DRAFT

Volume 1

MADAGASCAR

Diagnostic Trade Integration Study

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ACRONYMS

ACIS	Advanced Cargo Information System
ACP	Africa, Caribbean, Pacific group
AERC	Africa Economic Research Consortium
AGOA	Africa Growth and Opportunity Act
ANGAP	Association Nationale pour la Gestion des Aires Protegées
ASYCUDA	Automated System for Customs Data (Software Provided by the UN for Managing Customs Clearance Functions in Developing Countries)
B2B	Business to Business
BFV	Bank Fampandrosoana Varotra
BFV-SG	BFV-Société Générale
BLNS	Botswana, Lesotho, Namibia and Swaziland
BMOI	La Banque Malgache de l'Océan Indien
BNI-CL	BNI-Crédit Lyonnais Madagascar
BOT	Build, Operate and Transfer
BSM	Banque de Solidarité Malgache
BTA	Treasury bonds
BTM	Bankin'ny Tantsaha Mpamokatra (Banque agricole)
BTM-BOA	Bankin'ny Tantsaha Mpamokatra-Bank of Africa
c.i.f.	Cost, Insurance and Freight
CBI	Cross-Border Initiative (See RIFF)
CEMAC	Communauté Economique et Monétaire de l'Afrique Centrale
CET	Common External Tariff
CL	Common Law
CMA	Common Monetary Area
CMCS	Centre Malgache de la Canne à Sucre
CMT	Cut, Make and Trim
COMESA	Common Market for Eastern and Southern Africa
COMTRADE	Commodity Trading Statistics Database of the United Nations
CU	Customs Union
DFID	Department for International Development
DHL	DHL International Ltd. (International Express Carrier)
DRC	Democratic Republic of Congo

DTS	Data Transmission Services
EAC	East African Community
EBA	Everything But Arms (EU liberalization initiative)
EC	European Commission
ECOCERT	Ecological Certification Agency
ECOWAS	Economic Community of West African States
EDF	European Development Fund
EIA	Environmental Impact Assessment
ENI	Ecole Nationale d'Informatique
EPA	Economic Partnership Agreement
EPM	Enquêtes Permanente Auprès des Ménages
EPZ	Export Processing Zone
ERP	Effective Rate of Protection
ESA	Eastern and Southern Africa Region
EU	European Union
FAO	Food and Agriculture Organization
FASP	Fonds d'Appui au Secteur Privé
FDI	Foreign Direct Investment
FER	Roadway Trust Fund
FIAS	Foreign Investment Advisory Service
FOFIFA	Centre National de Recherche Appliquée au Développement Rural
FORMACO	Formation Madagascar Confection (former name for AFD, Agence Française pour le Développement)
FTA	Free Trade Area
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
GOM	Government of Madagascar
GOTICOM	Groupement des Opérateurs en Technologie de l'Information et de la Communication
GPT	Generalized Preferential Tariff (Canada)
GSP	Generalized System of Preferences
HCR	Head Count Ratio Index
HS	Harmonized System (of tariff nomenclature)
IBS	Impôts sur les bénéfices des sociétés
ICC	International Chamber of Commerce

IF	Integrated Framework
IFC	International Finance Corporation
IFPRI	International Food Policy Research Institute
ILO	International Labor Organization
IMF	International Monetary Fund
INSCAE	Institut National des Sciences Comptables et de l'Administration des Entreprises
INSTAT	Institut National des Statistiques
IOC	Indian Ocean Commission
IOR	Indian Ocean Rim
IPR	Intellectual Property Rights
ISDN	Integrated Services Digital Network
ISIC	International Standard Industrial Classification
ISO	International Standards Organization
ISP	Internet Service Provider
IT	Information Technology
ITC	International Trade Center
JIT	Just In Time
L/C	Letter of Credit
LAN	Local Area Network
LDC	Least Developed Country
LDCT	Least Developed Country Tariff (Canada)
LDI	Landscape Development Interventions
MFA	Multifiber Agreement
MGF	Malagasy francs
MID	Marché Interbancaire de Devises
MISA	Matrise en Informatique et Statistique Applique
NTB	Non-Tariff Barriers
OECD	Organization for Economic Cooperation and Development
OMERT	L'Office Malagasy d'Etudes et de Régulation des Télécommunications
PAIGEP	Programme d'Appui Institutionnel à la Gestion Publique
PGR	Poverty Gap Ratio
PNUD	Programme des Nations Unies pour le Développement
PPT	Pro-Poor Tourism

PRIDE	Programme Régional Intégré pour le Développement des Echanges
PSI	Pre-Shipment Inspection
PTA	Preferential Trading Area (for Eastern and Southern Africa)
QUAD	Canada, European Union, Japan and the United States
RFT	Réserves Foncières Touristiques
RIFF	Regional Integration Facilitation Forum
RoO	Rules of Origin
RTA	Regional Trade Arrangement
SA	South Africa
SACU	Southern Africa Customs Union
SADC	Southern African Development Community
SAFE	South Africa / Far East Cable
SCAC	Service de Coopération de l'Ambassade de France
SDR	Special Drawing Rights
SME	Small- and Medium-scale Enterprises
SPS	Sanitary and Phytosanitary Standards
SSA	Sub-Saharan Africa
SYMA	Syndicat des Métiers d'Art (Union for Art Works)
TA	Technical Assistance
TBT	Technical Barriers to Trade
TEU	20-foot Equivalent Unit
TMP	Tourism Master Plan
TS	Technical Standards
TSA	Tourism Satellite Account
TSS	Trade Support Services
TST	Taxe sur les Transactions
TUPP	Taxe Unique sur Produits Pétroliers
TUT	Taxe Unique sur les Transactions
TVA	Taxe à la Valeur Ajoutée
UCB	Union Commercial Bank
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organization

US	United States
USA	United States of America
USAID	United States Agency for International Development
VAT	Value-Added Tax
WAEMU	West African Economic and Monetary Union
WB	World Bank
WCO	World Customs Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

PREFACE

This report was initially drafted following a visit by a team of foreign and local consultants who worked in Madagascar on July 7–28, 2001. The team was guided by the Ministry of Commerce and Consumer Affairs. The focal person in government was Mr. Rasolonjatovo Andrianirina, Director General.

The study team consisted of Greta Boye, Olivier Cadot, Ian Christie, Elizabeth Crompton, Philippe Hein, Ronald Kopicki, Michael Lane, Christiane Leong, Jan-Erik Van Leeuven, Jaime de Melo (chief of mission), John Nasir, Alessandro Nicita, John Paton, Patricia Rajeriarison, Olivier Rajonson, Luc Razafimandimby, Armit Sharma and Wendy Takacs. The report draws heavily on a series of background reports prepared by the United Nations Development Program (UNDP) as well as from reports prepared by the International Trade Commission and the United Nations Industrial Development Organization (UNIDO).

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Due to a political crisis following the Presidential elections in December 2001, the IF process in Madagascar was suspended. Upon the request of the new administration, the process was restarted with Madame Leong Ho Yng Christiane as the government-identified focal point. Volume 1 of this report has since been updated and presented at a National Validation Workshop held in Antananarivo on July 17, 2003.

The complete report consists of three volumes:

- Volume 1: Executive Summary and Overview with an Addendum [Analysis of Regional and Preferential Trade Arrangements]
- Volume 2: Background Reports
- Volume 3: Annexes and Statistical Annex

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EXECUTIVE SUMMARY

Madagascar's economic evolution since the end of the 90s has been marked by the development of several sectors of activity (including fishing, free exporting companies, tourism) which could bring the fulfillment of other existing potentials in their wake, in spite of the halt caused by the 2002 crisis. The island is characterized by a fragmenting of activities, notably because of its size; of the wealth and diversity of its natural resources; and of a dispersal of its capacities, both public and private. An integrated and harmonious development effectively requires an optimal management of the flows, the merchandise; the basic services; the people; and the information from different players, be they public or private, in order to attain an opening up of the regions, a fluid and broadened domestic market; better competitiveness and greater integration in globalization, in view of a growth directed towards the effective reduction of poverty.

Should the economic trends of these last years be confirmed, the current period of recovery is opening genuine perspectives through a concentration of resources (i) on the capacity building of the players both public (notably those departments in charge of supporting trade, the administration of customs and the sectors' regulatory bodies) and private (within the framework of an effective liberalization of trade), (ii) on domestic infrastructures (roads, information and communication technologies, water and electricity supply) and those that are important in terms of external trade (international ports and airports, the international communication networks entry points) and, (iii) on the enhancement of the business environment in order to secure existing investments and increase Foreign Direct Investments (FDI).

One should however not lose sight of the fact that integration is a long-term process that requires monitoring by national institutions and development partners at several levels.

Recent Economic Trends

Madagascar started the 21st century in a favorable position: Madagascar's economy restarted after years of negative GDP growth, showing an average increase of 4.6 percent between 1997 and 2001. The growth increase has been mainly due to the non-agricultural sector, notably services, whose growth was over 5 percent from 1996 on. The manufacturing sector showed a similar increase during the same period. The agricultural sector, however, has continued to stagnate. Fishing is the only agricultural sub-sector which has grown since 1997.

The establishment of the Export Processing Zone (EPZ) regime has been a success, though EPZ contribution to GDP remains modest (about 2 percent). Between 1996 and 2001, EPZ activity grew at an average rate of 20.2 percent, textile product exports expanded significantly (e.g. by 40 percent in 2001 thanks to the preferential access of clothing items to the American market within the AGOA), and jobs were created. The growth of the shrimp sector is also a positive point and demonstrates Madagascar's capacity to adhere to complex production and export standards, and to meet demanding

international sanitary criteria. The genuine development of information technology companies will take place when the costs of connecting internationally are lowered.

With the exception of EPZ, Madagascar's growth is essentially in the sectors that produce non-tradable goods or services. This direction that has been taken by production resources can be explained by the progressive disappearance of trade barriers in the other sectors of tradable goods. Malagasy companies, used to high protection levels, have not been able to restructure or sufficiently invest in order to meet the increased competition of imported products. Substantial barriers at entry still continue without the restructuring process progressing fast enough.

The good and steady achievements in terms of export since 1996 show that competitiveness has been maintained, in spite of a drop in 2001. Malagasy exports of non-factor goods and services have increased steadily from 20 percent of the GDP in 1996 to 30 percent in 2001 (and 16 percent in 2002). In 2001, export revenues for goods and services have increased by 13 percent (46 percent in 2000 and 47 percent in 2002), while export volumes have increased by 0.6 percent (38 percent in 2000 and 56 percent in 2002).

The economy's good performance of the last years has been mistreated by the 2002 post-electoral crisis. Economic growth went down 12.7 percent. The consequence of the crisis has been the slumping of overall activities, thus leading to a fall in production, technical lay-offs, and hence a reduction of the activity rate. Impacts were similar both for common law or EPZ companies.

Madagascar's reputation as a destination for FDIs is another indicator of international competitiveness reflecting a global perception of the business climate. It was relatively good in recent years, until the 2002 crisis. The balance of payments estimates show that the private capital flows (including the privatization revenues) went from 4 million SDR to 73 million SDR in 2001. As a share of GDP, this represents a tenfold increase (from 0.2 percent to 2.1 percent between 1996 and 2001), a major part of which went toward EPZs. In 2002, this contribution fell to 0.1 percent of GDP. Today, it is important that Madagascar restores its good reputation and its competitiveness as a destination for foreign direct investment.

Strengthen The Achievements And Overcome The Constraints

The first indicators of the post-crisis period (second half of 2002 and first quarter of 2003) show the recovery of a growth led by exports. Even if the trends noted before 2002 are confirmed during the coming months, several points require particular attention in a quest for sustainable growth.

As mentioned above, the first point is regaining the confidence of domestic and foreign investors, whether they are already present locally or are still to come. This implies the improvement of the investment climate in order to draw sufficient FDIs and establish a solid foundation for growth in an economy where the national savings rate is very low and where the factors of competitiveness were not always favorable even before the crisis. The challenge is to ensure the continuity with the pre-crisis period while

innovating in terms of the effectiveness and efficiency of the application of the different enticement measures and the different provisions liable to be of benefit to investors, including the preferential access to regional markets and those of the OECD countries.

The second point relates to the segmentation of Madagascar's economic growth. The dynamism of EPZs contrasts with a certain inertia on the part of the common law industrial sector. The EPZ regime allows for the rapid progress of reforms in a restricted framework, without encountering the resistance linked to the overall economic reform efforts. The emergence of a two-tier economy due to the existence of two different regimes is therefore not surprising. However, it is important to stop this situation from becoming a pretext to not undertake actions that affect the whole economy.

The third point is the volatility of investments in EPZ, which are particularly vulnerable to changes in the business environment such as demonstrated by the 2002 crisis. The end of the special regulation on textile products of the AGOA in 2004, nearly coinciding with the end of the Multi Fiber Agreement (MFA) in 2005, will certainly erode the real benefits guaranteed by the preferential agreements with the Least Developed Countries (LDCs) of which Madagascar is a part in the international textile sector. It is therefore essential to rapidly secure these investments by offering them a favorable national environment in terms of infrastructure, taxation, supply chain and a regulatory framework. If the construction efforts for such an environment succeed, then the EPZ will have the potential of becoming a model and a catalyst for the modernizing of the Malagasy economy as a whole.

The fourth point relates to EPZ capacity to create positive outsourcing toward the other sectors of the economy and more generally, common law companies. As in other countries, measures were taken for national producers to be able to supply EPZ by giving them access to duty-free inputs. In Madagascar as well, technology transfers must be facilitated by incentive measures so as to encourage partnerships between foreign and national companies, thus fostering the growth of a local sub-contracting industry. The texts ruling the EPZ must be revised in that direction in order to seize all the opportunities to allow for a real sharing of growth, the basis for sustainable development, and to reinforce the activities of other competitive sectors in EPZ like the food-processing industry and computer activities with a high added value.

The challenge for Madagascar, in the current post-crisis context, is to succeed in recovering quickly and consolidating the pre-crisis achievements, notably with regards to EPZs, in spite of all the future changes on the international markets caused by the many deadlines relative to trade agreements. The EPZ model could inspire new buoyant sectors geared towards exports such as the food-processing industry, the mining sector, or tourism that have the advantage of creating definite outsourcing for sectors whose activity is mainly located in rural zones, thus contributing to a relative opening up of the populations concerned and, effectively, to the reduction of poverty.

A Double Integration To Address A Double Enclosure

The integration to world markets and the integration of domestic markets, nowadays fragmented, are particularly efficient growth and poverty reduction vectors. As an island long closed on itself and far from export markets and certain supply sources, Madagascar must make more efforts than other countries to open itself up fully to international exchanges and to be competitive. Because of the weakness of the communication infrastructures, different regions of Madagascar are virtual islands, thus reducing the size of the domestic market and the efficiency of local industries.

Growth statistics of emerging country economies show that their integration to the world markets have resulted in an added contribution to annual growth, from 2.5 percent (during the 1980s) to 3.5 percent (during the 1990s). In order to do this, Madagascar must first guarantee the stability of its macro-economic policies (fiscal and monetary) and maintain a stable and competitive exchange rate. The State should also work towards establishing a simple and transparent incentive system. The fact that the country is a Member of the WTO and the reduction of the current rates' dispersal will contribute to making these efforts perennial. While benefiting from these new opportunities brought about by integration, Madagascar must also take measures to reduce potential costs. Investments in education and training, a steady attention to promptness in executing reforms and their timetable, as well as the setting up of effective and targeted social safety nets, will be important measures within this context.

A greater opening to foreign markets. Although not immediately obvious, one of the strongest barriers to the growth of the Malagasy economy arises from the multiple monopolies and other obstacles to free competition. Due to the lack of internal and external competition, the capacity to export outside the subcontracted activities of the EPZ is low. The diversification of the Malagasy export basket towards the regional markets, a necessary condition for Madagascar to benefit from regional integration agreements like COMESA or the IOC, requires improved export capacity in non-EPZ sectors. However, Malagasy companies can only be prepared to compete in foreign markets when they are accustomed to competing at home. It is especially important for Madagascar to create the conditions to enable it to take full advantage of these trade agreements, because they can potentially involve costs (loss of tariff income and more expensive products). To do so, in addition to a favorable business environment, the government must set up a permanent framework to accompany the development of export activities, with the necessary means to increase the knowledge of procedures and of potential markets relayed by private organizations.

A business environment that fosters the emergence of new practices and players. The opening up of the economy has, of course, reduced the importance of monopoly revenues in the domestic market. Profit margins have been reduced, and the needed investment and modernization of management methods is occurring. Nevertheless, the restructuring of the industrial sector requires new players and provision of new capital; which in turn requires the support of a well functioning and competitive banking sector. Currently this is not the case. Structural factors such as low domestic savings and long-term deposits that limit the banks' capacity to offer long-term loans without violating

prudential rules hinder the system. A number of institutional factors such as the difficulty that most borrowers face in providing sufficient collateral, and the possibility for banks to ensure sufficient profitability through low risk activities (such as currency exchange activities and public sector lending) have resulted in low lending to small and micro enterprises. Not surprisingly, the perception persists of the Malagasy banking sector as overly conservative in terms of its lending to small and medium scale enterprises.

A crucial competitiveness factor in Madagascar: the management of deadlines. Madagascar's labor costs and productivity is a comparative advantage in some industries with high labor intensity. Though necessary, this advantage is however not enough to attract private investments. Competitiveness, particularly in textile and apparel industries, has now taken new forms that somewhat attenuate the importance of this advantage. Indeed, for products whose marketing slots are measured in weeks, the indispensable factor of their competitiveness is less the attraction of labor costs than the reliability of the logistics in the supply chain and the capacity to meet delivery deadlines that are extremely short. The same type of consideration is applicable to the food-processing sector in which the critical factors are the reliability of the cold chain and the speed of the logistics and of quality control. Industries of this type require a high quality infrastructure, a good understanding of the needs and an efficient collaboration on the part of the competent administrative authorities.

In that capacity, the Information Technologies (IT) have two opposite effects on a country like Madagascar when it comes to integrating into the global market. On the one hand, they bring down transportation costs and contribute to making the country "less insular" on a geographical level. They thus open the way to support services projects to trade (the creation and management of databases, the setting up of information systems, the dissemination of information, on line processing, etc.), for which Madagascar has a comparative advantage in the French-speaking world. On the other hand, they also require a more effective administration and a quality infrastructure. The integration of this sector is therefore both an opportunity and a challenge.

The importance of infrastructure. Investments in infrastructure increase economic production and, consequently, represent a priority for any strategy of poverty reduction. An important effort will have to be undertaken in order to bring infrastructure to the level required by the Malagasy private sector. It is therefore necessary to take several contractual forms of public-private cooperation into consideration for the construction, exploitation and, finally, the transfer of heavy infrastructure (ports, airports, railways and toll roads). The dimensions of the rehabilitation and construction project requires a steering plan whose drafting the State, the private sector and the development partners will have to work on together in order to set the priorities, the calendar and the means after the systematic evaluation of the economic, commercial and social needs, and in order to ensure that there will be the clarity and stability needed to motivate investors. The construction and exploitation of infrastructure will bind the investors to funding that can easily be mobilized over a long period of time; but they will raise sensitive issues of profitability and tariffs, in case of a toll system. Consequently, it is essential that a climate of confidence be established.

The unavoidable rural development, integrated to the other economic sectors. Since 85 percent of poor populations are also rural, the development of agriculture is crucial for the reduction of poverty through a diversification of crops and the end of an agriculture of subsistence. Agriculture has been steadily declining over the last four decades and the overall situation of agricultural exports is not particularly satisfying. This decline stems from numerous factors, several of which are outside the field of trade and incentive regimes, including the weakness of the transportation infrastructure, the degradation of natural resources, the high risks to which agricultural production is subjected, the lack of inputs, limited access to credits and ill-defined land rights. The government's control over the subsidized sugar and cotton industries make up one of the factors that directly affect the effectiveness of the food-processing sector. Rice, one of the main consumer products for the poor, has suffered from frequent changes in import policies and from the lack of clarity in the long-term vision and strategy. Given the importance of rice for the poor (who tend to be net producers), it would be very useful to review the rice policies in detail.

The cotton industry is an essential element for the future development of the textile industry, particularly within the framework of AGOA that, in 2004, will require the use of local inputs in finished textile products in order to keep benefiting from the preferential access to American markets. Not only will the privatization of HASYMA be necessary, but so will the end of its monopoly on the purchase of cotton fiber from producers and its subsidies to the spinning industry. Currently, the cotton industry has to supply part of its production to national spinning mills at prices lower than those of the world market, thereby bringing down its profitability. Shrimp and vanilla are two areas in which Madagascar is competitive at the international level and in which control policies are, generally, satisfying. With regards to vanilla, the access to credits will be particularly important in order to ensure that small and medium scale exporters are able to keep taking part in trade efforts.

