A country's capacity to generate positive spillovers from mining projects depends on its capacity to collect revenue and to put them to good use to maximize economic growth and the fight against poverty. We will present the figures available related to the additional public resources linked to the three large mining projects currently being developed or operated and recall the lessons that can be learned from international experience in terms of managing the revenues from extractive industries, in order to present the options that can be considered for Madagascar. The availability of additional tax resources from mining activities offers an opportunity but, most of all, a challenge for the Malagasy authorities in their search for accelerated and shared growth.

41. It would however be proper to clarify that the ambition of this chapter is not to analyze the Government's mining and oil policy, including the relations of transparency between private companies and the Government, at the heart of the EITI[86] agenda, an initiative for which Madagascar is officially a candidate since February 2008. The issue here is at the level of the downstream sectoral policy and it strives to define the approach that would allow maximizing the impact of the tax revenues drawn from extractive resources on the Malagasy economy and community.

[85] Based on available projections, a more realistic contribution would be of 15% of the GDP by 2011.
[86] Extractive Industries Transparency Initiative (EITI). For further details see www.eiti.mg and www.eitransparency.org

Box 12: Madagascar and the "Extractive Industries Transparency Initiative"

Beyond the EITI itself, which focuses on the transparency of the revenue flows between the sector's industries and the public authorities, Madagascar is part of the "EITI ++" pilot countries. The objective of this approach, initiated by the World Bank, is to make a diagnosis of public policies relating to the entire extractive industries sector. Upstream, this approach leads to reviewing the conditions of access to resources, the quality of the sector's regulation and of the control of operator practices compliance with the regulations in force. The EITI ++ then takes an interest in the conditions in which public revenues are collected and in the arbitrations of their use. Finally, the conditions in which these revenues are transformed into sources of sustainable development are examined, in terms of the quality of public funds management, of environmental management, of investment choices and of the development of the local communities.

The present chapter contributes to structuring public policies relating to the downstream part of the chain, so that they are adapted to the Malagasy context.

A. The impact of extractive activities on the Malagasy public funds

42. The Malagasy State is the sole owner of the country's underground resources. Though the authorities have engaged discussions on numerous mining or oil investment projects, which are at various stages of maturity[87], only three major mining projects are currently sufficiently advanced to put forward a reasonable estimate of their impact on public funds.

43. The Ambatovy project, engaged by a consortium led by the Sherritt International Corporation, concerns the mining of a nickel/cobalt deposit located near Moramanga (Alaotra-Mangoro region). It represents a US$3.3 billion seed investment, for a 30-year project life. The end of the construction phase and the start of mining are expected for 2010. The Taolagnaro/Fort Dauphin (Anosy region) project is run by QIT Madagascar Minerals (QMM), a joint-venture between QIT Fer and Titane Inc[88], (which currently holds 80% of the capital) and the Office for Mining and Strategic Industries (or *Office des Mines et des Industries Stratégiques* - OMNIS), a Malagasy administrative public entity (20% of the capital). This project, which represents an investment in Madagascar of US$800 million, concerns the mining of ilmenite deposits in the Taolagnaro/Fort Dauphin mineral sands. Although the framework agreement was signed in 1998, 2009 should mark the first year of this project's commercial operations.

44. The company Kraoma S.A. exists since the 60s, it was nationalized in 1975 and now completely belongs to the Malagasy state. It operates an open-pit chromite mine located in Bemanevika, 90 km from Morarano. After several years of low or negative

[87] We can mention among others: the bauxite mining and aluminum processing project (Manantenina) is at the prefeasibility study stage; the international call to tender for the iron mining permit (Soalala) launched in June 2008; the mining and research permits granted for gold deposits likely to lead to relatively rapid investments (North of the country); the beginning of pilot stage production of Madagascar Oil and the other oil exploration permits granted, without much visibility on possible production at this stage.
[88] QIT Fer and Titane, Inc, is a Rio Tinto subsidiary. The above data was provided by the PGRM.

earnings, the rise of the price of chromite translated into a significant increase in this company's profitability in 2007 and in 2008 (6.8 million dollars net profit in 2007). Kraoma S.A. also recently purchased a mining permit for gold, with a view to diversifying its activities, but at this stage neither the date when a possible vein will start being mined nor the revenues related thereto can be estimated.

45. Because of the specificities and of the risks related to mining projects[89], the sector has its own legal and tax regime worldwide. In Madagascar, the succession of reforms carried out for a decade or so in the mining sector translates into coexisting several regimes. Indeed, the tax regime applied to mining projects results from the combination of provisions from the general tax code, the mining code, the law on large mining investments (or *loi sur les grands investissements miniers* - LGIM, 2005) and of several of their implementation texts. In QMM's case, the tax regime is governed by the framework agreement concluded between the State and the company in 1998, i.e. before the first wave of reforms of the mining tax regime.[90]

46. Analyzing these measures allows to identify the main sources of revenue and their destination and to make an assessment, from a modeling of the main taxes, fees, duties and dividends these projects are liable to (table 33). This modeling enables to estimate the impact of the different assumptions on public funds (notably the level of raw material prices, pace and volume of ore extraction and processing, exchange rate, etc.…). These data must therefore be interpreted cautiously, as orders of magnitude dependent on underlying assumptions that can be subject to numerous variations.

Table 33: Estimate of the total amount of annual public revenues, QMM project

(2009-2026, current millions of dollars)

	2009	*2010-13*	*2014-17*	*2018*	*2019-20*	*2021-26*	**Total**
Dividends	0	0	4,0	4,0	4,0	2,8	63,6
User fees	1,4	2,0	2,0	2,0	2,0	1,4	31,8
Tax/profits	0,0	0,0	2,0	2,0	3,0	2,1	28,6
Local taxes	0,0	0,0	0,0	0,2	0,2	0,2	1,8
Total pub. revenues	1,4	2.0	8,0	8,2	9,2	6,5	125,8

Main assumptions: 20 % of OMNIS participation in QMM, standard result before tax = 20% of the turnover; IMF macro-economic framework, application of the QMM framework agreement tax regime. For information, the price of ilmenite and zircon is assumed to be constant for the duration of the agreement

Sources: IMF, World Bank (COCPO), QMM Agreement, Compilation Report and preliminary diagnosis for the study of the mining sector tax environment revision, author's calculations.

[89] These risks are mostly a result of the very strong investment intensity needed to mine a resource that is always estimated in probability terms and to produce commodities whose prices completely depend on world market cycles.

[90] The 1998 policy aimed at reforming the state's role in the sector, and to shift its role from that of operator to regulator and sustainable development promoter. The first World Bank sectoral project (the PRSM was launched in 1999 and the PGRM in 2003, before being extended until 2010) supported the adoption of a modern mining code in 1999. QMM's framework agreement, the result of a long negotiating process, was adopted just before that, in 1998. It was the last and only one of this type in the mining sector. Uranium and hydrocarbons are the exceptions, since these substances can always be the object of contracts with the state.

47. According to these assumptions, the public resources collected would be in the 107 million dollar range between 2009 and 2026 (table 34). However, this result is very sensitive to commodity prices and to the State maintaining a 20% holding in the QMM capital through the OMNIS. Now, according to the terms of the stipulations of the framework agreement's article 4, an increase of the capital should take place when mining begins. At that time, QIT Fer and Titane will be able to convert the credits accrued for QMM during the project development in a QMM capital holding. The State, on the other hand, will have the choice of maintaining its shares at a minimum of 20 %. However, the execution modalities of this option and its possible cost for public finances are not public data. The decision to take this option or not must rely on a numbered financial analysis of its cost and profit statement.

48. Should this participation be diluted (for example, down to 5 %), the dividends received would be of 11.2 million dollars, bringing total revenues of 73.4 millions. This proportion would be lower than the levies which correspond to applying the LGIM tax regime which took place after the QMM agreement was signed. The shortfall for public funds, corresponding to the additional benefits granted to QMM compared to the LGIM regime, can be assessed at 86.7 million dollars by 2027. Maintaining OMNIS's 20% shares in QMM for the life of the project would let the authorities limit the tax advantage granted to QIT Fer and Titane when the framework agreement was negotiated to around 37.2 million dollars in relation to the LGIM regime. Whatever the weakness of this agreement is from the public finance perspective, renegotiating it is not advisable: it would be a negative signal in terms of legal security and risks being prejudicial for future mining investors.

Table 34: Estimates of the total amount of annual public revenues, Sherritt project

(2010-2026, current millions of dollars)

	2010	*2011-2020*	*2021-26*	**Total**
Tax/ profits	92,2	113,8	112,1	1 903,0
User fees	14,8	18,5	18,5	310,5
Local taxes	0,2	0,2	0,2	3,4
Total pub. revenues	107,2	132,5	130,8	2 216,9

Main assumptions: price of nickel 12.72$/pound or 28,000$/ton; profit distribution between production and processing: 20/80; IMF macro-economic framework, application of the LGIM tax system.

Sources: IMF, World Bank (COPCO), Compilation Report and preliminary diagnosis for the study of the mining sector tax environment revision, Sherritt International, « *Project benefits to Madagascar's economy* », author's calculations.

49. The public finances levy on the Sherritt project would be 2.2 billion dollars, in application of the LGIM provisions, over the 17 first years of project operations. The presented estimate could be increased if the domestic resale price of the mineral per processing unit were set sufficiently high to increase the proportion of profits going to the nickel extraction unit.[91] The estimate is also sensitive to the differential between the

[91] A 2007 decree provides that the distribution of profits between extraction and processing will depend on the operating costs of the mine against the costs of the entire project. This calculation, difficult to verify,

production cost and the sale price of nickel: a 1 dollar/pound drop of this cost (or a rising sale price of the same amount) over the entire period would translate into an additional 333 million dollars tax revenue.

Table 35: Estimates of the total amount of annual public revenues, Kraoma S.A.

(2009-2026, current millions of dollars)

	2009	*2010*	*2011-13*	*2014-16*	*2017*	*2018-21*	*2022-27*	**Total**
Dividends	0,3	0,3	0,3	0,3	0,3	0,3	0,3	4,5
User fees	0,4	0,4	0,4	0,4	0,4	0,4	0,4	6,8
Tax/profits	5,0	5,2	5,2	5,2	5,2	5,2	5,2	93,4
Local taxes	0,1	0,1	0,2	0,3	0,5	0,3	0,2	4,4
Total pub. revenues	5,8	5,9	6,0	6,1	6,3	6,1	6,0	109,1

Main assumptions: price of chromite 340 at 350$/ton; IMF macro-economic framework, application of the common tax system code.
Sources: IMF, Kraoma S.A., author's calculations.

50. Several lessons can be drawn from this modeling. According to an optimistic scenario (maintaining the 20% State participation in QMM), the addition of public revenues from these three projects would be in the 115.1 million dollar range in 2010, or 15.2 % of Malagasy tax revenues, 7.2 % of domestic public revenues or 5.4 % of total public revenues (including revenues from donors)[92]. QMM's and Kraoma's activities are in the same kind of public revenue range, i.e. around an average of 6 million dollars per year each, or a total of around 0.6 % of public revenues in 2010. The Sherritt project would result in revenues around 20 times higher than those of the QMM and Kraoma S.A. projects. In total, the impact of the large mining projects in their operation phase starting from 2009 on public revenues will remain modest the first years, though not insignificant. It is however likely that the combination of Madagascar's extractive resources, of the underlying rise of commodity prices and of the particularly attractive LGIM tax regime, translates into a proliferation of investment projects. Their cumulated impact on public funds could then be considerable.

51. Moreover, one can legitimately wonder about the contribution the management of revenues from extractive industries could bring to the risk of "Dutch disease" that was examined in the second part of this study. The following section therefore presents the relevant lessons drawn from international experience to outline possible solution to manage this issue at the national level.

B. THE LESSONS FROM INTERNATIONAL EXPERIENCE IN THE AREA OF PUBLIC MANAGEMENT OF EXTRACTIVE REVENUES

will be of major importance in terms of public funds since profits from processing are only taxed up to 10% whereas profits from extraction have a 25% liability rate.

[92] Revenues from these two large projects would increase in 2011, to reach around 138 million dollars, but the total amount of public revenues at that date has not been modeled.

52. Countries which benefit from public resources from extractive industries are facing, from the public finances perspective, three distinct main questions: Should the total revenue collected be spent, or should part of it be saved for subsequent use, and if so, what proportion of it? With the assumption that part of the revenue is saved, what mechanisms should be used to ensure that these funds are well-managed, protecting public funds from their fluctuations as well as from pressures to engage unsustainable expenses? Finally, how must public finances adjust to manage the impact of extractive industries on the local communities that are affected? This section tackles these three questions successively with the analysis of relevant international experiences.[93]

The determinants of the breakdown between public spending and savings

53. Extractive resources are not renewable: once used, they are no longer available to the community. Now, by nature public expenditure entails some rigidity, both because of social demand for public services, and of the status of civil service or the impact on the operating expenses of past investments. Financing sustainable expenditure through temporary revenues therefore risks translating into the commitment of unsustainable expenditure in the long-term. In addition to untenable public deficits and their negative macroeconomic consequences (inflationary risk, monetary depreciation, deterioration of the trade terms, etc.), such an approach brings up the problem of being fair toward future generations, that would find themselves deprived of the benefits of national wealth. A contrario, it would be unfair to current generations to put all the public extractive revenues in reserve. The question is therefore to know how to find the middle-ground between these two extremes.

54. The permanent revenue theory allows defining this middle-ground.[94] It is possible to show that national mineral resources can be preserved for future generations while funding a certain level of public deficit with extractive revenues, if the return on extractive revenue investments allows taking over from these extractive resources once they are exhausted. Concretely, public authorities must therefore make sure that their expenditure does not exceed the level of their permanent revenues, which implies that part of the extractive revenues must be saved and invested. The level of expenditure that extractive revenues can financed sustainably therefore depends essentially on the amount of public extractive resources available (net present value of these public revenue flows) and on the return on investment rate of these revenue flows. Based on the modeling presented above, the net present value of Malagasy public mining revenues is around 1.53 billion dollars, or a 130 million dollar annual revenue.[95] Given the rules for the

[93] Beyond these three main questions from a public finance perspective, Madagascar will also have to ask itself an additional question, relating more to its macroeconomic policy: how to transform extractive revenues into other forms of productive and reproducible capital, in order to offset the attrition of its underground assets and stimulate growth. This point will also be dealt with below.

[94] This theory makes the level of public expenditure depend not only on current revenues, but on revenues that can reasonably be expected in the future. See Barnett, Steven et Rolando Ossowski, 2003, "*Operational Aspects of Fiscal Policy in Oil-Producing Countries*" in Davis, Jeffrey, Rolando Ossowski and Annalisa Fedelino (Eds.) Fiscal Policy Formulation and Implementation in Oil-Producing Countries (Washington, IMF), pp. 45-81.

[95] By using a 5% updating rate. When using a 10% rate, the NPV is reduced to 0.9 MD.

distribution of fees between the central Government and decentralized territorial units, the net present value of State budget revenues would be in the 1.38 billion dollar range . Assuming a 4.6%[96] return on investments of these flows, revenues from the QMM and Sherritt projects would allow the Malagasy government to finance 63 million dollars of sustained additional annual expenditure once the deposits have run out. The balance (around 72 million dollars, variable according to the year) should therefore be saved and invested.[97]

Box 13: The careful management of diamond resources in Botswana

- We estimate that around 75 % of mining resources goes back to the authorities through taxes, fees and dividends;
- An appropriate monetary policy allowed to curb inflation and to stabilize the exchange rate, reducing the Dutch disease effects;
- Public expenditure strongly increased over time, while allowing the accumulation of significant reserves that are carefully and transparently managed by the Central Bank;
- National development plans were used to channel extractive revenues towards public investments, which were not always of good quality but enabled to make notable human development and growth;
- An implicit sustainability rule was followed by the successive national development plans, which consisted in keeping the connection between current operating expenses (except for health and education, considered as investments) and non-extractive revenues constant.

It should however be noted that institutional and historical factors, which cannot all necessarily be reproduced in Madagascar, have also played an important role in the success of this policy. Amongst these factors, we can note (i) pre-colonial tribal institutions encouraging wide social participation and imposing constraints on the politicians in charge; (ii) a strong and sensible power exerted by the Presidents of the country since its independence; (iii) a stable legal environment and an efficient mid-term budgetary constraint provided by the National Development Plan; (iv) an efficient public sector.

Source: According to the « *Guide on resource transparency* (2007) », IMF, p.39.

55. This method has the advantage of providing a first analysis of the dilemma related to the use of extractive revenues but has limitations. It relies on the assessment of public extractive revenue flows and therefore of the assumptions used to construct them. Moreover, applying the permanent revenue theory only guarantees the long-term sustainability of public funds if the financing modalities of the sustainable deficit are

[96] This corresponds to the historical yield of the Norwegian Oil Fund between 1998 and 2008. It is higher than the return obtained by numerous developing countries' Oil Funds.

[97] All things being equal, this analysis is valid. The liabilities that are susceptible to weigh on public funds in the long-term must be subtracted from the net present value of the extractive revenue flows to know the public funds net position as a whole. The actuarial liabilities of public pension regimes, whose situation is not balanced at this date, just like the environmental liabilities from the mining sector, which might one day have to be supported by the State, come to mind here.

adequate. Furthermore, the permanent revenue theory does not take the country's social needs into account (as such, it can under-estimate the amount of sustained annual expenditure), or the absorption capacity of additional public expenditure (from that point of view, it can overestimate the amount of sustained annual expenditure).

56. Thus, in a country like Madagascar, that has a relatively low human capital level, it is quite possible that the revenues from extractive industries generate a return on investments which is equal, or even higher, if they are invested by public authorities in public services like education or health or in international financial markets. A study based on the data analysis of 120 developing countries between 1975 and 2000[98] has revealed evidence of a positive impact on the growth of public investments in education and health.

57. A one GDP point increase of expenditure in education translated into an annual GDP per capita growth of 1.4 point, whereas an increase to the amount in health spending translated into an annual GDP per capita growth of 0.5 point. The effect on growth is particularly strong in Sub-Saharan Africa and for the least-developed countries. The quality of governance also had a strong influence on the impact of health and education spending on growth.

58. One could use a parallel reasoning for public investments in infrastructures (transport, energy, water and sanitation, information and telecommunication systems, etc). The level of capital invested being relatively low in the country, the internal return of any marginal investment is a priori high. However, this return will depend strongly on the exact location of the investment and on its incorporation into a coherent national land development policy. Choosing where these investments settle should notably take into account the development policy of the growth poles that the authorities have opted for, as well as the decentralization policy priorities.

59. When determining the optimal distribution of using extractive revenues, the authorities could draw their inspiration from the Botswana approach that has been successfully and prudently managed the diamond resources it is endowed with since the beginning of the 70s and has benefited from annual growth in the 9% range. The average income per capita in Botswana reached 3,500 US dollars in 2000.

60. Whatever the break-even point between expenditure and investments is when the authorities determine permanent revenue in relation to extractive resources, for long term balance, another factor will be in favor of saving part of these revenues. World commodity prices are strongly volatile. Moreover, though there are (future) derivatives which reflect the market consensus on predictable price evolutions, these indexes have little predictive value.[99] If, in the mid-term, the Malagasy budget were to become heavily dependent on extractive revenues, the rapid drop of the price of one or several of these commodities could lead to a significant and unexpected need in financing. Saving part of

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[98] Emanuele Baldacci, Benedict Clements, Sanjeev Gupta, and Qiang Cui1 "*Social Spending, Human Capital, and Growth in Developing Countries: Implications for Achieving the MDGs*", Washington, IMF, November 2004, Working paper WP/04/217.
[99] See, for the case of oil, illustration 3.1 of « *Managing the Oil Revenue Boom, The role of Fiscal Institutions* », op. cit.

the extractive revenues could then comply with a logic of stabilization in addition to falling within the logic of the intergenerational equity which is reflected in the permanent revenue theory.

61. At the economic level, this type of precautionary savings can be assimilated to subscribing to an insurance policy. According to the country's risk tolerance, it is possible to calculate, from retrospective statistical data, the minimum amount of precautionary savings needed to absorb the shocks of commodity prices against which the country wants to be "insured". The more public revenues are dependent on a diversified number of extractive resources[100], the less the amount of precautionary savings needed is important. In theory, nothing is against the intergenerational funds and the price stabilization funds being merged, provided that the country's portfolio contains a sufficient level of liquid assets that can quickly be liquidated for stabilization purposes.

62. It is often argued that saving part of the extractive industries revenues and placing them offshore would allow fighting the risk of « Dutch disease ». This is a possible option, but it has to come not only while considering the tax policy but also the monetary and exchange rate policies as proposed in the first part of this study. Furthermore, the large majority of revenues derived from the extractive industry will not transit in the government treasury (more than 90% will remain in the hands of the private sector) which greatly reduces the authorities' latitude to use these savings for macroeconomic stabilization purposes.

Review of the management modalities of the Funds for Future Generations

63. Considering the above development, the Malagasy authorities may decide to save part of the revenues from extractive industries, both for reasons of intergenerational equity, and to stabilize the impact of these revenues on the budgetary balances. It is also important to identify the appropriate mechanisms to ensure they are well-managed.

64. There is relatively wide international experience in the area of using funds dedicated to extractive revenues (ERF): 21 oil-producing countries and two mining countries (Chile and Papua New Guinea) had this type of fund in end of 2005.[101] A selection of available data is proposed in table 36 below. Lessons can be learned from the experience of countries that tried to implement this approach. They pertain to the rules for the set-up of ERF reserves, their integration with common law budgetary procedures and the economics of their operation.

[100] The correlation rate between the concerned commodity prices is also an important factor. The lower this rate is, the less the savings needed to stabilize the impact of price variations on the budget revenues are important.

[101] The complete list of oil funds and their main characteristics are in the appendix of « *Managing the Oil Revenue Boom: The Role of Fiscal Institutions* », op. cité. The developments that follow are largely taken from this paper. ERFs include both Funds for Future Generations (for savings purposes) and the Stabilization Funds (to smooth price fluctuations).

Table 36: Main characteristics of a selection of ERFs – oil sector

Country	*Creation date*	*Objectives*	*Savings rules*	*Usage rules*	*Bls $*	**% GDP**
Algeria	2005	Stabilization	Residual revenue beyond a threshold set at the barrel price	Transfers towards the budget if the extractive revenues are lower than budget estimates; debt repayment	9.9	11.8
Azerbaijan	1999	Stabilization and savings	Total oil revenues	Equipment and targeted program financing	1.4	11.1
Chad	1999, abolished in 2006	Savings	10 % of the user fees and dividends after payment of debt service to finance the pipeline	Outflows authorized when total extractive revenues are under 10% of the previous year's domestic revenues	0.02	0.4
Equator	2005	Stabilization and savings	20% of heavy crude oil revenue	Outflows authorized if (1) the extractive revenues are under the level projected in the budget (2) the state of national emergency is declared	0.4	1.2
Gabon	1998	Savings	Formula expressed in proportion of revenues, depending on the Funds' reserves	No outflow if the reserves are < 500Blions CFAF. Transfer of 75% of revenues generated by the Government Budget Funds beyond this threshold	0.4	4.3
Equatorial Guinea	2002	Savings and stabilization	Surplus after use by the budget	Unknown	2.9*	43.5*
Iran, Isl. Rep.	2000	Stabilization	Surplus after budgetary use (40$/barrel threshold in 2006/2007)	Discretionary transfers to the budget. Authorized preferential loans to the private sector	11.7	7.2
Kazakhstan	2001	Savings and stabilization	Surplus after budgetary use (49$/barrel threshold in 2006)	Expenditure proposed by President, approved by Parliament.	8.0	14.4
Libya	1995	Savings and stabilization	Surplus after budgetary use (26$/barrel threshold in 2005)	Discretionary transfers to the budget. Significant extra-budgetary expenses.	26.0*	68.7*
Mexico	2000	Savings and stabilization	Excises on the hydrocarbons for the Fund + 40% of oil revenue over budgetary assumptions	Discretionary transfers to the budget if revenues are lower than budgetary assumptions. Possible expenditure with Parliament majority vote	1.5	0.2
Norway	1990/2006	Savings and stabilization	Net oil activity flows towards the State and revenues from Funds'	Discretionary transfers to the budget to finance the deficit apart from extractive revenue,	206.7	73.8

Country	Creation date	Objectives	Savings rules	Usage rules	Bls $	% GDP
			investment	approved by Parliament		
Russia (Fed)	2004	Stabilization	Revenues of some hydrocarbon taxes and budget surplus of previous years	Allows covering the budgetary deficit if oil price is below a threshold. Beyond the 500 billion roubles, the funds can be used for expenses defined in finance law	53.0	7.0
Sudan	2002	Stabilization	Oil export revenues beyond a certain threshold	According to budgetary needs	0.3	1.0
East Timor	2005	Savings and stabilization	Net oil and gas activity flows towards the State and revenues from Funds' investment	Discretionary transfers to the budget to finance the deficit apart from extractive revenue, approved by Parliament	0.6	171.8
Venezuela	1999/2005	Stabilization	At least 20 of the previous year's budget surplus	When revenues are lower than the average of the last three years, up to 50% of the Funds can be spent	0.7	0.6

Notes:
* = Gross financial public assets, when there is no precise data on the ERF themselves.
Source: According to « *Managing the Oil Revenue Boom: The Role Of Fiscal Institutions*", Rolando Ossowski, Mauricio Villafuerte, Paolo A. Medas, and Theo Thomas, IMF Occasional Paper 260, Washington, 2008.

65. Three approaches were experimented with regard to the ERFs' **reserve accumulation rules**. The first consists in building the government budget assuming a certain level of price for the commodity extracted and the payment of all the corresponding extractive revenues to the ERF at a higher price than the threshold that is set. This rule was selected by countries like Algeria, Iran, Libya, Mexico, Russia, Trinidad and Tobago and Venezuela. The second method consists in permanently setting the proportion of extractive revenues paid to the ERF, the balance coming to fill budget revenues. The third approach consists in confining the ERF to a budget financing role. With this assumption, the overall public extractive revenues are paid to the ERF, which are meant to fund annually the amount of non-extractive revenues deficit defined by Parliament according to the macroeconomic and fiscal framework. Only Norway and East-Timor have opted for this approach.

66. When strict accumulation rules have been defined (the first and second approaches above), they aim at reducing the discretionary use of extractive funds and thus guaranteeing a certain level of savings to reach the defined objectives (revenue stabilization and/or intergenerational savings). However, assessing the implementation of these rigid rules shows that, in practice, their efficiency is very limited.

67. It is often difficult to determine ex ante the adequate level of accumulation in the ERFs over a long period of time, notably because it is difficult to distinguish the

temporary fluctuations from the permanent fluctuations of commodity prices. Furthermore, when rigid rules are defined, they are circumvented, eliminated or modified according to external circumstances and pressures that aim at increasing the expenditure, thus, the ERF rule of Alaska (US), of Alberta (Canada), of Oman, of Papua New Guinea were modified during the 80s and 90s. Similarly, some countries (like Kazakhstan, Russia and Trinidad and Tobago for example) modified the accumulation threshold of the funds after oil prices rose. Mexico authorized exceptional expenditure items from its fund in 2002; Venezuela modified the accumulation rules of its fund several times before leaving it in abeyance for an extended period; Chad, Ecuador and Papua New Guinea have even eliminated their ERFs, whose rules were considered technically or politically intolerable.

68. Besides, a quantitative study has shown that an ERF did not have a significant impact on the behavior of government savings faced with a rise in extractive revenues. On the other hand, the quality of public finance institutions and good governance were associated with a better moderation of expenditure during prosperous times.[102]

69. Only the experience of two countries that opted for a financing fund to date, Norway and East Timor, has been much more positive. This type of approach however depends on the Parliament's capacity to debate annual budgetary choices to ensure that the balance of the non-extractive budget proposed by the government is suited to the fiscal position of the country. It thus implies pedagogical efforts on the part of the executive branch, to well present the notions of permanent revenue and of sustainable non-extractive deficit.

70. In the area of the **integration of ERFs into normal budgetary procedures**, one of the founding principles of public finance is that of consolidation of the government's total revenues and charges into a single budget. This consolidation allows the Parliament to exercise its sovereign power to allocate public resources out of the total revenues – this is a strong democratic guarantee. But, setting up an ERF goes against this principle since this ERF has the power to commit public expenditure. A priori, such an ability is obviously attractive for the authorities, and in particular for civil servants who have the power to influence or decide ERF resource allocation.

71. However, the risks related to such a fragmentation of the budgetary decision power are well-known:

- Lack of alignment between the allocation of resources and public preferences, as expressed by voting;
- Possible duplication or, on the contrary, gaps in the resource allocation between the normal procedure and that of the ERF;
- Risk of loss of control of the aggregate fiscal discipline;
- Lower efficiency of the cash-flow management when the financial assets are not managed in a consolidated manner;

[102] See *« Managing the Oil Revenue Boom: The Role of Fiscal Institutions »*, op. cit, pp. 16-19.

- Risk of lack of transparency of the allocation decisions taken by the ERF authorities if these are not subject to the minimal transparency requirements that apply to the government budget.

72. Incidentally, creating an ERF whose authorities would have the possibility of directly committing public expenditure might translate into the deterioration of Madagascar's PEFA scores (in particular PI-6, on budget coverage, PI-7, on the scope of unreported government operations, PI-9, on the management of the aggregate fiscal risk, PI-10, on the transparency of budgetary information).

73. All these factors advocate for as close an integration of ERF operations as possible into those of the general government budget. From this perspective, the solution most recommended from a purely technical standpoint would be a financing fund, on the Norwegian and East Timor model, that would present the following features:

- The fund receives total public extractive revenues;
- Every year, the draft budget contains an estimate of the public extractive revenue flows (including the underlying assumptions), of their net present value, of the permanent spillover revenue, of the corresponding non-extractive resources budget balance that is sustainable, and the possible alternatives in the matter of public investment (financial markets or public investments in infrastructures and in the Malagasy human capital);
- ERF transfers to the budget are authorized by Parliament annually, according to the level of non-extractive resources budgetary balance that is sustainable and to the public investment choices made;
- ERF operations, both forecasted and executed, are traced back in the budget;
- The tax revenue and fee levying modalities come from common law, for collection activities to benefit from economies of scale;
- ERF transactions are the objects of internal and external controls compliant with the international standards that are regularly published and are systematically submitted to Parliament for public review.

74. Though this solution is a priori likely to limit the negative impact of creating an ERF on Malagasy public finance management, Madagascar's own economic policy context could make its operationalizing difficult.

75. There could be the temptation of using the ERF to circumvent problems that are inherent to the public expenditure chain (heaviness and relative inefficiency of controls, public procurement irregularities, perception of a lack of transparency). The idea would then be to seize the opportunity offered by the creation of an ERF to promote the development of a « pole of excellence » that would benefit from well-trained managers and whose management would be efficient, transparent and consistent. However, there is no international example of such an approach having borne fruits. On the contrary, it risks having a predatory effect on local public management capacities, while incurring all the risks of an insufficient integration into the public finance system and reducing the incentive to strengthen the current weaknesses of the system.

76. Furthermore, the operation modalities outlined above imply that the Parliament must show a level of technical competence and maturity when discussing the investment choices of extractive revenues, which might not be attained in Madagascar in the short-term. If such a question is subject to doubt, it could be reasonable for the choice of Parliament to be further supervised. For example, the two-third qualified majority vote could be imposed when the Parliament has the initiative of approving a non-extractive revenue deficit higher than the sustainable deficit presented by government. In parallel, it would certainly be desirable to build the Parliament's capacities in the area of budget analysis and of extractive resource management issues. The capacity of the internal and external bodies that control public finances should also be built so that these bodies can guarantee that ERF operations are reasonably transparent and consistent.

77. Therefore, the main message of international experience in the area of ERFs is that the distinction must be made between the objectives of extractive revenue management and the different instruments used to implement it, among which the ERFs. The intergenerational savings and flow stabilization objectives can be reached without resorting to an ERF, subject to the implementation of a conservative and sustainable fiscal policy. A contrario, setting up an ERF in no way guarantees that the fiscal policy followed will be sustainable. On the other hand, if there is a risk that the politico-administrative game translates into an excessive level of expenditure funded by extractive resources, the set-up of an ERF can strengthen the consensus in favor of a sufficient level of savings. It can also reinforce transparency. In this scenario, the ERF must however have both a role of "current account" (stabilization) and one of "savings account" (intergenerational equity). It is also important to make sure that there is as close an integration as possible between the ERF and all the country's public finance institutions. This integration would reduce the risk of the ERF set-up translating into an excessive concentration of power in the hands of a limited number of managers, thus arousing envy and conflicts. It would also avoid the inconveniences of a fragmented public finance system, and would not reduce the incentives to reform this system as a whole.

The issue of local extractive resources management: the example of the Anosy region

78. On local level, the size of revenues going to the decentralized territorial units where the mining activities are located could be significant given the weak local budgets.

Table 37: Estimate of local annual revenue, QMM project

(2009-2026, millions of current dollars)

	2009	*2010-17*	*2018-20*	*2021-26*	**Total**
Rebates[103]	1.0	1.4	1.4	1.0	22.3
Local taxes	0.0	0.0	0.2	0.2	1.8
Total pub. revenues	1,0	1,4	1,6	1,2	24,1

Main assumptions: standard result before tax = 20% of the turnover; IMF macro-economic framework, application of the QMM framework agreement and mining code tax regimes, by way of which 70% of the user fee is distributed between local groups, 60% of which for the mining activities' settlement

[103] The mining code calls mining « rebates » the part of mining user fees that goes to the territorial authorities.

communes, 30% for the region and 10% for the province (no longer exists and is now subrogated by the region).
Sources: IMF, World Bank (COPCO), QMM Agreement, Compilation Report and preliminary diagnosis for the study of the mining sector tax environment revision, author's calculations.

79. This local levy would be of 20 % of the total public finance collection for the QMM project. [104] The case of the communes around Fort-Dauphin is telling of the possible impact of mining revenues on the territorial units' budgets. During the QMM project first mining phase, the Ampasinampoina commune, a neighboring rural commune of Fort Dauphin, should receive allowances from the project. As for Fort Dauphin, it is not one of the extraction communes and as such does not benefit from the allowance – unless the legal or regulatory provisions are adjusted. Ampasinampoina should receive around 0.3 million dollars (534 million Ariary) in 2009 and 0.4 million dollars (762 million Ariary) in 2010. Now, the total budget of this commune of around 5,000 inhabitants is of 5,000 dollars (9 million Ariary). The attribution of the expected allowance amounts would therefore translate in multiplying the commune's revenue by a 100 factor within two years. Such dynamics presents obvious risks related to the low absorption capacity of the local public finance system: inefficient allocation of resources, capture of the mining income, corruption of local officials. Given the weak local capacities, the commune's low investment, administrative and jurisdictional capacities in terms of control of local funds, there is a high risk of these additional resources being wrongly utilized.

80. International experience indicates that positive local spillovers are a condition for mining projects to develop harmoniously. The strong capitalistic intensity during the investment phase tends to bring out, notably in isolated areas, signs of sudden and massively accumulated wealth, often foreign, in contrast with the poverty level of the neighboring population which is socially hard to accept. In addition to frustration, a mining project also generates more commonly very high expectations on local level since the population considers it has the right to benefit from the mineral resources. This right does not really exist since, in general, mineral resources belong to the State. But, in a lot of countries, the mining legislation recognizes distinctive characteristics for the mining sector and allocates, sometimes in the constitution itself, part of the revenues of mining these resources to decentralized unit or local communities. The mechanisms which allow this redistribution and the exact definition of the final beneficiaries varied extremely and seem to leave room for some creativity when taking local specificities into account.

81. In Madagascar, the mining code offers a first response since part of the fees (the allowance) is allocated to the territorial units: the Provinces (but these no longer exist), the Regions and Communes. This provision was introduced in the mining code in 1999 at a time when the small and artisanal mining sector (mostly gemstones, semiprecious stones and gold) was going through a renewed boom. Most of the allowance (60% or 42% of the total fee) was attributed to the extraction communes to strengthen their efforts to organize and manage the mining activity which was too often informal. With the development of large-scale international mining projects, the amounts corresponding to

[104] The equivalent proportion for the Sherritt project is 10%.

the allowances are now important and exceed, as illustrated above, the absorption capacity of most of the communes at least in the mid-term.

82. Furthermore, too-stringent application of the sharing of the mining allowance would induce major geographical and temporal imbalances. First geographically, since the extraction communes are the sole beneficiaries, only one commune would be allocated part of the allowances. The neighboring communes would get nothing, unless the mining footprint crosses their territory, a case where the allowance does not seem to be formally finalized. Then temporally, the beneficiary communes would receive substantial revenues for a set period of time. The « fall » when mining stops would correspond to the « jump » of the communal budget when production starts.

83. There are easy solutions to channel tax revenues from mining on local level. An option currently considered in the QMM case is the creation of a "Mining Foundation for community development in the Anosy region". It would have a triple purpose: i) to have the communities excluded from positive spillovers benefit in an expanded area around the mine directly and immediately ; ii) to enable capital creation in view of sustaining revenues once the mining project is over; and iii) to encourage community participation in the sharing and the managing of mining revenues.[105]

84. This Foundation would be a public-private partnership associating the authorities, the company and civil society. With the population's growing impatience as it waits to enjoy the positive spillovers of the mine, the creation of the foundation is also designed to be a way for QMM to obtain a "license for social work"[106] without taking the risk of having the funds transit by local units whose management capacities could be deemed insufficient.[107] In this proposal under consideration, the decentralized units would participate in the Foundation by allocating part of the allowances that are today allotted to the extraction communes. This share of resources, whose management would be entrusted to the Foundation according to predefined rules, could be saved or simply channeled by the Foundation. In all the cases, the beneficiary communes would keep part of the allowances that they would then allocate according to the needs of their communal budget. On the industry side, QMM would be invited to contribute to the capital[108] together with other partners who could be interested, including NGOs and/or donors.

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[105] In that sense, this project pursues the objective of creating a social capital put forward by the « *Large Mines and Local Communities: forging partnerships, building sustainability* », World Bank and IFC, 2002, p. 7 'Most importantly, foundations are involved in creating social capital, which is likely the more important social outcome for communities'.

[106] See Ralph Hamann, "*Mining companies' role in sustainable development: the 'why' and 'how' of corporate social responsibility from a business perspective*", Development Southern Africa, Vol 20, No 2, June 2003.

[107] See Business community synergies, report for the World Bank, « *The Potential for Community Development Foundations in Resource-Abundant Countries: A Window of Opportunity for Madagascar*", p. 4.

[108] Even if in such a case it is not a corporate foundation, Rio Tinto cannot remain indifferent to this project. It has already created several foundations, sometimes also called community foundations, notably in South Africa (Palabora Foundation, 1987), in Australia (Central Highlands Community Employment Trust, 1999; Coal and Allied Community Development Trust, 1999; Rio Tinto coal Community, 1999-2001, Tarong Coal Community, 1999), and in Namibia (Rossing Foundation, 1979). See Natalia Yakovleva, "*Corporate Social Responsibility in the Mining Industries*", Ashgate, London, UK 2005.

Ultimately, the communities themselves could contribute according to the model of community foundations widely experimented with worldwide.[109]

85. This project raises interesting questions relating to the trade-offs between contradictory objectives. The settlement of mining activities and the resulting economic development leads to additional population and an inflow of staff whose standards of living are necessarily much higher than the local population (the town's poverty index after the 2007 census is of 0.738, on a scale from 0.429 for the richest commune to 0.839 for the poorest; this poverty index puts the commune at a national median poverty level). This inflow, visible in Fort Dauphin, leads to a rise in the demand for local public services, by combining volume and nominal effect, be it in terms of water supply, sanitation, household waste treatment, or of the maintenance of the municipal garbage collection.[110] Furthermore, it is possible that in the longer term, communes will have to bear the financial cost of the possible negative social or environmental consequences of mining. Revenues from the allowance would therefore be really useful for the communal or intercommunal budget. The mission of a private law Foundation is not to meet the need for public services.

86. Moreover, considerable practical obstacles would have to be overcome for a community foundation to have a significant impact. Community participation is difficult to reconcile with the management power of the board of directors. Admittedly, a community forum could be put in place on an elective basis, but its directions would not be binding. The relationships between this possible community forum and the decentralized territorial units would have to be carefully structured not to weaken the decentralization process or create a deliberative assembly which competes with existing institutions.

87. Finally, other alternatives could be envisaged to manage the local inflow of resources created by the settlement of mining projects. If the authorities wish to respond to the fact that the project impact on local populations is beyond the simple communes where facilities are set up, they can use the Public Organization for Intercommunal Cooperation (or *Organisme Public de Coopération Intercommunale* - OPCI) structure which already exists around Fort Dauphin. One can imagine it would receive public resources, such as the mining fees, tax products and support from donors, but also private resources through a support fund. It could also establish reserves, if need be, provided it is not more rational to immediately invest in upgrading the lacking basic public services.

[109] Based on the assumptions currently envisaged (60 % capitalization of annual income, 20% of usable funds as operating costs), the quota available for the foundation's activities would be between 75K$ and 150K$ per year from 2009 to 2026, and the available capital in 2026 would be 3.6 M$. This in the case of a 800K$ contribution to the seed capital.

[110] A 2003 World Bank study on decentralization in Madagascar revealed that, on average, Malagasy communes dedicated 70% of their budget to administrative and managerial expenses, 14.5 % to so-called economic services (security, transport, markets, water supply, sanitation, waste management) and 15.5 % to social services (health, education, social work or other). The issue of non-decentralized public services of course also arises, but in different terms since the resources that would allow financing them have to come from the central administration.

88. The authorities therefore have to decide which local development model they want to promote. These two visions are in part mutually exclusive, since the share of the allowances allocated to local collectivities that would be transferred to the Foundation would no longer be available to fund the development of local public services.

III. 3 TRADE LIBERALIZATION AND THE POOR

89. The trade opening pursued by Madagascar has contributed to increasing its linkages with international markets. This policy reinforces competition, generating an upgrade of the local firms' productivity that can now develop through international sales. This logic of productivity is the one prevailed in a large number of emerging countries; its relevance for Madagascar has been scrutinized in the second part of this study.

90. Yet, this approach is sometimes criticized since it fails to consider the negative impact trade liberalization could exert on the poorest households or on heightened inequalities in the country. It is often understood that decline of tariffs only favor the « strongest », i.e. those who have the means to fight international competition on an equal footing, to the detriment of the vulnerable groups. Unfortunately, the criticisms are rarely substantiated by technical analyses to the point that it jeopardizes their impact and, most of all, the search for concrete solutions and actions.

91. This is why, in this chapter, we propose to examine the implications of poverty terms regarding the three aspects of the trade liberalization pursued by the Government.[111] The first aspect relates to the reduction of (tariff and non-tariff) protection the Malagasy Government could continue and its possible impact on the poorest strata of the population. The second aspect is that of the dissymmetry between Madagascar's trade opening and the protection imposed by trade partners on Malagasy exports. Finally, the third and final aspect relates to the vulnerability of the local economy to world markets shocks, notably commodity and food prices.

A. THE IMPACT ON HOUSEHOLDS OF THE REDUCTION OF PROTECTION IN MADAGASCAR

92. In the last decade, the Malagasy Government has started a trade liberalization policy translated into scaling down tariffs and dismantling most of the non-tariff barriers. This policy has undeniably had repercussions on the welfare of households, with a magnitude which varies according to their production and consumption structures.

93. To capture these effects, we have used the approach proposed by Porto [2005] or Nicita [2008], which is summarized in this chapter's annex, as a starting point.[112] It

[111] The results presented in this chapter are based on Marcelo Olarreaga, *Is there a bias in favor of poor households in Madagascar's trade policy or in that of its business partners? (or Y- a-t-il un biais en faveur des ménages pauvres dans la politique commerciale de Madagascar ou dans celle de ses partenaires commerciaux ?)* Background Paper for this CEM, June 2008.

[112] Nicita, Alessandro (2008), "*Who benefited from trade liberalization in Mexi*co? Measuring the effects on household welfare", Journal of Development Economics, forthcoming. Porto, Guido (2006), "*Using*

simulates a shock which consists in eliminating any current existing protection on imports in Madagascar. This shock, by amplifying the expected results, allows bringing out the households that will win and those that will lose when faced with the country's trade opening to the rest of the world. This approach has the virtue of simplicity but it supposes that the households' consumer basket and sources of income remain unchanged whatever scenario is envisaged. Excluding these effects can be justified in the short-term but contributes to underestimating real gains and overestimating household losses over time.

94. Household data come from the 2005 household survey in Madagascar. The data on tariffs (six digits) and on trade partners date from 2006. Data on ad-valorem equivalents of non-tariff barriers for Madagascar and its trade partners are first taken from the recent studies by Lee, Nicita and Olarreaga (2008a and 2008b)[113] and then filtered with the help of the elasticities on import demand to match the description of the products included in the 2005 household survey.

95. On this basis, we have estimated the effects of eliminating protection taking the main characteristics of Malagasy households into account, including their income level, the gender of the head of the household, their education level and their location. The statistical results presented in table 38 show that it is difficult to find a significant effect on the welfare of Malagasy households linked to the elimination of trade barriers. All the coefficients that were estimated, though positive, seem relatively low so that the poorest households (1st quintile) would only see their income (monetary and non-monetary) increase by 0.1%, whereas the richest ones would observe a 0.8% rise.

survey data to assess the distributional impact of trade policies", Journal of International Economics 70(1), 140-160.

[113] Kee, Hiau Looi, Alessandro Nicita and Marcelo Olarreaga (2008a), "*Estimating trade restrictiveness indices*", Economic Journal, forthcoming. Kee, Hiau Looi, Alessandro Nicita and Marcelo Olarreaga (2008b), "*Import demand elasticities and trade distortions*", Review of Economics and Statistics, forthcoming.

Table 38: The impact of eliminating tariff and non tariff barriers according to household characteristics

(t-statistics in parentheses)

Variable	**Coefficient**
Income	-4.80 e-9
	(-2.00)
Income 2	3.18 e-16
	(1.69)
Rural	-0.025
	(-20.1)
Head (Man)	-0.007
	(-2.97)
Age	-0.0002
	(-0.95)
Age 2	2.36 e-6
	(1.00)
Education Year	0.0023
	(13.84)
Head (married)	-0.004
	(-1.73)
Antananarivo	0.026
	(4.77)
Fianarantsoa	0.019
	(3.48)
Toamasina	0.017
	(3.21)
Mahajanga	0.036
	(6.50)
Toliara	0.036
	(6.50)
Antsiranana	0.026
	(4.67)
Number of observations	11299
R^2	0.125

Source: M. Olarreaga [2008], op. cit.