Tourism as a driving force of development. Tourism can contribute to opening enclosed areas. With a coastal region that is particularly appropriate for seaside activities and a unique wildlife, Madagascar possesses assets that are substantial in terms of the development of tourism. This sector has the possibility of generating activities in regions that have remained inaccessible to industrial development, and could have positive effects on the least-favored segments of the population by creating dynamic links with other sectors, such as crafts and agriculture. However, at this date, tourism does not meet the expectations linked to its potential. Paradoxically, Malagasy tourism is the least developed among the Indian Ocean islands (compared to Mauritius and the Seychelles) and comes up against serious handicaps. The diversification of markets is low (60 percent of the tourists are French), the costs of international and domestic air transport remain very high, and current accommodation structures do not allow for the development of a genuine industry. Other generic factors also contribute to discouraging investors in this sector, such as the lack of a site development policy that would enable the facilitation of land procedures and making sites viable, as well as heavy taxation (the sector is not considered an export activity). Finally, the lack of adequate public infrastructure (health and transportation) is another obstacle that puts Madagascar at a disadvantage compared to other destinations.

The mining sector reform. Like tourism, the mining sector has been identified in the draft Poverty Reduction Strategy Paper as one of the buoyant sectors for the reduction of poverty. The institutional framework was designed to adapt to small artisanal mining through the simplification of the granting procedures of mining deeds and of the commercialization mechanisms that would enable integration into the formal activities anywhere along the sector supply chain. The goal is to promote the mining assets by putting an end to fraudulent exports and by enticing the creation of added value in the country through the development of the processing activities of stones (cutting and setting). It is essential that there be a regulating and structuring of the domestic market and of the export of gemstones, within the framework of the mining sector reform, by setting up an adequate institutional framework and a policy that aims at promoting the products. Madagascar has the potential to eventually achieve a vertical integration of the mining sector by grouping the large and small structures into a processing industry for minerals that would be liable to create more jobs than those in mining alone. The EPZs can serve as a framework for this processing industry with a specific supply system in which the transactions would take place on the basis of stock exchange international prices on a local stock market, in order to secure foreign exchange and tax revenues.

Poverty integration and reduction. In Madagascar, as in the majority of LDCs, poverty particularly touches rural environments. About 77 percent of households in rural environments live under the poverty threshold (incomes of less than a dollar a day) while this rate is 52 percent in urban areas. . . This incidence of poverty reflects the inadequacy of Malagasy agricultural policies, the limitations of current commercialization channels, as well asthe poor state of communication and transportation networks. The fact that rural areas are largely enclaved limits the set of economic opportunities available to rural households, forcing them into a life of subsistence. Though growth is an important component of poverty reduction, it is not sufficient. It must go together with an increase in productivity for urban and agricultural workers which would result in wage increases, as well as added mobility for potential workers to shift between the different production areas. This implies tangible actions at the grassroots education level, professional training at every sector's level and the facilitation of circulation and reception of people.

The Need For A Transparent And Stable Regulatory Enticement Framework

The redefinition of the State's role. The Malagasy economy suffers from a paradox of simultaneous excessive and inadequate state intervention. On the one hand, state intervention is significant in entire sectors such as cotton, sugar, telecommunications and air transport. On the other hand, in education, health, and the supply of basic infrastructure (roads and medical), the state's functions are often not adequately carried out. The Malagasy State must redefine its role. Part of this redefinition will occur through privatization, with the aim of allowing fiscal savings to operate the related activities more effectively. Another part of this redefinition however, as indicated earlier, is to create an environment that supports the development of the market, for example, air transport or telecommunications. Thus, it is not a question of considering privatization as a simple transfer of credits between public and private sectors ensuring

mainly a maximum financial return. Privatization must be strategically planned in order to maximize the gains of effectiveness for the economy, which can imply, in certain cases, supporting attractive investors but also those that are less likely to establish monopolies (or monopsonies) in key sectors.

Good governance. Recent technological progress, particularly in the fields of telecommunication and energy, are liable to lower infrastructures cost while opening to competition, sectors which have been considered natural monopolies to date. In this context, the role of the state is essentially to watch over the proper application of these rules. This new role will require credibility and integrity from regulating bodies, as well as the possibility of an effective appeal in case of a dispute. In other words, the existence of a healthier regulatory and legal regime and the establishment of the Rule of Law. This profound desire for the Rule of Law and for good governance is manifested by sectors as a whole: tourism, common law industries, EPZs, the banking sector, etc. Even if it today is impossible to have a non-discretionary institutional framework, the latter remains the ultimate objective of any reform of regulatory and public procedures and of all discussions related to the definition of the public sector's duties.

The reduction of transaction costs. The high transaction costs between private actors or between private and public actors characterize all sectors of the Malagasy economy. The transaction opportunities within the private sector are limited by the presence of moral hazards that the legal system has little control over. Thus, credit risk limits the capacity of the banks to finance the growth of the economy. No long-term credit is available to finance investment, which limits investment opportunities only to investors who can finance themselves. Thus, while existing companies can make investments, experience stresses the importance of new actors in the identification of commercial opportunities (new technologies, new products and so on) and risk taking. The same constraints prevent banks from offering short-term credit to their customers, limiting the growth of internal markets. These constraints in access to credit are due partly to the limitations of the Malagasy financial system. They also reflect the low capacity of the legal system to guarantee contracts and to effectively impose sanctions in the event of litigation.

The customs services reform. The cost of transactions between the private and the public sector are also high. The customs service is one of the most critical interfaces between the public and private sectors in any economy integrating into world trade. In spite of recent improvements such as the appointment of an international service company in charge of setting up a risk management system and the development of a customs reform program, the service is up against serious problems. Despite the installation of the SYDONIA 2.7 program (and soon, SYDONIA ++), agents make little use of information technologies, notably due tolack of training and material, and still proceed to the verification of all customs declarations. The delays this causes are particularly prejudicial for sectors such as textile that are faced with extremely tight delivery schedules. Also, preferential trade agreements impose an additional heavy burden on customs services. Checking adherence of transactions to these agreements' regulations require the use of over 25 percent of customs services' resources.

A credible customs reform cannot be established without a cooperation framework between the government, the service company mentioned to accompany the reform, the private sector and the donor agencies.It must also include an agreed timetable, as well as performance indicators and monitoring procedures. If this plan is successfully implemented, its benefits will spread beyond the EPZs, with resulting immediate returns. Indeed, a successful customs reform could be used as a reform model for other public services (judicial services for instance) that are faced with similar operating problems.

Transparency and effectiveness. Numerous talks with economic operators and civil servants have shown that the overuse of discretionary measures is obvious, leading to a lack of uniformity in the application of measures, a lack of predictability, even an instability of regulations, and a legislation that is sometimes redundant and contradictory. The delays in granting the approval for the EPZ regime, for example, remains, to date, well beyond the official period of 20 days. This discretionary regulatory environment is the source of uncertainty in the business world, and represents an obstacle to trade and investment in Madagascar. Furthermore, the exercise of discretionary power increase even further the companies' transaction costs. These costs are higher for small companies since they are less likely able to absorb them.

To review the incentive measures. It would be desirable to further simplify the taxation structure and, as we have already emphasized, to reduce discretionary power. The experience of other countries in the tax field shows that a more transparent administration would be in a better position to improve its collection rate and its relationship with the private sector. Operating within the Malagasy tax system is still very complex, particularly for companies located outside of EPZs. The weakness of the collection rates reduces the effective tax base and therefore results in higher rates for registered tax payers, i.e., the formal sector outside of EPZs.

An Institutional Framework Adapted To A Better Coordination Of Actions

As shown by the Eastern European experience, structural reforms can mutually strengthen one another. Thus, in the Malagasy context, customs reform could reinforce the credibility of the EPZ, and improvement of communications could contribute to the efficiency of agricultural reforms. By putting pressure on the national industry, trade liberalization would encourage it to ask for tax reforms. In the end, the liberalization of air transport is a precondition to making the profits that can be expected from a tourism sector policy. The examples are aplenty. Consequently, in order to get a clearer picture of costs and benefits with regards to a status quo situation, it is important to look at these reforms as a whole, rather than separately.

The Integrated Framework is an opportunity to look at the evolution of sectors of activity (and the related reforms) from a double perspective of trade promotion and poverty reduction, at all the players' levels, both public and private.

The current institutional framework is very recent and bears several levels. The technical ministries (industrialization, trade and development of the private sector, and foreign affairs) have a certain experience though very limited capacities to assess,

monitor and implement the different regional and international trade agreements. including to conduct impact studies, develop negotiating strategies, monitor achievements, and coordinate with other ministerial departments. The creation of a Steering Committee for the Integrated Framework at the level of the Ministry of Trade aims at setting up and supervising the program of actions that come out of the IF. Furthermore, an interministerial "task-force" under the supervision of the Vice-Price Minister's office in charge of Economic Affairs has been set up to oversee regional trade integration issues. This task force has limited analytical capacities though there are plans for involving other players, such as the business community, the research centers and the NGOs.

In order to avoid the redundancy of structures and roles, it is important to validate an institutional framework that matches the government's objectives and priorities, and that would take into account the deadlines of regional and international timetables (the COMESA Customs Union, the Economic Partnership Agreements with the EU, the end of AGOA's special regulation on clothing, the end of the MFA etc.) by distributing the roles and the resources between the different entities involved, planning for consultation mechanisms with non-public players notably for better coordination and effectiveness of actions and mainly leading to a trade strategy and policy for Madagascar in the short, medium and long term. As of now, the position of trade in the PRSP does not prefigure the importance of market integration (domestic and international) and regulation on growth, the problems linked to the current incentive measures, as well as protection levels. Furthermore, the program of actions will have to include a method for systematic collection and processing of trade data through maintenance of existing programs and structures, such as the capacity building program of the customs administration implemented by a service company and the customs administration, and the National Statistics Institute (l'Institut National des Statistiques - INSTAT) that centralizes a major part of the trade related data.

PRIORITY ACTIONS

Reforms have costs - whether administrative, political or budgetary - and are difficult to carry out simultaneously. The hierarchization of reform is thus priority, particularly as previous experience of structural reform programs has shown the importance of sequencing of reform in establishing their credibility. In the case of Madagascar, a top priority is imposed by the upcoming changes in the international trading system. The Government established an inter-ministerial task force to coordinate the discussions on regional and multilateral agreements. Madagascar needs to reinforce its trade negotiating capacities notably with respect to future EPA negotiations with the European Union and the COMESA integration process. These actions would require the participation of international trade experts and the organization of workshops on relevant topics. With respect to EPA, Madagascar would have to focus on support measures to ensure that Malagasy exports could meet European standards and regulations, the extension of the Sugar Protocol and the modification of the rules of origin, as well as collaborating with other LDCs who share similar priorities.

In the medium term, Madagascar should be able to benefit from preferential market access opportunities, both at the regional level and in Quad countries. For that to happen, a top priority is to guarantee the anchorage of foreign investors and the long-term success of the EPZ. Second, the restructuring of public expenditures towards pro-poor expenditures (social sectors and infrastructure), which has already started, must accelerate. This would build an infrastructure that will make Madagascar more attractive for investment, open up the rural areas where poverty is highest and increase the productivity of the poor. Third, the legal and regulatory framework must be streamlined for all firms.

Most of the investments in the EPZ are still small and can easily be relocated. It is imperative that they are anchored or secured, given their importance for employment and growth. This requires a number of specific measures. The first in terms of priority is customs reform. This presupposes an overall plan that allows evaluation (in agreement with the private sector) of how to simultaneously improve the speed and consistency of control operations along with the collection rates. Any reform must be compatible with the existing budgetary constraints to be feasible. However, a reform of the customs service that limits itself to changes in procedures has little chance of being effective. I It is equally important to improve the working conditions and remuneration of customs agents in order to eliminate the incentives for corruption.

Overall, all the trends elsewhere (technological, world trade, or the development of the national economy) point to the same direction: a change in the philosophy of government intervention in the economy, with the State becoming less of an indiscriminate player and becoming more of a referee, especially in the presence of tradeoffs. To summarize:

- The Government’s responsibility is to point the right direction to all of society and to initiate the first steps in this direction.

- The responsibility of the private sector is to be equipped with representative and solid institutions at the professional, sectoral and interprofessional levels, in order to provide credible interlocutors in the implementation of the new policies.

- Development partners and donors can help by intensifying assistance for reforms, in particular in terms of technical assistance, and effectively implementing multilateral and bilateral agreements regarding opening of their markets.

TECHNICAL ASSISTANCE MATRIX: PRIORITY ACTIONS

Objectives	Priority Actions	Agencies/Existing external support	Timeline
Promote and secure investments	Support the development of a strategy to promote investments, notably FDI, including: (i) operationalization of an investment promotion agency; (ii) development of a clear and simplified Investment Code; (iii) extension of the "One Stop Window" for investment; (iv) alleviation of red tape formalities and establishment of regional desks (export activity centers); (v) improvement of incentive tax measures. Establishment or strengthening of organizations supporting firms through: (i) advisory and technical support, training, information; (ii) monitoring of project elaboration and management and partnership search.	WB, IMF	2003-2005
	Support to judiciary system in order to recover the confidence of investors, banks, and the private sector in general : training of magistrates, of judiciary personnel as a whole (since the National Police), support for anti-corruption.	WB, USAID, FFE	2003-2004
Maintain and Strengthen EPZ performances	Pursuance of the study on reshaping laws governing EPZ		
Facilitate financing of firms namely SMEs	Support the development of the financing system (bank credits) to respond to SME needs including through: (i) the creation of an adapted guarantee fund; (ii) the promotion of the banking sector by strengthening the system and encouraging new bank entries; (iii) an adapted legal framework; (iv) the modernization of services to be intensified and internal payments (computerized entry of ownership); (v) the establishment of a financial institution for the promotion of women entrepreneurship; (vi) the establishment of credits of proximity		
Adopt a transparent and simplified taxation policy	Evaluation of overall situation of tax and customs administration Evaluation of all taxes and of their relevance Setting up of an incentive tax system Dissemination of updated texts and laws	IMF	Immediate
Enhance performance of Customs Administration, notably with respect to its tax collection and trade facilitation functions.	Support for the ongoing study to establish priorities in customs reform and to monitor their implementation. The study is conducted by a team government representatives and the business community, with donor participation.	IMF	
	Support the reform program by integrating customs and the inspection firm (SGS) works involving a risk management system. Capacity building among customs departments (training, information system integrated to that of SGS, and the Ministry of Trade). Public dissemination of the customs performance (revenues, processing timelimits).	IMF	

Objectives	Priority Actions	Agencies/Existing external support	Timeline
	Customs Valuation: (i) support customs administration reform to comply with Customs Valuation practice; (ii) support to development of a Guide on CV for users with interpretive notes to ensure greater transparency; (iii) training of economic operators	To be identified	
Opening further external markets including regional ones.	Training of the public and private sector to improve its knowledge and awareness of the regional and multilateral agreements to which Madagascar subscribed	USAID, EU, FFE	2003-2005
	Strengthening the capacities of the Interministerial Task Force in charge of coordinating trade policy issues; establishment of a coordination and consultation body for civil society, Members of Parliament and the public and private sectors.	USAID	
	Cost-benefit analysis of the Customs Union, EPA and SADC (including customs revenue losses, trade diversion risk, potential trade flows by product type, rules of origin)	WB	
	AGOA: Development of strategy for identifying export opportunities to the USA, analyzing approach fees and related rules, analyzing the logistic and organizational costs (e.g. storage, cold storage system,etc), identifying possible key US marketing networks; and identifying possible financing sources and possible support for local exporting SME	WTO, USAID	2003-2005
	Market access besides AGOA: analysis of tariff barriers and non tariff barriers; assistance to foster compliance with international norms and standards in order to better penetrate these markets; support for the implementation of a national policy on quality.		
	Strengthening of the analytical capacity of Universities and research centers on trade policy related issues.	To be identified	
Promote tourism sector.	Completion of the Tourism Marketing Plan which defines Madagascar marketing positioning (including demand analysis, tourism type, products to be promoted, marketing strategy, role of stakeholders, priority and sequence of investment, nature of required financing). Support in cooperation with tourism groupings, to develop a Tourism Master Plan including a management plan of sites, with zoning, site development, and an overall environmental plan.	WB, EU	
	Strengthening of institutional capacity within the ministry of Tourism		
	Implementation of the open sky policy; privatisation of Air Mad to facilitate better partnership with other airline companies; and facilitation of operators' access to specific financing system		
	Strengthening existing capacities and support for the creation of an information system to enhance the base of statistic information (with creation of a satellite account for tourism)	WTO	
Diversify agricultural production, including export supply	Promote the integration of rural economy to industrial economy through the identification of exporting agro-industrial development poles	To be identified	
	Support to development and promotion of labels for export products such as essential oils, non-lineous products or organic agriculture products	To be identified	

Objectives	Priority Actions	Agencies/Existing external support	Timeline
	Study of possibilities for reconversion to crops other than products which undergo price falls on international markets (promotion of research in FOFIFA)	WB (PSDR)	
	Utilization of certification procedures recognized internationally for biological Agriculture		
	Support for the professionalization of agricultural economic operators (agricultural system restructuring, respect of local and international norms, producers' negotiations capacity, training)	UNDP, USAID, Ffe, Switzerland	
	Strengthening of consultation platforms for each cluster at different geographical levels		
	Development of micro-finance in rural environment, facilitation of access to financing and adjustment of rates according to the risks related to different agricultural activities	To be identified	
Further integrate cotton industry	Privatization of the cotton ginning State-owned Company (HASYMA)	WB	
	Study of integration of cotton industry	To be identified	
	Analysis of supply chain (kind of inputs, processing timelimits, prices, value line)	To be identified	
	Adopt measures ahead of the end of preferences granted in the framework of AGOA (including identifying the optimal supply sources in fabrics and threads, in accordance with the conditions governing the textile industry	To be identified	
Promote visibility of fishing sector and livestock farming	Development of a fishing policy (overall objectives, operation framework for the sector as a whole, etc..)	To be identified	
	Compliance of control authorities as well as private enterprises with rules including with respect to management structure, independence of official services, resources, staffing and training, legal and coercitive powers, control documents, laboratory services, import control, zoosanitary controls, food security control. Facilitating financing through specific credit lines for required equipment	EU	
	Financial support to SME including exporting ones, to promote their compliance with standards and norms. Support for the acquisition of motorized engines. Support to strengthening SME associations' capacities for better management of resources. Technical support for the evaluation of stock.		

TECHNICAL ASSISTANCE MATRIX:
ACTIONS IN SUPPORT TO OR IN COMPLEMENTARITY WITH PRECEDENT ACTIONS

Objectives	Essential actions in support to or in complementarity with precedent actions	Agencies/Existing external support	Timeline
Redefine the role of the State	Study on the impact of privatization of public enterprises in the following sectors of sugar, cotton, air transportation, telecommunications, energy production, water distribution, and infrastructure managements (including ports).	WB	2004-2005
Enhance business environment and institutional framework	Carry on the efforts to improve the coherence of business related legal and regulatory provisions (notably with respect to taxation, immigration, export, land tenure); accounting for sectoral specificities	USAID	2003-2005
Promote handicraft	Simplification of procedures for the establishment of handicraft enterprises Improving the coordination between different ministerial departments and the private sector Bring support to professional associations.		
Strengthening the external trade information system.	Training of public servants (INSTAT, Customs, Ministry of Trade, and decentralized authorities) and of private sector associations with respect to data collection and market analysis Set up of a network including the product list, the market prices, and of a directory of exporting and importing operators	CCI, UNCTAD	2004-2005
Develop and implement an export promotion strategy	Assessment of the need for the creation of an Export Promotion Center (feasibility study, analysis of its financial sustainability and set up).	CCI, UNCTAD	2004-2005
	Support to set up permanent exhibition showcases of exportable products within Madagascar Houses and Chambers of Commerce; promotion of Malagasy products through the internet; organization of and participation in international economic events; training of Malagasy attaches and advisors abroad	CCI, UNCTAD USAID	2004-2005
Secure the land tenure system in a clear and transparent way	Support for the modernization of land tenure system through training of land tenure administration (to be computerized) and heo implementation of the renovated land tenure systems.	Invitation To intent manifestation under way at Ministry of Agriculture	
Strengthen competitiveness of Malagasy products	Support sectoral programs for compliance with international standards (including through information, support to investment, and training). Strengthening the regulatory framework for competition and consumer protection.	To be identified	
Develop and enhance physical infrastructures	Conduct economic impact studies on infrastructure projects – including multimode transportation -- integrating the needs of private sector and user groups.	To be identified	

Objectives	Essential actions in support to or in complementarity with precedent actions	Agencies/Existing external support	Timeline
	Support the rehabilitation of railway infrastructures as a whole. Ensure the sustainability of the railway system before its conversion to private operators.	ADB, EU, HIPC, USAID	2003-2008
	Rehabilitation of 16,000 km of national and secondary roads, as well as of rural roads in the six provinces of Madagascar.	WB	2003-2005
	Strengthening of Administration's management capacity and good governance of Infrastructure programs and projects (including Road Maintenance Funds (FER)	To be identified	
Develop the private sector at regional level	Support to sectoral professionalization (cattle breeding, handicraft, artisanal fishing, agriculture products, facilitation of access to agriculturers and quality plants to Enhance direct community-based support services to improve access to information. Promotion of access to affordable IT centers.		
Strengthen consultation mechanisms between the Administration and the Private Sector	Strengthening consultation bodies including the Support Committee To Enterprise Steering (CAPE)	WB, USAID, UNDP, Governance Programs	
Promote technologies of Information and of Communication (TIC)	Support for the development of a strategy in the area of TIC (including definition of an adapted legal and fiscal framework)	UNDP	
	Tax exemption of TIC material and software for better popularisation		
	Establishment of training institutes to develop required competences (such as The National Computering School)	EU	
Strengthen the transparency, governance and management of mineral resources.	Improve regulations involving marketing of mining products. Simplify stone export procedures by establishing a stone counter and a single desk. Strengthening coordination with other ministries (namely those of the environment, social protection, of decentralization	WB, USAID, SCAC, South Africa	Short term
	Acceleration of the implementation of governance program in the mineral sector (PRGM) Community-based management and promotion of private mining investment Strengthening of geological infrastructure and updating of geoscientific information	WB, USAID, SCAC, South Africa	Medium term Long term
Promote essential	Facilitation of access to revolving credits.		