96. The importance of non-monetary income explains why eliminating trade protection has little impact on the income of Malagasy households. It is a preponderant share of the households' total income, notably in the form of self-consumption, which is not directly affected by changes in the country's trade barriers. If only the monetary income is taken into account in the simulations, the effects could respectively reach 1.4% and 1.1% for the two groups of households, independently from the households' income level, which explains why the trade policy only has little influence on the country's income inequality.[114]

[114] This marginal role can be emphasized through the ratio of the change in welfare of the richest quintiles compared to the change in that of the two poorest quintiles, which is equal to 1.02. A much bigger value than 1 would have indicated that the richest households would have benefited more from eliminating trade

97. Before we conclude this section, it is fitting to remark that some of the households' characteristics clearly affect the scope of eliminating trade protection. First of all, their location is not neutral since urban households appear to be the main winners with a possible income increase that could go up to 3%, to the detriment of rural households that would see their (monetary) income decrease by 0.7%. This differentiation of the effects mostly comes from the negative impact of removing protection on agricultural production, whereas consumption would be favored. Households headed by women or whose head has a high education level would also be favored since their income are less independent from agricultural production than other households.[115]

Table 39: The removal of protection favors urban households to the detriment of rural ones

Area	Quintile		% of monetary and non-monetary income	% of monetary income
			WHOLE COUNTRY	
Country	Poorest	1	0.1%	1.4%
Country	↓	2	-0.02%	1.1%
Country		3	0.0%	1.0%
Country		4	0.3%	1.5%
Country	Richest	5	0.8%	1.6%
			URBAN AREAS	
Urban		1	1.97%	2.56%
Urban		2	2.09%	2.89%
Urban		3	2.64%	3.43%
Urban		4	2.74%	3.42%
Urban		5	3.18%	3.70%
			RURAL AREAS	
Rural		1	-0.24%	1.21%
Rural		2	-0.77%	0.67%
Rural		3	-0.71%	0.36%
Rural		4	-0.40%	0.99%
Rural		5	-0.43%	0.48%

Source: Olarreaga [2008]

B. Effect of the trade partners' policy on Malagasy households

98. Madagascar has followed a trade liberalization policy this last decade, but it is often argued that this policy is not accompanied by reduced import barriers in industrialized countries. These persisting barriers impede the expansion of exports of countries like Madagascar, and as an indirect result are harmful to its fight against poverty.

barriers, which is obviously not the case in Madagascar. However, we note that the relationship between protection and income level is not monotonous and that the households in the intermediate quintiles are those who benefit the least from trade liberalization.

115 A « Head=Man » probit regression on the part of the income that sells work gives a negative -0.35 coefficient with a standard 0.03 error. The same conditional regression in the income, rural/urban, regions, education level, etc. also gives a negative and significant result.

99. Following the same approach as in the previous section, we have tried to isolate the effects produced by the elimination of tariff and non-tariff barriers in Madagascar's main trade partners on household income. The results presented in table 40 highlight that the gains for Malagasy households would be in the 30% range, or close to 20 times higher than those related to the one-sided diminution of protection in Madagascar. However, it is important to underscore that these gains presume that Malagasy producers can fully use the removal of non-tariff barriers, which seems excessive in view of their limited capacity and of the competition in these markets.[116] The scale of the effects however remains sufficiently large to say that the diminution of non-tariff barriers should lead to substantial gains for Malagasy households.

100. It is also interesting to note that gains would be greater for the poorest quintile of households, therefore reducing the country's current income inequality. This pro-poor effect is explained by increased exports, notably food items mostly produced by poor rural households.

Table 40: The elimination of trade protection in the main trade partners would be extremely favorable to Malagasy households

(in % of monetary and non- monetary income)

	Non-tariff barriers	Tariff barriers
Poorest 1	39.69%	0.13%
2	36.14%	0.15%
3	30.64%	0.14%
4	28.05%	0.12%
Richest 5	20.05%	0.14%

Source: Olarreaga [2008]

101. The gains for Malagasy households would come nearly exclusively from eliminating non-tariff barriers from their trade partners since tariffs are already very low, notably with the European Union (UE), COMESA and SADC preferential agreements. Non-tariff barriers indeed remain extremely substantial in particular on food items that are calculated equivalent to a 283% tariff in European Union countries, the main destination of Malagasy exports. These barriers generally include tariff quotas, import monopolies and, increasingly, phytosanitary norm and standard requirements.

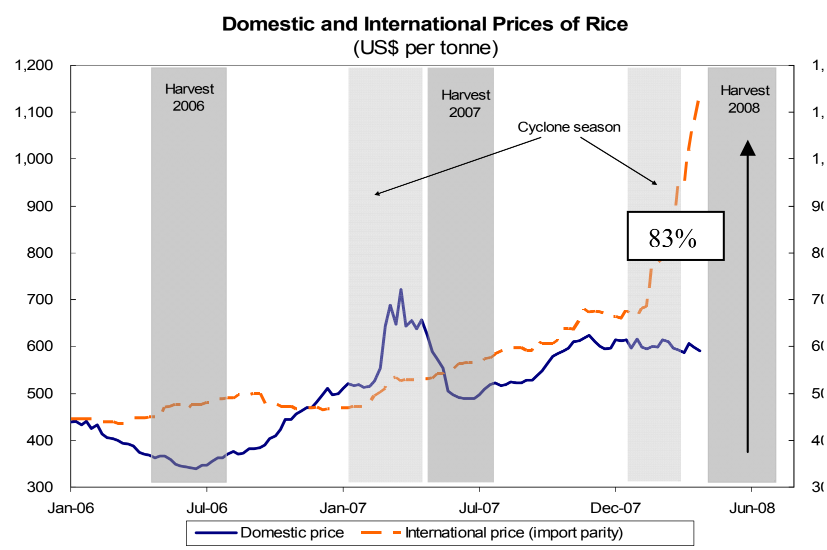
102. The message from this section is neither that the international trade structure is iniquitous, nor that all the non-tariff restrictions imposed by Madagascar's trade partners should imperatively disappear. Most of these restrictions come in response to the need to protect these countries' consumers against problems of hygiene and public health. In chapter II.3, we already mentioned that they were not destined to disappear in the future, but rather to be reinforced. Face to this development, countries like Madagascar must react by bringing their producers up-to-par through a series of recommendations that will be presented in the final part of this study.

[116] To assess the impact of a non-preferential elimination of Madagascar's trade partners' non-tariff or tariff barriers on the income of Malagasy households, we would need a global trade model, this would allow us to estimate the impact on world prices. This goes beyond the objective of this paper.

A. The underprivileged groups' vulnerability to external shocks

103. Madagascar's trade opening to the outside world makes Malagasy households more vulnerable to world market shocks. This vulnerability has never been as visible as during the sudden rise of global commodity and food prices these last 12 months. The vulnerability of Malagasy households to the variations of rice and oil world prices, the two major products in the consumer basket of Malagasy households, particularly the poor, is examined below.

Figure 15:



The rise of the price of rice

104. For a long time, Madagascar was Sub-Saharan Africa's rice granary. But, in the last decade, after its rapid population growth and the low productivity gains recorded, the country has become a net rice importer. This dependence on imports is seasonal and comes into play mostly during the October to February period, i.e. after the local post-harvest period.

105. During this period, the dependence on rice imports imposes the adjustment of domestic prices with those in force in world markets. This seasonality of the price of rice in Madagascar is illustrated in the figure above. A priori, the gap that existed between the local price and the price of rice in international markets (around 83% in July 2008) could suggest an explosion of domestic prices during the counter-seasonal period when local consumption needs to be supplied with imports.

106. The authorities have been aware of the dangers of this possible rise of the prices of rice, in particular for the most vulnerable strata of the population. As an illustration, we have estimated the impact of the rising price of local rice has on the income of Malagasy households. The results of this exercise are presented in table 41 and show that a 50% rise could cut the households' income down by 3 to 7% according to their income

level. The poorest quintiles would in principle be less affected than the rich ones because of the predominance of non-monetary income.

107. The level of income loss is closely related to the location of the households, which reflects in large part if they are net rice producers or consumers. Generally, losses appear to be 3 times higher for urban households than for rural ones. To better ascertain the effects of the price hike on households by distinguishing their income level and their place of residence, a two-way frequency table is proposed below. It highlights the fact that losses can reach up to 15% of the income of households living in the Antananarivo region. On the other hand, relatively poor households living in the rice-growing regions of Mahajanga and Antsiranana can record gains of up to nearly 20% of their current income.

Table 41: Change in well-being per area and quintile following a 50% increase of the price of rice

Regions	Area	Quintile	% of monetary and non-monetary income	% of monetary income
Antananarivo	Urban	1	-13.8%	-14.5%
Antananarivo	Urban	2	-16.1%	-17.1%
Antananarivo	Urban	3	-14.9%	-15.4%
Antananarivo	Urban	4	-14.4%	-15.1%
Antananarivo	Urban	5	-11.0%	-11.2%
Antananarivo	Rural	1	-10.0%	-14.0%
Antananarivo	Rural	2	-6.2%	-10.1%
Antananarivo	Rural	3	-6.9%	-10.7%
Antananarivo	Rural	4	-5.7%	-9.2%
Antananarivo	Rural	5	-4.8%	-7.8%
Fianarantsoa	Urban	1	-12.4%	-13.0%
Fianarantsoa	Urban	2	-8.4%	-9.3%
Fianarantsoa	Urban	3	-9.0%	-9.8%
Fianarantsoa	Urban	4	-8.7%	-9.6%
Fianarantsoa	Urban	5	-6.4%	-8.7%
Fianarantsoa	Rural	1	-7.1%	-10.1%
Fianarantsoa	Rural	2	-4.7%	-8.4%
Fianarantsoa	Rural	3	-5.7%	-11.4%
Fianarantsoa	Rural	4	-4.9%	-9.3%
Fianarantsoa	Rural	5	-4.8%	-9.9%
Toamasina	Urban	1	-7.0%	-8.6%
Toamasina	Urban	2	-13.5%	-13.5%
Toamasina	Urban	3	-11.9%	-12.6%
Toamasina	Urban	4	-11.7%	-12.1%
Toamasina	Urban	5	-6.7%	-6.5%
Toamasina	Rural	1	-3.4%	-5.4%
Toamasina	Rural	2	-5.6%	-5.4%
Toamasina	Rural	3	-5.8%	-8.2%
Toamasina	Rural	4	-0.1%	-0.4%
Toamasina	Rural	5	2.5%	2.0%
Mahajanga	Urban	1	-0.5%	4.2%
Mahajanga	Urban	2	-4.6%	-2.0%

Regions	Area	Quintile	% of monetary and non-monetary income	% of monetary income
Mahajanga	Urban	3	-8.4%	-8.5%
Mahajanga	Urban	4	-10.4%	-10.9%
Mahajanga	Urban	5	-8.8%	-10.6%
Mahajanga	Rural	1	10.6%	19.1%
Mahajanga	Rural	2	6.4%	13.8%
Mahajanga	Rural	3	0.1%	5.2%
Mahajanga	Rural	4	-0.2%	2.6%
Mahajanga	Rural	5	0.0%	0.1%
Toliara	Urban	1	-5.5%	-7.3%
Toliara	Urban	2	-8.3%	-9.1%
Toliara	Urban	3	-7.7%	-7.3%
Toliara	Urban	4	-7.6%	-7.1%
Toliara	Urban	5	-7.4%	-7.3%
Toliara	Rural	1	-4.0%	-4.0%
Toliara	Rural	2	-3.8%	-4.4%
Toliara	Rural	3	-4.5%	-4.1%
Toliara	Rural	4	-4.2%	-4.8%
Toliara	Rural	5	-3.3%	-4.1%
Antsiranana	Urban	1	-9.8%	-9.2%
Antsiranana	Urban	2	-12.0%	-12.6%
Antsiranana	Urban	3	-9.2%	-7.6%
Antsiranana	Urban	4	-10.9%	-10.3%
Antsiranana	Urban	5	-9.8%	-9.6%
Antsiranana	Rural	1	11.4%	19.7%
Antsiranana	Rural	2	5.1%	10.1%
Antsiranana	Rural	3	7.5%	13.9%
Antsiranana	Rural	4	2.3%	6.1%
Antsiranana	Rural	5	-0.4%	0.8%

Source: Olarreaga [2008]

108. These results need to be interpreted somewhat cautiously. Indeed, they represent a scale more than precise forecasts of losses that the rising price of rice could cause the income of Malagasy households. As in the previous analyses, we assumed that Malagasy households do not substitute their rice consumption with another basic food, which, in the short term, is realistic in a country where rice is the staple food. Moreover, our results do not take production seasonality and difficulties of one region supplying the other into account, which lead to the existence of several compartmentalized markets rather than one single rice market in Madagascar (for example, imports are mostly for urban centers).

109. Nevertheless, they indicate that a rise of the price of rice would exert a significant influence on the well-being of Malagasy households, and that this influence would vary according to whether the households are producers or consumers of this food. For this reason, Malagasy authorities have not remained inactive and have taken a certain number of measures that aim at reducing the price of rice imports and therefore the impact of the rising prices on Malagasy consumers (cf. details in part IV).

The soaring oil prices[117]

110. The near-totality of energy needs of Malagasy households is met with the imports of petroleum-based products. The main products consumed by Malagasy households are electricity, kerosene, gas, diesel and fuel oil, which on average account for 2.6% of the consumer basket of the average household in Madagascar but with considerable variations according to the income level. A series of activities is also indirectly affected by oil prices, including transport, fishing, the food-processing industry and tourism.

111. Soaring oil prices on world markets therefore have not failed to impact the well-being of the vast majority of Malagasy households. To estimate the side-effects of the rise in oil prices, we have combined the findings of the 2005 household survey (as we did before) with the input-output matrix derived from the national accounts that were drawn up in 2001. This approach allows us to justify both the direct and indirect effects related to rising oil prices (cf. table 42).

Table 42: Estimate of the impact of a 20% oil price increase on the well-being of Malagasy households

(in % of total expenses)

Quintile	***Q1 (poor)***	***Q2***	***Q3***	***Q4***	***Q5 (rich)***	**Total**
Direct effect	3.40	2.43	2.09	1.86	1.68	2.19
Indirect effect	1.39	1.39	1.39	1.48	1.81	1.52
Total effect	4.79	3.82	3.48	3.34	3.49	3.71
Distribution of weight						
Direct effect	11.9	14.1	15.8	18.6	39.7	100.0
Indirect effect	6.2	10.1	13.3	19.3	51.2	100.0
Total effect	9.2	12.2	14.6	18.8	45.2	100.0

Source: Amendola and Vecchi [2008]

112. The 20% rise of oil prices would lead to a loss in the households' income equivalent to 3.7% on average. The poor households' losses would be emphasized (4.8%) because of the weight of these products in their consumer basket. The importance of indirect effects must be noted, notably through the food-processing industry (half of the indirect effect), which today accounts for close to one third of total income losses for households.

113. Malagasy households therefore seem vulnerable to the change of energy and food (rice) prices variations in the global markets. However, this vulnerability is unequally distributed depending on households' characteristics, notably their location and income level.

[117] N. Amendola and G. Vecchi, *Distributional Impact of Energy Price Changes in Madagascar*, 2005-07, Background Paper for the CEM.

III. 4 CONCLUSION

114. Sharing the fruits of growth is not only justified for economic and social equality reasons, but also to put in place the necessary conditions for the creation of a virtuous circle for economic growth. The exclusion of the poorest groups, today accounting for around 2/3 of the Malagasy population, will keep the expansion of global demand and domestic savings and investment capacities limited, therefore stopping the country from reaching the path of optimal economic growth over time.

115. The need to set-up mechanisms ensuring a distribution of growth has been examined in this chapter in light of three pillars of the development strategy followed by the Malagasy Government. We have also shown that the success of an approach based on the integrated growth poles will have to be strongly linked to a dual sharing. First, it requires the active participation of local actors through the development of synergies with the large mining and tourism investments in the poles. Then, it requires the preservation of interregional balance since the emergence of too large gap between the growth of the poles and that of other regions could generate social and political tensions, exacerbated by the low flows of population mobility.

116. Mining is at the center of the development policy proposed by the Malagasy authorities. Its impact on macroeconomic variables, such as the trade balance, is already perceptible and should intensify in the coming years. Yet, the direct spillovers on the local economy risk remain marginal if the externalities created by the distribution of tax revenues from this sector fail to support the authorities' development efforts. This challenge imposes a quality of management and of the use of these funds that must become a central concern of the Government.

117. The opening of the Malagasy economy to the outside world has been a pillar of the economic policy adopted by Madagascar. This policy has a diverse impact on households, not so much in terms of the scaling-down of tariffs and non-tariff barriers practiced by Madagascar but because of its increased dependence on the policy of its trade partners and of its vulnerability to shocks in international markets. The existence of trade barriers in industrialized countries slow down the expansion of Malagasy exports and through an indirect effect on the producers' potential income, particularly those of agricultural products. The strategy must thus focus on the need to bring these producers up to grade so that they can overcome these barriers of norms and standards. The vulnerability to external shocks must also be considered since the rise of food and energy prices have caused loss of income, particularly for the poorest households, which can challenge the gains that have been obtained these past years in terms of poverty reduction.

PART IV: A REFORM AGENDA

1. Action must come from analysis, if not the latter becomes trivial. The Madagascar Action Plan (MAP) offers a direction for the years to come with well-defined objectives that are shared by all the local and foreign partners working in the country. The President reminded that: « *If we want Africa to change its destiny, we must establish peace, stability, continuity, efficiency, discipline, good governance and professionalism in our countries. We, in Madagascar, are striving to follow all these rules. We are looking for our own way. Our way is defined by the vision: « Madagascar, naturally ».* [118] If the MAP proposes a reference framework, it then has to be made operational to be completely effective. In spite of the Government's ongoing efforts, well-known progress has been recorded in specific areas such as the fiscal policy, infrastructure and education, whereas advances seem more limited when it comes to private sector development and the sharing of growth.

2. The reform agenda proposed in this chapter seeks to complement the ongoing efforts that aim at putting Madagascar on the road to accelerated, sustainable and shared growth. Our schedule is structured around 5 pillars that are made up of 39 actions (table 43). It emphasizes the objectives presented in the three first parts of this study, i.e. the ambitions in terms of economic growth and poverty reduction displayed by the Government require sound macroeconomic management, the private sector as an engine of growth and the expanded participation of the population. We think that we need no longer go back to the arguments in favor of these three pillars; we will simply recall that they are the foundation of the economic success of countries like Chile and Malaysia.

3. The five axes that make up our proposed reform agenda seek to propose a summary of the conclusions we have reached at the end of our analysis. They rest on the assessment that the private sector development and the sharing out of growth in Madagascar impose: (i) the maximization of the contribution of foreign capital inflows; (ii) the take-off and the diversification of trade; (iii) job creation; (iv) the settlement and the expansion of businesses, including SMEs; and (v) the integration of vulnerable groups into the circuits of growth. However, a reminder is needed here. These five pillars are not the exhaustive conditions and actions that Madagascar has to carry out to have a successful transition toward economic emergence, but they remain essential. They aim at supporting the policies of infrastructure modernization (road, communication, electricity) and of human capital development (education, health, social protection) put in place by the Government, with the support of development partners.

4. It is important to note that the proposed reform agenda must be taken as a whole. Only its overall implementation will help reach the country's economic growth and poverty alleviation objectives. Each pillar is designed to not only support the above objectives individually, but also to maximize their interactions. For instance, the need to streamline and expand the coverage of programs in support of employment is a key element of the pillar dedicated to job creation and the one dedicated to the protection of

[118] Extract of the speech of H.E. MARC RAVALOMANANA, President of the Republic of Madagascar, African Union Summit, January 2008, Addis Ababa.

vulnerable groups. Similarly, facilitating access to land plays a central role in the business creation (Pillar 4) and in the maximization of foreign capital inflows (Pillar 1). This complementarity is also present in the temporal horizon relating to each action. Some, like upgrading workers' skills as proposed in Pillar 3, will take time; whereas others like the scaling-down of tariffs collected on capital goods will have a more immediate impact (Pillar 2).

5. Implementing our reform agenda requires the participation of numerous actors of the Malagasy economy. To facilitate this activation, they have to be stakeholders and aware of the stakes. They first participated in this study by sharing the analysis and then its conclusions, and finally by identifying actions within the working group. This dialogue process not only allowed to share but also to take ownership and this was then passed on to an advisory committee composed of government, private sector, development partners and civil society representatives. This process also implies that the proposed actions represent a consensus among the participants and not the World Bank's opinion.

Table 43: Overall reform agenda

Objectives/Instruments	***Recommendations/Actions/Reforms***	***Examples***
Pillar 1: To maximize the contribution of foreign capital flows		
To pursue a conservative monetary policy	1. To monitor the total amounts of foreign capitals injected into the economy with the help of four basic indicators 2. To continue the sterilization policy while monitoring the crowding-out effect on the private sector and the evolution of prices, including in the regions	
To ensure a sound and transparent management of tax revenues from extractive industries	3. To integrate revenues into transparent budgetary mechanisms 4. To allocate revenues according to the MAP's priorities	
To encourage the intra-sectoral and inter-sectoral synergies with the local economy	5. To promote knowledge transfers through vocational training programs 6. To encourage shared infrastructures 7. To set up programs to support and upgrade local suppliers and distributors	Malaysia, Tunisia, Gambia, Jamaica
Pillar 2: To promote trade		
To adopt a tariff policy encouraging investment	8. To cap tariffs on capital goods at 5% 9. To facilitate the VAT repayment mechanisms	Mauritius, Chile
To lower logistics costs	10. To consolidate the customs administration reforms 11. To encourage transparency in the forwarder market 12. To strengthen the intra- and inter-sectoral competition of domestic transport	Argentina, Mexico
To set up a coordinated export promotion	13. To establish an export promotion agency 14. To help exporters identify and target new markets and prospective products 15. To support the establishment of a coherent SPS strategy	Mauritius, Chile
Pillar 3: To promote employment		
To strengthen the	16. To reorganize the Ministry of Labor through	

Objectives/Instruments	*Recommendations/Actions/Reforms*	*Examples*
institutional framework around the labor market	an audit and a functional organizational chart 17. To improve interministerial and inter-agency coordination	
To promote the workers' qualification	18. To encourage the formalization of traditional learning 19. To streamline and develop vocational training programs	Kenya, Senegal, Malaysia
To facilitate workers' mobility	20. To make the labor regulatory framework more flexible 21. To secure governance within existing employment promotion programs and extend them to most vulnerable groups	
To improve conditions in the workplace	22. To increase resources allocated to health and safety administrations 23. To update the implementation texts associated to the sanitary and hygiene conditions and those related to social dialogue with enterprises 24. To develop private-public partnership for developing health care inside companies 25. To strengthen the National Labor Committee (or *Conseil National du Travail* - CNT)	
Pillar 4: To promote business development.		
To consolidate the streamlining of administrative procedures	26. To consolidate the streamlining of administrative procedures faced firms at entry during their operations.	Kenya, Zambia
To integrate the effort to simplify procedures in the general State reforms	27. To motivate civil servants with an incentive and sanction policy 28. To coordinate administrative streamlining efforts with the decentralization policy of public services 29. To target initiatives on growth poles to maximize the demonstration effect of successful reforms	France, Latvia
To simplify access to land	30. To facilitate access to land for SMEs through partnerships, including with local authorities 31. To encourage land development in favor of vulnerable groups in urban areas 32. To set up a land title deed transfer system that takes into account the customary law	Cameroon, Namibia, Mali
Pillar 5: To protect vulnerable groups		
To protect vulnerable groups from external shocks	33. To encourage local production through sectoral strategies for agriculture and energy 34. To facilitate inter-regional trade that will ensure an arbitration of local rice prices throughout regions 35. Tax reliefs on rice and kerosene mostly consumed by poorest households	
To develop Youth Employment Programmes	36. To improve the management of the existing labor promotion programs targeted to vulnerable groups (i.e., youth) 37. To increase budgetary resources allocated to labor intensive public works programs and those integrating training and microcredits	India, Kenya, Uganda
To ensure inter-regional	38. To reduce the distance factor through	Brazil

Objectives/Instruments	*Recommendations/Actions/Reforms*	*Examples*
balance through improved connectivity	infrastructure development and information dissemination rather than through resorting to incentives 39. To use a redistributive tax policy which emphasizes support to people (mobile factor)	

PILLAR 1: TO MAXIMIZE THE CONTRIBUTION OF FOREIGN CAPITAL

6. By emphasizing the need to manage the impact associated to foreign capital inflows, expected to reach close to 20% of the GDP in the coming years, our objectives are threefold. On the one hand, it is about to keep in check the effects related to the foreign capital flows on the real exchange rate by minimizing possible losses in competitiveness through a prudent and well-suited monetary policy. On the other, insofar as these capitals will mostly take the form of direct investments in the mining sector, it emphasize the need to manage tax revenues derived from these projects and thus create positive externalities for the Malagasy economy. Finally, the settlement of foreign investors, notably in the growth poles, should generate synergies with the local enterprises and workers, including through the training of labor force, sharing structuring infrastructure (roads, health centers, etc.) and setting up networks of suppliers and distributors.