Objectives	Essential actions in support to or in complementarity with precedent actions	Agencies/Existing external support	Timeline
oils	Revision of laws and regulations relative to the exploitation of emerging field products Removal of all charges and rebates on export essential oils (decentralized collectivities, concerned ministries). Technical and financial support for market canvassing and contract finalization Promotion of semi-intensive cultures; support to study trips; improvement of essential oil field definition in national accounts; set up of the sector databases with an update for economic and commercial watch.		

CHAPTER 1
ECONOMIC BACKGROUND

1.1 RECENT ECONOMIC PERFORMANCE

1.1.1 The Malagasy Economy Prior To The Crisis

During the last few years, leading up to the 2002 post-election political and social crisis, Madagascar's economic situation improved steadily. The economy is currently being revitalized.

Since the mid-1980s, the Malagasy government has implemented tax and administrative reforms as well as financial and economic liberalization. As a result, the economic performance at the end of the 1990s resulted in a sustained economic recovery in Madagascar. In fact, the economy grew between 1997 and 2001, with an average GDP growth rate of 4.6 percent. At the dawn of the third millennium, there is macroeconomic stability and positive growth in real terms, although the benefits have not reached the population as a whole. The rate of investment has grown from 6 percent to 11 percent. During this period, the primary, secondary and tertiary sectors contributed, contributed 28 percent, 13 percent, and 59 percent of GDP, respectively. Thus, the service sector is the largest, comprising nearly three-fifths of all added value (Table 1.1 below).

TABLE 1.1 1997-2001 ECONOMIC INDICATORS

	1997	1998	1999	2000	2001
Annual GDP Growth (%)	3.7	3.9	4.7	4.7	6.0
GDP added value by Sector (%)					
Primary Sector	31.2	30.2	29.6	30.0	19.5
Secondary Sector	13.3	13.5	13.6	14.9	10.2
Tertiary Sector	55.6	56.4	56.8	55.2	70.4
Private Investment (% of GDP)	6.3	6.9	8.0	9.1	11.7

Source: Bureau of Economic Affairs and Directorate General of Ministry of the Economy, Finance and Budget

The country's performance, measured by GDP growth, has been very disappointing, particularly from 1990 to 1996, a period in which output fell by an annual average of 0.6 percent. Since then, the growth of GDP in constant terms has accelerated, exceeding 4 percent (Table 1.2). The acceleration of growth has occurred primarily outside of agriculture, especially in the service sector, which began the decade slowly with an average increase of 0.6 percent, but accelerated after 1996 by an annual average of over 5

percent. The manufacturing sector experienced a similar rise in economic activity during the same period. Conversely, the agricultural sector remains stagnant, and its growth has been very unstable. Using the broadest definition of agriculture, cultivated crops, livestock production, fisheries, and forestry contribute 55 percent, 28 percent, and 18 percent of agricultural production, respectively. Fisheries is the only sub-sector of agriculture to record positive growth.

TABLE 1.2 MADAGASCAR GDP GROWTH RATES, 1985–2000

	1985-1989	1990-1996	1997	1998	1999	2000
GDP (at market prices)	2.4	0.6	3.7	3.9	4.7	4.8
Agriculture	2.9	1.6	1.9	0.2	1.4	0.8
Mining	11.0	1.0	8.5	9.0	4.7	4.8
Manufacturing	2.2	0.2	2.4	4.8	4.2	5.5
Services	2.0	0.6	4.7	5.3	4.3	11.1

Source: World Bank, World Development Indicators.

The Malagasy industrial sector, with a contribution to GDP of just over 12 percent, also experienced accelerating growth during the second half of the 1990s. However, this growth has a limited base, and its contribution, after a long period of stagnation, is still modest. The food and beverage industry, in which growth has been the most rapid, contributes approximately 6 percent of the total added value and represents approximately half of the production in the secondary sector. When the Export Processing Zone (EPZ), which experienced an annual average growth of 19 percent between 1995 and 1999, are excluded from the calculation, performance is even weaker.

Although the EPZ contributes significantly to exports and provides many manufacturing jobs, it contributes only a small part of GDP. However, following the introduction of this incentive system in 1991, because of its vitality, its size and its importance in the Malagasy economy have developed rapidly, and this remains the highest performing area in the secondary sector.

Nevertheless, the rigidity of Malagasy EPZ laws has largely impeded any sub-contracting of local businesses, as occurred in South Korea, in Mauritius or in Saint Lucia. These three countries implemented the appropriate policies to facilitate links between their export industries and the rest of the national economy. For example, in each case, customs authorities encouraged domestic manufacturers to supply the EPZs, giving them access to production inputs at duty free prices. In these same countries, technology transfers have been facilitated due to various incentives from the authorities in order to encourage partnership between foreign and domestic businesses, thereby

creating the growth of a local sub-contracting industry. In Madagascar, the laws will have to be reformed to create such opportunities and to allow a genuine sharing of growth, which is the basis for sustainable development. Moreover, it should be possible to include high added value businesses in these laws (for example, software development in the NICT [New Information and Communications Technologies]).

The tertiary sector, particularly transportation and services, provided the greatest source of growth. When retail and wholesale business are included, these sectors have contributed the largest portion of added value during the last few years. Although the tourism sector continues to grow, it should be noted that the government's role in tourism and in other private sector activities has diminished considerably (reflecting the government's commitment to liberalization). According to the IMF, an increase in revenues and the increased capacity of the tourism industry have spilled over to the construction industry, which has grown at an annual average of more than 10 percent at the end of the 1990s.

In sum, once industries located in the free trade zone are excluded, growth in Madagascar comes principally from non-tradable goods production. The re-direction of productive resources toward non-exportable goods may be influenced by the gradual disappearance of trade barriers in the other export sectors. Firms in Madagascar, accustomed to high levels of protection in the past, have not been restructured and have not invested sufficiently to confront increased competition from imports. Consequently, resources may be diverted from traditional import-substitution industries to those industries producing non-tradable goods that do not have to compete with imports. However, significant trade barriers still exist, and the process of restructuring is slow.

1.1.2 The Crisis Of 2002

The findings below were derived from various surveys and analyses of the impact of the crisis. The EBRP (Emergency Business Recovery Program) study, which was sponsored by various groups in the private sector (GEM-SIM-FIVMPAMA-CONECS), is cited. This study is based on a survey carried out on a representative sampling of 300 businesses from all over Madagascar.

Macroeconomic Effects

Madagascar's promising economic outlook during recent years has been hindered by the post-election crisis of 2002. Economic activity declined by 12.7 percent.

Relative to their 2001 levels, all economic aggregates fell. Inflation rose from roughly 6 percent in 2001 to 15 percent in 2002. Exports fell by half. Anticipated investments did not materialize.

The crisis resulted primarily in a general decline in economic activity together with a fall in output, layoffs and increased unemployment; and thus, a reduction in the activity level. The effects were felt equally among free trade zone and non-free trade zone enterprises. Local businesses that had aimed at producing for foreign markets had to shut down production.

TABLE 1.3 ECONOMIC INDICATORS FOR 2001 AND 2002

	2001	2002
(Annual percentage change)		
GDP at constant prices	6.0	-12.7
Deflator of GDP	9.0	13.5
Average consumer price index	6.9	15.8
Exports. f.o.b.	20.6	-50.5
Imports. c.i.f.	5.5	-37.6
(Percentage of GDP)		
Trade balance	-3.2	-6.6
Net imports of goods and services	-31.8	-22.6
Exports of goods and nonfactor services	28.6	16.0
Gross domestic investment	19.0	10.0
Public sector	7.2	4.8
Private sector	11.8	5.2
Total Government revenues	10.1	15.0
Of which: tax revenues	9.7	10.3
Nominal GDP (in billions of MGF)	30,334	30,058
Per capita GDP (in US$)	302	281

Source: Ministry of the Economy, Finance and Budget

TABLE 1.4 AVERAGE EFFECTS OF THE CRISIS ON BUSINESSES BETWEEN 2001 AND 2002

	Workforce	Revenues	Local Sales	Exports	Activity Level	Inventory
Annual Percentage Change	-27%	-65%	-69%	-47%	-65%	-37%

Source: EBRP

Provincial-Level Effects Of The Crisis

At a provincial level, the businesses of Toamasina were most affected by the crisis. Although employment remained somewhat stable, revenues decreased 100 percent. Goods bound for Antananarivo were held up by road blocks (note that the primary destination for goods produced in Toamasina is Antananarivo), while sales in

Toamasina dropped due to a runaway inflation that eroded residents' purchasing power.

Businesses in the city of Mahajanga were the least affected by the crisis: growth in revenues continued despite a drop in production capacity, the road blocks were less severe, goods passed through in exchange for negotiable "tolls" (Table 1.5).

In Toamasina, businesses experienced the greatest losses (relative to sales completed).Conversely, additional operating costs were the lowest. Factor costs (fuel, etc.) did not increase, but sales dropped because of the road blocks, which slowed the flow of goods. On the other hand, businesses in Antananarivo and Toliary paid high additional operating costs (compared to sales completed), but at the same time sustained considerable losses (Table 1.6).

TABLE 1.5 PROVINCIAL VARIATIONS IN THE EFFECTS OF THE CRISIS (CHANGES OCCURRING BETWEEN 2001 AND THE 1ST HALF OF 2002)

	Employment	Revenues	Activity Level
Antananarivo	-30%	-68%	2%
Toamasina	-4%	-100%	-45%
Antsiranana	-9%	-18%	-19%
Toliary	-50%	-31%	-50%
Fianarantsoa	-33%	-72%	-75%
Mahajanga	-13%	55%	-55%

Source: EBRP

TABLE 1.6 PROPORTION OF LOSSES AND ADDITIONAL OPERATING COSTS BY PROVINCE DURING THE FIRST HALF OF 2002

	Proportion of Losses	Proportion of Additional Costs
Antananarivo	17%	53%
Antsiranana	4%	2%
Fianarantsoa	22%	2%
Mahajanga	6%	5%
Toamasina	38%	0%
Toliary	37%	86%

Source: EBRP

Effects by Sector

Agriculture

Agricultural production was relatively good in 2002, benefiting from good weather in general, despite the hailstorm in April 2002. With the exception of certain activities, such as those related to cotton production, which was not directly affected until July 2002, the crisis occurred after the harvest and therefore had little effect on crop production.

However, agricultural and livestock production revenues fell by 37.6 percent and 31.2 percent respectively, relative to those in 2001, as a result of the decline in economic activity and the fall in quantities sold. In fact, rural farmers must now begin to replenish their buffer stocks.

The scarcity of harvesters, due to a lack of credit and means of communication, together with the crisis, resulted in a drop in prices of approximately 62.5 percent for agriculture and 43.2 percent for livestock production.

Furthermore, the transportation problem led to decreased mobility for farm laborers, with utilization rates falling by 23.2 percent, which effectively disrupted seasonal migration. As a result, farmers resorted to hiring family labor to reduce cash expenses.

The potential impact, notably on future production and on the income of the sector, is reflected in the expectations reported by agricultural middlemen. According to them, a decrease in agricultural yields should be expected if no progress is made to address procurement problems in agricultural inputs (insecticide, fertilizer, etc.), the suspension of development projects, the upward trend in prices of veterinary products and the fears of a shortage of medicine that could lead to an increase in the incidence of plant and epizootic diseases.

The crisis affected the flow of goods to market considerably. During the first growing seasons, middlemen had difficulties accessing farms because of the scarcity of (bank or

equity) credit, and because of economic barriers and fuel shortages which caused transportation costs to increase excessively. The costs of harvest increased and prices to producers fell. In the face of these conditions, many products (fruits, vegetables, etc.) spoiled and producers were forced to build up inventory or to sell at very low prices, even at a loss.

The later harvests were heavily mortgaged owing to the crisis. Future production (including off-season crops) fell because of the lack of agricultural inputs (particularly fertilizer).

Farmers' incomes deteriorated and poverty worsened. In fact, while production prices fell, the prices of basic consumption goods (edible oil, soap, sugar, salt, domestic kerosene, etc.) have tended to increase. Moreover, the unpredictability of the weather in 2003 may very well disrupt harvesting.

Agricultural food production was not significantly affected; although despite the absence of severe cyclones, hailstorms devastated some potentially productive regions, right at the beginning of the harvest (April 2002). The harvest and marketing period of food products extends from March / April to August / September. Cotton and sugar cane production was relatively good. Tobacco production decreased significantly.

Manufacturing

The secondary sector was most affected by the crisis. Business production came virtually to a halt, especially œmpanies in the EPZ, due to the lack of local and imported raw materials, the disruptions in the flow of goods to domestic markets, the inability to export and the fall in domestic demand. That led to a significant reduction in employment. In the local manufacturing industry as a whole, approximately 50,000 jobs were eliminated. Of the 156 free trade companies, 50 laid off employees, and more than 35,000 jobs (out of more than 100,000) were temporarily eliminated.

At the industry level this resulted in:

- a drop in the activity level, from 55 percent in chemicals to 78 percent in mining compared to 2001;
- a decrease in revenues from 51 percent in food products to 89 percent in textiles and leather;
- a drop in the workforce, which reached a peak of 48 percent in food products, during the same period;
- a business slump, with layoffs and business closings.

Source: EBRP

Companies in the EPZ were greatly affected by the crisis. By mid-March 2002, more than one third of all companies were forced to shut down.

The crisis occurred at an unfortunate time, because it is during the first quarter that anticipated deliveries of goods are made and orders for the following year are negotiated.

Customers delayed, and then canceled not only a large number of their orders for 2002, but also their reservations on firm capacity and their orders for the next year. Factories found themselves without orders. Certain dealers thus made the decision to leave Madagascar because of uncertainty since the crisis. Business closings led to a loss of jobs and a considerable decrease in the EPZ's contribution to GDP. Hence the secondary sector's negative growth rate for 2002 was unavoidable.

The government is currently working to restore foreign investor confidence and encourage the return of capital inflows to Madagascar. In this vein, several missions abroad have been carried out (participation in fairs, road shows, etc.).

Services

The tertiary sector was also greatly affected by the crisis. Roadblocks and a lack of fuel held up ground transportation. Air transportation declined due to the many domestic and international flight cancellations. Domestic trade slowed considerably, a large portion of foreign trade was blocked and shortages abounded. Banks saw their portfolios deteriorate. The situation in the tourism sector was catastrophic.

The EBRP study cited above noted that during the crisis there was:

- a generalized drop in the activity level, varying from 40 percent for banks to 75 percent in BTP [construction and public works] and telecommunications;

- a decrease in revenues, by as much as 82 percent in tourism and telecommunications;

- a subsequent reduction in the workforce, down to 3 percent in banks and 36 percent in trade, due to rotations or layoffs.

In the banking sector, activities that thrived in prior years were compromised. Companies that became financially distressed during the crisis could not honor their bank obligations on time. The closing of the ICE [Interbank Currency Exchange] and the freezing of foreign assets exacerbated the slowdown in exports, and economic activity in the sector as a whole declined by 63 percent.

The transportation industry was the most severely affected by the crisis. Fuel prices were seven times higher in some regions. Road traffic was only 10 percent of its capacity with a total of 23 bridges being destroyed in the political turmoil, and by cyclone Kesiny in Toamasina, while the highway system continued to deteriorate. Almost all domestic and foreign airlines suspended their operations. This situation led to a 60 percent drop in the number of tourists recorded up to July 2002 compared to the same period the preceding year. Moreover, Air Madagascar, which was already financially weak, went deeper into debt.

1.1.3 The Recovery

Thus, the economy in Madagascar was significantly affected by the political crisis of the first half of 2002.

The EBRP survey, sponsored by various trade groups, made it possible to measure the extent of the damage. Many businesses closed. Others could only attain their pre-crisis financial state through the business recovery plan.

To mitigate the effects of the crisis, re-generate growth and lay the groundwork for a prosperous and more equitable society, the relevant measures recommended by the EBRP study are listed below:

For businesses

- A solution must be found, within the banking system and through other channels, to meet businesses' liquidity and investment needs as that is a prerequisite for the recovery of economic activity and investment. Companies will not be able to plan their investments in capacity if commercial activity does not return to their 2001 levels. However, that will take time because the most dynamic sectors in terms of exports that also provide large numbers of jobs (tourism, textiles) cannot expect to reach their 2001 levels until the end of 2003 or even 2004. For this reason, urban unemployment is going to last several additional months, affecting the recovery of businesses producing for the local market that are heavily dependent on the development of domestic purchasing power.

- A recovery policy package must also meet the needs of the informal sector, not only for economic reasons (creation of a less inflationary environment), but also for social reasons. While it is acknowledged that the recovery of agriculture, in which the bulk of the informal sector is employed, must be the responsibility of specialized agencies, there are a large number of formal or somewhat informal businesses that do not have access to bank lending.

- If the problems stemming from the crisis are to be solved, a new approach will be needed – one that takes into account the multitude and diversity of needs.

For the Government:

- The Government must be resolutely committed to support the businesses in this post-crisis period and to play the role of facilitator in establishing the apparatus necessary for recovery.

- Public works projects are indispensable in the short term, to make up for the weakness of private investment, to stimulate growth and generate income for the tens of thousands of unemployed workers.

- The crisis provides an opportunity to contemplate more thoroughly about the growth model that Madagascar wants to implement. The rural informal sector

(which represents 80 percent of the population) must be included in this analysis; otherwise the risk of social turmoil will burden the country.

A rapid return to economic and social stability is essential to stimulate renewed confidence for and the return of both foreign and domestic investors.

Economic recovery and sustainable growth require the establishment of an incentive-based framework, which includes the following measures:

- a settlement of Government's debts held by the private sector to relieve the cash position of companies;
- a clarification of public sector salary policies that will dispel private sector fears regarding any uncontrolled increases in salaries that would wipe out the profitability of current and future investments;
- a foreign exchange policy that conforms to macro-economic realities (such as inflation differentials);
- the strengthening of infrastructure, particularly in terms of communication channels, which are crucial in facilitating the circulation of goods and wealth in the domestic and export markets;
- stronger property rights enforcement for investments (property security, commercial law training for magistrates, etc.);
- the establishment of a modern, incentive-based legal, property, customs and tax framework;
- the strengthening of commercial courts to boost investor confidence;
- reforms to improve the transparency and efficiency of customs administration and tax collection;
- empowering government agencies to apply this modern framework.

All these measures will be based on good governance and a fair distribution of the effects of growth, as well as a constant effort to combat corruption. These latter fundamentals constitute the *sine qua non* conditions of a stable society and lasting growth. People from both the public and private sectors and from civil society must all be conscious of these measures and act accordingly (Table 1.7).

The Poverty Reduction Strategy Paper (PRSP) focuses on recovery and takes these priorities into account.