7. It is useful to remember that the scope and the duration of the massive private capital inflow are relatively uncertain for most observers of the Malagasy economy. The, conservative, projections of the International Monetary Fund indicate that it would be a temporary episode linked to the ongoing settlement of the two mining projects. Starting from 2010, this inflow would drastically diminish and be reversed because of the payment of substantial interests and dividends, which will not fail to cause a problem of readjustment for the Malagasy economy. The Malagasy authorities are asserting that the country should be able to attract a continuous foreign investment flow thanks to still-unexploited resources and to the adoption of reforms. In spite of their optimism, it is certainly reasonable for the Malagasy authorities to take this element of uncertainty into account when pursuing their monetary policy.

1. Pursuing a conservative monetary policy

8. If the real exchange rate appreciation seems undeniable since the last quarter of 2004, it is however difficult to conclude that the Malagasy economy is suffering from a noticeable loss of competitiveness since this appreciation remains low and a slowdown of its exports has yet to be noted (on the contrary, they have risen by 10% and 8% in 2006 and 2007, i.e. more rapidly than the Malagasy economy as a whole). The analysis developed in the first part of this study showed that these results were not surprising in light of the relatively modest net capital inflows that were injected in the Malagasy financial system and of the conservative monetary policy followed by the monetary authorities.

9. Nevertheless, the monetary authorities need to stay vigilant in the near future. Indeed, the private capital inflow is expected to explode in the coming two years, so that in 2008, the injection of liquidities in the local economy could exceed 500 million dollars, or five times more than in 2007. In 2009, the injection of liquidities is estimated at around 250 million dollars. It is recommended that they pursue their sterilization policy since the amounts at stake will remain controllable if foreign investors keep spending close to 80% of their foreign currencies in purchases abroad and the breakdown between foreign currency and local currency bank deposits is stable. In that case, the sterilization cost for the Central Bank should not exceed 7.5 million US$, which seems manageable.[119]

10. However, such a policy could encounter obstacles if it lasts and if pressures on the foreign exchange market increase. The following scenario is conceivable (i) the dollar keeps depreciating against the Euro in international markets; (ii) the conversion of foreign currency deposits to local currency deposits accelerates; and (iii) local disbursements of foreign investors increase, therefore contributing to increase the price of some products and services in the country. This combination would impose a massive sterilization policy on the Central Bank that could lead to a considerable increase of its costs, particularly in terms of a higher price of credit with rising interest rates.

11. The two series of recommendations are formulated below in this context. **The first series is that the monetary authorities have to continue closely monitoring a certain number of indicators which capture the causes of the evolution of the real exchange rate in the country**. The first indicator is *the evolution of the American and the European currencies in world markets* has an influence on the local currency rate since they are Madagascar's two main trade partners. The appreciation of the Ariary in 2007 and during the first half of 2008 is in large part explained by the drop of the American currency.

12. The second indicator is to monitor *foreign capital flows in the form of foreign direct investments*. Contrary to the episodes of overappreciation studied in economic literature on Latin American or Asian countries, foreign capitals coming to Madagascar are not scattered in the form of portfolio flow. They are the result of the decisions of two mining investors that will make up to 90% of the flows in the next two years. The authorities must not only monitor the amounts injected but also how they are injected and used. To date, the mining companies have deposited their foreign currencies in their bank accounts in one single financial institution in Madagascar that adopted a conservative attitude when managing these funds. The vast majority of the funds is used to finance off-shore purchases (up to 80% according to what they declare) so that their impact on the local economy remains relatively limited. In that sense, it is strongly recommended that the authorities improve their forecasting capacity notably by encouraging an interministerial dialogue with the mining sector. As of now, the Central Bank and the Ministry of Finance find it difficult to propose reliable foreign direct investment projections in this sector.

[119] This cost is calculated as the interest differential equal to 7% to the amount of 100 million dollar amount which will be necessary to absorb the 500 million dollar injection in foreign direct investments with a 20% expenditure rate on the domestic market.

13. The third indicator is *to monitor the behavior of financial agents since they have gradually transferred their foreign currency bank deposits* (mostly US$) to local currency deposits in 2007. The depositors have anticipated a gradual appreciation of the local currency, which can become stronger in case of a pronounced transfer of their portfolio to local assets. These movements could bring about the issue of liberalizing capital accounts in Madagascar. In the end, in close collaboration with IMF experts, the authorities could consider measures such as authorizing commercial banks to invest their assets in foreign securities; granting foreign currency credits of higher amounts than one year in specific sectors (e.g. real estate); or extending the authorization for mining companies to pay for their contracts beyond the current 1.5 million dollar limit.

14. Based on these three basic indicators, the monetary authorities should be in a position to assess the risks of a serious appreciation of the local currency. Should the risk be pronounced, they can modulate the intensity of their interventions in particular the sterilization policy which if for the Central Bank to absorb the inflow of foreign capitals by purchasing domestic securities.

15. **Our second series of recommendations, linked to the first, is that the monetary authorities carefully monitor the implications of their monetary policy in order to adjust their interventions**. Particular attention should be paid to the possible costs to the local economy of pursuing a sterilization policy. If it allows reducing inflation, it can have a negative impact on the local economy with time because of its crowding-out effect on credit to the private sector. In that sense, we suggest *to monitor the evolution of bank credit amounts granted to the private sector as well as the interest rate*. To date, probably because of the low-level intervention of the Central Bank, these two indicators have behaved reassuringly.

16. In parallel, it is still useful *to monitor the evolution of prices*, which ultimately justifies the intervention of the sterilization policy. We encourage the authorities to pay attention to the general price index but also to price variations in the regions concerned by the mining investments. Indeed, in recent months, local housing and some commodity prices have been boosted upward by an excessive demand from the construction phase of these two projects, as noted in the Tolagnaro region where local food and housing prices have risen faster than in the rest of the country.[120] Concretely, the price of meat has risen sharply in the last months whereas importing meat is prohibited for health reasons.[121] Relaxing this measure could be envisaged, to relieve domestic prices. A coordinated response can also require a targeted policy action from Malagasy authorities.

[120] For more details, cf. INSTAT, Evolution of the prices of the main goods and services in Tolagnaro (*Evolution des prix des principaux biens et services à Tolagnaro)*, May 2007.

[121] The interdepartmental decree Nr. 9459/2001 forbids all import of fresh and processed meat of any species on the national territory beyond international practice which only imposes standards and sanitary controls.

2. Ensuring the sound and transparent management of tax revenues from extractive industries

17. As Madagascar is beginning to garner the fruits of the first large mining investments and is readying itself to welcome new ones, the time is right for the authorities to define a sound management framework for public revenues from extractive industries. Managing these resources, as raised several times in this text, indeed represents the main channel for the country to enjoy the positive spillovers from these projects.

18. However, international experience reminds us that managing properly these resources remains a challenge, starting with the temptation they represent for political predators. Their visibility explains why they are often monopolized for short-term projects, often with a strong political nature and therefore not necessarily efficient from an economic standpoint. To minimize this risk, *the basic principle is to set up a legal and institutional framework that is as transparent as possible and that relies on a series of checks and balances and objective criteria to answer the two following questions: (i) how much must be saved out of the amounts the State receives? and (ii) how must the revenues be used or spent to maximize their impact on Madagascar's economy?*

19. The modeling that was done enabled to define the size of the public revenues from the two large mining projects that are soon to enter their mining phase. It therefore concretely translates the choices made, notably regarding the preferential tax regimes granted to the mining companies. From this perspective, it is striking to see that, in QMM's case, obtaining a 20% share of the company's capital, which could not last until the start of the mining period, occurred as a compensation for extremely significant tax advantages. The authorities could therefore use the model presented for the ongoing consideration of the mining tax regime. The right balance between incentives for private investments and a fair public collection from the exploitation of national non-renewable resources has yet to be found.

20. Whatever the tax regime in force, **it is possible to recommend an approach that enables the Malagasy authorities to carry out a rational balance between the immediate use and the savings of extractive revenues**. This approach first rests on identifying the level of permanent revenues likely to be drawn from the extractive industries, to deduct the amount of additional public expenditure that can be financed sustainably. Based on the selected assumptions, the margin of sustained additional expenditure is half the annual extractive revenues, implying the need to make a moderated decision when it comes to distributing the balance between financial market investments and public investments. From that perspective, it would be desirable to engage a public debate on the choices need to be made, on their implications for society and for the country's development.

21. **If the authorities opt to put together an ERF, be it within a logic of stabilization or intergenerational savings, a certain number of precautions need to be taken.** The more the ERF is integrated into the functioning of the Malagasy public funds system, the less it is likely to produce perverse effects. However, such an integration reinforces the absolute need to improve public finance management as a

whole, so that Madagascar can turn the opportunity of abundant natural resources into a development opportunity.

22. The first contact point between extractive revenues and the public finance system is at the tax revenue and fee collection level. Madagascar must continue with its strategy to increase tax revenues, notably by improving the collection rate, and the issue of mining taxes and fees must be incorporated into this approach. The mid-term expenditure framework must be adjusted and upgraded to take into account the impact of extractive revenues on the level of sustainable budget deficit. The budgetary procedure will have to consider the management of extractive revenues, which implies an effort of transparency and pedagogy on the part of the executive branch and a capacity building effort on that of the legislative branch. The transparency of the operations of public institutions like the OMNIS, which could collect an annual amount in the range of 4 million dollars from QMM according to some scenarios, will have to be considerably improved. It will also be relevant to strengthen the efficiency of the expenditure chain, the capacity and the resources of internal and external auditors to absorb the additional expenditure from extractive revenues in satisfactory conditions of transparency and efficiency.

23. Finally, the issue of managing extractive revues locally must be tackled from the mining companies' perspective, as they are justifiably concerned with social peace, but also from the general interest perspective. The massive increase of demand for public services following the settlement of a large mining company requires that sufficient public resources be made available. In the EITI++ process context, as well as in the decentralization one, the issue of distributing mining profits between the central government and the decentralized territorial units will probably have to be reexamined.

3. Promoting intra-sectoral and inter-sectoral synergies with the local economy

24. The arrival of foreign companies represents an opportunity inasmuch as they serve to direct the transfer of skills and know-how to the local firms and workforce; i.e., the emergence of synergies. Yet, there is some confusion around this concept which leads us to reiterate that it covers a variety of relationships between sectors and/or companies that are intra-sectoral and inter-sectoral, local or foreign, upstream and downstream. In short, there is potentially a multitude of interactions that one should seek to use to lay the foundations for sustainable and shared development.

25. Economic literature has proposed three main instruments to promote and intensify these synergies. It is well-known that training the workforce is one of the privileged instruments to transfer knowledge that can benefit the companies in which they work but also the entire private sector, if these workers decided to work for themselves or to work with another company. The second channel which serves to spread synergies between companies is to share basic infrastructure. Thus, building a road can promote the movement of goods and services related to various activities, like agriculture or tourism. Finally, linkages between companies often include financial interdependence in the sense there are credit or cash advances that neutralize financial risks all along the value chain.

26. In order to present concrete solutions to encourage the emergence of these synergies within the Malagasy economy, we propose focusing on this issue in the growth poles since we have highlighted that their emergence is a *sine qua none* condition for this approach to be successful and on the tourism sector. The choice of this sector is not fortuitous given its position in the MAP and the growth pole approach in Madagascar and the weight synergies can have in the benefits – that can account for up to half the gains as we are reminded by the Gambia example (table 44).

Table 44: Synergies between the hotel sector and the other activities in Gambia, 2006 (US$)

Worker categories	*Nb. of full time workers*	**Average monthly salary**
Direct impact		
Hotel employees	2700	94$
Porters	289	n/d
Management	50	164$
Sub-total	3039	262 000$
Synergies		
Guides and tour operators	75	218$
Taxis	453	212$
Craft sellers	384	146$
Drink sellers	225	182$
Sub-total	1137	208 900$
Total	4176	470 900$

Source: Mitchell & Faal (2006)

27. We will successively look at two types of synergies, i.e. those that are intra-sectoral and those that are inter-sectoral. Synergies within the tourism sector are potentially important and can take the form of links between hotel complexes and tours operators as well as with service providers like cabs and restaurants. These links generally involve a foreign company (the hotel) and local entrepreneurs (the tour operators) and are downstream of the hotel activities. Their potential in Madagascar is undeniable since several studies have shown that visitors are ready to spend financial amounts beyond their hotel expenses and that can be at least equal to the latter.

28. The visitors' willingness to spend on these activities downstream from their hotels is in close correlation with the capacity of the local economy to fulfill the tourists' expectations. The first parameter becomes the quality of these services; the second is their promotion and the third their price. The interesting aspect of it is that the emergence of these synergies can increase the income of all the actors involved. Therefore, the visitors' satisfaction allows hotels to upgrade their appeal, service providers to make money, and the entire country to strengthen its image in international markets. Thus, a positive externality which justifies the Government's intervention. Its role therefore means providing the necessary incentives, not necessarily financial ones but by taking on a function of coordination and information.

29. **The recommendation is that the authorities seek to promote synergies within the tourism value chain by favoring three channels: (i) knowledge transfers; (ii)**

financial supports; and (iii) sharing of infrastructure. The transfer of knowledge and quality standards can be transmitted by the hotel chains to local companies and the workforce. This transfer takes place within the hotels with vocational training programs like the one currently in the Nosy Be and Fort Dauphin poles, which represent around 1 000 individuals a year. It can also develop in the value chain by associating service operators to the upgrade programs. The role of the government is to ensure that the training programs meet the quality standards and requirements of the hotel chains. The successful experience in Gambia and Indonesia suggests that the participation of local authorities and associations must be at the heart of these programs since, often, individual participants do not have sufficient financial standing and information to turn the knowledge gained into concrete activities (box 14).

30. The government can financially assist small companies by enabling them to purchase quality material or equipment and maintain them. A sufficient working capital must also be financed to avoid stock shortages or delivery delays (cf. Belisle 1983, Telfer and Wall 1996, Torres 1997). This financial aid function must not be carried out without training; if not, the beneficiaries might not have the required knowledge. We suggest that this support takes place within the framework of programs for employment that will hold our attention further on in the reform agenda.

Box 14: Local consultations on and training of the local workforce – the case of Nusa Dua in Indonesia

"The Nusa Dua" hotel club in Bali is a 4 and 5 star hotel complex with 4,500 rooms, targeting Western tourists. The project is co-financed by the World Bank and is developed and managed by the Bali Tourism Development Corporation (BTDC). As in Sua Bali, discussions with the community and capacity building of local staff took place with two outlying villages to explain the development plan and to discuss the potential benefits/drawbacks for the local population. Through this process, for example, the local fishermen were able to keep the right to use the space where they traditionally dock their dugouts on the beach, leaving a corridor for pedestrians going through the hotel complex. Tourists living in the hotel complex have become very much interested in fishing activities.

A local community center was made available to the village youth, making training for the hotel business and tourism (subsequently for employment) the priority to ensure permanent job opportunities in the hotel complex. Special programs to bring the training level up to standards were set up to remedy the limited schooling level and allow inexperienced young people to register to these training programs. Financial aid is also provided.
Source: World Tourism Organization, Guide for the local authorities – Additional volume on Asia and the Pacific, Madrid, 1999.

31. Developing linkages between hotels and local service providers is also a condition for shared infrastructure set-up. This can include roads (for tour operators and taxis) but also shared space or joint information campaigns, advertising leaflets and joint events. The State's role is to maximize the use of these instruments through opportune interventions.

32. **The second type of synergies we would like to underline is those between the tourism and the agricultural sectors and for which the authorities can facilitate the sharing of joint infrastructure and the upgrading of local producers**. These inter-sectoral synergies are upstream of hotel activities and emphasize the development of suppliers' networks.[122] They are potentially promising for Madagascar since several recent studies have revealed that ¾ of the hotels and restaurants would rather, if they can, source from the local market rather than resort to import. Furthermore, the tourists' spending on food and beverages can represent up to 1/3 of their hotel expenses in countries like Gambia or Tanzania and even up to half in Tunisia – there is no reason why it should be otherwise in Madagascar.

33. Once again, the scope of this synergy is related to the farmers' capacity to meet the quality requirements of hotel clients. We will not go back to the validity of the government's intervention in support of local companies and minimize the problems of coordination and information, but we simply want to illustrate its relevance through concrete examples. The first example is the one about the development of joint infrastructures that make it possible to establish commercial links, including roads, passable tracks and water supply. This need has already been incorporated by Malagasy authorities into the growth poles, so that there is no need for us to come back to it.

34. We would rather spend more time on the need to upgrade the level of local farmers since their ability to provide products that are up-to the standards required by hotel clients is often the main obstacle. To guide the authorities' support, below are the examples of Gambia and Jamaica whose support programs for their local producers have been somewhat successful by involving local hotel chains (cf. box 15). The program supported by the Gambian Government used an approach based on « contracts based on trust » between hotels and farmers that aim at strengthening the linkages between these operators in a certain number of areas that range from work methods to financial management to procurement procedures. This upgrade relies on the participation of local administrative units, of intermediaries and of farmers to generate a consensual and participatory approach over time.

[122] This can be extend to other suppliers such as construction, the assembly of manufactured electrical parts, security, etc.

Box 15: Haygrove and Concern Universal in Gambia

The 'Gambian is Good' project is led by Haygrove Development Ltd, a leader in the field of horticulture in the United Kingdom. It came into partnership with Concern Universal, which is a charity. The project's objective is to establish a business agreement with a "Fair Trade Marketing Company" to benefit the small gardens and community associations in Gambia by improving their agricultural production, in close contact with the urban and hotel business market. The project began in September 2003 and is currently conducting technical and market research in Gambia as well as in the United Kingdom.

Currently, the thousands of jardinières in Gambia produce with a minimum of technical inputs and can only sell to middlemen at the garden's entrance.

The Gambian is Good objective is therefore to mix a good production level with a market demand-based approach. In its first stage, specific objectives relate as much to producers as to consumers. Specifically, it means:

- *For producers: to set up a post-harvest system that precedes grading and packaging and to provide producers with information in return*
- *For consumers: to supply a variety of vegetables and fruits up to quality standards.*

Thus, 26 producers were selected to work on the project, based on their willingness and their capacity to attain production, the required quality and their commitment to horticultural projects. Each of these producers have signed a "loan agreement" with "Gambian is Good" for the main inputs such as seeds and fertilizer the project supplies. Additional workers operate with the farmers to attend to the grading and sorting of the products. The first potatoes, carrots, cabbages, eggplant, onions and peppers were delivered on February 23rd, 2004 to the Safari Garden Hotel. The agricultural products were sorted and graded before delivery by the Gambian is Good staff. With a good feedback from the Safari Garden Hotel on the quality of the agricultural products, the producers were able to attract other clients including a restaurant, a supermarket, a wholesale store and another hotel.

Source: Haygrove Development Ltd, pers. comm.;www.haygrove.co.uk/development.php

35. The Jamaican example is full of lessons since it rests on the partnership between foreign and local operators, which will be the case in most cases in Madagascar with the arrival of international chains like Accord and others that should follow (cf. box 16). These newcomers have quality and physio-sanitary requirements prevailing in their countries of origin. Their know-how can therefore be usefully transmitted to local producers which can use this linkage as a first step to access import markets in industrialized countries. The government's role is still to ensure the coordination between the different participants and to minimize information and transaction costs.

Box 16: To maximize the contribution of foreign companies in the tourism sector to bring agriculture up to standards

International experience has proven that the prospective cooperation between hotel chains and local producers is important to develop food items. Not surprisingly, one notes that hotel chains source from the local market when local products meet their quality requirements. This link is consequently stronger in countries such as Tunisia and the Dominican Republic, where local purchases represent over 80% of their payroll. These rates are not as high in countries where local food products do not meet hotel quality and hygiene standards.

To make the most of this potential, collaboration programs between the public and private sectors can be put in place. These programs require public sector participation, often in the form both of financial and training support, to encourage the participation of private operators. For a hotel chain, the mid-term benefit is obvious since it will reduce its costs, but it requires a significant initial investment, with the risk of being profitable to its competitors if the farmers supply other hotels.

Such programs have been mostly been set up in the Caribbean. The farming development program in Jamaica (Farmers Program) was established to encourage synergies between the tourism project (Sandals resort) and local farmers (see details in Lengenfeld and Stewart 2004). This program included a series of measures aiming to facilitate communication and cooperation between the hotel complex and the local community. These measures highlighted the central role played by the Chefs who play an integral part in the process and therefore convince and encourage farmers to improve the quality of their products in practical terms. The benefits associated with this programme were that: (i) the local farm sales soared from US$60,000 to US$3.3 million; and (ii) the purchase of melons and watermelons by the Sandal complex which is the equivalent of US$7,200 per month made it possible to transfer around US$100 per month to 70 families and therefore promote their economic development.

Source: Lengefeld and Stewart (2004) All-inclusive Resorts and Local Development, KIaus Lengefeld GTZ and Robert Stewart, Sandals, World Travel Market, November 2004 www.propoortourism.org.uk/WTMPresentations/WTMSandalspresentation.pdf).

36. Finally, the collaboration between hotels and farmers can extend to joint advertising initiatives, like raising clients' awareness, promotional weeks of local cuisine, the establishment of a certificate to guarantee authenticity and freshness, as the St. Lucian government succeeded in doing through its *Heritage Tourism Program*.

37. The main lesson drawn from these examples in the tourism sector is the central role the government is destined to play in promoting intra- and inter-sectoral synergies. Not only this doesn't automatically happen, but their benefits goes far beyond the interest of a few private companies. Their « public good » nature is obvious in the set-up of structuring infrastructures but also in the development of training, information and upgrade programs at the heart of the promotion of growth poles.