TABLE 1.7 SURVEY OF COMPANY LEADERS REGARDING THE APPROPRIATE MEASURES TO PREVENT A FUTURE CRISIS

		Percentage of respondents (heads of companies) (*)
1	Have good governance	51%
2	Have a policy that is centered on the most disadvantaged	44%
3	Reduce corruption	31%
4	Reform public administration and the management of public finances	19%
5	Strengthen the democratic process	18%
6	Leaders must get closer to the people in order to understand their real problems	17%

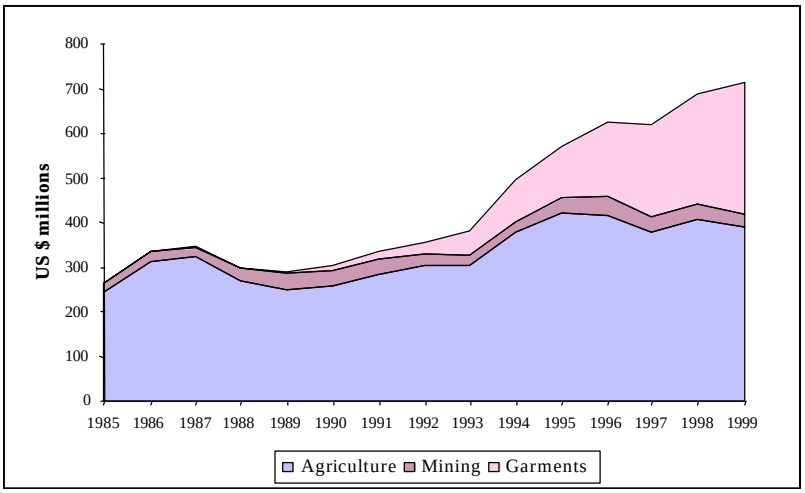
Source: EBRP

(*) The percentage indicates the number of times that this item was classified as a top priority by the heads of companies questioned. Example: good governance was the top priority for 51 percent of those surveyed, 44 percent cited the need for a policy centered on the most disadvantaged, reducing corruption was cited by 31 percent of those surveyed, etc.

1.1.4 Foreign Trade

If the Malagasy economy is to be integrated with world markets and poverty is to be reduced, investors must be given the right incentives so that they can redirect resources to the sectors in which they can compete at the import or export level. This new focus is based on the success that EPZ firms in light processing industries, food processing, computer technology and other labor- or natural resource-intensive industries, have had.

FIGURE 1.1 MADAGASCAR EXPORTS (1985–99)



Source: Based on the trade partners data from the statistics of the UN COMTRADE

COMTRADE statistics indicate that in 2001, Madagascar's exports were dominated by textiles and clothing (39 percent), followed by agricultural and processed foods (29 percent), seafood products (17 percent) and tourism (17 percent). In 1990, food and unprocessed agricultural products made up approximately 75 percent of exports. This reversal is largely explained by the increase in exports from the free trade zone. The percentage of textiles and clothing in the exports increased from 4.5 percent (1990) to 39 percent (2001).

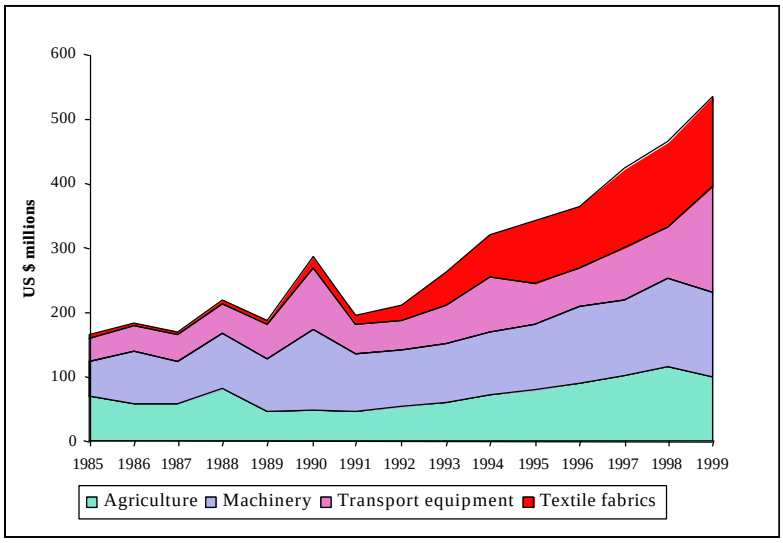
In the present recovery phase of the economy, foreign trade plays a major role; and current Malagasy government policies to improve infrastructure, will also facilitate this turn-around. Madagascar has real advantages to offer in terms of exports. Several promising lines of business sectors that are promising in terms of exports are already looking to operate in the global marketplace. In addition to the products already mentioned, Madagascar is also developing export products in other areas, such as essential oils, crafts, NICTs and mining products.

This change in the composition of exports was accompanied by a change in destination. In 1999, exports to Japan and the United States dropped to1.4 percent and 5.4 percent of total exports, from the 6.9 percent and 17.8 percent levels that they had in 1990. The process of redirecting resources toward a more efficient production is, of course, under way; but this transition is still slow. So far, most of the investments in the free trade zone have come from abroad. However, the business surveys carried out for this study reveal that many Malagasy investors, aware of the increased competition in the domestic market and of the general improvement in the business climate, are in the process of transferring their investments to export sectors, such as fresh vegetables, textiles, services and crafts.

Excluding clothing, significant increases in other exports since the big change in direction in 1996 seem unlikely. Following a significant growth in the economy in 1993, agricultural exports have stagnated. Seafood is the only component of agricultural exports that has expanded.

In contrast, imports have grown considerably. Their volume increased 15.7 percent annually between 1995 and 1999, and this rate of growth was continued between 1999 and 2000. Textile imports, the primary raw material input for the booming clothing export sector, have grown dramatically (see Figure 1.2). Agricultural products and machinery are also steadily increasing. In agriculture, food imports have steadily increased during the last decade.

FIGURE 1.2 IMPORTS BY MADAGASCAR (1985-99)



Source: Based on partners' data from UN COMTRADE statistics.

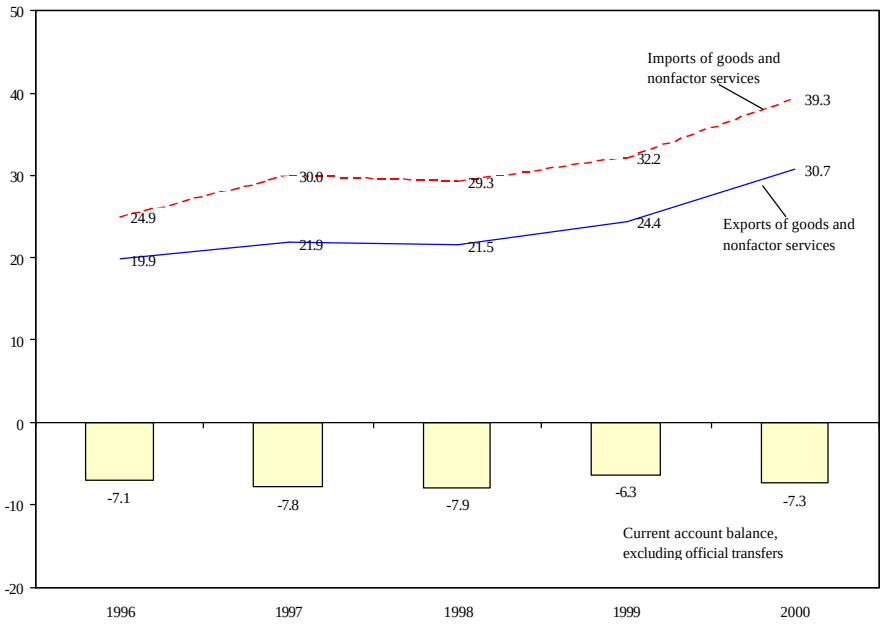
Machine and transportation equipment imports have contributed notably to the growth of imports. This growth reflects the positive impact of having a stable macroeconomic environment, the incentives for the companies in the free trade zone and the expansion of the transportation sector. The increase in machine imports also suggests that this more rapid growth could be sustained in the future.

The solid performance of exports in 2001 demonstrated the competitive nature of exports until the crisis in 2002. Malagasy exports of goods and non-factor services have increased steadily since 1996, rising from 20 percent of GDP in 1996 to 29 percent in 2001. This amount dropped to 16 percent in 2002 (see Figure 1.3 below). In 2001, SDR denominated export revenues for goods and services had increased 13 percent, but plummeted by 47 percent in 2002, while export volumes increased by 0.6 percent in

2001, and dropped 52 percent in 2002. Although imports of goods and non-production services evolved from 25 percent of GDP in 1996, to 39.3 percent in 2000, and then 22 percent in 2002, the current account balance, excluding official transfers, remained generally in the red, and fell from 8 percent of GDP in 1997-98 to around 6 percent in 2002. Besides favorable capital flows, official reserves increased considerably (120.7 percent) in 2001, but declined significantly by 31.4 percent in 2002.

The volume of FDI capital inflows is another indication of international competitiveness, as it reflects global perceptions of the overall business climate. Prior to the 2002 crisis, Madagascar had, in recent years, a relatively good reputation. The balance of payments estimates show that private capital flows (including proceeds from privatization) went from 4 million SDR to 73 million SDR in 2001. This represents a tenfold increase from 0.2 percent of GDP in 1994 to 2.1 percent of GDP in 2001, a large part of which was directed toward the EPZs. In 2002, this amount fell to only 0.15 percent of GDP.

FIGURE 1.3 TRADE AND THE CURRENT ACCOUNT BALANCE, 1996–2000 (PERCENTAGE OF GDP)



Source: Malagasy authorities, Balance of Payments

With the crisis over, it is important for Madagascar to recover its good reputation and competitiveness with respect to direct foreign investment. This recovery of confidence is one of the major obstacles that must be overcome in Madagascar.

However, other obstacles to a growing economy remain, including the narrow base on which the expansion rested, the slower growth of the industries supplying the domestic

market, and the lack of access to factors of production in export-oriented industries. These obstacles also offset the potential that any positive developments might have in reducing poverty.

Several factors explain the weakness of Malagasy industry. The first is the problem of access to capital. Essential investments, including attempts to improve factors of production, cannot be undertaken due to the difficulties in getting access to finance.

Secondly, managers in the food processing industry point to the deterioration in the quality of agricultural products due to a general failure to improve seed quality. Decades of under-investment in agriculture have eroded the ability to produce high quality fruits and vegetables, especially if Malagasy products are compared with those from regional competitors like South Africa. The lack of agricultural investment incentives during the last two decades, linked to low producer prices (see Chapter 3), is made worse in some cases by the control exercised by the government over processing activities.

Finally, most companies find that the cost of local imports are driven upward by high domestic transportation costs, due to the poor condition of infrastructure. Moreover, a large quantity of low value-added products is sold on the international market. Processes that are indispensable for obtaining products with high added value are not implemented because of a lack of financing, equipment, expertise, or certification. Insufficient dissemination of information about international standards makes access to certain markets difficult.

In addition, promotion of Malagasy products on an international level is inadequate. Better advantage should be taken of the opportunities offered by various multilateral, regional or bilateral agreements. A consistent and effective trade policy would be needed to facilitate access to markets.

1.2 FOREIGN EXCHANGE AND COMPETITIVENESS[1]

The improvement in the macroeconomic situation before the crisis of 2002 was reflected in the increase in the rate of growth, the reduction in inflation, and the growth in the national savings rate. On an international level, as indicated in the preceding sections, the growth in exports was particularly strong in 2001. It will be noted that the macroeconomic forecasts are optimistic for 2003 relative to 2002, though they remain below 2001 levels.

From a macroeconomic standpoint, once fiscal and monetary management is achieved, the extent to which an economy can successfully integrate into the world economy is determined by its competitiveness. This is the challenge now facing Madagascar, both domestically and abroad. The country's ability to compete is based on two factors:

[1] This section was contributed by the IMF.

- A real, competitive and stable foreign exchange rate.

- Interest rates reflecting the opportunity cost of capital.

Although a properly functioning banking system is necessary to obtain funding at interest rates that reflect the risk-adjusted cost of borrowing, we will address this aspect of incentives briefly in chapter 4.

In the past, Madagascar's real exchange rate fluctuated significantly (see Figure 1.4 below). Since the liberalization of the exchange rate and trade, beginning in 1994, until mid 2000, the nominal effective exchange rate was stable, but depreciated steadily, reflecting inflation differentials with trading partners, implying that the real effective exchange rate remained stable[2]. The relative stability of the Malagasy franc exchange rate and a relatively smooth devaluation of the nominal exchange rate means people face less uncertainty, a condition that favors export and import substitution activities.

Following the exchange rate liberalization and the reforms that accompanied it, Madagascar's export revenues have increased, owing in particular to greater export diversity and an increase in capital flows, particularly in foreign direct investments. As a result, as shown in Figure 1.3, the economy has opened up considerably with that portion of the GDP accounted for by exports of goods and services rising one-third since 1996. This contrasts sharply with the declining competitiveness observed in the economy from 1982-94.

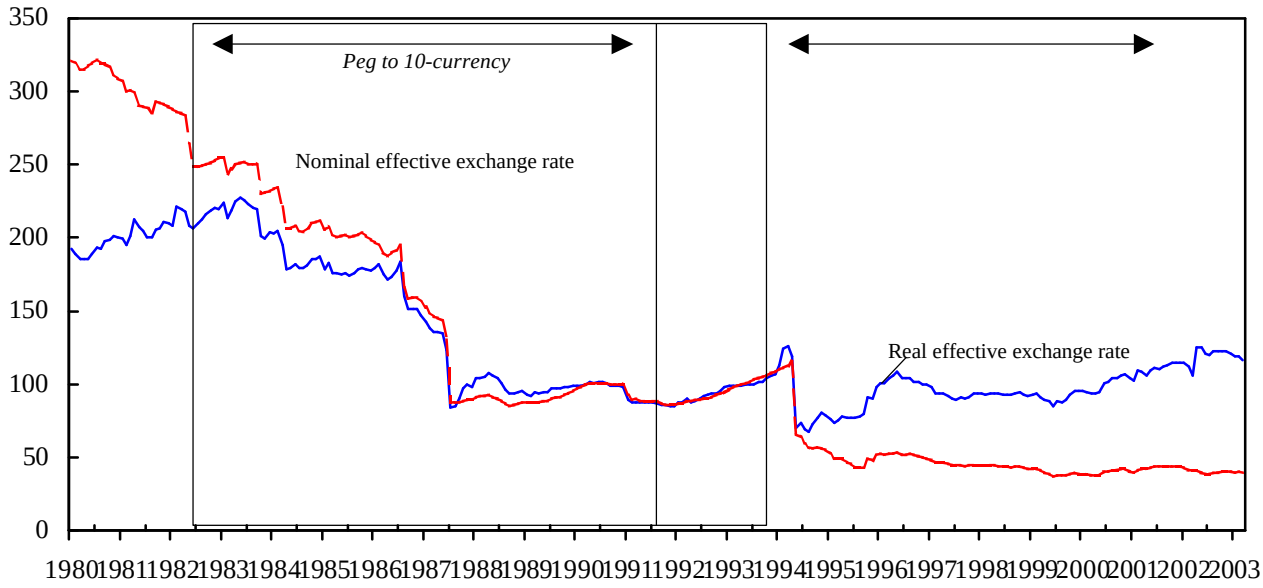
At the beginning of May 1994, the Malagasy authorities adopted in-depth exchange rate and trade reforms. An interbank currency exchange and a floating exchange rate were created, thus eliminating most obstacles to imports, liberalizing current account transactions on the currency market, and allowing residents and non-residents alike, to freely open foreign currency denominated bank accounts. The quasi-tax on exports, in the form of an exchange restriction of 40 percent to the central bank at an overvalued exchange rate, was also eliminated. In early 1994, just before liberalization, the premiums between the parallel market and the official exchange rate varied between 40 and 50 percent. Immediately after liberalization, the official exchange rate dropped 40 percent compared to the US dollar. This effectively represented a drop of 43 percent in nominal terms and 41 percent in real terms.

This initial devaluation of the real effective exchange rate in May 1994 was probably excessive. From November 1994 to August 1996, the devaluation of the nominal effective exchange rate neared 7 percent, while the real rate appreciated around 30 percent. Afterwards, from August 1996 to April 2000, the real and nominal effective rates

[2] See A. Zanello and D. Desruelle, "A Primer on the IMF's Information Notice System", IMF Working Paper WP/97//71-EA, May 1, 1997, Washington, DC. This document details the calculation methodology of the real and nominal effective exchange rates used here, a calculation that brings consumer price indices into play. This document is available to the public on the IMF's web site (www.imf.org).

depreciated by 28 and 10 percent, respectively. Since May 2000, the two rates have begun to increase for reasons explained below.

FIGURE 1.4 EFFECTIVE EXCHANGE RATE INDICES, 1980–2003



Source: International Monetary Fund, Information Notice System.

The Interbank Currency Exchange (ICE) is an auction market where Malagasy francs were initially exchanged for French francs, until the end of 1998, and now for euros with the introduction of this currency in 1999. Commercial bankers and central bank officials are physically present each day between 10:00 a.m. and noon. Daily volume on average reached 4 million US dollars in 2001. This system is not without drawbacks. The low number of participants and the trading volume limit competition and the ability to arbitrage. Due to the limited trading session, rates are effectively fixed for most of each day.

The monetary authorities, with technical assistance from the IMF, intend to introduce a "continuous market" by the end of 2003 in order to address these problems. The plan is to allow markets to emerge for US dollars and Japanese yen, in addition to euros and Malagasy francs. Competition and arbitrage would be extended, allowing foreign banks to participate, while the system itself would operate by telephone and computer (Reuters Dealing), which would permit continuous trading. A continuous market would facilitate the emergence of an efficient futures market, thus replacing the current

mechanism in which the importer gets foreign exchange from certain banks with a deferred payment, and the exporter obtains pre-financing in foreign currencies.

During the second half of 2000, the nominal effective exchange rate rose slightly, while the real effective exchange rates increased more. The actual increase in the value of currency from the second half of 2000 on, resulted from a nominal increase, while domestic inflation, despite a decline, was still higher than in partner countries. The nominal increase reflected the movement of capital associated with direct foreign investments in the EPZs, and the interest rate differentials in favor of Madagascar[3]. In 2001, both the nominal and real effective exchange rates rose 14 percent. As noted above, the competitiveness of exports was demonstrated by their steady expansion in 2001. In 2002, exports fell considerably, as did the nominal and real effective exchange rates.

It is also possible that the profile of the real and nominal effective exchange rates up to 2001 ensued from a relatively inflexible monetary policy. If that is the case, this monetary inflexibility might have contributed to the high effective interest rates (in addition to the inefficiencies of the banking system), a factor likely to lead to an increase in the nominal and real exchange rates. In 2000, given an international environment characterized by relatively high performing current accounts, capital flows and an increase in world oil prices, the monetary authorities could have decided to keep the increase in the value of the Malagasy franc in check by buying more foreign currencies on the interbank market. This could have led to a more liquid domestic position, resulting in a lowering of the interest rate. However, the authorities did not choose this option, because their goal was to stabilize the Malagasy franc exchange rate against the US dollar in the context of rising oil prices and the privatization of the national petroleum company. This privatization, in turn, required a substantial increase in domestic oil prices so that new private sector investors could be guaranteed adequate profits. The fall in the euro exchange rate against the US dollar in the beginning of 2000, thus caused the nominal effective exchange rates of the Malagasy franc to appreciate in 2001 (see Figure 1.4).

The crisis of 2002 brought about a significant drop in rates, in particular the nominal effective exchange rate (see Table 1.8). This was due to the poor performance of exports following a fall in economic activity in the EPZs. It should be noted that at the end of the crisis, during the second half of 2002, the exchange rate of the Malagasy franc was relatively strong. Although this may have signaled a renewed confidence in Madagascar, the appreciation may have been excessive.

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[3] The appreciation in 2001 in real terms could result from better productivity brought about by investments in the EPZ. The increases in salaries accompanying it would then result in price increases of Malagasy products compared to its trade partners. This could lead, in turn, to an appreciation of the real effective exchange rate. Unfortunately, detailed time series data on productivity and salaries that would make it possible to verify this assumption are not readily available. However, detailed interviews conducted with the companies tend to show that that was probably not the case.

TABLE 1.8 RECENT CHANGES IN REAL AND NOMINAL EFFECTIVE EXCHANGE RATES

Based on the 1993 weighting coefficient	2000	2001	2002	
			Proj.	Est.
NEER				
Average for the period	1.3	8.1	-5.6	-6.5
End of period	4.9	7.0	-11.4	-10.0
REER				
Average for the period	10.1	10.4	7.2	8.0
End of period	8.4	9.6	10.6	5.2

Source: IMF

In the second quarter of 2003, it seems that the real effective exchange rate may be appreciating on the order of 30 percent (source IMF). The question then is whether or not production costs are currently increasing. However, without sufficient data, it is impossible to disentangle Madagascar's actual competitiveness from changes in exchange rates.

Since mid-2000, officials at the IMF have encouraged authorities to ease monetary policy through a more rapid reduction in the Central Bank's discount rate. However, the Central Bank hesitated, resulting in an exchange rate appreciation. Investors could, in fact, have had recourse to foreign funding instead of borrowing from Malagasy banks, which would have resulted in financial inflows.

Nevertheless, in October 2000, the Central Bank's discount rate was lowered from 15 to 12 percent and inflation followed (from 14.4 percent at the end of 1999 to 9 percent in October of the following year). This rate was lowered even more, reaching 10.5 percent in June 2001, while inflation during the first five months of the year was reduced to 6.3 percent (on an annual basis). In October 2001, the rate moved to 9 percent, then to 7 percent, where it has remained since January 2, 2003.

In the second quarter of 2003, it must be noted that this latter rate remains just as an indicator, as commercial bank margins remain high. Because of the excessive liquidity of the banking system (a non-interest bearing surplus of MGF 400 billion), and in the face of its needs, with the reopening of an auction market, the Government has encouraged commercial banks to buy treasury bills. It is currently acknowledged that the banks are not buying treasury bills at auction and are not granting enough loans either. Explanations given include the fact that country-risk remains high and that the banks have reached their limit in terms of treasury bill auction purchases. The solution would be to allow more competition between the banks (new entries?) such that the number of loans might increase and the "spread" between lending and borrowing rates might fall.

In summary, the scarcity of loanable funds for businesses remains critical. Innovative solutions are needed to generate the financing that businesses lack to fund both their operations and investments. Furthermore, Madagascar's competitiveness merits further consideration. In the current environment, an analysis of effective protection would be very useful.

1.3 POVERTY IN MADAGASCAR

Poverty in Madagascar increased from the advent of the socialist regime until 1997. It was not until growth resumed, from 1997 on, that household survey analyses showed a stabilization of poverty between 1997 and 1999[4] (See Table 1.9). As a result, in comparison with the poverty statistics of other countries and of Sub-Saharan Africa, Madagascar ranks as one of the poorest countries in Sub-Saharan Africa.

It is useful to consider the poverty breakdown by activity and per capita spending profiles according to the household head's primary source of employment. Poor households rely primarily on income from the agricultural sector (see Table 1.10). Indeed, according to the household survey of 1999, 77 percent of all households, in which the head of the household works in agriculture, are poor[5]. The poverty threshold was estimated at MGF 865,000 in 1999. Consequently, in all sectors except transportation, per capita spending for a large majority of unskilled workers falls below the poverty line (refer to median per capita spending in the column for unskilled labor)[6].

[4] Chapter 3, Volume 2 describes in detail the various aspects of rural and urban poverty: measures and income, as well as consumption profiles for urban and rural areas.

[5] Given the many dimensions of poverty, information on the household head's source of employment (given in table 1.10) may understate the diversity of poor household activities.

[6] By using per capita spending as an initial approximation of salary, it is found that even with unskilled workers in sectors in which per capita spending is high, as in textiles or tourism, the median salaries are well below the poverty threshold.

TABLE 1.9 POVERTY TRENDS: 1962–1999

Poverty Incidence (HCR)									
	1993			*1997*			*1999*		
	National	***Urban***	***Rural***	***National***	***Urban***	***Rural***	***National***	***Urban***	***Rural***
National	70.0	50.1	74.5	73.3	63.2	76.0	71.3	52.1	76.7
Province									
Antananarivo	68.0	42.4	76.2	66.4	52.0	72.1	61.7	43.3	69.3
Fianarantsoa	74.2	64.9	75.3	75.1	83.1	73.6	81.1	55.8	85.9
Taomasina	77.9	55.8	81.1	79.8	76.3	80.8	71.3	52.6	76.4
Mahajanga	53.2	37.3	56.7	73.8	68.2	75.1	76.0	65.2	78.8
Toliara	81.1	66.9	84.2	82.0	69.1	84.9	71.6	66.5	73.1
Antsiranana	60.2	49.5	63.7	62.3	27.0	69.5	72.6	31.3	80.6
Poverty Gap (PGR)									
	1993			*1997*			*1999*		
	National	***Urban***	***Rural***	***National***	***Urban***	***Rural***	***National***	***Urban***	***Rural***
National	30.3	17.5	33.1	33.6	29.6	34.7	32.8	21.4	36.1
Province									
Antananarivo	27.8	15.9	31.6	29.1	23.0	31.5	26.0	17.5	29.5
Fianarantsoa	33.7	22.4	35.3	32.0	42.0	30.1	40.2	25.2	43.1
Taomasina	33.7	18.5	36.0	39.3	39.9	39.2	32.6	21.1	35.7
Mahajanga	18.6	11.6	20.2	29.1	23.2	30.6	36.5	25.3	39.4
Toliara	42.8	25.0	46.5	46.4	37.3	48.5	33.7	29.8	34.8
Antsiranana	22.0	14.3	24.5	23.9	6.2	27.5	32.0	7.8	36.7

HCR = Head Count Ratio Index
PGR = Poverty Gap Ratio
Source: Paternostro et al., 2001.

The prevalence of subsistence agriculture can be detected by analyzing the contribution of cash crops to rural income, and the self-produced consumption profiles for each type of crop. Self-produced consumption in fact makes up 60 percent of the food consumption in poor households, and is distributed relatively equally over almost all crops. Even urban households produce between 20 and 30 percent of their food supply.

TABLE 1.10 PERCENTAGE OF POOR/NON-POOR AND SKILLED/UNSKILLED WORKERS ACCORDING TO THE ECONOMIC ACTIVITY SECTOR OF THE HEAD OF HOUSEHOLD (1999)

Principal Income	Population	Poor	Nonpoor	Mean per capita expenditure	Unskilled workers	Skilled workers	Median per capita expenditure unskilled
Sector	%	%	%	(000 MGF)	%	%	(000 MGF)
Agriculture	71.17	77	23	793	93	7	546
Commerce	5.45	55	45	1,232	62	38	675
Public Service	5.35	52	48	1,284	28	72	711
Others / Not Classified	3.81	67	33	1,250	63	37	651
Other Private Service	2.61	39	61	1,504	39	61	824
Transports	2.14	46	54	1,345	58	42	917
Other Primary	1.77	79	21	748	82	18	423
Fishing	1.13	79	21	863	95	5	552
Wood Industry	1.10	62	38	1,031	69	31	720
Other Manufacturing	1.04	58	42	1,492	51	49	756
Textile Industry	1.01	41	59	1,461	47	53	619
Breeding	1.00	65	35	931	71	29	537
Agro / Alim Industry	0.80	59	41	1,090	76	24	677
Construction	0.72	53	47	1,154	62	38	830
Tourism	0.46	45	55	1,592	46	54	656
Mining	0.44	75	25	1,126	78	22	407

Note: The poverty line is set at 865,000 MGF per year.
Source: Authors' calculation based on Enquetes Permanente Auprès des Ménages (EPM) data.

In urban areas, household heads with jobs in the tourism, textile and service industries have the highest average per capita spending, but their skills vary depending on the sector[7]. For example, the textile industry employs a significant number of skilled workers, while labor management tends to be highly trained. The strong growth recorded in the labor-intensive industries in the free trade zone (for example, the textile industries) could create a significant number of skilled jobs paying average wages.

1.3.1 Poverty After The Crisis[8]

The effects of the crisis on the most disadvantaged segments of the population, which manifested themselves primarily in a loss of income and employment opportunities,

[7] Skilled workers have more than nine years of education, or at least six years of education and at least one year of training specific to their industry.

[8] This analysis was adapted from an ILO / USAID funded study to assess the effects of the crisis.

resulted in their inability to meet their most basic needs, especially in the area of childhood education, health and nutrition. This was compounded by the deterioration in basic public infrastructure.

The hardest hit groups are the small rural producers, especially those farthest removed from markets, whose income decreased by approximately half, urban dwellers who were already among the most disadvantaged before the crisis, and the new urban unemployed, primarily from factories in EPZ's, who total nearly 150,000 (and together with their dependents sum to nearly 500,000).

1.3.2 Education

The crisis severely affected access to and quality of primary and secondary education.

According to the study carried out by the ILO program on 200 primary and secondary schools, the 2001-2002 school year was interrupted in the majority of schools in urban areas (96.2 percent) for an average period of time of 45 days in public schools and 35 days in private schools.

There was also a change in class schedules because of the difficulties with domestic travel. Teachers had to teach their classes all day without a noontime break in order to alleviate these difficulties. This change in class schedules caused a decrease in the amount of hours in urban areas, from 30 hours before January 2002 to 28.9 hours after March 2002 (once classes resumed). The school calendar was also disrupted. Official examinations were delayed about one month, and the new 2002-2003 school year initially planned for September 16, 2002, was moved up to the first week of October 2002.

The school dropout rate increased 10 percent between 2001 and 2002, rising from 7.7 percent in March 2001 to 8.5 percent in March 2002. Absences, after classes officially resumed in March 2002, also rose 20 percent compared to the first quarter of the school year, with the daily absentee rate rising from 2.4 percent in the first quarter to 3 percent between March and June 2002. The financial difficulties caused by the business slump, especially in urban areas, remained the principal cause of the high student dropout and absentee rates. In fact, the students' parents had a great deal of trouble paying the various school fees and expenses (including transportation, not including the purchase of supplies). Added to that was the greater use of child labor in rural areas during the rice harvest period (March-June).

Compared to the beginning of the 2001-2002 school year, the number of teachers paid by parents' associations (FRAM) decreased by 10 percent. Two reasons may be put forth: first, the parents' associations could no longer afford to pay their salaries; secondly, the salary offered by the associations was not enough to cover the personal expenses of those teachers who preferred, wherever possible, to go into other more lucrative work.

1.3.3 Health

Compared to the preceding year, health services provisions deteriorated sharply in 2002, both in terms of services supplied and services used. This deterioration resulted in a greater prevalence of endemic disease, a notable decrease in visits to health centers by people, low vaccine coverage, in addition to an inadequate supply of medicines, particularly in rural communities and the scarcity of medicines in stock at basic health centers.

The result of the survey conducted by the ILO program confirmed that the likelihood of finding medicines dropped 17 percent. This situation is even worse in the health centers remote from the administrative center of the province. According to the same source, the probability of no longer finding medicine during and after the crisis was 4 percent for urban communities; 17 percent for centrally located communities; and 27 percent for remote communities. Only 50 percent of the centers surveyed that used refrigerators before the crisis were using them in June 2002. This reversal was due primarily to the lack of gas, oil and replacement parts needed to operate them (more than 20 percent of the centers). Accordingly, the availability of vaccinations decreased, essentially in rural areas.

1.3.4 Social Welfare

In general, the drop in income, which was reflected above all in the resulting decrease in demand, caused an increase in the number of families unable to afford most of their basic food staples (from 32 percent before the crisis to approximately 42 percent). Conversely, the increase in prices for staples further reduced already low purchasing power (primary income), making it all the more difficult to meet the basic needs of the population.

Moreover, because of the lack of maintenance and renovation, the aforementioned deterioration of socio-economic infrastructures increased the scarcity of potable water and sanitation services, except in health-care and educational facilities (redistribution of income).

All this is compounded by a lack of security, especially in rural areas, where there was a pronounced increase in cattle theft during the first half of 2002.

CHAPTER 2
TRADE POLICY AND ACCESS TO MARKET

2.1 INTRODUCTION

International trade is a particularly important engine of growth for small poor countries. By engaging in international trade these countries have the opportunity to use their limited resources efficiently by specializing in producing goods in which they have comparative advantage. In addition, trade opens new markets for their goods, which cannot be fully consumed at home.

For Madagascar, maximizing income gains from trade depends on two factors: first, the incentive structure created for local producers; second, the degree to which Malagasy exports can access markets abroad. This chapter discusses both factors and assesses their impact on the country's trade. The first section reviews Malagasy practices concerning import taxation, customs valuation and tariff exemption.

The chapter shows that while Madagascar has liberalized its trade regime and simplified the import tax structure, the top rate of 30 percent is still high. The spread between the lowest and highest rates could potentially allow for a high level of protection of import-substitution activities. Exemptions and pure evasion of duties and import taxes further distort the incentive structure. In addition, liberalization could be undermined by some proposed trade policy actions. There have been discussions to adopt antidumping duties, countervailing duties and safeguard actions. Domestic interest groups have also recommended the adoption of a system of reference prices. Creating these non-tariff barriers would undermine the progress that has already been made to liberalize the economy.

The second section reviews Madagascar's trade relations with QUAD (Canada, EU, Japan, and the United States) countries and with its other trading partners. It considers various trade barriers that Malagasy exports face in these markets. Though recent initiatives by QUAD countries to open their markets to exports of the least developed countries (LDCs) have provided Madagascar with new opportunities for export expansion, they have fallen short of providing a completely liberalized market access. The product coverage in certain countries does not include some of Madagascar's important export goods, which are still subject to high tariffs. NTBs, such as sanitary regulations, also restrict access to many of Madagascar's principal exports.

Finally, the chapter looks at regional trade arrangements and their potential impact on Madagascar's trade flows. The chapter argues that while moves toward regional agreements liberalize trade for members, they also distort trade flows and increase the cost of imported goods by providing an incentive to source products from other member countries instead of relying on potentially less costly imports from nonmembers.

2.2 INCENTIVES IN MADAGASCAR'S TRADE REGIME

2.2.1 The Structure Of Import Taxes

Madagascar applies several different taxes on imports. The current structure has been in effect since February 2000. Imported goods are subject to a Most Favored Nation (MFN) tariff, an import tax, a stamp tax and an import statistics tax. The value-added tax (20 percent) and excise duties on certain imported products (primarily alcoholic beverages, tobacco products, rubber products and vehicles) are collected at the border.

Madagascar grants at least MFN status to all trading partners. Seven different MFN *ad valorem* tariff rates range from 0 percent to 30 percent. In addition, there are seven different import tax rates ranging from 0 percent to 30 percent, a 1 percent stamp duty and a 2 percent import statistics tax. There are 5,988 individual product lines 5,969 of which are *ad valorem* rates. The remaining 19 tariff lines are subject to specific duties.

The structure of the MFN tariff the import tax and their combined effect are shown in Table 2.1. The unweighted average customs duty rate is about 6 percent which, when combined with the unweighted average import tax rate of just over 10 percent, yields a combined average of slightly more than 16 percent. The trade-weighted averages are somewhat lower: 4 percent for the customs duty, 9.6 percent for the import tax and 13.6 percent for the combined rate.[9]

The seven different customs duty rates and seven different import tax rates, when combined, could potentially create a highly dispersed structure of import taxes. When the Malagasy legislature adopted the new structure in 1999 because of the Cross Border Initiative (CBI) negotiations, the customs duty and import tax rates across products were coordinated to create a relatively simple structure of four rates (5 percent, 15 percent, 25 percent and 30 percent). The 25 percent rate applies to relatively few tariff lines, so the bulk of imports is subject to three combined rates (5 percent, 15 percent or 30 percent).

Despite reductions in tariff rates since the mid-1980s, import taxation remains relatively high by international standards. More than one-third of all tariff lines are subject to the top combined rate of 30 percent, including necessities such as food and clothing. Meat and fish, fruit and nuts, coffee, tea, processed vegetables, fabric, apparel, footwear, furniture and other manufactured items also face average rates above 25 percent (see Volume 2, Chapter 2).

[9] Trade-weighted averages are generally lower than simple averages because imports are lower for goods that have high tariff rates.

TABLE 2.1 STRUCTURE OF CUSTOMS DUTIES AND IMPORT TAX, 2000

Ad Valorem Rate	*Customs Duties*			*Import Tax*			*Combined*		
	Number of Lines	Percentage of Lines	Percentage of Lines at or below	Number of Lines	Percentage of Lines	Percentage of Lines at or below	Number of Lines	Percentage of Lines	Percentage of Lines at or below
0	2024	33.8	33.8	1112	18.6	18.6	0	0.0	0.0
5	2455	41.0	74.8	1904	31.9	50.5	2663	44.6	44.6
10	773	12.9	87.7	1010	16.9	67.5	1	0.0	44.6
15	237	4.0	91.7	397	6.7	74.1	1001	16.8	61.4
20	179	3.0	94.7	866	14.5	88.6	3	0.1	61.5
25	156	2.6	97.3	548	9.2	97.8	183	3.1	64.5
30	164	2.7	100.0	132	2.2	100.0	2118	35.5	100.0
Total*	5988	100.0		5969	100.0		5969	100.0	
Simple Average	6.0			10.1			16.2		
Trade Weighted Average	4.0			9.6			13.6		

* There are 19 tariff lines subject to specific duties.

Source: Authors' calculation.

In spite of the small number of distinct rates, it is possible that the dispersion among them distorts incentives. Most items tend to fall into either the lowest-rate or highest-rate category, with a 25-percentage-point gap between those rates. Almost 45 percent of all products come in at the 5 percent rate, while almost 36 percent fall into product categories taxable at the 30 percent rate.

The gap between the lowest and highest combined rates can distort the allocation of resources by creating a high effective rate of protection (ERP) for a manufacturing process or economic activity (see Annex 1 on *Excerpts from the International Customs Guidelines*). The analysis here and in Annex 1 shows that:

- Once the impacts of the customs duty and the import tax are combined, one finds a small number of different rates but a relatively large dispersion among rates owing to the large gap between high and low rates.

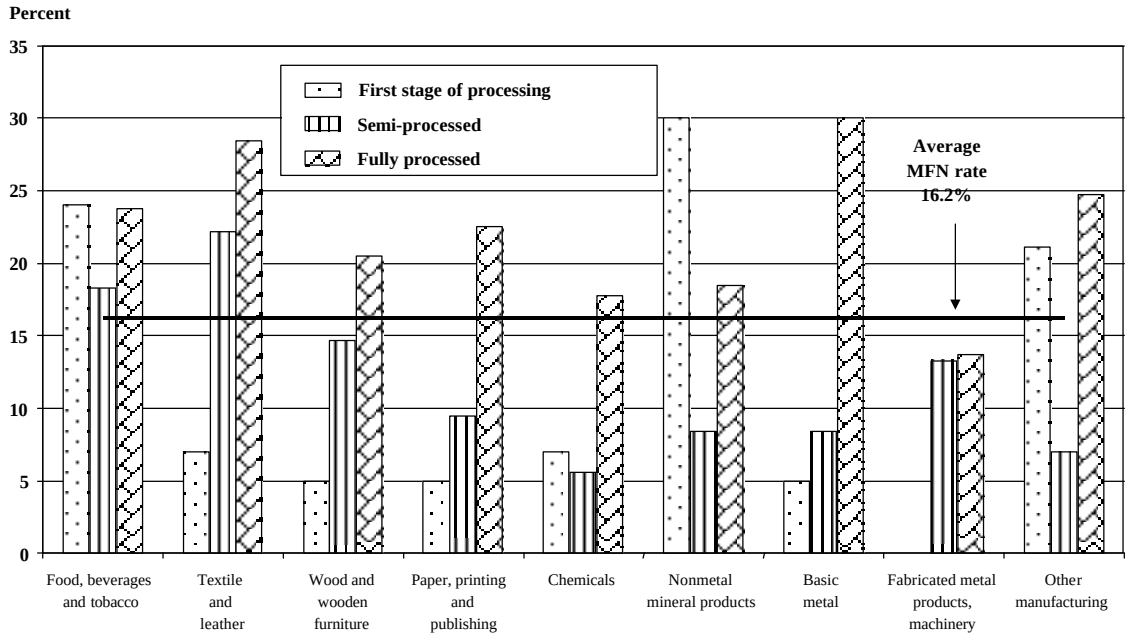
- The structure of nominal protection increases with the degree of product transformation.

- A potentially large discrepancy in effective rates of protection exists across sectors.

These stylized facts suggest that the tariff structure should be simplified further to reach a greater degree of uniformity and to reduce the top 30 percent tariff rate. The customs

duties and import taxes, which are coordinated to create a limited number of rates, could be consolidated into one rate. Such a simplification would be advantageous for two reasons: (i) it would reduce distortions in the allocation of resources and (ii) it would reduce incentives for producers to get "made-to-measure" tariffs.