PILLAR 2: TO PROMOTE INTERNATIONAL TRADE

38. Madagascar need to open up to the outside world. Access to international markets allows to make up for the low level of domestic demand, which is perpetrated by the population's limited purchasing power, and to benefit from the provision of equipment

that is better-suited to modern productions. The Malagasy Government followed this policy during the last decade with trade liberalization and an infrastructure policy which aims at facilitating international trade. This policy is underway even if it is still a long way from being achieved with the construction of the Ehoala port in Fort Dauphin, the modernization of the port of Tamatave, the liberalization of air transport (*open sky*) and the set-up of fiber optic which will enable to reduce international communication costs from 2009 on.

39. Despite these advances, international trade still suffers from a certain number of obstacles that need to be remedied. The analysis proposed in part II of this study has highlighted that the tariff policy penalized private investors, logistics costs between the plant and the port remained high and lack of information and coordination reduced incentives for exporters to develop new products and look for new markets. All these obstacles translate into additional costs for business operators in Madagascar, in addition to natural disadvantages like the distance from the main markets of industrialized countries.

40. Our reform agenda successively emphasizes the need to streamline the tariff policy, to bring down logistics costs and to adopt a coherent export promotion policy. If these reforms mainly serve to facilitate international trade, they also aim at accompanying the efforts of companies that operate in the local market, most of which are faced with the same obstacles just less intensely since they are subject to international competition. In other words, the actions we will propose below should benefit businesses that work in international as well as domestic markets.

1. Adopting a tariff policy in favor of investment

41. Private investors working in Madagascar highly depend on importing equipment and capital goods, unavailable locally. For this reason, we propose that the authorities adopt an incentive tariff policy.

42. Our main recommendation is to cap tariffs on the import of equipment goods, today equal to more than 10%, at 5% (rates under 5% should remain identical).[123] This measure would have the virtue of bringing down the tax burden related to importing capital goods to a level comparable to that of countries like Tanzania and close to those of Mauritius and Chile, and therefore promote productive investment in Madagascar.

43. The immediate capping of the common law tariff at 5% for capital goods as a whole will allow anticipating on the tariff policy followed within the COMESA which plans to set-up a 0% common external tariff on these goods in the long-term. This upper limit also comes within the logic of the tax policy followed by the authorities that aims at improving the common law regime and at reducing special regimes. With a generalized 5% tariff, the Government would be less subject to pressures from some economic groups as it was the case during the first half of 2008 when the authorities exonerated the investments of several tourism projects. Indeed, if investors are ready to fight not to pay

[123] The number of these lines is limited and only represents 1.7% of capital goods imports in Madagascar in 2007.

10% or 20% customs duties, this will not necessarily be true for a tariff equal to or under 5%.

44. For simplification purposes, we suggest to extend this measure to all the capital goods covered by the definition used within the COMESA and to all the products included in chapter 84 of the Malagasy Customs Code.[124] This extended coverage enables not only to include the list of the main investment goods but also to reduce the risks of diversion with the use of tariff lines that do not match reality.

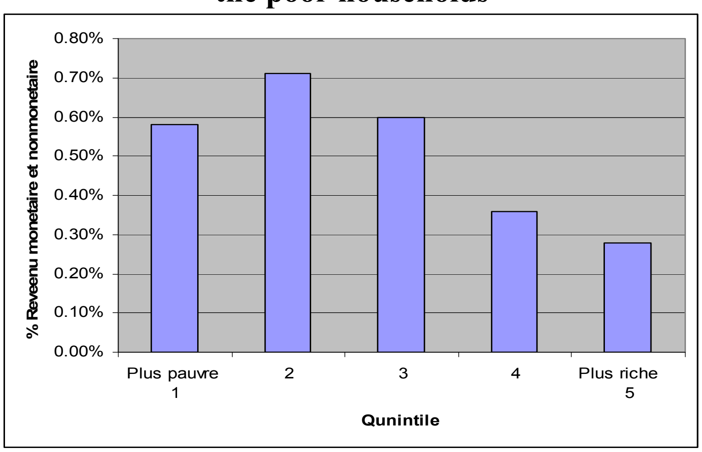
45. The proposal to scale down tariffs on equipment goods would be fiscally controllable. Its immediate cost is estimated at 5% of the total revenues collected on imports, or around 2.5% of total government tax revenues (cf. table 45). Over time, these losses could be offset by lower tax evasion and an upgrade of the customs and tax administration that the use of a relatively low and uniform rate should not fail to bring. Furthermore, the propensity to import capital goods should increase. These significant dynamic effects remain difficult to assess since they rely on the firms' and the administration's behavior.

Table 45: The tax losses associated to a 5% ceiling rate on capital goods in 2007 (in % of the revenues collected on imports)

	5% ceiling rate
Customs duty	-12.70%
VAT 1/	-1.10%
Total revenues	-5.00%

Sources: World Bank based on information supplied by Customs.
Note: Loss of VAT revenues is because its base is calculated on the import value increased by the customs duty.

Figure 16: Reducing protection on capital goods favors the poor households



46. The adoption of this measure should not only encourage Malagasy firms to invest more, with a minimum tax burden, but it should also have a positive impact on the poorest households. Indeed, using the analytical framework developed in chapter III.3 we can show that the tariff reduction on capital goods should generate an increased income for households of the poorest quintile by 0.5% against around 0.2% for the richest quintiles (cf. figure 16). This differentiated impact would be because the elimination of protection would reduce part of the income of the richest groups, more than their increased investments.

[124] Mostly tractors and vehicles to transport freight.

47. As a conclusion, **it is important to recall that the proposed lowering of tariffs should be accompanied with the acceleration of VAT credits, since this tax is extremely penalizing for the cash flow of businesses**. We indeed showed that the tax charges paid to the customs line exceeded 40% for more than half the imports. Thus, if a firm imports around 30% of its turnover, it will have to pay a VAT amount equivalent to 6% of its turnover, which can substantially affect its working capital should there be any delay. Fortunately, the authorities have already reacted by adopting a new regulatory framework that provides for the refund of VAT credits in less than 15 days for registered companies and of under 30 days for the others. These delays correspond to international standards and to make certain they are constantly respected by the tax administration, we propose to put in place an online monitoring system on the Internet. For example, the list of VAT refund requests mentioning the receipt date of each request by the DGI and the refund date could be accessible on the Ministry of Finance's web page. This measure would serve to, on the one hand, have the tax administration face up to its responsibilities, and on the other, to reassure the private sector that the refund system is functioning adequately. In parallel, we suggest the introduction of a prompt and independent dispute settlement system.

2. Cutting down logistics costs

48. Business operators are faced with three types of logistics costs that have held our attention, i.e.: (i) delays relating to customs procedures; (ii) fees paid to forwarders; and (iii) costs relating to domestic transport. As a whole, these costs can add up to close to 10% of the merchandise value for an industrial firm located in the Tananarive-Tamatave corridor. Our recommendations therefore aim at bringing down these costs to increase the competitiveness of companies working in Madagascar.

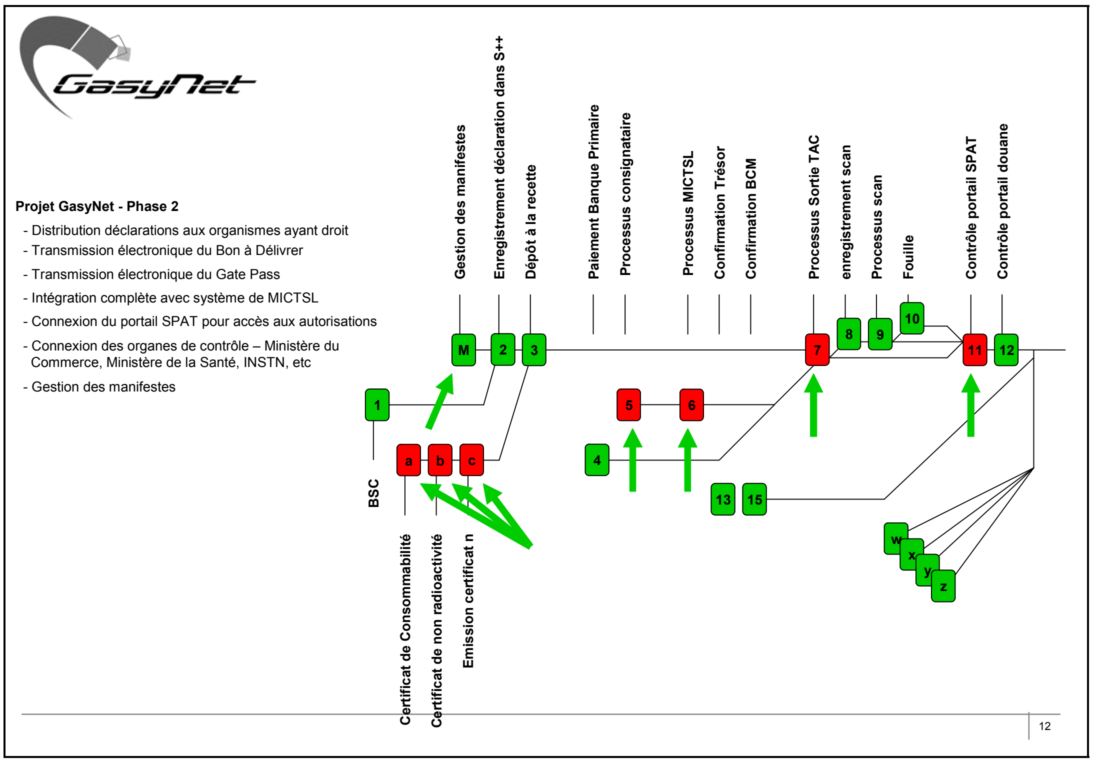
49. **Our first series of recommendations emphasizes the need to consolidate the reforms underway within the customs administration**. Our analysis had shown that these reforms already began bearing fruits. Delays have been spectacularly reduced, suggesting that Madagascar is today as efficient as Mauritius. However, it would be regrettable to stop half-way. We have seen that Madagascar has not caught up with countries like Ghana, which in turn is still far from the performance recorded in Asian countries.

50. The three following actions are advocated:

- *To extend the efforts to streamline and computerize the customs systems over the whole national territory.* To date, the implementation of the Tradenet electronic system has focused on the customs post of the Tamatave port. This choice was justified given that close to 80% of Madagascar's trade value went through this entry and exit point in 2007. Nonetheless, the network needs to be extended to other customs posts, notably those of Fort Dauphin where transactions are expected to greatly increase when the port of Ehoala becomes operational. Extending the system is largely reliant on the effort to disseminate information tools, including training the agents, but also on the certainty that the support of the power and communication infrastructures are available to the customs administration.

- *To continue streamlining customs procedures.* The program proposed by *Gasynet* must be pursued since it aims at reducing delays through an increased consolidation of procedures (cf. figure 17). This effort must include the possibility of using an electronic signature with an amendment to the legislation, validation by batches (and not by transaction) by the Tradenet system and the option of submitting ships' manifests in the ASYCUDA customs management system before unloading, which would expedite procedures since declarations can currently only be filled in by forwarders once the manifest is submitted.

Figure 17: Pursuing the efforts to streamline customs procedures



- *To encourage behavioral change in the customs administration.* As in any reform activity, there is some resistance, often simply because human nature prefers a status quo. For example, some operators complain of the delays in the physical inspection of their freight (unexpected closing of the scanner, slow transmission of the results, lack of availability of technicians). In this perspective, a human resource policy emphasizing both incentives and sanctions and comprising both a clear recruitment, training and remuneration policy must be adopted. To that effect, the agreement to create the company *Gasynet* presents an interesting element since it links the gains linked to the operations of the *Tradenet* system with the remuneration of customs officers (the better the *Tradenet* system operates, the more customs agents enjoy additional gains). Most operators hope to see the introduction of a greater flexibility of the customs agents' working hours, notably regarding inspections, since it would reduce delays when transactions are classified in the « red » circuit. When goods arrive at the end of the afternoon, one generally has to wait till the next day for the physical inspection. A generalized training system becomes important since, today, only inspectors benefit from such an opportunity, even though they only represent around 10-15% of the customs administration.

51. Beyond these actions relating to the general functioning of the customs administration, *it is recommended to expedite the operationalizing of the regimes that enable export companies to import their material and inputs with deferred customs duties*. At a time when eliminating the export processing zone regime is increasingly under discussion, firms should be presented with alternative mechanisms. These alternatives (bonded or industrial warehouses, temporary import, for instance) are already included in the Customs Code but the implementation decrees are still missing. More serious still, customs services have not begun organizing themselves whereas international experience has demonstrated there are risks of abuse and diversion if monitoring and control efforts are not developed. [125] To that effect, one of the principles to be respected is the simplicity allowing both the firm to use these regimes and the administration to check their utilization as in the example of « merchandise passports » used in Bangladesh and Nepal (cf. box 17 below). In the case of warehouses, the use of electronic (rather than physical) controls seems essential, which means the customs administration must have non-stop access to the inventory management system (the CCTV system) to compare them with the customs declarations.

[125] For a description of the advantages and drawbacks related of these regimes, cf. World Bank, *Streamlining Customs Procedures; Export and Duty-relief regimes*.

Box 17: The « merchandise passports » systems in Bangladesh and in Nepal

Bangladesh has a bonded warehouse system to assist exporters from the apparel sector. More than 3,400 warehouses function with this system in the Dhaka region. Each of them must be approved by customs and supply banking guarantees to cover the duties applicable on stored inputs. A merchandise-passport system allows controlling import and export flows going through each warehouse. Raw materials for the manufacturing of finished products for export can be imported exempted from duties up to the amount of 75% of the finished product's expected value (itself re-exported). However, despite the safeguards put in place, a large quantity of finished products is sold fraudulently on the local market, generating revenue losses proportional to the embezzlement.

Nepal has also set up a system of merchandise passports in 2001. This system allows producers to suspend payment of duties on inputs used to produce exported goods (or locally sold in foreign currency) if the local value added is at least 20%. Customs control goes through a passport system (or "large book") stamped by the nearest customs post. A cash deposit covers the duties that are payable in case of a sale in the local market but suspended in case of export. Upon evidence that the finished product is exported, customs release the appropriate percentage of the deposit. If the company does not export the finished product within twelve months, duties are payable along with a 10% additional charge. Overall, the operators consider the passport system better than the former "duty drawbacks" system it replaces.

52. **Our second series of recommendations focuses on the forwarding market**. Beyond customs services, part of the delays comes from other agents involved in the transaction chain. Most of the forwarders seem to take around half a day to present the documents to customs. If the goods are in the red circuit, delays are extended because of the scanning, which requires that a truck be available to transport the container to the terminal with the scanner. Finally, the time between the issuance of the customs' clearance slip and the physical removal of the merchandise out of the port depends on the clients' logistics and on their carriers. Late collection by the client, because of delayed trucks or for any other organizational reason, seems to be frequent and explains in large part the differences in delays. The few examples are enough to show that the issue of customs clearance procedures goes beyond the customs administration context and implies the quality of the services provided by forwarders.

53. To improve the quality of services offered by forwarders in Madagascar, the level of competition in the market needs to increase. This movement is already in place with the conjunction of three actions: (i) the increased transparency of customs services which contributes to reducing the advantages of forwarders with historical connections; (ii) changes in the legislation (notably on credit) have improved the homogeneity of the market; and (iii) the arrival of new forwarders related to foreign mining investments. These efforts must now be consolidated to further open this market to international players, thus facilitating joining the *FIATA (*the International Federation of Freight Forwarders Associations*).* A greater international visibility will not fail to attract the players already working in the region, for example in Mauritius or in South Africa.

54. *The improved transparency of the tariffs practiced is also recommended, notably by setting up an electronic database where the tender processes* could take place for operators interested in a forwarder's services.[126] This service is generally provided by an independent agency (the EDBM could do it or a new export promotion agency as argued above in the text). *Direct support to small companies or to those who do not have easy access to information* is useful as we are reminded by the success of the program set up by the Mexican Government (box 18).

Box 18: To encourage small and medium-sized enterprises to improve their logistics chain and access to forwarders

Generally, small and medium-sized enterprises have higher logistics costs than large companies, notably because they are cannot take advantage of returns of scale. That is why resorting to forwarders is often a necessity for them. The Mexico experience where the Government financed information and training workshops proved that SME managers were most often ill-informed on the practices of forwarders. Access to this information allowed them to later reorganize their distribution chain and generate gains equivalent to 53% of their initial distribution costs.

Access to new techniques all along the production and distribution chains is at the core of the preoccupations of most businesses. Sharing international experience through a series of seminars and support and training programs is therefore a public good that could be shared with Malagasy operators, because most do not have access to these services. The Government's support can contribute to ensuring that this communication service reaches small companies and those located in regions far from business centers.

Mexico, Program for Innovation in Logistics Practices. Industry and Trade Under-Secretariat. January 2006

55. The ambition of these efforts is to strengthen competition in the forwarding market. However, a warning is needed since the market will remain relatively concentrated by definition. Indeed, the returns of scale that occur only for relatively large transaction volumes are natural barriers to entry. Moreover, transnational companies tend to use international forwarders which come with them to their overall markets. The playing field will therefore probably never be leveled for all the actors on the forwarding market in a country like Madagascar, but it imposes a role of information, support and regulation on the authorities as proposed above.

56. **Our third series of recommendations aims at cutting down the costs relating to the domestic transport of goods, notably in the Tananarive-Tamatave corridor**. The apparent agreement between carriers that dominate the Tananarive-Tamatave corridor allows them to maintain tariffs and a profit margin in excess of 70%, or more than three times the one observed in South Africa. Such a margin is only justified in a high-risk environment (like the Chad-Cameroon corridor); which is not the case in Madagascar. Not only do the tariffs seem excessive, but the lack of competition slows

[126] As an example, it would be useful if the calculation of the transport costs of hydrocarbons were more transparent. To date, it is not easy to identify them both for road and rail transport.

down the renewal of the fleet and this is harmful to the quality of services and contributes to increasing delays.

57. Several avenues are suggested below, all aim at cutting down the costs related to the road transport of merchandise between Tananarive and Tamatave. The first avenue is to reduce the hauliers' operating costs that are kept relatively high because of the low level of use of the trucks (in addition to the cost of fuel). In general, it is estimated that most of the trucks only do one return trip a week, leading to limited mileage and to high costs. The main reason for the slow return speed is therefore the traffic congestion at the entrance of the cities of Tananarive and Tamatave and this justifies the urgent implementation of the following measures, which have already received some attention from the authorities in their sectoral strategy:

- *Upgrading logistics at the entrance of the city of Tamatave*. Not only can the waiting time for trucks to unload their merchandise exceed several hours (even days), but the parking of trucks and drivers in an undeveloped area poses numerous hygiene and public health problems for the local population. A waiting area at the entrance of the city must therefore urgently be developed and managed by an integrated electronic system of entry and exit. These systems are relatively cheap compared to heavy investments in infrastructure and can generate considerable gains of time and of utilization by facilitating the cooperation between the trucking profession and the port authorities.

- *Relaxing the ban on daytime traffic in the city of Tananarive*. If this relaxation must be carefully assessed (notably in terms of its repercussions on air quality and congestion), the current ban is a source of distortions since it covers too-wide an area, including industrial zones. Neither is it certain that they promote the security of users, who are few in these zones. This relaxation could be only temporary and precede the construction of a multimodal platform at the entrance of Tananarive as it is now being considered by the Malagasy authorities, with the possible support of the World Bank[127].

- *Harmonizing and reducing haulage and parking taxes in localities*. There is today a multitude of local taxes and their collection imposes considerable delays on the trucks during the trip. These taxes are collected according to tonnage (in the town of Tananarive) or as a 2,000 Ariary set rate in the other towns and villages, which is significant since there are over 30 towns and villages.[128] Consolidating these local taxes could be considered for subsequent redistribution through a simple and transparent mechanism of financial adjustment out (via the road maintenance fund (or *fonds d'entretien routier*) for instance).

[127] For more details, see CPCS, *Inception report: Madagascar, Multimodal Logistics Platform on the Toamasina-Antananarivo Corridor* », May 2008.

[128] Crossing thirty or so towns and villages in the corridor, a haulier is therefore potentially hit with 60,000 Ar (or around 25 Euros). 50,000 Ar (or 20 Euros) must be added to this amount collected on a load above 25 tons in the Tananarive municipality.

- *Maintaining the road*. Though the road in the corridor is generally in a satisfactory state, improving the monitoring of the surface deteriorations and the speed of intervention on the Tananarive-Tamatave road remains a priority. The speed at which holes form requires a rapid logistics response which today is still in its infancy. Since they are the best source of information, truckers should be involved in the information system relating to the state of the roads and the formation of holes. Improving the surfaces will allow reducing trucks wear and, by reducing amortization costs, will enable to cut down costs. It is recommended that a long-term maintenance contract of the road network be established, which is all the more necessary because it is easy to predict that this road will degrade rapidly, given the ever-rapidly increasing traffic. This type of contract enables to daily control the state of the road and to quickly intervene when degradation begins. In this case, maintenance become more effective (rapidity of the repairs) and more efficient (the cost of repairing being lower and the cases being more manageable than they are today).

58. Aware of the fact that cutting down the hauliers' operational costs through an increased use of the rolling stock[129] will only benefit Malagasy firms if it is passed on to the users, it *becomes essential to increase the transparency of the tariffs practiced through the facilitation of access to information related to tariffs and delays as reported by each trucking company.* A regulatory role also falls to the State, in particular within an Agency for Competition Monitoring (or *Agence de Surveillance de la concurrence*) (even if their intervention capacity is limited in a developing country as international experience suggests).

59. *To promote competition among trucking companies, it becomes central to develop alternative modes of transport* (in particular in the current context of surplus demand caused by the construction of the Sherritt mining project). Modernizing the railway stretch between Tananarive and Tamatave is a priority today for Malagasy authorities, offering an additional option for firms located in the Tananarive/Antsirabe axis. As indicated before, the set-up of a multimodal rail-road platform, including the railway, should allow shortening the transactions and the transfer delays from trucks to freight car. Yet, in spite of lower tariffs, road transport today remains the preferred mean of transport because of the lateness of the railway which means that most (textile) firms have to take risks they cannot afford in view of the stringent delivery requirement enforced by international buyers.[130] However, the efforts underway should enable to increase competition and to offer alternatives to the operators in the Tananarive/Tamatave corridor.

[129] An increase from 35,000 km to 65,000 km per year of the use of trucks (together with a more rapid depreciation at 25% to take accelerated wear into account) would make a duopoly pricing almost financially viable for the firms in the sector.

[130] There is also a need to comply with the concession agreement with Madarail which unambiguously guarantees Madarail's access to the domain granted to the port of Toamasina (container terminal). Non-compliance with this clause unnecessarily raises the cost of rail transport and therefore affects the competitiveness of the latter.

60. *Finally, another source of competition for road transport should not be overlooked, and that would be to develop the industrial zone in Tamatave.* Indeed, it is surprising that textile companies have yet to consider this move, at a time when the authorities plan to develop this region with the development of industrial zones. Historically, making developed land and access to relatively qualified labor available had justified their settling in the Tananarive/Antsirabe axis, but this choice can today be questioned if access to developed land is facilitated around Tamatave. It is not accidental that in most countries around the world manufacturing industries are located close to ports, thus cutting down on transport costs (and delays) and improving their competitiveness in international markets. The absence of an industrial (manufacturing) fabric around the country's biggest port is a paradox Malagasy authorities must address to accelerate the boom of the private sector.