FIGURE 2.1 TARIFF ESCALATION BY 2-DIGIT ISIC DIVISION, 2000



Note: **Figures include the import tax.**

Source : **WTO Secretariat calculations, based on data provided by the Malagasy authorities.**

2.2.2 Import Taxation As A Source Of Revenue

In Madagascar, as in many developing countries, trade taxes are an important source of government revenue. In 2001, import taxes combined (collectively known as border taxes) yielded total revenues of MGF 1.452 billion, and represented 49.9 percent of the government's fiscal revenues (see Table 2.2). Of this total, MGF 348 billion (12 percent of tax revenue) were from customs duties and import taxes; MGF 722 billion (24.8 percent of tax revenue) were value-added tax (VAT) levied on imported products and MGF 272 billion (9.3 percent) were taxes on petroleum products (Taxe Unique sur Produits Petroliers [TUPP]). Given that imports amounted to only 31.7 percent of GDP in 2001, these figures imply that the VAT collected on imports was more than that collected on domestic output. Undoubtedly, these figures also reflect the higher efficiency in collecting border taxes compared to domestic indirect taxes.

TABLE 2.2 STRUCTURE OF TAX RECEIPTS IN MADAGASCAR, 1995-99 (MILLIONS OF MGF)

	1995	1996	1997	1998	1999	2000	2001	2001 (% of total).
Direct taxes	**168**	**258**	**329**	**340**	**398**	**467**	**595**	**20.4**
Land & building taxes	**14**	**17**	**27**	**23**	**25**	**31**	**34**	**1.2**
Taxes on goods & services	**299**	**342**	**370**	**411**	**662**	**865**	**804**	**27.7**
TUT-TST-TVA	*242*	*167*	*178*	*206*	*389*	*513*	*536*	*18.4*
Excise taxes	*1*	*74*	*66*	*78*	*128*	*160*	*110*	*3.7*
Redevances	*46*	*91*	*112*	*117*	*112*	*179*	*146*	*5.0*
Other	*9*	*9*	*14*	*11*	*33*	*13*	*12*	*0.4*
Border taxes	**634**	**750**	**948**	**1197**	**1481**	**1591**	**1452**	**49.9**
Customs duties	*81*	*103*	*132*	*146*	*149*	*123*	*116*	*4.0*
Import tax	*149*	*181*	*235*	*279*	*265*	*241*	*232*	*8.0*
VAT on imports	*281*	*258*	*341*	*592*	*624*	*712*	*722*	*24.8*
Petroleum tax	*79*	*156*	*187*	*142*	*340*	*398*	*272*	*9.3*
Others	*0*	*34*	*46*	*38*	*105*	*18*	*6*	*4.1*
Export taxes	*44*	*19*	*7*	*0*	*0*	*0*	*0*	*0.0*
Other indirect taxes	**7**	**7**	**15**	**14**	**14**	**18**	**22**	**0.7**
Total tax receipts	**1121**	**1374**	**1688**	**1984**	**2580**	**2972**	**2906**	**100.0**

TUT = Taxe Unique sur les Transactions
TST = Taxe sur les Transactions
TVA = Taxe à la Valeur Ajoutée
Source: IMF (2000).

2.2.3 Customs Valuation

Customs duties and import tax rates are one determinant of the extent of trade barriers created by the tax system. The magnitude of the barrier created by *ad valorem* (percentage of the value of the shipment) duties and taxes depends on the valuation method used to determine the value base to which the percentage tax rate applies. Madagascar became a WTO member in 1995, and until November 2000, invoked all of the special and differential provisions available to developing countries to delay

application of the Customs Valuation Agreement. In November 2000, Madagascar, in accord with the WTO rules,[10] adopted the transactions value as the standard valuation method for imports.

2.2.4 Tariff Exemptions

Exemptions from customs duties, import taxes, VATs and excise taxes for a number of imported goods or for particular importers reduce the "collected" rate (or "liquidated" rate in the official GOM terminology) of trade taxes below their "theoretical" values. The collected rate is the ratio of actual revenue collected to the cost, insurance and freight (c.i.f.) value of imports. The theoretical rate is the ratio of revenue collected to the value of imports, had the relevant tax been applied without exception to all shipments. The "implicit exemption" is the difference between the theoretical rate and the collected rate. Table SA.2.1 contains estimates of implicit exemptions, by important two-digit Harmonized System (HS) product codes for the year 2000, and the revenue lost due to exemptions. Exemptions from customs duties and import taxes are highest for artwork, fish and other seafood, beverages and tobacco and fruit and vegetables. The largest number of VAT exemptions appears for arms, fish and other seafood, fertilizers, fruit and vegetables and railway materials product categories.

The significance of exemptions can be evaluated by comparing the statutory rates with the rates actually applied after adjusting for exemptions. The unweighted average of the combined customs duty and import tax rates was 16 percent in 2000. After adjusting for exemptions, the unweighted average rate was 14.2 percent. The combined weighted average rate was 10.8 percent before exemptions and 9.6 percent after including exemptions. By excluding exemptions, the weighted average of all border taxes taken together (customs duties, import taxes, VAT and a number of other taxes of limited importance) would be 30.5 percent. When exemptions are included, the weighted average falls to 27 percent. The decline in revenues in 2000 for the Malagasy Treasury was thus MGF 139.795 billion (US$22.2 million at the average 2000 exchange rate), which represents 11.5 percent of border tax receipts excluding petroleum taxes.

The impact of exemptions from customs duties and import taxes appears relatively small compared with other SSA countries. Only a small number of tariff lines have significantly different theoretical and collected rates. VAT exemptions are more prevalent than exemptions from customs duties and import taxes.

Figures 2.2 and 2.3 depict the impact of exemptions in terms of budget cost by product category. Figure 2.2 shows that the most significant customs duty and import tax exemptions are on oils and fats (22 percent of the total), paper and printing products (13 percent), automobiles (11 percent) and machinery (9 percent). The most significant VAT exemptions (see Figure 2.3) are on oils and fats (55 percent), automobiles (10 percent),

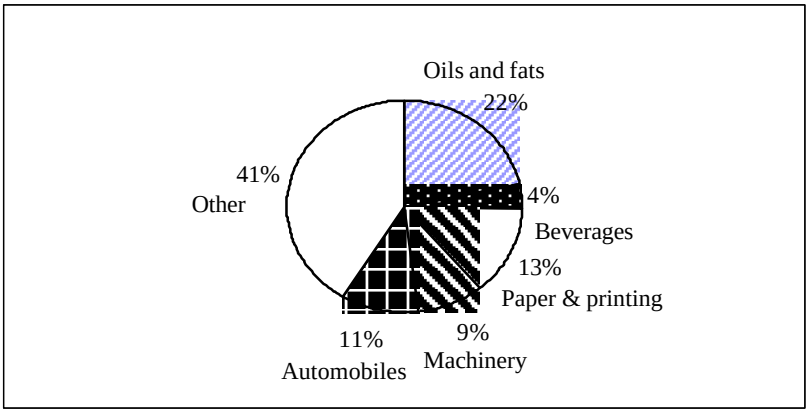
[10] Madagascar has obtained a temporary waiver to maintain minimum import prices for used tires, secondhand motor vehicles and spare parts and scrap aluminum.

machinery (8 percent) and fertilizers (4 percent). Thus, exemptions primarily affect capital goods and manufacturing inputs. This is not surprising for two reasons:

- First, border tax structure in Madagascar is escalating, and the structure of exemptions is consistent with this pattern.

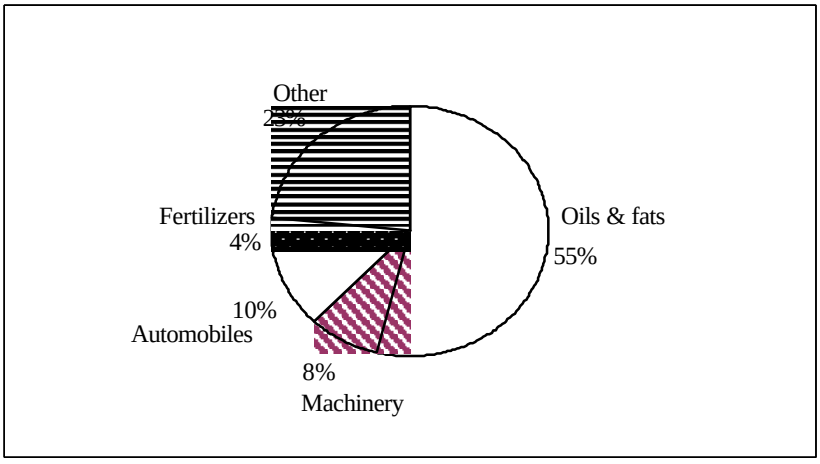
- Second, exemptions are granted arbitrarily, reflecting political forces. Therefore, it is natural to expect that goods not competing with domestic production are more likely to be subject to exemptions than products competing with local goods. Such a pattern of exemptions contributes to the distortionary impact of the protective regime.

FIGURE 2.2 BUDGET COSTS OF CUSTOMS DUTY AND IMPORT TAX EXEMPTIONS



Source: INSTAT, authors' calculation.

FIGURE 2.3 BUDGET COSTS OF BORDER-COLLECTED VAT EXEMPTIONS



Source: INSTAT, authors' calculation.

2.2.5 Antidumping Duties, Countervailing Duties And Safeguards

Madagascar does not currently apply antidumping duties, countervailing duties or safeguard measures. Yet, discussions are underway to draft legislation to create such mechanisms. If Madagascar does develop legislation and administrative mechanisms for antidumping duties, countervailing duties and temporary protection measures (safeguards), policy makers should ensure that such regulations do not become a back door for protecting domestic producers from foreign imports. If antidumping duties, countervailing duties, or safeguard laws are implemented, policy makers should make sure that such laws meet not only WTO requirements but also protect the welfare of consumers and users of imported inputs as well as the interests of domestic-import-competing firms.

2.2.6 Other Potential Non-Tariff Barriers

Several non-tariff trade measures applied by Madagascar could potentially distort and restrict international trade flows if they are administered in an arbitrary or discriminatory way.

On the import side, Madagascar applies 63 different product standards. These standards are nondiscriminatory because they are applied uniformly to imported and domestically produced goods. Furthermore, foreign and domestic firms have equal access to the certification office in the Ministry of Commerce and Consumer Affairs. Product standards can act as an NTB and distort trade if domestic standards are significantly different from international standards or if the actual certification procedures are not identical for imported and domestic goods. Prior authorizations are also required for imports of certain telecommunications equipment to ensure that the items are compatible with domestic standards.

Regarding exports, most registration and export licence requirements have been abolished. There is an export fee of 1.5 percent on processed wood products, which exporters pay directly to the National Forest Fund. There are also export controls on wood, managed by the General Directorate of Water and Forests in the Ministry of the Environment. While these may theoretically create distortions, the moderate export tax is essentially earmarked to finance reforestation and anti-deforestation programs.

2.3 BARRIERS IN THE QUAD MARKETS

Madagascar can improve resource allocation by reforming and liberalizing its own trade regime. However, the country will not be able to take full advantage of potential gains from trade if its trading partners maintain import barriers on the products that Madagascar exports. This section looks at the issue of market access in the major developed country markets (the QUAD markets). For many years, Malagasy exports to

QUAD countries benefited from preferential treatment that reduced duties and tariffs to below MFN rates. In fall 2000 and spring 2001, QUAD countries launched new initiatives to expand the product coverage of preferential access, widen the preference margin and ease origin requirements. This section reviews the recent initiatives by QUAD countries and their implications for Madagascar's major exports. The following section focuses on regional trading arrangements and questions of market access on a regional level.

2.3.1 Trade Relations With Canada

Canada implemented a Generalized Preferential Tariff (GPT) in 1974 to improve market access for developing countries. In 1983, it enacted the Least Developed Country Tariff (LDCT), which provided even more favorable tariff treatment for LDCs. Exports from Madagascar are eligible for these LDCT tariff rates. In 1998, Canada extended product coverage of duty-free access to include (i) all products except textiles, apparel and footwear and (ii) the out-of-quota tariff rates for agricultural products subject to tariff quotas.

In September 2000, Canada added an extra 570 tariff lines to the list of products eligible for duty-free treatment when exported by LDCs. The expanded coverage included iron and non-alloy steel, certain chemicals, prepared foods, cut flowers and shellfish. The percentage of tariff lines with duty-free treatment for exports from LDCs increased from 83 percent to 90 percent of all lines. Canada also liberalized the rules-of-origin requirements that apply to LDC imports. Previously, the preferential scheme called for a minimum of 40 percent of the content of a good to originate in LDCs or Canada. The new measure permits up to half of that required 40 percent content to originate in any countries eligible for the GPT, not just in LDCs. The other half of the 40 percent must originate in LDCs or Canada. The liberalization of the rules of origin allows firms in Madagascar to source additional materials from other developing (not just least developed) countries while taking advantage of improved access to the Canadian market.

2.3.2 Trade Preferences In The United States

A bill to increase growth and economic opportunities in Africa, or AGOA, was enacted in 2001, giving preferential access to US markets for eligible African countries.[11] In accordance with the bill's name, Madagascar now benefits from greater market access, relative to those countries that did not sign the free-trade agreement with the US.

Prior to AGOA, most African countries did have preferential access in that, under certain conditions, they did not pay customs or tariffs under the Generalized System of Preferences (GSP). Specific provisions under AGOA include the following:

- Expanded product coverage of duty-free treatment by roughly 1,800 tariff line items (including petroleum products, clothing subject to the Multi-Fiber Agreement

[11] African Growth and Opportunity Act or Africa Bill.

(MFA), footwear, luggage, handbags, watches and flatware) beyond the standard 4,600 tariff line items that had already been included under the Generalized System of Preferences (GSP).

- Extended GSP benefits for SSA countries until September 30, 2008, seven years longer than for the rest of the world.

- Duty-free and quota-free access to the U.S. market for apparel made from U.S. fabric, thread and yarn.

- Exemptions for SSA countries from competitive need limitations, which eliminate duty-free status of imports from a country that exceed certain limits.

- Duty-free and quota-free access to the U.S. market for apparel products made in eligible SSA countries from U.S. thread, yarn and fabrics. Access for apparel made from yarn and fabric produced in eligible SSA countries as a group is limited to a cap of 1.5 percent of the U.S. market, which expands to 3.5 percent over an eight-year period. As of July 2001, U.S. imports under the AGOA program total about 9 percent of the cap.

- A special rule for less developed SSA countries (those with a per capita gross national product below US$1500 in 1998) that allows duty-free access until September 30, 2004, for apparel made in those countries using fabric originating elsewhere. Imports in this category count under the cap noted above.

By far the most important provision of AGOA for Madagascar is the special rule for LDCs that allows duty-free access to the U.S. market for apparel made using fabric originating elsewhere. Madagascar is one of five countries certified to export to the United States under these provisions. The provision creates a tremendous incentive for garment production in Madagascar for export to the U.S. market, especially for production within EPZs, where firms have access to fabric at world market prices.

Since the late 90s, there have been considerable inflows of textile and ready-made clothes firms, which were encouraged by the EPZ provision scheme, and since 2000, by the AGOA provisions certification. Companies in the free trade zone more than doubled production between 1995 and 2001, which is the most rapid growth observed in the textile and clothing sector, over 90 percent of the 2001 production value. However, the political crisis of the first 2002 semester had a devastating effect as firms could not produce and export. Production for the textile industry was nearly wiped out in 2002 and is currently operating at only 30 percent of total capacity.

If labor productivity in Madagascar proves to be competitive, the share of salaries in total production costs remains low (15 percent of fob value). Most costs are related to overhead, management fees and input costs. The main problem currently is loss of confidence among investors, and buyers from Madagascar following the 2002 events, as most importers, primarily from the US, moved their operations to other African countries. All measures taken by the government to ensure political and economic

stability and to strengthen the transparency of investment and trade related regulation are essential for the sector to recover.

In addition, small and medium size enterprises have difficulties benefiting from AGOA provisions due mainly to working condition standards required by US buyers. Such standards require a minimum investment, which are feasible for EPZ enterprises, but not for smaller firms, whether they subcontract or not. This is an area in which funds may be mobilized to help SMEs invest in standards upgrades.

In the medium run, the main priority is to take proper actions regarding the end of the AGOA special rule for LDCs in September 2004, which virtually coincides with the end of the MFA in January 2005. After September 2004, Malagasy firms will retain their duty-free access to the US market only if they use fabrics produced locally in the United States or in other eligible AGOA countries. Several sources foresee an extension of provisions for LDCs through to 2008, but even if that is the case, this would leave only 3 years to either develop a local cotton industry capable of supplying the industry with sufficient quantities of quality fabric, or to find supply sources in AGOA eligible countries. The end of the MFA implies the end of quotas imposed on Asian producers, and accordingly, greater competition on the world market. Madagascar must, therefore, find solutions to address areas where it remains uncompetitive, namely production costs, energy expenses, forwarding time limits, infrastructure, efficient customs administration, and especially by restructuring of the cotton industry through the privatization of HASYMA, the main cotton ginning enterprise. These issues are addressed further in this report.

Textile products and vanilla account for 95 percent of the exports from Madagascar to the United States. Non-traditional exports such as lychees, seafood and handicrafts are competitive in and exported to European markets, but not to the United States even if they benefit from substantial preferential tariffs under GPS. Madagascar can develop other export products for the US market and avail itself of the temporary preferential advantages through capacity building in order to better grasp the many and complex technical standards and phytosanitary regulations required by US authorities, the US market itself and various distribution channels, as well as the high transportation costs. The ALINK and GTN programs, financed by USAID, are already addressing these issues in many COMESA member countries and might also be mobilized by Madagascar.

2.3.3 Trade With Japan

Japan's GSP scheme dates back to 1971 and consists of a list of agricultural products eligible for preferential treatment and a list of industrial goods (including textile products) not eligible for such treatment. Import ceilings apply to imports of some industrial products, but LDC's are exempt from these limits.

In April 2001, Japan expanded preferential access to its market for LDC's. This provision broadened product coverage for an additional 350 items under the GSP, including textiles and clothing products, guaranteeing duty-free and quota-free access. This action will benefit approximately 99 percent of all industrial products exported by LDC's.

2.3.4 Trade Relations With The EU

The European Union, especially France, is Madagascar's most important trading partner. In the last five years, however, Europe's share of Malagasy exports has fallen from 54.2 percent to 33.3 percent, while its share of imports has fallen from 41.7 percent to 27.8 percent. Since the first Lomé Convention in 1975, Madagascar has benefited from numerous European trade preferences as a member of the ACP group. The Cotonou Agreement, and Europe's unilateral "Everything But Arms" (EBA) Initiative, signed in 2000, have major ramifications for bilateral trade between Madagascar and Europe. These two events are analyzed below.

Everything But Arms

The EU's general GSP program grants developing countries preferential access to the EU market by offering a percentage reduction of the MFN duty rate. The level depends on the "sensitivity" of the product in the EU market. Launched in September 2000, the EBA initiative provides duty-free and quota-free access to its market for all products originating in LDC's, with the exception of arms and ammunition, and three highly sensitive agricultural products: bananas, rice and sugar.

- *Bananas:* Duties on bananas will be reduced by 20 percent per year beginning in January 2002 and eliminated by January 1, 2006.

- *Rice:* Duties on rice will be reduced by 20 percent on September 1, 2006, by 50 percent on September 1, 2007, by 80 percent on September 1, 2008, and completely eradicated by September 1, 2009.

- *Sugar:* Duties on sugar will follow a similar pattern: a 20 percent reduction on July 1, 2006, a 50 percent reduction on July 1, 2007, an 80 percent reduction on July 1, 2008, and complete elimination by 2009.

To compensate delays for total market access as regards rice and sugar, EU has introduced quotas within which duty-free rice and sugar imports may be carried out. Quotas will be calculated based on the best export levels by LDC's, marked-up by 15 percent and will increase by 15 percent per year until duties are totally eliminated.

In fact, additional access to the European market which is generated by the EBA initiative with regard to trade preferences guaranteed by Lomé Conventions is restricted and mainly involves the following products:

- Sugar, for which Madagascar has been entitled to a more substantial duty-free quota from mid-2001.
- Rice, for which Madagascar is currently entitled to a duty-free quota allowed by the EBA initiative.
- Beef, for which access to the European market is liberalized as soon as health and hygiene standards are met.

Consequently, based on Madagascar's foreign trade activity in 2001, the impact of the EBA initiative, primarily on the agriculture sector, which obtained additional access, has been limited. The problem with European market access for agricultural products occurs on different levels: imports from Madagascar are limited due to exporters' limited capacity to observe the health and hygiene standards (with the exception of shrimp exporters who benefited from the removal of the European embargo following a significant investment in quality control; meat exporters were unable to observe such standards) and due to measures aimed to protect the environment (export restrictions on endemic species).

The main constraint related to the EBA initiative is that rules of origin are more stringent than under the Lomé/Cotonou agreements. Even though the required processing level by product category tends to be similar, a number of rules have changed:

- Inputs from ACP countries cannot be cumulated to achieve the added value required for preferential access. Therefore, double transformation processes required by the rules of origin cannot be accumulated from one ACP country to another.

- Inputs from countries, which differ from countries of origin, cannot exceed 10 percent of the ex-plant value of the product, versus 15 percent for Cotonou agreement.

- For fishing products, the Cotonou agreement is more liberal regarding vessel related conditions (registration place, nationality of the crew, flag, etc.)

Recent research indicates that in 2001, EBA preferences by ACP countries that were eligible on average accounted for less that 5 percent of the total exports. In Madagascar, 15 percent of exports that could have benefited from preferential tariffs did not, possibly for reasons related to rules of origin or certification of origin, and 98 percent of preferences granted fell under the Cotonou agreement. Beyond the time required to adapt to new procedures, it is very likely that the majority of exports from ACP countries had had duty-free access to the European market under the Cotonou agreement and, as EBA imposes additional restrictions on rules of origin and requires different forms (form A instead of EUR1), there are no actual incentives to change schemes, except for agricultural products which actually benefit from greater market access, provided production is structured and standards are set up.

The Cotonou Agreement And Economic Partnership Agreements (EPA)[12]

One of the objectives of the Cotonou agreement, which was signed between the European Union and the group of ACP countries in substitution for Lomé Convention, is that ACP member countries enter the Economic Partnership Agreements, on an individual or collective basis, taking into account the existing regional integration processes. EPA negotiations started in September 2002 and should end on December 31,

[12] See, Addendum to Volume 1 entitled "Analysis of the preferential and regional trade agreements of Madagascar", May 2003.

2007. EPA should establish an agenda for progressive withdrawal of trade barriers on the road to establishing a Free Trade Area (FTA) between EU and regional ACP groups in accordance with WTO rules. Negotiations will be as flexible as possible with regard to the length of the transition period, the final list of products covered, sensitive sectors and the degree of asymmetry. Thus, preferential market access for Malagasy products will be modified from 2008 on. Madagascar will be able to benefit from preferential access under EEA like all LDCs, and / or to participate in one EPA on an individual basis, or more probably within a regional group which is still to be defined, which will result in a reciprocal but asymmetrical preferential trade agreement with the EU.

The Malagasy government seems to be determined to take part in one EPA in that Madagascar would like to be an active partner in the regional and global economy through regional and multilateral agreements, rather than depending on unilateral tariff preferences granted to LDCs by the main OECD countries. Costs and profits with regard to participation to an EPA, however, have to be assessed in depth. Besides the fact that an EPA will be a contractual agreement securing the framework of trade with the EU, it will allow Madagascar during negotiations, to address substantial issues such as the future of the Sugar Protocol, maintaining or enhancing Cotonou rules of origin, mainly for textile products, financing of standardization of products to European health and phytosanitary standards, and other aid or assistance forms likely to increase trade. A major drawback will be the progresssive reduction of tariff barriers on imports from the EU from 2008 on, which may entail trade diversion situations or revenue losses to the State. However, Madagascar will probably have to reduce its tariffs in the MFA scheme in accordance with the current multilateral trade negotiations (Doha Round).

If Madagascar decides to initiate negotiations for an EPA, taking account of restrictions in available human resources and in the influence that a LDC may have, it would be in its interest to join a larger negotiation group in the framework of COMESA, or which includes both COMESA and SADC. Madagascar will, however, have to set objectives at the end of such negotiations and look for alliances with other LDCs sharing the same priorities such as elimination of NTBs for access to EU markets, enhancement of rules of origin, and extension of the Sugar Protocol. Anyhow, Madagascar must decide rapidly and use the €10 million allocated by EU to ACP countries in order to conduct surveys, organize seminars, and build negotiation capacities.

2.3.5 Non-Tariff Barriers In QUAD Countries

Recent initiatives by the QUAD countries to expand duty-free and quota-free access to exports of the LDCs increase the potentially offsetting impact of any other barriers that could limit trade expansion even in the absence of tariffs and other quantitative restrictions. Exports of LDCs in particular face numerous forms of NTBs.

NTBs are essentially any government regulations or practices, other than a tariff, that limit, restrict or distort international trade flows. The list of NTBs is potentially very long. Some NTBs are clearly measures (other than customs duties) designed to control trade and applied at the border. They include any additional taxes on imports (antidumping or countervailing duties, temporary import surcharges), as well as

quantitative trade restrictions (import quotas, import licensing requirements) that directly limit imports. Tariff-quotas can act like quotas if the tariff on over-quota imports is so high that no imports exceed the quota limit. Regulatory measures targeting trade indirectly can have a distorting effect on trade flows. Technical standards on products designed to protect health and safety can act as trade barriers if applied asymmetrically to imported and domestic goods, or if the standards themselves depart from generally accepted international standards. Product standards can be particularly restrictive for LDC exports if set at a very high level or if administered in arbitrary ways.

The compilation in Table SA.2.2 shows that Madagascar's exports, particularly in agriculture, face widespread NTBs in the QUAD countries. Across the four QUAD countries, the major problem is in the area of product standards and sanitary and phytosanitary requirements. The NTB categories "Authorizations" and "Product Characteristics" are usually standards requirements. In addition to standards that are applied at the border and can result in denial of entry, imports into the United States are subject to testing and inspection.

Given the importance of food exports, the prospects for future growth of those exports and the proliferation of barriers in the QUAD markets, Madagascar has a great stake in the debate over standards in the WTO and in the revisions of the Agreement of the Application of Sanitary and Phytosanitary Standards (SPS) and the Agreement on Technical Barriers to Trade (TBT). Progress toward setting international standards for food safety and preventing WTO members from unilaterally applying measures that are stricter than international standards would help to maintain and enhance market access for agricultural products in the QUAD countries. Lack of progress in these areas could negate the gains achieved in the removal of the traditional tariff and quota restrictions.

2.4 REGIONAL TRADING ARRANGEMENTS

Madagascar participates in a web of overlapping regional trading arrangements with complex and sometimes potentially conflicting rules, including preferential trade liberalization, rules of origin and regional cooperation in a number of areas (regulatory and other). Africa has long lived with partially implemented trade liberalization agreements. Should even a small number of the existing arrangements survive or deepen, member countries will have to make choices and set priorities based on an assessment of the costs and benefits of participation in these agreements in terms of both economic efficiency and budgetary implications. In particular, as Chapter 1 shows, regional trading arrangements among developing countries may well result in greater costs than benefits. Chapter 2 elaborates on potential costs or problems associated with preferential trading arrangements. They include possible trade diversion, developing a suitable compensation mechanism among unequal partners, implementing rules of origin and the administrative costs of implementing them. When tariffs are quite high, as is the case in Madagascar, complying with rules of origin can be particularly costly and can become subject to evasion. Interviews with Malagasy customs officials suggest

that up to 20 percent of customs resources are used in checking rules of origin. Nonetheless, regional trading arrangements are a reality for Madagascar (as for many other African countries). The challenge is to take advantage of the opportunities and benefits that they can potentially offer.

2.4.1 COMESA

The Common Market for Eastern and Southern Africa (COMESA) was initiated in Kampala in 1993 as the successor to the Preferential Trading Area (PTA) for Eastern and Southern Africa, which was founded in 1981. Currently it has 20 member countries.[13] Madagascar joined the organization in 1995. COMESA's objectives include:

- The complete elimination of internal tariff and nontariff barriers and, in a second phase, the adoption of a Common External Tariff (CET).
- Free movement of labor and capital.
- Harmonization of product standards, especially sanitary and phytosanitary standards.
- Fiscal harmonization, particularly for VAT and excise duties.
- Cooperation on intellectual property and investment laws, and ultimately, a monetary union.

The most significant achievement under COMESA so far has been the establishment of a free-trade zone on October 31, 2000, among 9 member countries, namely, Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia, and Zimbabwe. More countries are expected to follow suit in coming years, but those not taking part do give preferential access to member countries. COMESA members agreed on creating a Customs Union in 2004, which includes the creation of CET. COMESA recently revised and simplified its rules of origin, which implies a minimum added value of 35 percent, a CIF value of imported inputs of less than 60 percent or a tariff line change. A COMESA certificate of origin must accompany all goods eligible for preferential treatment.

According to the COMESA Secretariat, the recent trade liberalization has had a favorable impact on trade: transportation costs within the area have on average decreased by at least 25 percent, and intra-COMESA trade has increased by 18.6 percent per year since 1993 (See Table SA.2.3). Madagascar's intra-COMESA trade has grown more rapidly, with an annual rate of 18.1 percent for imports and of 36 percent for exports. Nevertheless, the share of intra-COMESA trade in total trade among member countries remains marginal, but not negligible. To illustrate, only 15.8 percent of Madagascar's total imports come from COMESA countries while only 24.6 percent of its total exports

[13] Its members include: Angola, Burundi, Comoros, the Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.

go to COMESA members. For comparison, Madagascar's EU import and export shares are, respectively, 32.2 and 56.8 percent. However, trade with Mauritius accounts for 90 percent of Madagascar's intra-COMESA trade, which means that the other 18 member countries account for less than 1 percent of the remaining foreign trade flows. Mauritius is one of the biggest winners from trade liberalization in the area: its intra-COMESA exports more than doubled between 1994 and 2001 and reached US$ 105 million. This reflects the growth in vertical trade (especially with regard to textiles), whereby, Mauritian enterprises have sent the highly labor intensive portions of their operations to subcontractors based in neighboring countries, like Madagascar, where labor is cheaper. This sort of intra-industry trade may take form in various contracts (subcontracting, jobbing[14] or intra-group exchange) and provides one of the greatest benefits of trade, and is probably the engine of growth in Madagascar's EPZ. It however seems that offshore activities in Madagascar have also expanded by means of preferential access under AGOA in the US and EBA in Europe. In sum, vertical trade of semi-manufactured products among neighboring countries is driven more by preferential accesses to markets of OECD countries (North-South agreements) than by regional trade liberalization.

The almost negligible volume of trade between Madagascar and other COMESA countries, excluding Mauritius, can be explained by the following: transportation costs, poor knowledge of the market, and language differences. Other problems are tied to the rules of origin, namely that Malagasy producers cannot generate value added through vertical integration because they lack the necessary local inputs, in terms of quantity and quality. Without being sure about complementarity between the Malagasy foreign trade and that of COMESA, exporters find that there are real opportunities for exporters who are not yet ready for OECD markets: COMESA is still an untapped market both as a source of raw materials and as a destination of Malagasy products. For example, 13 COMESA member countries are also eligible for AGOA and could provide a supply of cotton fabric even after the special AGOA rule for LDCs on ready-made clothes items expires. The public and private sectors should jointly explore further opportunities in the COMESA market, with support from COMESA Secretariat administered funds. In addition, Madagascar's association with the Agency for Trade Insurance in Africa (ATI-ACA[15]) should be formalized soon. This agency was created with World Bank support and launched by the COMESA Summit in May 2000. Its objective is to promote and facilitate trade by insuring against any political risks associated with commercial transactions, thereby reducing the perceived risk of doing business in the region.

In 1994, COMESA members agreed to create a Customs Union by 2004. A Customs Union implies a higher degree of trade integration among members and requires the following measures (i) agreement regarding the Common Foreign Tariff applied by all

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[14] Cut Make Trim (CMT).

[15] African Trade Insurance Agency (ATI): according to an agreement signed by President Ravalomanana in October 2002, Madagascar should become in 2003 the 8th member country of ATI-ACA (the founding members are Burundi, Kenya, Malawi, Rwanda, Tanzania, Uganda and Zambia).

member countries (ii) liberalization of domestic trade to ensure free movement of goods in the new customs territory (iii) harmonization of regulations and technical measures for effective and uniform implementation of the Customs Union, as well as easy management (iv) an institutional framework which may implement and supervise the regulations of the Customs Union (v) a scheme to manage customs and tax revenues distribution and collection and (vi) a common foreign trade policy which will ensure coherence in implementing CET in all countries. Although the COMESA Secretariat worked intensively to execute the Customs Union roadmap, much of the basic technical work has yet to be done and the most sensitive decisions have yet to be made. Expectations should not be set too high, as the inaugural date should be deferred.

The various simulations carried out by the COMESA Secretariat based on a tariff bracket proposal (4 brackets of which 3 are non zero: 0 percent for capital products, 5 percent for raw materials, 10 percent for intermediary products, and 30 percent for manufactured products) indicate that there will not be revenue losses for Madagascar following the establishment of the CET. Though such calculations should not be taken too seriously, these results should not be too surprising due to relatively low level of actual tariffs, but they should not mask the relative costs of the increasing levels of protection and tariff escalation. Indeed, the CET proposal will require that Madagascar increase its tariffs on crucial import categories, including food products that might not be available in the region, at a reasonable quality or quantity, which may harm consumers' interests and trigger actions to avoid high tariffs. In addition, there are trade diversion[16] risks, which benefit the most developed countries at the expense of countries like Madagascar, which would lose tariff revenues and accommodate industrially less efficient countries elsewhere[17]. The CET could be a step backwards for Madagascar in its long-term liberalization strategy due to its trade and integration policy with respect to the world economy; and the issue being raised is whether or not the customs union will provide an opportunity to integrate, given the low levels of trade with members of COMESA. If Madagascar embarks on the COMESA agenda and wants to join the future Customs Union, the government must do so by preserving and maximizing its interests, indicating clearly that its priority consists of adopting a lower end uniform CET that is compatible with WTO rules, in order to reduce protection levels and minimize risks of tariff escalation and trade diversion.

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[16] See explanations on "trade diversion" in Volume 3, Box 2.3 "The bases of the economy of regional trade agreements".

[17] Case of Egypt: this dominant COMESA country applies an MFN scheme with high tariffs (the non weigted average of Egyptian tariffs is 29 percent) and accumulates a considerable number of non-tariff barriers. Most of its imports are made under State control, with an Office of Imports, which keeps an exhaustive list of authorized importers. Such conditions in general make Egyptian products uncompetitive with regard to wolrd prices. Obligations to import Egyptian products rather than others from elsewhere on the world market under preferential agreements will therefore penalize partner countries.

2.4.2 The Indian Ocean Commission (IOC)

The Indian Ocean Commission (IOC), created in Victoria in 1984, is a regional cooperation agreement, which reclassifies five COMESA members[18], under the auspices of the European Union through the European Development Funds. Its objective is to encourage trade and regional cooperation in all possible areas such as diplomacy, economic and culture matters, and in technical sectors (environment, tourism, health, etc.). A five-year Regional Integration Program for Trade Development (PRIDE) was set up in 1996, aiming to strengthen regional integration within the IOC through trade liberalization and coherence of investment and trade policies. The main achievement has been the bilateral elimination of tariff barriers between Madagascar and Mauritius in January 1, 2000. Until recently, Madagascar has been a passive stakeholder in this organization, whose agenda was largely driven by that of Mauritius. Since then, the Malagasy government has pointed to the IOC as its target to increase its presence in matters of regional integration. Additionally, when IOC member countries in the past encountered difficulties when aligning IOC trade regulations with those under COMESA, they adopted the COMESA framework and procedures for their bilateral operations (with the exception of Reunion). It might probably make sense for Madagascar to examine its participation in IOC in depth regarding regional cooperation issues, but lo leave trade issues to COMESA.

2.4.3 The Southern Africa Development Community (SADC)

The Malagasy government is favorable to membership to SADC, which will grant it access to the South African market, as South Africa is the most important economic partner in the region. In this regard, contacts between the two governments have already been established. SADC was instituted in July 1992 by means of a Treaty. It includes 14 member countries[19] and aims to achieve economic development and growth by reducing economic dependence, by creating a means to increase integration within the region and by promoting international cooperation. As it was originally created to address regional security and solidarity, SADC extended its actions to political, trade and investment issues: the member countries have signed 19 protocols on various themes such as trade, health, energy, water, standards, national security, corruption, transportation, telecommunications, drugs, etc.

The SADC Trade Protocol was signed in 1996, became effective on January 25, 2000 and was officially launched on September 1, 2000. It provides for the establishment of a Free Trade Area (FTA) in 2008 after a transition period of 8 years at the end of which 85 percent of trade will be duty-free. Sensitive products, which do not exceed more than 15 percent of trade volume, will be totally liberalized in 2012, whereas others will be excluded from any liberalization, which is not in conformity with Article 24 of GATT.

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[18] Madagascar, the Comoros, Mauritius, Reunion (France), and Seychelles.

[19] South Africa, Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Zambia and Zimbabwe.

The Trade Protocol has retained the principle of asymmetry in which SACU (Southern African Customs Union[20]) will reduce its tariffs within 8 years, while the other countries will do so within 12 years. However, the implementation of the protocol varies greatly by country, and in 2004, only a small proportion of intra-SADC trade will have been liberalized (starting with the lowest and the least important ones for domestic trade), and by 2008, most countries (except SACU) will probably not have achieved 80 percent of the planned liberalization. The impact on trade flows has so far been very limited.

One of the key issues of the Trade Protocol, which could be important for Madagascar, involves the rules of origin for products traded in SADC. Though they are similar to those of COMESA, specific rules apply to several products involving specific transformations or requirements to obtain the status of origin, thus preventing the development of regional supply lines or cross-border vertical integration between countries. In addition, agreements still have to be made regarding the rules of origin, which apply to textile products, wheat flour, flour-based food products, spices, plastic products, machines and equipment, vehicles and components, and some products in chapter 90.

Madagascar has duty-free access to most SADC member countries thanks to the COMESA FTA; its primary motivation for adhering to SADC is to gain better access to the South African market, which in theory represents interesting prospects: the Republic of South Africa (RSA) accounts for 70 percent of SADC GDP. Another reason for adhering to SADC is to attract more investment from South Africa, due to provisions in the RSA's balance of payments regulations[21], and thereafter to supply the whole region. Malagasy exports to RSA totalled only US $2.1 million in 2001 and were dominated by three product categories: vegetable fibers, spices, and fruit and nuts. For its part, 20 percent of RSA imports come from SADC member countries, and this share might increase once SADC FTA is set up, which would be harmful to Madagascar if it was to remain outside. Madagascar may no longer be competitive in producing those goods currently, or likely to be, exported to South Africa, due to preferential treatment for competitors such as Mozambique (shrimp) or Tanzania (cloves and spices). Recent trade patterns within SADC, however, indicate that preferential access to RSA, by means of the Trade Protocol or bilateral agreements, does not always result in an increase or equalization of trade. RSA exports in the region account for more than 70 percent of intra-SADC imports to the detriment of European goods. Furthermore, a recent study by the World Bank indicates that SADC countries have difficulties increasing their agriculture exports to RSA, which then turns to other regions in the world. The explanations cited include transportation costs, protectionist rules of origin, communication problems, low volume of production, lack of market related knowledge, standards and quality issues. For example, RSA imports more than US $ 200 million of

[20] The Customs Union between South Africa, Botswana, Lesotho, Namibia and Swaziland has been operational since 1970 and revised in 2000.

[21] According to the current control rules on the payment balance, South African enterprises are authorized to invest up to a limit of Rand 50 million. The ceiling increases to 250 million for investment in SADC countries.

clothing per year, of which only 10 percent comes from SADC countries. This is due in part to a very slow liberalization of SADC trade regarding textiles and, in part to rules of origin that demand a double processing minimum.

If Madagascar wants to adhere to SADC, a more detailed analysis must be conducted regarding current obstacles to effective RSA market access, be they violations of the Trade Protocol or other RSA trade practices (relating to tariffs, non-tariff barriers, and anti-dumping), in order to evaluate their impact, as well as the risks of trade diversion, and to establish a means to overcome them through negotiation. Furthermore, Madagascar, like other countries, will have to reconcile its obligations to SADC (which goes beyond the trade framework) with other regional integration agreements which might be contradictory, namely at COMESA level (membership to the Customs Union and application of CET). The ability of the Ministry of Trade to carry out studies, and discussions and to put agreements into practice is limited; but the real problem is with the customs administration, which will have to manage imports from various countries subject to differing tariff rates, rules of origin, and clearance procedures. The confusion and corruption that may result would be harmful to the business and investment climate, and to the agreements themselves. Last, SADC membership has a cost: a US $ million entrance fee and an annual contribution of US $ 500,000 per year. It would perhaps be in the interest of Madagascar to wait until 2005, after revising the Trade Protocol toward a more rapid liberalization and the elimination of NTB's, and meanwhile to focus on ongoing trade negotiations such as the current WTO cycle, EPA and COMESA Customs Union, unless Madagascar wants to initiate bilateral negotiations with RSA or SACU which, nevertheless have other priorities (the United States and other countries which have engaged in negotiations).

2.5 CONCLUSIONS AND RECOMMENDATIONS

Madagascar must aim to strengthen incentives within its trade policy regime to expand its presence in international trade. This must be done while working to expand market access for Madagascar's export goods abroad.