3. Establishing a coordinated exports promotion

61. Today, opinions converge in Madagascar about the need to create an export promotion agency. Beyond this convergence, we wonder how to establish such an agency as efficiently as possible.[131] Lessons from international experience indicate that an efficient promotion agency must: (i) be institutionally tied up to a policy maker - oftentimes as an autonomous agency to a Ministry or to the President's/Prime Minister's Office; (ii) count on private sector participation, notably through a joint board of directors; (iii) carry out the 4 main functions in chapter II.2 through a rational internal organization; (iv) remain relatively modest in size but with motivated and efficient executives; and (v) rely on a stable source of financing which is predominantly public. Based on these general principles, it becomes possible to develop concrete recommendations for Madagascar.

62. *Institutional set-up.* In most countries where there is an export promotion agency, it is tied up to a Ministry – in general that of Commerce – or to the Prime Minister's or the President's Office, but run like an (semi-) autonomous agency.[132] This set-up offers the benefit of ensuring consistency between the activities of the agency and the government' overall strategy and gives the agency visibility through its tie to the political authorities. Its autonomous agency status allows it to function with its own budget and to mark out its executives' salaries from those of civil servants, offering salaries that are both closer to those in the private sector (to attract the best executives) and performance-based (with incentives and penalties)

63. Our recommendation is that Malagasy authorities align themselves with this model and grant the legal status of state-approved Association to the Agency. The crucial question is to choose the institutional tie of the new agency between the Ministry of Economy and Commerce and the EDBM. The Malagasy authorities will have to keep the

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[131] For considerations to that effect, cf. « Feasibility study on the creation of an export promotion agency in Madagascar », April-June 2004 (*Etude de faisabilité de la création d'une agence de promotion des exportations à Madagascar*, avril-juin 2004).

[132] The Agency is a unit of a Ministry in only 23% of the countries included in the World Bank survey, with a strong concentration of these units in Asian countries. In Sub-Saharan Africa, these units only represent 11% of the promotion agencies.

criteria of visibility, of efficiency and of financing presented in table 46 below in mind when making their decision.

Table 46: Costs and benefits associated to the institutional set-up of the export promotion agency

Criteria	Ministry of Commerce	EDBM
Visibility	Good but lack of ties with the private sector	Good because direct ties with the President's Office
Authority	Moderate because associated with a sectoral ministry	Strong through the Board of Directors but depends on the relationship with the President's Office
Board of Directors	Does not exist and should be created	Exists and includes private and public sector representatives
Current legal status	Unit within the Ministry, the new public institution status should be created	Public institution
Financing	Non-autonomous budget (merged with the Ministry's) but explore the possibility of financing through the Integrated Framework Secretariat	Autonomous budget and World Bank
Internal organization	Service exists but should be reorganized	A new service should be created with recruitment related thereto

64. However, it is useful to remember that the functions of promoting foreign investments and exports are different even if they are sometimes complementary. They require different qualifications from the concerned agencies since they do not have the same clients. Domestic or foreign companies already settled in the country are those privileged by the export promotion agency, whereas transnational companies are targeted by the investment promotion agency. Even when the two agencies interact with the same firms, they involve different contacts at the firms' level. Professor L. Wells of Harvard University compares the activities of the export promotion agency to those of a firm's commercial sales, whereas those of the investment promotion agency have longer-term strategic decisions. Usually, these activities imply different services and diverging temporal horizons.[133] This reminder does not necessarily mean that these functions must be carried out by two distinct agencies, but they imperatively have to be separated within a single agency.[134] Otherwise, there is a real risk of one of the two activities dominating the other, or that the two activities be conducted in a sub-optimal manner, thus potentially endangering the Government's efforts .

65. *Private/public interface.* To be both credible and understand the preoccupations of the private sector, the export promotion agency must be representative. Indeed, the officials of the agency must constantly wonder about the needs of the private sector and about their capacity to meet them adequately and promptly. Such representativity will

[133] For further details, cf. Louis Wells, *Marketing a Country*, FIAS Occasional Paper, N. 1.
[134] This choice was made by South Africa for instance, through Trade and Investment South Africa that groups the two functions.

also help ensure the coordination with private entities, like the Chamber of Commerce, which offer a few promotion activities.

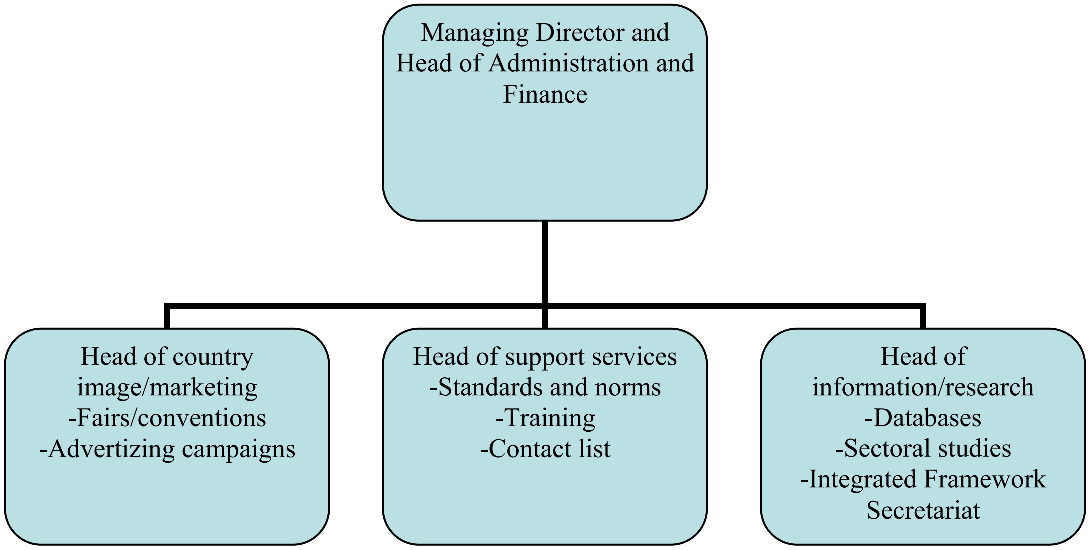
66. The option usually selected to ensure this linkage between the public and the private sectors is to set up a joint Board of Directors. Today, this option exists in 3 out of 4 agencies, with an even higher proportion in OECD countries. In Madagascar, the membership of this joint Board of Directors would ideally comprise more private sector than public sector members, to guarantee a certain independence of management. Without going into details, because the personality of the members will have to be taken into account, the representativity of the private sector should aim at covering the main sectors and organizations involved in exports. At the public sector level, the linkage must be established with the main Ministries and agencies which play a role in export expansion (sectoral Ministries like Tourism, Fishing and Agriculture, as well as the Ministry of Finance).

67. *Internal organization.* The agency will have to be organized around the main 4 functions described in chapter II.2, i.e.: (i) building the country's image; (ii) support services to exporters; (iii) promotional marketing activities; and (iv) making information and research available.

68. Below, we propose a relatively simple internal organization that can be modulated according to the priority given to each function (diagram 2). The promotion agency will be organized around three units, a Managing Director (associated to an Administrative and Financial Manager). The specificity would be the merging of the country-image and marketing functions to benefit from economies of scale (we also work on the principle that promoting the image of the country could in large part be done by an investment promotion agency). The service to exporters unit could include a one-stop-shop, with the function of facilitating export (and import) procedures notably in the area of norms and standards that will be examined in more details further on in our reform agenda. Finally, the unit in charge of information and research would aim at supporting inquiries from investors. Thus, the unit could benefit from a connection with the Secretariat for the Integrated Trade Framework, run by a focal point and made up of a national expert and of an administrative and financial officer, which benefits from the financial support of several donors. One of the main objectives of the integrated framework program consists in promoting the coordination between trade-related technical assistance programs and it could then be an entity within the Agency where all the international trade data would be centralized.[135]

[135] Currently, the Secretariat reports to the SG of Trade, as the chairman of the steering committee, to the DG of Trade as the project manager and to donors (UNDP as the manager and the WB as the facilitator). The projects prepared by the Malagasy side (ministry, private sector and support unit and donor's support) are validated by an approval committee composed of the SG, the DG, representatives of the donors, of the private sector and of civil society. Once validated, the fund manager puts the funds at the the country's disposal (quarterly advances according to a detailed plan).

Diagram 2: Internal organization of the Agency



69. The agency's executives should initially be around 7-10 in total, including the Managing Director and 3 Heads of Units. It is possible to increase the number of executives if the one-stop-shop for exporters is created and if the Secretariat for the Integrated Trade Framework is directly attached to the information and research activities of the new agency. The profiles of the officials and executives of the agency will have to be defined.

70. *Budget and source(s) of financing.* To function effectively, the export promotion agency will have to be able to rely on a stable source of financing. It must imperatively come from the State Budget because of the public good character related to export promotion. Sometimes, this source of financing can be complemented by the intervention of donors, but the latter can only be in part and temporary (only one African country has donors funding more than ¾ of the agency).[136] In several emerging and industrialized countries, agencies are also financed by the private sector, which is ready to pay for some services the agency provides. But this option hardly seems realistic for the time being in Madagascar since not only will the agency first have to build its reputation but most companies that will use the agency only have limited financial resources because of their small size.

71. International experience underscores that, to be effective, the agency requires a budget equivalent to around 0.04 % of the country's export value, or around US$700,000 per year for Madagascar. This amount does not include some standing expenses such as the rent of the agency's premises (including in the regions), since the latter will be made

[136] There is however the possibility of counting on funding from some funds if the Integrated Framework Secretariat is attached to the promotion agency. Under the reinforced integrated framework, Madagascar should benefit from a 5-year US$300,000/year operating budget for the implementation unit to which a budget for the development of studies and capacity building should be added.

available by the government. This amount of course represents a range and will have to be modulated according to the agency's activities and their development over time. The message to remember is that this budget must not be small - otherwise the agency cannot fulfill its functions - but not too big either since decreasing returns seem to be linked to promotion activities.

72. Once the export promotion agency is created based on the above-stated principles, it will become essential for it to achieve tangible results in the short-term. **In this perspective, we suggest that, based on the arguments proposed by D. Rodrik and using the Brenton-Newfarmer methodology, the agency's officials focus on three axes of intervention**. The first axis seeks to curb the market losses observed for Madagascar's traditional exports that have been considerable these past years. To avoid defending products without potential, we recommend that three criteria be used to identify the most promising products, i.e.: (i) those with seemingly sustained world demand; (ii) those for which Madagascar seems to enjoy a comparative advantage (in the sense that its market share is increasing) ; and (iii) those that are exported to markets that already benefit from some type of penetration by Malagasy products, since it indicates that there are logistics value chains and that Malagasy products are known.

73. With the help of these three criteria, we have identified an indicative list of traditional products/markets that the management of the export promotion agency could target and, conversely, those that should not hold the authorities' attention (for details, cf. tables in Annex 3). Among the first, we can distinguish the traditional export of frozen shrimps toward the United-States (but not the EU), that of gemstones towards Thailand and India, some semi-sophisticated items of apparel towards the UE and the United-States, and natural products (wood, oils) toward the EU and historical Asian markets. Among the products to exclude, because they suffer from a loss of competitiveness and/or a decreasing world demand, we can keep the export of frozen shrimp toward Japan, the UE and Mauritius; those of vanilla, clove, cacao and coffee toward all the markets.

74. The second intervention axis we suggest is to support the export of existing products toward new markets. This axis is currently favored because Madagascar only exploits 3 % of its export potential according to the foreign market penetration index proposed in the analysis in chapter II.2. To guide the authorities, we propose once again to use of the three following criteria to identify the products: (i) those with a sustained world demand; (ii) those that are competitive in existing markets (their market share increased in the past years); and (iii) those that post a still-unexploited export potential (cf. results in Annex). By using these three criteria, we were able to identify canned fruits, with export to countries like Japan, Korea and Canada that could be encouraged. The export of essential oils to markets like Switzerland, Mexico or the Philippines seems to have an untapped growth potential. As for the first axis, these three criteria also allowed us to remove some products that are neither competitive nor in strong demand worldwide (clove or tuna for instance, even if there are numerous untapped markets for these products).

75. Finally, the third intervention axis emphasizes promoting and supporting emerging products, i.e. those that benefit a sustained global demand and for which

Malagasy exports have increased the most these last three years. Based on this, the promotion agency could focus on promoting apparel items like anoraks (notably toward European markets), perfumes (toward Asia and Russia), plastic cutlery (Asia and North America) or animal feed (EU, US, Asia).

76. These three lists of products (and markets) must be interpreted as indicative. They need to be complemented with more in-depth analyses, particularly at the level of the local companies' capacity to meet world market requirements. To that effect, it seems that the promotion agency is likely to achieve better results by focusing on support to existing and potential investors in the country rather than by devoting these efforts abroad. This recommendation is particularly relevant when it comes to the need to assist Malagasy firms in adopting the norms and physio-sanitary standards (SPS) that are increasingly imposed by importing countries.

77. Support to upgrading domestic companies to bring them up to SPS norms and standards will have to be a central activity of the export promotion agency. The analysis in chapter II.2 reminded us that these were increasing, particularly in OECD countries, thus slowing down Malagasy exports and creating income losses for Malagasy households that could possibly reach one third of their income. The export promotion agency's role is justified when it comes to centralizing government interventions that are currently scattered in multiple agencies and ministries. This dispersion is a source of waste and inefficiency since there are economies of scale in the support to companies, notably in terms of sharing information. However, it is useful to say that the agency's competence is to coordinate ongoing efforts and not to take the place of the technical controls that are the responsibility of sectoral ministries.

78. The agency's coordination role appears as essential in view of the complex sanitary norms imposed by importing countries. Not only do these norms change over time, they also vary according to countries, some are mandatory, others are voluntary or indicative; in short, the confusion exists and needs to be clarified. In this context, the promotion agency will have to ascertain that information is made available to the country's operators. Beyond this, the authorities should assist Madagascar's existing and potential exporters on issues of interpretation and of practical implications, notably in terms of sanitary risks for the value chain. We need not go back to the crisis that was barely avoided in 2006 in the shrimp sector when the UE nearly banned Malagasy exports. This risk potentially exists in fresh product (litchi) value chains with the adoption of the Global GAP rules (that are still sometimes called Eurep GAP) on retail trade. These rules risk imposing traceability within the value chains or the "from the farm to the table" concept. It means limiting sanitary and phytosanitary risks along the production chain by putting a traceability system in place at each stage of the production sector, and not only to limit it to the final stage.[137]

[137] The example of the Guatemalan raspberry production illustrates how a sector which does not have an appropriate traceability system can be vulnerable to a sanitary crisis. Guatemala exported 3 million dollars worth of raspberries to the United-States in 1996, when cases of diseases linked to the Cyclospora parasite were detected on US soil. After a lot of difficulties, Guatemalan producers were suspected. It is only in 2000, after several compliance plans and the set-up of a traceability scheme, that one single farm in Guatemala was identified as being the probable source of the contamination. But the harm was already

79. The coordination effort led by the promotion agency must not only take place within the public sector but also with private sector partners and regional authorities. The collaboration with the private sector will have to be at several levels, starting with the adoption of good practices and the set-up of surveillance mechanisms that are increasingly the responsibility of a private entity.[138] Such collaboration was already a successful example in Madagascar's shrimp value chain, and it could be duplicated in the tourism sector with the arrival of new international groups. In Pillar 1 of this reform agenda, we highlighted that the promotion of synergies between the hotel chains and local producers was strengthened by a partnership relating to transfer of knowledge and know-how.

80. Coordination with regional entities, like the COMESA or the SADC, allows bringing a collective response to problems common to the sub-region.[139] There are economies of scale in setting up joint databases or training and upgrade programs. The development of regional control and surveillance structures can limit costs as demonstrated by the successful experiment conducted within the *East African Commission* (EAC) with the regional accreditation and management center for animal and plant plague.[140]

81. Bringing local companies up to international standards is not a done deal. If benefits are real in the mid-term, the immediate costs of such a support are significant as reminded by the experience of numerous developing countries. It is therefore necessary for Malagasy authorities to prioritize their interventions by taking the costs and benefits of their actions into account. This effort should consider: (i) the sanitary risks for each product; (ii) the potential of reconversion toward less-demanding markets or toward products that are less-subjected to strict norms; (iii) possibilities for private exporters to assimilate these norms and standards which depend on the gap between their current practices and those that are required; and (iv) the cost of assistance and the availability of financing.

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done. In the meantime, American supermarkets had turned to Mexico. From 85 producers in 1996, the sector only counts 4 in 2001, with exports under 200,000 dollars (Calvin, 2003a, 2003b).

[138] Cooperation in the framework of a long-term relationship with buyers can turn out to be crucial, in particular to avoid – as much as possible – the imposing of arbitrary and superfluous requirements as well as their never-ending redefinition. In other words, the objective is to set up good corporate practices *both ways*.

[139] Article 16 of the SADC trade protocol signed by Madagascar provides for « the member states establishing their sanitary and phytosanitary measures based on international norms, guidelines or recommendations in order to harmonize SPS measures on agricultural and animal productions. The Member States will, on request, consent to consultation with a view to achieving agreements on the recognition of the equivalence of specific SPS measures, in accordance with the WTO agreement on the application of SPS measures.

[140] In January 2001, Kenya, Tanzania and Uganda signed the SQAMT (*Standardization, Quality Assurance, Metrology and Testing*) agreement. Under this agreement, the countries accept to establish a joint policy to manage sanitary and phytosanitary risk. They are under the obligation of adopting a joint system to develop norms and to standardize existing regulations as well as control and inspection systems. In 2003, 160 out of the 490 standardized norms were related to food items.

82. The application of these four criteria is suggested for three of Madagascar's main export categories, i.e. products from the sea, foodstuffs and livestock products (table 47). It appears that advantages and drawbacks vary from one category to the other, suggesting a differentiated approach for the assistance the promotion agency could offer each of these sectors.

Table 47: The costs and benefits associated to adopting SPSs in three value chains

	Existing markets	Possibilities of diversion	Adaptation of private operators	SPS constraints	State help.
Sea products	Shrimps Tuna EU and USA (80%)	Asia and regional market	Possible because large operators are organized and possibilities of developing value chains with smaller operators.	• Hygiene conditions in factories • Approval and inspection of factories • Private public coordination	Existing institutional framework with ASH. Sea products are well covered but with a bias in favor of large industries.
Food products	Litchis Vanilla Horticulture EU and USA	Asia and regional market (La Reunion, Mauritius, and maybe the Middle East and South Africa).	Difficult	• Limits Maximum Waste • Food Additives Heavy Metals • Hygiene Measures • Traceability • Hazard analysis critical control points (HACCP)	Few support
Livestock	No meat export towards the EU due to the ban since 1997 for sanitary reasons.	Regional market	Difficult because small operators and logistics problems	• Veterinary Certificate • Epidemic Monitoring • Zoning and compartmentalization • Vaccination • Analysis of zoo sanitary risks • Putting in quarantine • Decontamination, Fumigation, Disinfection	Few support

PILLAR 3: TO PROMOTE JOB CREATION

83. Job creation must be at the core of the reform agenda followed by the authorities. Indeed, the MAP's success will depend in large part on the working population having decent jobs allowing them to increase their income and benefit from social coverage. Yet, today, close to two Malagasy workers out of three are looking for work or are under-employed, and when they do work, their average monthly salary is only equivalent to US$17 .

84. It is often reminded that, to come out of poverty, one must work and that to work one must be productive. A series of recommendations of which outline is drawn below is formulated to increase the productivity of Malagasy workers. The starting point of this reform agenda must begin with the strengthening of the labor market's institutional framework, followed by the collective implementation of a set of actions that aim at improving workers' skills, their mobility from one job to another and the sanitary and social conditions in their workplace.

1. Strengthening the institutional framework of the labor market

85. **The Minister of Labor (MFPTLS) must be endowed with sufficient means to fulfill the ambitions formulated by the new employment strategy**. This adjustment imperatively goes through modernizing and improving the MFPTLS at central and regional levels, including the bodies under its authority, and implies the implementation of the following tasks:

- *Organizing an audit of the MFPTLS functions and posts*: the objective here is not to judge the agents' individual performance but really to define what the different operational circuits should be with regard to the functioning of the MFPTLS. This audit, initiated as quickly as possible should be completed within 6 months at the most. Once it is done, it would enable all the Ministry's agents at the different levels to know who is doing what (job description), what are the appropriate decision making circuits and what the functional relationships between the different services should be in view of the implementation of the employment, training, labor and workers social protection policy.

- *Defining quantitative and qualitative performance indicators* in the implementation of the different actions engaged by the Ministry. It means having a « Performance Chart » (that goes beyond the very formal current PTA) to accompany the different services concerned to enable them to assess the quality of their actions with regard to the objectives they are each responsible for. Identifying these "performance indicators" should, in parallel, lead to the above-mentioned audit and should therefore be completed at the same pace. A feasibility study regarding this should be undertaken as soon as possible.

- *Setting up an INTRANET system* within the MFPTLS as well as between the Ministry and its regional services and bodies under its supervision. The current situation does not allow the MFPTLS to guide the entire mechanism it is in charge of: Internet connections are quasi-absent, which, in addition to the lack of equipment (fax, photocopiers, etc.) makes circulation of information near-impossible and leads to isolating different services one from the other. The minimum minimorum would be that each service has to have at least one access to this INTRANET. To the extent that the MFPTLS already has a Web site it should be possible to put this INTRANET in place quite easily. A technical and financial study should be conducted as rapidly as possible to be able to start installing this INTRANET, with the corresponding training interventions for the staff. It must be noted that, normally, the MFPTLS should already have the governmant Intranet, like all the other Ministries and that, in this case, the only issue remaining is to « pull the cables », to make sure that the concerned services have access to it and the people at the Ministry have the relevant training to use it !

- *Establishing modern internal operating procedures that enable the different MFPTLS services to be informed on time of the procedures underway, of the content of department meetings* – of their draft agenda and of the conclusions these meetings led to. Though this proposal may seem hardly innovating, together with the measures recommended above, it would nevertheless represent a significant improvement to the current functioning which, as a whole, lacks transparency. Nothing will prevent the MFPTLS to implement this measure gradually, starting with the meetings of Department Directors and Heads as quickly as possible, and then extending the approach within the different Directorates as well as at other levels.

- *Accompanying these different measures with a training program of MFPTLS Agents regarding modern management methods.* The search for better efficiency in terms of the Ministry's internal operations and of the implementing of policies it is in charge of will not come easily since a lot of agents are not sensitized to and trained with regard to these methods. The MFPTLS should therefore accompany the implementation of the above-stated proposals with a training program of the agents to dynamic management of the administration. In parallel with the other tasks identified above, this training program should be completed and implemented gradually and rapidly.

86. **Moreover, there has to be a coordination effort between the concerned ministries, in particular with the Ministry of Education with regard to vocational training** and with the Ministry of Economy (as well as with the INSTAT) with regard to defining and monitoring the strategic objectives and statistical tools of the labor market. This rapprochement with the Ministry of Finance is also desirable to develop a coherent mid-term expenditure framework for this sector and to identify sources of financing for the programs, including from donors.

87. Institutional strenghening is essential, but it is only justified if it contributes to implement concrete actions that we suggest be focused on the three areas described below.

2. Promoting workers' skills

88. At the onset, the level of workers' skills is strongly linked to the performance of the education system. We will not go back to the reforms that should take place in the school system, notably in secondary education, since they are described in a parallel World Bank study (and summarized in box 9 in chapter II.4). We will first pay attention to the need to integrate those who are excluded from the school system and that represent the majority of young people in Madagascar (as a reminder, only 25,000 students reach the *baccalauréat* every year), to then focus on professional and vocational training.

89. **It is recommended that traditional learning be « formalized » since it remains the prevalent mode for skill acquisition in a country like Madagascar**. The experience of several African countries, of which Benin, with the issuance of professional qualification certificates (cf. box 19) has shown that is useful to set up a "validation of experimental knowledge" (or *validation des acquis expérientiels* - (VAE) system. In parallel, we recommend promoting the development of traditional knowledge toward more structured forms of knowledge by drawing on the German "dual system" model. This transformation could rely on the set-up of training centers that would accompany young people during their learning period by giving them a structured reference. This accompaniment is important whether for training in the classical sense of the word (the youth is under contract with a training center which is under the responsibility of one or several firms) or in that of cooperative education (in this case, the youth in a training center maintains his/her school status, including during the internship periods). These training centers must be established in close collaboration with private companies, to avoid that the courses taught remain overly school-oriented and far from corporate reality. This approach could be kept when implementing the CAEP (Learning Centers for Productive Employment or *Centres d'Apprentissage à l'Emploi Productif*) that should provide the training and professionalizing of buoyant sectors in the intervention regions such as cooperatives, producers' associations, craftsmen, even young graduates from the "*grandes écoles*" [*Note: prestigious higher education institute with competitive entrance examination]* or not.

90. To implement these structured learning modes, it is useful to rely on intermediary structures like consular chambers and professional organizations that can play an interface role, even operators in order to benefit several SMEs/SMIs (and very small businesses) in the concerned sector or geographical area, as successfully developed in Germany, France and Benin (cf. boxes 19 and 20). This solution would relieve private firms which, in a country like Madagascar are oftentimes informal SMEs or micro-enterprises that do not have enough financial and human resources to take an interest in training.

Box 19: Benin – The Professional Qualification Certificates (or Certificats de Qualification Professionnelle - CQP)

CQPs mostly target apprentices over 14 years old and with at least the 1st year of middle school level. It combines training with a craftsman and within a training center (which can be a Crafts Center ("Maison des métiers") or a Tool Center ("Maison de l'outil") managed by the Chamber of commerce and/or a professional organization. It concern basic trainings, even bringing levels up to standards (3 levels of 200 hours each). The apprentice goes to the center once a week and spends the other 5 days with his "apprenticeship master". Training lasts 2 to 3 years and is co-managed by the professional association the manager and center are from. At the end of the 3 training cycles, the apprentice takes the national CQP exams which will guarantee a skilled worker qualification level. This approach is less interesting and original because of the CQP itself (which comes from a similar formula implemented in France by the UIMM) than because of the pedagogical engineering that is centered both on skills and know-how and on the list of the trades that exist in crafts. There are currently 1,500 apprentices being trained and the challenge is to manage to train 3,000 apprentices a year with twenty CQPs, from cutting-sewing to refrigeration-air conditioning. Other CQPs are being examined in other fields such as automobile mechanics or TV/radio repair, sectors in which informal work is highly developed.

Box 20: Germany, France, Benin – The role Consular Chambers play in training

In these two countries the administrative structures relating to vocational training and more generally to education are very different, Consular Chambers, particularly the Chamber of Commerce that brings craftsmen together, play a major role. These trainings are under the authority of these Chambers, which also work in collaboration with professional sectoral organizations to "manage" the initial vocational training, and with national organizations such as the CERQ in France and the BIBB in Germany playing an advisory role, if not one of support to the development of pilot projects. Furthermore, social partners at sectoral or geographical level are directly involved in defining the content of the training and in the process of validating the acquired skill, including "informal" skills acquired in the workplace or outside the company. Consular structures as well as professional organizations and social partners simultaneously provide the training and the place where the latter is regulated.

It is interesting to note that in Cameroon, an original structure was set up, the GIPA (Interprofessional Craftsmen Organization or "Groupement Interprofessionnel des Artisans"). Created in 1999 on the initiative of a certain number of managers of crafts businesses representing different trade associations, this Group is concerned with building technical and managerial capacities as well as with structuring and standardizing apprentice training. The GIPA today includes nearly 100 craft companies in the capital (Yaoundé), each employing 3 workers and two apprentices on average distributed among 11 trade associations from hairdressing to carpentry, from electrical engineering to basketry or the clothing industry. The GIPA budget largely comes from member subscriptions, or 18 Euros/year, complemented by bilateral aid (DED-Germany). The master craftsmen support the costs of their apprentices' training on their own funds.

91. **The Malagasy Government must not only promote the skills of those who are excluded from the school system, but also those of workers above school age through vocational training programs**. The rationale of these programs has been correctly understood by the Malagasy authorities and it is now a priority in the new employment strategy. At this stage, *it becomes indispensable to improve the coordination between the Ministry of Employment (MFPTLS) and the Education (MENRS*) *one* which seems minimal. The fragmentation of responsibilities and, most of all, the inexistence of existing communication between the two Ministries in this area goes against the design and the implementation of an integrated vocational and technical training policy. For example, the MENRS is setting up a « *cadre national de qualifications* » (National Qualification Framework), whereas the MFPTLS (under the aegis of the OMEF) is about to launch a national survey on vocational training, all levels and institutions included. According to the information collected, these two initiatives are not coordinated.

92. Once the respective MFPTLS and MENRS competences have been clarified in the areas of initial and continuous training, *our recommendation is to strengthen the vocational training programs by taking the positive lessons that have emerged from the programs supported by the Integrated Growth Poles and by some Export Processing Zone firms.* This effort must keep relying on a close public and private sector collaboration since the involvement of the latter allows guaranteeing that the trainings provided match the demand of businesses. The government's role however remains important to fill two gaps that are likely to emerge if the initiative were left to private firms alone: (i) SMEs and informal companies are oftentimes excluded since they lack sufficient resources to fund such programs; and (ii) a company can decide to under-invest because it wants to avoid its competitors benefiting from the training of its own workers (if the workers leave once they are trained).[141] Based on this, Malagasy authorities could draw on the experiment conducted in Senegal, through the Fund for the Development of Technical Education and Vocational Training (or *Fonds de développement de l'enseignement technique et de la formation professionnelle* - FONDEF), or in Kenya through the distribution of « vouchers » to businesses and micro- and small-sized enterprises (cf. box 21).

93. It must also be noted that the set-up of partnerships with foreign companies is particularly promising in this field. The vocational training of their employees is one of the most efficient channels to transfer technical and managerial skills.[142] This channel has already received specific attention in Pillar 1 of our recommendations to promote synergies, but it should be reminded that it constitutes one of the bases of the South-East Asian countries' success. The latter have known how to capitalize on the advantages

[141] For a more in-depth discussion of the reasons why the government's intervention is justified, cf. *Malaysia: Enterprise Training, Technology and Productivity,* 1997, World Bank.

[142] It can be demonstrated that, because the entry costs are relatively high for foreign companies compared to local firms, they initially have to be more productive and pay higher salaries to attract skilled workers. In the end, there are externalities for the local economy since these workers can transmit their know-how and their technical and managerial knowledge to other companies or assist them when they decide to go in business for themselves. For a theoretical approach and empirical evidence of these effects in the case of Denmark, cf. Nikolaj Malchow-Møller, James R. Markusen, and Bertel Schjerning, *Foreign Firms, Domestic Wages*, NBER Working paper, N. 13001, March 2007.

provided by the arrival of foreign companies by training their workers who then used their skills in the local economy, while serving as channels of dissemination themselves.

Box 21: The training programs based on public/private partnerships

The Kenya experience

One of the most known "voucher" programs is the one set up in Kenya, under the name of "Jua Kali voucher program". The latter started as a Government-managed pilot project in 1997 by distributing "vouchers" to young people looking for employment or with a job in a company of under 50 employees so that they themselves could select training according to their needs and objectives, rather than through the decision of civil servants. This approach has already been used successfully in some industrialized countries (UK and Germany) to make users more responsible and to institute competitiveness among training providers, which could include the private sector.

In the framework of this program, the beneficiaries receive a "voucher" that can be exchanged to pay a training provider. The voucher covers 90% of the training costs and the rest is funded by the beneficiary. Master craftsmen turned out to be the trainers most in demand by the beneficiaries. Around 37,606 vouchers were distributed between 1997 and 2001. Empiric evidence showed a positive impact on the degree of qualification, generating a rise in employment for the participants and productivity gains for companies. But it appears that the program became heavy for the authorities to manage with time, suggesting that transferring it to the private sector would be desirable. To better motivate participants, an incentive mechanism should have been introduced to continue training when the subsidy offered by the program is near its end, particularly with companies that employed these workers.

The Senegal experience

The Technical Learning and Vocational training Development Funds (or "Fonds de développement de l'enseignement technique et de la formation professionnelle" - FONDEF), created in 2004 by the Senegalese State in agreement with social partners, has the objective of promoting continuous vocational training (or formation professionnelle continue - FPC) according to the needs of the companies in Senegal. The FONDEF is jointly financed by the State which pays it part of the CFCE tax collected from companies, and by firms who, requesting the FONDEF's support for continuous training interventions for their own paid employees, must take on 25% of the operational costs and pay this amount to the FONDEF on an escrow account. Generally, the FONDEF intervenes in all the sectors of economic activity, particularly, to finance public and private corporate training plans, if not in the training programs defined with the professional organizations for value chains, branches and groups of companies. Once the training projects the companies or branches presented are selected by the Selection and Approval Committee (formed by representatives of social partners and of the administration), their implementation is entrusted, after the call to tender to guarantee transparency and equity, to training providers. The FONDEF contribution, which can reach 75% of the learning costs, can include the balance as well as the definition of the training needs and actions that are the responsibility of those companies requesting financial support from the FONDEF.

To date, nearly 130 training providers are registered with the FONDEF, nearly half of which public and private training centers under the supervision of the Ministry of Education. In 2006 and 2007, the FONDEF contributed to financing training actions/plans for 106 companies (89% from the private sector) – i.e. a total of nearly 650 training actions carried out for nearly 6,900 trainees – the global cost of the contracts reaching nearly 790 million FCFA, of which 221 million FCFA come from companies. Out of this total, 52% of the requests were presented by SMEs and 31% by large companies.

Source: World Bank, Senegal: Job hunting – The road to prosperity, September 2007.

94. It is for this reason that countries like Malaysia and Tunisia have placed the development of continuous training programs with foreign companies that come and settle there at the heart of their strategy. The Malagasy Government should lead a proactive policy that would become central when negotiating with foreign firms. This could include setting up incentives in return for continuous education programs, not only within these companies but also for local SMEs working around the sector. This approach should be extended to the firms that are selected to carry out large-scale public works (road, port sites, etc.) Establishing training programs should be a part of their terms of reference and impact on their selection process. The development of human capital stock is one of the tangible benefits that foreign investments can bring a country like Madagascar, even for short-term projects since local workers who are trained will stay in the country whereas capital is mobile and can leave at any time.

3. Facilitating workers'mobility

95. The analysis proposed in chapter II.3 has shown that two actions could help achieve this objective. **The first one is to make labor regulations more flexible, whereas the second is to reinforce the programs that support job-hunting. Here, we will look into the first action since the second one will be detailed in Pillar 5 dedicated to the protection of vulnerable groups.**

96. Our first recommendation is to fill the legal vacuum around the numerous measures of the Labor code, since it makes interpreting them difficult and therefore contributes to increasing the costs of hiring for formal companies. Priority should be given to the implementation texts that relate to the flexibility of working hours (duration[143], weekly days-off, overtime, etc.).

97. With this update, the authorities should consider modifying some of the measures of the code, though these changes could lead to a social dialogue that could delay the process. We nonetheless want to indicate that the *CDD* and minimum wage measures are constraining in view of international standards needed to improve conditions in the workplace, as presented below.

4. Improving conditions in the workplace

98. Improving workers' productivity depends partly on the conditions that prevail in the workplace. A worker operating in an environment where risks are controlled becomes more efficient. However, regulations that are over-restrictive could turn out to be counterproductive in the sense that they discourage companies from adopting them and prompts them to live on the fringe of legality, particularly in a context where sanctions are hardly penalizing. Malagasy authorities must therefore find a middle-ground between workers' protection and employers' needs.

[143] For example, the annualization of working hours instead of imposing monthly limitations would allow to increase the flexibility of the manegement of working hours.

99. Today, in Madagascar, the conditions that prevail in the workplace are generally far from international and even sometimes regional standards. **This is why our first recommendation is that Malagasy authorities strengthen their resources to enforce the regulation proposed by the Labor code regarding occupational hygiene and health**. In the end, complying with these rules is mutually beneficial for employees and employers since it should bring down absenteeism because of illnesses and accidents which is relatively widespread in the country. According to the study on the business climate, a formal company employee in Madagascar loses an average of 4 work days a month for health reasons, mostly bouts of malaria, or the equivalent of 10% of his/her work days.

100. The objective is to give the Directorate for Labor the means to play its role by strengthening its workforce (and by endowing them with the necessary technical and financial supports), notably in the regions (cf. box 22 for the proposal of an action plan). Currently, the training of health and safety inspectors is done within the ENA, but there are few classes (twenty or so for a two-year cycle) and a significant number of new inspectors, once they have their degree, look for other positions within the Ministry, in another administration, even in the private sector. Besides, a clear sanction regime should be established to penalize companies that do not comply with the rules. This supposes independent oversight and controls of the inspector's work and also improving the legal system that penalizes offenders.

Box 22: To develop the operational capacities of the Occupational Safety and Health Administration

To allow the Occupational Safety and Health Administration (or "Inspection du Travail") (which also includes the Health and Safety Controllers) to fully play its role of counsel, control and, if need be, sanction, a certain number of measures should be taken as quickly as possible.

- *To broaden, in agreement with the other concerned Ministries (first the Ministry of Finance), the recruitment base of the Health and Safety Controllers currently trained in the ENA framework with the purpose of reaching a yearly total of classes with at least 40 inspectors in the coming 5 years.*
- *To strengthen the relationships between the Malagasy Health and Safety Inspectors /Controllers training structures and the organizations in charge of similar functions in other countries (for example, with the INTEFP and its 9 Interregional Centers in France) but also with the ILO – with the objective, through transnational training periods and continuous training sessions, of making sure that the Health and Safety Inspectors and Controllers improve their knowledge by being more motivated.*
- *To entrust the corps of the Health and Safety Inspectors with the responsibility of updating the social and sanitary standards protecting workers, in connection with the social partners, while taking into account the standards already implemented internationally for this purpose. This update should be initiated very quickly and result in a proposal in the course of the following year.*

In cooperation with the Department for the Social Protection of the Workers (or "Direction de la protection sociale des travailleurs"- MFPTLS), carry out an assessment of the Inter-Corporate Medical Services and of the Autonomous Company Medical Services (or "Services Médicaux Interentreprises et des Services Médicaux Autonomes d'Etablissement") (operations, cost/efficiency, strengths and weaknesses, etc.). This assessment should also start very quickly.

101. **In parallel, the Government must make sure the implementation texts are updated,** like those referred to in Articles 134-135 of the CT (Labor Laws) dedicated to industrial medicine that are obsolete. Also, general hygiene and work safety measures are still defined in an order dating from May 1960.

102. **Improving sanitary conditions and the care offered within the company should include a partnership system between the public sector and private companies.** In case of a health problem, most employees – between 40 and 35% - declare that they turn to public health services (hospitals and dispensaries) which are hardly efficient. In order to make up for the deficiencies of the public sector and because of obvious externalities for employers, it is proposed that the cooperation between private firms and the State be intensified, notably in terms of support to communication and disease prevention, as well as medicine distribution. This type of partnership is being put in place in the fight against malaria and AIDS strategies.

103. Finally, **improving social dialogue which rests in large part on the proper functioning of the CNA is advised**. Its operations procedures must be simplified and an adequate operating budget must be allocated to its Secretariat.

PILLAR 4: TO PROMOTE BUSINESS DEVELOPMENT

104. Investors who want to create a business in Madagascar are confronted with a whole range of administrative procedures that are source of considerable delays and can therefore discourage them. These barriers exist at the entry and as well as during operations, and concern both central and local administrations (devolved and decentralized). They go against the government's policy that aims at setting up an incentive framework for the private sector development.

105. We propose to develop a series of actions that are structured around (i) a reminder that formalities must be streamlined in the context of the State's more general reforms since their main causes of complexity are often rooted in the inadequate remuneration of civil servants, in the complicated relationships between the central administration and the communal one as well as in the success of the integrated growth pole based approach; and (ii) the importance of simplifying procedures related to access to land and its development, that are crucial for investors interested in the MAP priority sectors, notably in the growth poles.

1. Incorporating the effort to simplify procedures in the general reforms

106. The first recommendation is to put the streamlining of procedures in the context of the State's general reforms at least in three areas: (i) the wage policy in the civil service; (ii) the decentralization/devolvement policy; and (iii) the policy based on the integrated growth poles. In general, it is not really difficult to identify the formalities that are redundant or complicated and, based on this, to define the measures that would make it possible to simplify them. This important exercise is being finalized by the IFC/FIAS, in collaboration with the EDBM, so we have decided not to dwell on it (cf. box 23 for a reminder). Moreover, the Government has already made considerable progress, notably

in the area of customs procedures as described in chapter II. 2 of this study, and we will come back to the issue of access to land further in the text.

Box 23: The simplification of administrative procedures: The joint FIAS and EDBM effort

Since the second half-year period of 2007, the FIAS - *the investment climate advisory service of the World Bank Group* – made, in collaboration with the EDBM, an inventory of the main administrative procedures that a company wanting to settle and operate in Madagascar must undertake. The results of this inventory have fed the analysis presented in Chapter II.3 of this study, highlighting the monetary costs and delays associated with the main procedures.

Based on this, a reform process is being implemented. The reforms are centered on simplifying the license and business authorization regime, in application of the "guillotine" principle, under the leadership of the EDBM and the Ministry of Economy, Trade and Industry. These licenses are assessed based on the following criteria: (i) legality; (ii) necessity; (iii) burden of costs and procedures for the private sector. Furthermore, a prioritization also takes into account the following dimensions: (iv) easy implementation; (v) impact on the *Doing Business* ranking; and (vi) impact on the MAP priority sectors.

These reforms were carried out in connection with the establishment of an electronic register of valid licenses, as well as with the introduction of a *Regulatory Impact Analysis* (RIA) system that aims at guaranteeing the quality of future business regulation proposals. The program also aims at building the capacities of regulatory agencies.

This process, conducted with the help of the private sector, should result in reducing 30% of costs and of waiting periods related to licenses, by mid-2010.

107. Nevertheless, experience indicates that for these streamlining efforts to be lasting (and for the constraints not to reappear in another guise) **they need to take place within the civil service reform or at least with actions that provide incentives for civil servants to implement administrative simplification**. The complexity of administrative procedures often constitutes a way for civil servants to take advantage of the situation and extract a secure rent. They can squeeze a payment out of companies to expedite the process. Civil servants are therefore going to try to maintain the status quo if they cannot offset their loss of income through alternative gains.

108. This is why it is essential to accompany the effort of streamlining procedures by setting up a system that provides incentives and sanctions for the administrative services in charge of implementing administrative reforms. On the one hand, administrations must be encouraged through monetary (such as pay raises) and non-monetary (such as honorifications) rewards. It is also useful to publish the performances of each service and to make sure that they take ownership of their actions and accountability toward users. Countries, like France, have instituted a yearly reward for the service that proposes the most efficient streamlining of procedures associated to it. This approach has the virtue of promoting dynamic reforms since the initiative does not only come from the action plan but is perpetrated by the administration itself. The Malagasy public administration can inspire itself from the successful reforms at the customs level linking the functioning of the *Tradenet* system with the gains customs agents can get out of it. Therefore, there is a real link between the productivity of the customs administration when carrying out clearance procedures and the financial benefits for inspectors. The success of such initiatives depends a lot on the visibility given to them by political authorities, including the President. In parallel, a sanction system must be put in place to penalize services that

hesitate to put the administrative streamlining efforts in place or that do not comply with the deadlines.

109. Technical support is important, notably for services that are asked to improve their performance and to increase their output. This is the case for instance for the center for business formalities, the cadastre and the Directorate for tourism. This support can take two forms: a) training, and b) equipments and systems. The development partners' role is particularly important in this context.

110. **The effort of streamlining administrative procedures is also linked to the decentralization/devolvement policy followed by the authorities**. Indeed, part of the formalities take place where the firm is located and the latter must then interact with local authorities. Their accountability level and their skills therefore become important factors, and they must be supported by capacity building programs at the local level. Oftentimes, responsibilities between central and local administrations need to be clarified, they are not always clear, notably in the area of licenses and property rights. Because simplifying administrative formalities risks reducing local revenues (the FIAS analysis shows that a large number of licenses are obsolete on the local level), mechanisms that enable offsetting these losses and therefore avoiding stoppages need to be introduced. If these losses are not substantial in absolute terms, they can nevertheless represent an important part of the local authorities' budget. One recommendation is to introduce a transfer of additional income to those local governments that have made the most advances in their administrative reforms, which would have the advantage of promoting healthy competition between regions.

111. Finally, in Madagascar's case, **the streamlining of procedures should take into account the role played by the growth pole based approach**. Because of the visibility of this last initiative, there is a strong tendency to focus part of the administrative efforts on these regions. Facilitating the entry of businesses is a condition of their success since only it can produce agglomeration effects and the expected returns of scale both within the companies and over the entire production and distribution chains within the sectors. Besides, this conclusion relating to the need to concentrate efforts on the poles will be incorporated in the actions proposed hereafter.

2. Simplifying access to land

112. The second recommendation is to pay particular attention to solving the problem of access to land and its development. This problem has already benefited from some efforts from the authorities, notably at the overall level through a draft revision of the Land Code and the establishment of certain initiatives, generally with the support of development partners, like the Itinerant or Mobile Terrier Courts (or *tribunaux Terriers Itinérants ou Ambulants* - TTI/TTA – or *Fitsarana Mitety Vohitra momba ny Tany*), the "*guichets fonciers"* (or *Birao Ifotony momba ny Fananan-tany*) and the Land Information and Resource Centers (or *Centres de Ressources et d'Informations Foncières* - CRIF). The issuance of land certificates to local micro-enterprises has also started to bear fruits since they have the same legal value than title deeds and can therefore serve as collateral

for mortgages. However, the use of these instruments is not widespread, since they are only used in 20% of the communes on the entire Malagasy territory.[144]

113. This is why it must be recognized that the fruits of these efforts are a long time coming, notably in the selected regions around the growth poles. As a reminder, to date and in spite of intents, not a single international hotel chain has built a hotel for want of securing land in Fort Dauphin and Nosy Be.

114. The issue of access to land plays a determining role in the development of the priority sectors of agriculture and tourism, and in the land development policy. The importance of access to land on the decision of investors is not only acknowledged by international experiences but also having a title deed facilitates access to credit in the tradition made popular by H. de Soto.[145] In addition, an expanded distribution of land ownership helps distribute the gains of growth to the extent that a household with title deed can sell and therefore directly collect financial benefits from new investors purchasing land. For lack of these deeds, these gains are often monopolized by the authorities and real estate developers. Finally, from a dynamic perspective, the idea of acquiring a title deed is a determining element that encourages new immigrants to come since it gives them the financial stability and a foothold in the host society.

115. The problem of access to land is national but it is more acute in the regions around the growth poles since the progress made to reduce other constraints, like infrastructure development, has highlighted a series of second generation constraints, among which access to land and land disputes have taken a preponderant position. Indeed, the emphasis has mostly been put on the development of basic infrastructure, which is a necessary but insufficient condition to guarantee connectivity within the growth poles and their links to international markets. Therefore, around 80% of the World Bank's financial support in these regions is allocated to the construction and the modernization of roads, of the port and of water and power services. This proportion even goes up to 90% in the Fort Dauphin pole.[146]

116. If the land problem is visible in the three growth poles, its nature differs according to the regions. In Nosy Be the problem lies more in the difficulty of purchasing and securing a title deed than in obtaining it a land registry. However, in Fort Dauphin, the main constraint is the quasi-absence of a land registry (table 48). This difference in problems justifies a targeted approach that takes the characteristics of each region into account. For example, priority in Fort Dauphin must be given to developing a land registry, whereas in Nosy Be and Tananarive efforts must mainly relate to facilitating title deed transactions and settling possible disputes. The authorities have launched several local initiatives like the building-up of a land registry in Fort Dauphin, the establishment of land reserves around Nosy Be and the development of an industrial platform (agri-business complex) in the city of Tananarive/Antsirabe.

Table 48: Access to land and property rights in the poles

[144] Source: Commune survey, 2007.
[145] H. de Soto, *Mystery of Capital*, 2000.
[146] For details, cf. World Bank, PIC, 2005 and its mid-term review.

Regions	Tananarive/ Antsirabe	Nosy Be	Fort Dauphin	Others
Communes that have more than 10 % of registered land	49%	32%	28%	13%
Communes with more than 10% of their households with title deeds	10%	41%	7%	10%

Source: Commune surveys

117. To support these efforts whose progress is still fragile[147], three examples based on best regional practices are presented below, and they all constitute directions Malagasy authorities can explore:

- **Facilitating access to land for SMEs and informal companies**. The project *Mbanga-Japoma Project* in Cameroon developed in the Douala suburbs to reconcile customary land rights with the need to develop plots for the development of manufacturing or food-processing activities. This project, designed as a partnership between private investors, public institutions and local collectivities, works as follows. The first step is to make plots of land covering 160 hectares and located about 30 km from the center of town available to private developers at subsidized prices. Each developer is in charge of developing access to basic infrastructure (roads, water, electricity) on a 1 to 8 hectare surface. After the development, the developer retrocedes 45% of the land to local collectivities and keeps the rest. Then, everyone is free to sell his/her plots to businesses or investors. The advantage of this system is that it allows finding a balance between the needs of the private sector and customary law, thus reducing the cost and the risks related to land transactions, which also characterize the business environment in Madagascar.

- **Encouraging access for underprivileged groups**. The projects *Shac Dwellers Federation* set up by the Government of the city of Windhoek (Namibia) and the *Homeless People Federation* in Malawi subsidize land for underprivileged groups that develop them in close collaboration with a local committee. These examples are efficient to relieve tensions that exist in an area because of the concentration of vulnerable groups as it is the case around the Tananarive/Antsirabe pole.[148]

- **Facilitating title deed transfers when there are several reference systems present** as it is the case in Madagascar, notably in rural areas. Customary laws that are the prerogative of traditional chiefs do not give the ownership of land to those who exploit it, which makes the position of potential investors fragile. The system set up in Baguinéda (central Mali) allowed securing a user right for farmers in a similar context. This system, governed by the Village Council, specifies the number of days the farmers are authorized to cultivate the land in their own name and for the entire community. The success of this system has

[147] If the building-up of a land registry is well underway in Fort Dauphin, only one land reserve out of the three identified is secured, and still, no transaction has been finalized.
[148] The concentration of population is still modest in the Nosy Be and Fort Dauphin poles. Nonetheless, the equitable distribution of land ownership is one of the authorities' objectives.

enabled to incorporate new farmers (from other villages) to exploit the land and produce fruits and vegetables, making it possible for farmers and the host village to reap benefits together.

118. These three initiatives bring out characteristics that exist in Madagascar's growth poles, namely the presence of customary law and local authorities, the preponderance of small-scale businesses and of pockets of poverty (mainly urban in the Tananarive/Antsirabe urban areas). They show that some African countries have managed to improve access to land in such a context, even if several pitfalls remain.

PILLAR 5: TO PROTECT VULNERABLE GROUPS

119. The sharing of the fruits of growth is at the core of the reform agenda we are proposing. It is integrated into the actions formulated in each of the four pillars of this agenda. For instance, job creation aims at providing income to the entire working population, just like the emphasis is put on the need to develop synergies between foreign businesses and the local economy in the growth poles. Yet, there is a risk that some groups remain marginalized or vulnerable to exogenous shocks, like soaring international market prices.

120. The actions recommended below aim at reducing the risks that vulnerable groups be excluded from growth mechanisms by emphasizing: (i) the need to reduce their vulnerability to the shocks of world markets; (ii) the need to support young people and women looking for work; and (iii) the need to control the development gaps that can emerge between regions. Focusing on these three aspects does not mean that there are no other vulnerabilities, if only climate shocks that lead to significant damages by destroying the most vulnerable groups' homes and basic infrastructure or by exposing them to epidemics like cholera or malaria.

1. Protecting vulnerable groups from shocks on commodity and food prices

121. In chapter III.3, we showed that Malagasy households, particularly the most destitute ones, were exposed to losses of income because of the rising prices of rice and oil. Though the evolution of these prices in international markets is uncertain, the World Bank and IMF projections agree and predict that these prices will remain high (compared to those prevailing end of 2005) for years to come, although a drop is expected compared to the record ceilings that were reached during summer of 2008 (because of the recession in industrialized countries and of the good rice harvests by Asian producers).

122. Malagasy authorities reacted to the prospect of high market prices for rice in the medium-term. Therefore, they implemented an action plan that aims at increasing local production through an increased productivity and the extension of cultivated areas. This program is not described in detail here since its content can be found in the recent World Bank document dedicated to its budget support to the Malagasy Government.[149] This is important in terms of poverty reduction since, in the context of rising world prices, to

[149] World Bank, *Financial Supplemental to the PRSC-5*, July 2008.

encourage rice production is one of the privileged instruments to assist Malagasy rural households.[150]

123. The Government also sought to identify what were the actions needed to reduce the impact of the rising price of rice on consumers. **The first type of action is the development of assistance programs targeting the consumers the most penalized by rising prices**. So, proposals to extend labor intensive public works programs and food aid in schools were formulated and should be carried out in the coming months. It must however be recognized that these programs have a limited coverage (we had indicated that labor intensive public works reached 25,0000 people) which is far from what is needed to mitigate the effects of the food crisis on the population even if these specific actions are welcome. Any attempt to extend these existing programs or create new ones would, in addition to institutional deficiencies that restrict their implementation and monitoring on a large scale, also be faced with the low level of monetization of Malagasy households (less than 3% of them have a bank account) thus limiting the use of the banking system to distribute assistance.

124. **The third intervention privileged by the Malagasy authorities was to reduce the price of imported rice. To do so, they managed to negotiate attractive prices (notably with India) for the 2008 lean period. In parallel, the authorities temporarily eliminated the VAT on rice consumption**. This measure was relevant for two reasons:[151] first of all, the current VAT rate is extremely high (20%) and secondly, rice represents a central element of the consumer basket in Madagascar. Furthermore, past experience, notably during the removal of customs duties on rice imports in 2006, shows that this market is competitive enough to ensure that the VAT reduction will reflect on consumer prices. The elimination of the VAT therefore potentially allows to get a 20% reduction of the price of local rice and to mitigate the households' loss of income should there be a generalized price hike as the results in the table below show. The removal of the VAT seems beneficial for Malagasy households as a whole, but most of all for the poorest ones since rice represents around 1/3 of their consumer basket (table 49).

125. **In addition to this tax relief, the authorities must promote the integration of rice markets in Madagascar**. Today, there is no single market with a homogenous price, but rather several markets that are partitioned because of the lack of information and of deficient transport, preventing price arbitration between the regions. The implementation of the Rice Observatory was an improvement since it regularly publishes the prices observed in Madagascar's different regions, thereby illustrating interregional variations, notably between urban centers and rural areas. This first stage toward the establishment of a homogenous market must come with measures facilitating access to regional markets, notably by increasing competition in intermediary and haulage markets (see Pillar 2 for some of the proposals).

[150] Cadot, Olivier, Laure Dutoit and Marcelo Olarreaga (2006), "*The cost of subsistence*", Policy Research Working Paper no. 3881, The World Bank.
[151] A reminder: customs duties on rice are already at 0%.

Table 49: The impact of a VAT reduction on rice on the monetary income of Malagasy households

Quintile	Monetary income
Poorest 1	5.01%
2	5.71%
3	6.13%
4	5.79%
Richest 5	5.12%

Source: Olarreaga [2008]

126. Concerning the oil crisis, the strategy must be the same as the one for rice, namely streamlining production and energy supply in the country, while considering a short-term tax rebate. The first element must be included in the finalization of the sectoral strategy, which relies on World Bank support for its operations in the sector. This is why **we focus on tax measures while recommending that this measure target kerosene which is used proportionally more by poor households**. Our estimates show that a 10% reduction of the price of kerosene could lead to a 0.4% increase of the well-being of the poorest households, whereas these gains would be limited to 0.2% for the richest ones. This regressive effect does not seem as great if the tax rebate related to energy products like electricity, oil or diesel (and the tax cost would also be much higher).[152]

127. Finally, one should conclude this discussion with the reminder that if these tax relief measures on rice and kerosene are justified in the short-term to reduce the harmful effects related to rising international market prices, their impact will remain temporary if these price rises are permanent which actually seems to be the general perception of international experts. In the end, all things being equal, domestic prices will end up aligning with world prices. These measures must therefore be perceived as transitional interventions whose objective is to enable the authorities to put their sectoral programs in place both in the agricultural and the energy sectors and to promote the increase and diversification of national productions.

2. Targeting vulnerable groups through the development of programs for the promotion of employment.

128. For a lot of workers, access to a job is difficult, justifying the program of actions proposed in Pillar 3. For some vulnerable groups, like young people looking for their first job or women in rural communities where more than 300,000 newcomers will flood the labor market every year, this challenge is just about insurmountable. In this context, we propose to extend the programs in support of employment, that currently only utilize 1.5% of the government budget, which is marginal compared to international standards.[153]

[152] For details, cf. op. cit.

[153] The VATSI (« Malagasy Office for the Promotion of Full Employment » or *Office Malagasy de Promotion pour l'Emploi pour tous*), created by Decree of June 27, 2006, as an EPIC is another interesting example which illustrated both the will of public authorities to implement the « employment » measure in achieving the MAP and the lack of apparent overall coordination in implementing the employment sectoral policy. The resources however remain derisory.

129. The marginalization of these programs in support of employment is partly due to the lack of systematic monitoring and evaluation of their results. It is therefore urgent that systems be put in place that, not only enable to improve the efficiency of the concerned agencies, but also their ability to attract additional financing from the government as much as from development partners.

130. In this context, we propose to structure their approach around the two following sequential actions:

- **Improving the management of existing programs**. The lack of control and monitoring, both at the financial level and in terms of their impact in the field, is detrimental to the efficiency of these programs. It means that the concerned institutions must put genuine internal control and monitoring mechanisms in place. So doing, the review of the documents that are presented will have to be facilitated, projects will have to be certified and selected to better monitor on site those that have been selected. In parallel, these measures will have to come with external and independent controls, for example by the Government Accounting Office or by other State mechanisms. As in any control, it is important to have a specific schedule to avoid shifts and delays that could accumulate over the years.

- **Increasing the budgetary resources allocated to active programs in support of employment**. This recommendation must follow (and not precede) the set-up of an efficient control and monitoring system, but it remains essential for two major reasons. The first one is that the resources given to these programs are insufficient, whereas the majority of the Malagasy population is misemployed or under-employed. As an illustration, while being otherwise equal, if the Malagasy State dedicated as many resources for these programs than Sweden, 250,000 workers could be affected compared to 25,000 today. The second reason is that getting additional resources, based on the quality of the results achieved, would act like an incentive which in turn would improve the management of these programs. To that effect, this financial effort should be supported by donors, most having neglected to directly support employment in their assistance strategies in Madagascar.

131. However, not just any program in support of employment is adapted to an economy like Madagascar's. Experience has shown the validity of concentrating on labor intensive public works and programs that offer training and microcredits to the target populations. Based on this, the Government must therefore continue to favor labor intensive public works that have proved themselves efficient to help some communities' target populations. A coordination effort between the existing programs is however desirable, not only to reduce operating costs, but also to avoid duplicating the interventions and thus improve the targeting of vulnerable groups.

132. Programs that aim at supporting self-employment and job creation in micro-enterprises must pick up the principles which have made the apparent success of the PER, the results of which are described in chapter II.4. It is crucial that these programs supervise their financial support by training the beneficiaries. They must also target their interventions on the most vulnerable groups, starting with young people. Finally, as

reminded above, they must be accompanied by strong monitoring and evaluation mechanisms to avoid risks of abuse or of political takeover. International experience proves that these risks are not harmless,[154] but they can be avoided as illustrated in the examples presented in the box 24 below.

Box 24: The integrated self-employment promotion and microcredit programs

Uganda: Program for the promotion of children and Youth (PCY) was set up between 2003 and 2006 in the framework of an integrated approach. It aims to promote the employment of disadvantaged young people who are unemployed or under-employed, particularly in rural areas, by offering services such as: (i) the promotion of social work; (ii) information and advice; (iii) support to entrepreneurship and self-employment; and (iv) development of local skills (traditional medicine, AIDS prevention, etc.) The program also offers aid to refugees. The program rested on the collaboration between a lot of agencies and ministries including those of Labor, of Youth and of Education to develop synergies and favor its alignment with the national youth employment strategy. The first 2004 assessment showed that the income of participants was on average 26% higher than the one of the members of other communities. In addition, the main sources of the youth's revenue came from salaries (23%) and group activities (38.5%), whereas in other communities they were from subsistence agriculture (76%). Finally, the program built the human, institutional and methodological capacities of the government and other participants in their effort to support young people.

Philippines: The Farm Youth Development Program (FYDP) aims to promote employment with the youth in rural areas. The program targets young people 15 to 24 y.o. and offers training specialized in management as well as activities such as international exchanges and internship through its collaboration with the Department of Agriculture, Livestock and Fishing. It also implemented financial support for micro-businesses and small-scale projects. Between 1989 and 1992, the program offered training to a total of 2,436 farms and credits to over 156 micro-businesses in 78 provinces.

***Kenya: Baobab Project** is a program managed by an NGO which teaches young people still in secondary school skills to reach economic independence and this in partnership with secondary schools. It targets young people, mainly women, located in rural areas and is structured around the following three elements:*

- *General skills: introduced during the 2nd and 3rd years of the secondary cycle aiming to promote communication, information and self-confidence.*
- *Entrepreneurial skills: Courses introduced during the 4th year of the secondary cycle aiming to transmit knowledge on business and project management, including the organization of internship and concrete exercises.*
- *Financial support: the participants can submit projects to a committee made up of private sector representatives to obtain microcredits as well as to launch an activity. Moreover, every year, 3 or 4 100 dollar-prizes are also given to the best students of that year. This program's assessment showed that 50% of the financial supports allowed developing activities with profit margins, even if around 20% of the others ended with their activities failing.*

***India: Microcredits for youth.** The initiative led in India called Commonwealth Youth Credit Initiative (CYCI) offers microcredits through the specific targeting of potential beneficiaries. It targets unemployed young people and also offers accompaniment measures such as technical training and assistance. The objective is to create employment opportunities at a lesser cost by promoting self-employment and small enterprises while encouraging the rapid development of youth and organizations. The credits are offered at subsidized rates in partnership with NGOs and corporate training and assistance providers. The program is structured along three successive stages: (i) Pre-Credit (targeting and pre-selection); (ii) training program (course, technical assistance, etc.); and (iii) financial contribution (credit, financial program, course and monitoring and assessment). In India, the CYCI started with a 3 year pilot project through which 82% of the beneficiaries were able to sustainably start and establish an activity. Women's participation went beyond 75% of the total which reached 2,500 young people overall. This success allowed extending the program to several Asian and Latin American countries. In Africa, it was initiated in Ghana in 2005 and contacts were made with authorities in Cameroon, Mozambique, the Seychelles and Sierra Leone*

Source: Pezzullo (2005) and Betcherman et al, (2007).

[154] For an illustration of these in Senegal, cf. World Bank *Country Economic Memorandum*. 2007.

3. Ensuring interregional balance to improve the connectivity between regions

133. The emphasis put on the growth poles in the Government's development strategy presents the inherent risk of causing an imbalance between these regions and the rest of the country. This gap can be a source of conflict, particularly when taking ethnic tensions and the distance of the pockets of poverty from the growth areas into account.

134. Before we develop a series of recommendations, it is useful to remember that unity does not mean equality or convergence and that the growth pole approach explicitly recognizes that the speed of growth will vary from one region to the other. In principle, the Malagasy Government can always remain inactive and let market forces operate. Indeed, the presence of an imbalance between regions should gradually be reduced by the movement of the working population toward working positions and promotion opportunities which will increase in the growth poles. This dynamics will certainly occur but, as the results of the Commune Survey have shown, the movements of population will spread out over time because of the social, political and economic characteristics in Madagascar. We have to admit that even in Asian countries like China, these movements took nearly 20 years. It is only today that the majority of the Chinese population is located in the Western coastal areas of the country, i.e. those with high economic growth.

135. The slow speed of adaptation and the transition costs justify an intervention by the government, in light of international experience, can act in two complementary manners. The first one is to reduce the « distance » factor by pursuing a policy promoting the circulation of people and of production units to high-growth regions. The second manner is to try to minimize interregional differences with a tax redistribution policy. The advantages and limitations of these interventions are examined below.

136. **The Government can reduce the distance factor by developing transport and communication networks between regions**. This instrument is obviously at the heart of the sectoral transport and communication strategies put in place by the Government. In the end, the isolation of the Fort Dauphin region should decrease, facilitating trade between the latter and the rest of the country. Since these are long-term efforts, they must come with appropriate measures for the factors which can have a short-term influence. In this perspective, it becomes useful to favor the dissemination of information relating to regional development opportunities. Indeed populations, when particularly isolated, which is Madagascar's case, suffer from a chronic deficit of information. The experience of Poland, where the Government implemented an information and assistance program for (potential) immigrants, shows that such initiatives can facilitate the process.

137. The authorities also have the option of considering the use of non-financial and financial incentives to encourage population movement toward regions with faster opportunities for growth. Among the non-financial incentives, the set-up of reception conditions which enable integrating new arrivals must be ensured by proposing new schools and health centers. It is also useful for the legal system to function to solve possible conflicts regarding the respect of property rights. The implementation of an

integrated program is often useful to reduce the tensions between immigrants and local populations.

138. Often, the government is tempted to use financial incentives, but we want to demonstrate that it is preferable to resist such temptation. International experience reminds us that these interventions are costly and their efficiency doubtful, in particular in developing countries where the direct taxation system is still marginalized. For example, financial incentives for natural persons are fiscally costly and perverse; since they generally benefit other people than those who are supposed to move. They have been tried out with little success in Indonesia in the 80s.[155] The efficiency of tax incentives for businesses is also mixed since taxation levels seldom play a decisive role in the location decision of a company.[156] This is much more linked to access to developed land, the guarantee of property rights and the availability of a qualified and inexpensive workforce. Resorting to incentives would furthermore go against the tax strategy currently followed by the Malagasy authorities which aims at streamlining the system by eliminating as many special regimes as possible.

139. **In addition to striving to reduce to reduce the « distance » factor between regions, the authorities can use fiscal policy to control the gaps of growth between regions.** This policy must serve to reduce the transition costs between regions and not be an instrument aiming at interregional convergence. This distinction must be understood to avoid any confusion and the criticisms made about the European Union (UE) regional policy of these past years.

140. *A fiscal policy that emphasizes people (the mobile factor) in the underprivileged regions and not infrastructure or physical capital (fixed production factors) is recommended.* To that effect, access to education system is crucial since not only are better educated people more likely to emigrate toward the most favorable regions but they are also liable to adapt more easily to new conditions and come out of poverty. A recent study in Brazil confirms that educated people are twice more likely to emigrate to another region than those without an education. Eventually, a virtuous circle can establish itself: on the one hand, education which promotes immigration; on the other, immigration which encourages education since households incorporate the expected returns in others regions to their decision to invest in human capital.

[155] See A. Adhiati and Bobsien, 2001 for a description of this experiment.

[156] For an overview, cf. Wells. Allen, Morisset and Pirnia*, Using Tax Incentives to compete for Foreign Investment: Are they Worth the Costs*?" FIAS Occasional Paper, 15.

Table 4: The emerging products to promote

Product description	Average annual export growth 2003-06 (%)	Average annual growth in world imports from all sources 2003-06 (%)	Main current markets 2006	Largest unexploited importing markets 2006
Bleached woven cotton fabric	208402	4.38	EU, Mauritius	India, US, Morocco, Brazil, Mexico
Porphyry (granite)	85956	18.26	EU, China	US, Switzerland, Canada, Trinidad, Thailand
Women's anoraks	18483	8.94	EU	US, Japan, Hong Kong, Canada, Switzerland
Animal feed	13894	9.18	Not specified	EU, US, Japan, Russia, Indonesia, Mexico
Dyed plain cotton weave	10282	0.12	Mauritius, South Africa	China, Hong Kong, EU, Macao, Mexico
Lids	6645	13.68	EU	US, Canada, Mexico, Russia, Australia
Stamps & stamp impressed paper	4841	16.12	EU	India, Ghana, US, Malaysia, Mongolia
Parts of slide fasteners	4593	1.33	Not specified	EU, China, Hong Kong, Mexico, South Korea
Plastic kitchenware	4180	14.16	EU	US, Canada, Hong Kong, Japan, Mexico
Men's coats	3667	35.27	US, Canada, EU	Aruba, Japan, Hong Kong, Mexico
Mattresses	3159	23.37	Kenya	EU, US, Canada, Japan, Switzerland, Norway
Scrap iron	1287	27.61	India, Singapore	EU, Turkey, China, South Korea, Taiwan
Dyed plain cotton weave	1233	0.37	EU, Mauritius	Hong Kong, China, Morocco, US
Printed plain cotton weave	875	10.66	South Africa, Mauritius, EU	China, Hong Kong, US, Ukraine, Brazil
Aerials	871	20.82	US, Mauritius	EU, Singapore, China, Japan, Canada, Mexico
Printed plain cotton weave	591	-5.84	China, Mauritius	EU, US, Hong Kong, Canada, Australia
Sugar	563	19.76	EU, Comoros, South Africa	Pakistan, US, Indonesia, Syria, Mexico
Knitted hats	561	8.28	EU	US, Japan, Hong Kong, Canada, Saudi Arabia
Women's cotton jackets	487	24.28	US, Canada	Hong Kong, US, Japan, Singapore, Australia
Unbleached plain cotton weave	445	-8.90	EU, Mauritius	Hong, Malaysia, China
Dyed woven cotton fabrics	424	-1.51	US	EU, China, Morocco
Scrap tinned iron	346	25.81	India, Singapore, Bangladesh	EU, Malaysia, India, Pakistan, Singapore
Cargo containers	313	17.09	Mauritius, South Africa, EU	US, Australia, Norway, Japan, Canada, Russia
Perfumes	311	11.65	EU, Mauritius, Thailand	US, Singapore, Russia
Dyed plain cotton weave	309	-0.25	South Africa, Mauritius, Morocco, EU, Sri Lanka	Hong Kong, China, India, Brazil

Source: Gillson [2008]