Despite significant progress, rates of protection are still relatively high in Madagascar. Its trade regime remains as restrictive as that of many other SSA countries. The simple average combined customs duty plus import tax is 16 percent, but over one-third of products are subject to the maximum rate of 30 percent. The tariff structure is relatively simple, with three major rates of 5, 15 and 30 percent. Nonetheless, the 25-percentage-point gap between the low rate and the high rate opens up the possibility of high effective rates of protection when inputs into productive processes are taxed at the low rate and the final products are taxed at the top rate. Lowering the top rate would reduce the degree of dispersion and the potential for high effective rates.

NTB's do not appear to be a major problem in the current regime, but care must be taken not to allow excessive and arbitrary levels of protection to creep in through laws on antidumping duties, countervailing duties and safeguard actions, or through the adoption of arbitrary reference prices. Exemptions to customs duties, import taxes and

the VAT, although limited, appear to result in some loss of revenue to the government and an amplification of tariff escalation.

The coming trade negotiation program at a regional and international level provides a major challenge and an opportunity for Madagascar. The Government has taken the initiative to create an inter-ministerial "task-force" to coordinate discussions on regional and international agreements. An agenda to strengthen the institutional framework including the task-force, the ministries (industrialization, commerce and private sector development, and foreign affairs), customs administration and related capacities must be set up by empowering the task force rather quickly. This means setting up a small committee comprised of few members, a secretariat in charge of general administration, and a steering committee of the Integrated Framework as a working group under its direction.

In the short term, Madagascar must enhance and build its negotiation capacities in international and regional trade, namely to prepare the Economic Partnership Agreements with the European Union and to take a position regarding the establishment of a Customs Union within COMESA. In the same period, the capacity building agenda of the customs administration, which aims to set up a risk management scheme must go on by observing a specific timeline. These actions call for the participation of international experts in international trade to carry through a continuous agenda of seminars on various problems of trade. Regarding EPA's, Madagascar should not take the lead on negotiations. It should instead focus on priorities, such as providing support to get exports to meet European health and phytosanitary standards, getting an extension on the Sugar Protocol and a modification of the rules of origin to eliminate the requirement for double processing that allows for accumulated criteria in ACP countries, and to come to accords with other LDCs sharing the same priorities. In addition, Madagascar should obtain financing from EU to conduct a study on the advantages and the drawbacks of EPA for the country; the same study should also examine the reasons why 15 percent of Malagasy exports to EU, which are eligible for preferential treatment, do not benefit from it. A study should also be conducted on the future of the sugar sector. Regarding the COMESA Customs Union, one step might consist of requesting for a one-year delay, and for a reduction in the Common Foreign Tariff, which is currently being proposed to reduce and harmonize the level of protection.

In the medium term, Madagascar has the possibility to benefit more from various initiatives of the QUAD group or from regional integration agreements, which aim to extend preferential market access. A more extensive preference system provides opportunities to increase exports. Similarly, regional agreements often open untapped markets to exporters who are not ready yet for OECD markets. Actions aimed at enhancing knowledge of these various markets are indispensable to bypass tariff or non-tariff barriers, and to diversify the eligible competitive products that are actually exported. However, the advantages of preferences granted by the QUAD group will, over time, decrease as they are provisional, and quotas for products coming from other countries will be progressively eliminated, and MFN tariffs will be negotiated downward. It is therefore essential to take advantage of current opportunities, to

endeavour to maintain competitiveness and to best manage exposure to institutional transitions, such as the end of the special rule for AGOA and MFA LDC's. Madagascar has expressed willingness to adhere to SADC, but it must conduct an in-depth analysis of the implications of such actions. De facto, it is necessary to conduct various studies and to develop strategies to realize such actions; they are as follows:

- a study of possible supply sources among other AGOA eligible countries;

- a development strategy for the Malagasy cotton industry through namely de-monopolization along the entire supply line and a privatization strategy for HASYMA;

- a strategy to increase new product exports to the United States based on preliminary studies of costs and frequency of transportation, technical regulations specific to the US market, distribution channels, and the logistical difficulties that exist in Madagascar. Furthermore, facilities should be set up so that Malagasy SME's can comply with working condition standards required by the US market;

- a strategy to penetrate COMESA markets based on marketing studies identifying trade opportunities, transportation feasibility, and based on funding participation in trade fairs in the COMESA area;

- an in-depth study of the consequences of becoming a member of the SADC, while waiting for 2005 to file a formal membership application, after the Trade Protocol is modified.

Finally, Madagascar must, in general, make the most of opportunities to foster regional cooperation beyond trade. The highest priority should be granted to regional economic cooperation beyond trade preferences, for example, in matters related to customs, or to comply with WTO accession regarding standards and intellectual propriety.

CHAPTER 3
DEVELOPMENTS IN THE PRIMARY SECTOR

3.1 INTRODUCTION

Madagascar faces important challenges to agricultural development. Efforts to reduce poverty, over the next ten years and beyond depends, to a large extent, on its ability to (i) reverse long-term trends of declining (per capita) production of major food crops, (ii) improve the competitiveness and local value-added of both traditional and non-traditional exports, and (iii) raise the general productivity and sustainability of production systems. As discussed in Chapter 1, poverty in Madagascar is above all a rural phenomenon. The growth of urban activities and of tourism can absorb surplus agricultural labor. Yet tackling rural poverty requires direct improvements in agriculture itself and in the supply chains which market agricultural products, both domestically and abroad. Hence, agriculture remains at the centerpiece of Madagascar's long-term development strategy.

The agricultural and fisheries sectors accounts for nearly 43 percent of GDP and just under 50 percent of total exports, and employs more than 75 percent of the active population. These exports are generated by highly labor-intensive sub-sectors, especially in primary production processes. For a long time, the country's agricultural output growth has been weak, and productivity and traditional agricultural exports have largely stagnated or declined, although in some sub-sectors (i.e., vanilla) there are on-going efforts to revive competitiveness. A large number of smallholder farmers have a major stake in the success or otherwise of these efforts. Non-traditional exports, especially shrimp and fruits and vegetables, have expanded in recent years and hold out growth potential for the future. Combined public-private actions in natural resource management and the maintenance of effective quality, phytosanitary, and sanitary standards will be required to sustain this growth.

This chapter describes the geographical nature of rural poverty in Madagascar, highlights major long-term trends in agricultural development, and reviews policies and various structural factors that distort prices, which have generally retarded agricultural development. It provides a series of short sub-sector case studies. These case studies highlight links between primary producers and the national or international market to identify priorities for policy-makers. The chapter argues that the state will have to continue to redefine its role in agriculture, which, paradoxically, requires both disengagement from some activities, and becoming more proactive in others in order to reduce rural poverty and improve the trade performance of the agricultural (and fisheries) sector. More specifically:

- *The government should privatize remaining agro-industrial parastatals (i.e. in cotton and sugar) and more generally reduce its direct market and pricing interventions, while ensuring that marketing and distribution activities remain competitive;*

- *The government should help improve infrastructure and institutional development. This includes: (i) developing new and revitalizing the existing road and irrigation infrastructure, (ii) facilitating research and extension, and advisory services, (iii) creating the right conditions so that farmers and small agro-food processing firms can have access to credit, (iv) strengthening capacity to meet international phytosanitary standards, and (v) establishing more secure land ownership rights.*

3.2 GEOGRAPHY AND DISTRIBUTION OF RURAL POVERTY

Poverty and remoteness are closely related in Madagascar. Remoteness is in turn associated with a lack of infrastructure and/or limited access to basic services, and also to markets, for a segment of the rural population. Table 3.1 computes the poverty levels for rural households ranked by their degree of remoteness.[22] The relationship between remoteness and poverty incidence suggests that one of the priorities to reduce poverty should be to expand and facilitate the participation of rural communities beyond their local economy by further integrating with the national economy and ultimately the international marketplace.

TABLE 3.1 POVERTY IN RURAL MADAGASCAR BY DEGREE OF REMOTENESS, 1999

Remoteness Quintile	Poverty Incidence (HCR)	Poverty Gap (PGR)
Most remote	82.8	42.4
2	78.9	35.6
3	78.9	37.7
4	77.7	36.5
Least remote	65.6	29

Source: Paternostro et al, 2001.

Remoteness means that the only accessible markets are local ones. This in turn has two implications: first, many of these markets may not be competitive, even in the absence of any government restrictions; second, when the extent of the market is limited, transactions may not be profitable, with consumers and producers bearing additional costs, such that the rural economy may be caught in a poverty trap. These issues are discussed in detail in Chapters 2 and 5 of Volume 2, which deal, respectively, with the impacts of infrastructure and of regulations on rural poverty.

[22] The remoteness index is constructed as the weighted sum of indicators of the existence in the community of a road, a bus stop, and access to agricultural extension services, access to fertilizers as well as distance to the nearest school and health clinic. The remoteness indicator is a proxy for the lack of connection between the local (mainly subsistence) economy, the national, and the international economy.

Table 3.2 summarizes the distribution of cultivated area by province and by major commodity. A few observations emerge from the data:

- Food crops are grown on four-fifths of all cultivated land, and a large proportion of agricultural production is self-consumed or sold in local markets. Rice remains the dominant crop, even though maize and tubers are importation for some regions.

- Roughly 5 percent of all cultivated land is devoted to mechanized agriculture, primarily for sugar, groundnuts, and cotton. These crops are produced across different regions throughout the country.

- The remaining 15 percent of cultivated land, which is located on the east coast of the country (in the provinces of Fianarantsoa, Toamasina, and Antsiranana), is devoted to cash crops for export, including coffee, cocoa, cloves, pepper, and vanilla.

TABLE 3.2 SUMMARY OF THE DISTRIBUTION OF AGRICULTURAL PRODUCTION BY CROP AND REGION, 1998

	Antananarivo	**Mahanjanga**	**Fianarantsoa**	**Toamasina**	**Antsiranana**	**Toliary**	**Total**	**Total area**
a. Share in total area	%	%	%	%	%	%	%	ha
Rice	16.1	18.2	17.6	27.7	11.7	8.6	100.0	1,212,650
Maize	50.2	10.7	10.9	8.5	3.6	16.1	100.0	193,270
Beans	47.6	2.7	36.4	5.4	1.0	6.9	100.0	82,985
Pois du cap	0.0	1.0	0.0	0.0	0.0	99.0	100.0	4,590
Cassava	15.3	6.4	45.9	9.0	3.4	20.1	100.0	351,985
Sweet potatoes	35.3	2.3	25.6	5.6	2.0	29.2	100.0	91,240
Potatoes	87.9	0.3	10.8	0.7	0.2	0.1	100.0	49,405
Sub-total food	23.2	13.5	22.9	19.8	8.2	12.3	100.0	1,986,125
Sugar cane	4.4	20.5	19.4	18.8	23.1	13.8	100.0	67,780
Cotton	-	-	-	-	-	-	100.0	33,792
Tobacco	-	-	-	-	-	-	100.0	3,310
Groundnuts	29.9	15.0	21.9	6.0	3.0	24.1	100.0	47,450
Sub-total industrial crops								**152,332**
Coffee	0.5	2.2	45.1	31.0	20.1	1.2	100.0	193,355
Vanilla	0.0	0.7	0.0	16.6	82.7	0.0	100.0	25,750
Pepper	0.0	7.0	36.5	7.8	48.8	0.0	100.0	4,000
Cloves	0.0	0.1	11.3	87.7	0.7	0.0	100.0	79,570
Cocoa	0.0	0.0	0.0	0.0	100.0	0.0	100.0	4,428
Sub-total export crops	0.3	1.6	31.8	43.8	21.9	0.7	100.0	307,103
b. Agricultural population								
	2,924,460	1,372,890	2,563,230	1,667,980	1,115,200	1,558,040		11,301,800

Source: Agricultural Statistics Services, Ministry of Agriculture, 2001.

Thus, improving the incomes from the current export-producing areas cannot in and of itself contribute substantially to poverty reduction. There must also be incentives (and available infrastructure) to enable farmers to shift away from import-substitution crops (like sugar and rice) toward exports and/or other types of higher value products.

While geography has an important impact on market access, the available data confirms the positive relationship between cash cropping and overall agricultural diversification on the one hand, and rural household welfare (as measured by average per capita household expenditures) on the other. Table 3.3 illustrates that richer households are more likely to grow cash crops (industrial and export crops) than are poorer households (31 percent compared to 24 percent). Richer households are more prevalent in the East and the North East regions. Households that grow vegetables are primarily located in the Highlands, and in the geographical area surrounding large urban centers.

TABLE 3.3 AGRICULTURAL INCOME BY EXPENDITURE QUINTILE

Variables	Unit	National	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Per capita real expenditure	MGF	341,359	101,588	176,740	246,163	347,623	889,916
Per household Expenditure	MGF	1,654,012	668,177	1,091,072	1,334,646	1,618,496	3,772,229
Total Value Product	MGF	1,458,374	746,880	930,677	1,106,352	2,731,085	1,879,439
Grow cash crops	% of hhs	26	24	24	25	26	31
Grow vegetables	% of hhs	9	5	5	10	12	13
Grow fruits	% of hhs	26	21	25	26	28	34
Diversification	% of hhs	41	36	36	40	44	49

Source: EPM 1993

3.3 THE LONG-TERM DECLINE OF AGRICULTURAL PERFORMANCE

The agricultural sector in Madagascar has declined since independence in the early 1960s. Despite the gradual reduction of state intervention in the sector since the mid-1980s (see Box 3.1), agricultural performance, as measured by a wide range of indicators, has been unsatisfactory, and insufficient in reducing rural poverty. Tables 3.4 and 3.5 provide some indicators of this performance, which suggests an actual deterioration of performance during the 1990s compared to the prior decade.

TABLE 3.4 AVERAGE ANNUAL GROWTH RATES IN FOOD AND NON-FOOD PRODUCTION

	1980-89	1990-2000
Agricultural GDP	2.50	1.40
Food Production	1.63	0.81
Food Production Per Capita	-1.04	-2.31
Non-Food Production	1.45	-1.77

Source: World Bank Africa Regional Database.

TABLE 3.5 AVERAGE ANNUAL GROWTH RATES IN YIELDS FOR MAJOR CROPS

	1975-1984	1985-1989	1990-1998
Rice	**-1.1**	**0.2**	**0.1**
Cassava	**-1.2**	**0.6**	**0.0**
Coffee	**-1.3**	**-0.8**	**-0.6**
Vanilla	**-6.6**	**7.6**	**-0.3**

Source: World Bank Africa Regional Database.

BOX 3.1 MAIN REFORMS OF THE AGRICULTURAL SECTOR

Beginning in the 1980's, structural adjustment programs focused on low levels of demand -- restrictive monetary and fiscal policy, devaluations in 1987 and 1994 -- to make domestic products more competitive. For the agricultural sector, the reforms were implemented through the ASAC loan (Agricultural Sector Adjustment Credit). Structural reforms included:

- a liberalization of prices in domestic markets;
- the elimination stabilization funds;
- a liberalization of marketing institutions including crop marketing boards in the agricultural sector (e.g., rice in 1986);
- the gradual elimination of export taxes (coffee, cloves, pepper, and finally vanilla in 1997);
- the privatization of public sector enterprises;
- the liberalization of imports (e.g. the elimination import licenses); and
- the transfer in 1990 of the state's public works management of the irrigation system to agricultural cooperatives (FC).

Foreign Aid. Several coinciding projects, funded primarily by the World Bank and the European Union, included the National Project for Agricultural Research (NPAR), the National Project for Agricultural Extension (NPAE), and the Small Perimeter Irrigation Project (SPIP).

Institutional Reforms. The Rural Agricultural Development Policy (RADP) was launched in 1997. It came into existence following the Rural Development Support Program (RDSP) and the other programs, such as the NPAR, NPAE, and SPIP programs. This political framework oversees all public investments and will stimulate a participatory process involving the integration of (decentralized) agricultural cooperatives, and localized public sector operations.

Presently, the cotton and sugar sectors have not yet been reformed, and the state continues to play a role in allocating fertilizer provided by foreign aid.

The long-term decline of food production per person reflects a deteriorating food security. Rice consumption measured in kilograms per person dropped from 136 kg's in 1995 to 114 kg's in 2000. The average daily caloric intake per person has fallen from 2,940 calories in 1975 to 2,001 calories in 1998.

Madagascar's long-term performance in agricultural exports has also been unsatisfactory, reaching a total value of roughly $235 million in 1999 compared to $293 million in 1980. Only a few African countries have experienced similar declines in their agricultural exports over this period, and most of those experienced civil wars (i.e. Mozambique and Angola), which undermined all commercial activity.

The volume of traditional agricultural exports fell even before the decline in world prices. At the same time, the quality of exports fell due to the fact that platings are past their prime due to the lack of quality control. With the exception of vanilla, Madagascar is losing ground in international markets. The decline in volume and in the prices for traditional exports has been accompanied by the emergence and continual growth of new products, such as shrimp, canned tuna, other seafood products and tropical fruit. As shown in Table 3.6 below, the value of new export products now surpasses the value of traditional products.

The export data are extracted from the UN COMTRADE database and calculated by summing up, for all other countries, total imports from Madagascar. This methodology gives more reliable estimates than the government's export data, and provides a way discern just how large the volume of undeclared exports is.

The data show that the portion of exports from agriculture and fishing has fallen from 70 percent in 1980 to 68 percent in 1990, and to 49 percent in 1999. This negative trend is largely driven by the drop in coffee, as the majority of other traditional exports (e.g., sugar, spices, and sisal) have remained stagnant or have fallen only slightly. Exports of fruits and vegetables, and cotton have risen during the 1990's, but did not offset the decline in coffee. Seafood exports, particularly shrimp, have risen dramatically, from an export share of only 5 percent in 1980 to a share of almost 20 percent during the 1990's.

Madagascar's exports are destined for a small number of markets, with industrialized countries (the EU, especially France, followed by the United States and Japan) being the primary trade partners absorbing more than 80 percent of its agricultural exports. Although the destination of Madagascar's principal exports did not change radically during the 1990s, there has nonetheless been a shift away from the United States and Japan to France, the Middle East, North Africa and other European countries. For the most part, Madagascar has failed to take advantage of a large food and agricultural import market located virtually at its doorstep—that of South Africa.

TABLE 3.6 MADAGASCAR'S PRINCIPAL AGRICULTURAL EXPORTS AND EXPORT SHARES (US$1000), 1980-99

SITC-4 Code	Product	1980	1985	1990	1995	1998	1999
0360	Shellfish and molluscs, fresh, chil	20,091	24,588	40,523	80,772	110,275	102,640
0371	Fish, prepared or preserved, n.e.s. I	0	0	36	22,384	37,212	30,530
0342	Fish, frozen (excluding fillets)	0	627	12,163	5,886	786	4,585
	Total Fish	0	627	12,200	28,271	37,998	35,115
0579	Fruit, fresh or dried, n.e.s.	1,075	1,112	14,025	48,939	49,504	42,418
2929	Other materials of vegetable origin	472	274	1,991	3,851	5,360	6,147
2923	Veget. mater. of a kind used primar. f	2,809	816	1,392	6,068	5,726	5,378
0542	Beans, peas, lentils & other legumino	2,281	1,201	2,564	5,562	4,904	5,375
0565	Vegetables, prepared or preserved, n.	284	147	409	2,950	2,640	4,000
	All Vegetables	5,847	2,437	6,354	18,432	18,630	20,900
0711	Coffee, whether or not roasted or fr	178,528	88,159	45,010	91,319	71,389	55,848
0752	Spices (except pepper and pimento)	67,437	89,254	90,206	89,489	60,219	70,093
0751	Pepper ; pimento	6,995	6,651	2,879	4,151	4,012	4,309
2631	Cotton (other than linters),not car	1,610	0	2,150	2,779	9,869	13,377
0612	Refined sugars and other prod. of r	9,441	5,239	4,098	7,084	3,865	6,974
0611	Sugars, beet and cane, raw, solid	6,199	4,427	7,912	9,417	1,991	6,446
	Total sugar	15,640	9,667	12,010	16,501	5,856	13,420
0721	Cocoa beans, whole or broken, raw or	5,444	4,221	2,811	4,739	6,148	6,382
2654	Sisal & other fibres of agave famil	10,466	4,767	5,546	6,696	7,029	4,917
2483	Wood of non-coniferous species, sawn	0	6	1,514	2,598	4,967	3,093
	Total Agriculture	**313,133**	**231,489**	**235,227**	**394,685**	**385,897**	**372,512**
	Share of agriculture in total exports (%)	69.6	78.8	67.9	63.1	51.5	48.6
0-9	**All goods**	**449,888**	**293,765**	**346,203**	**625,973**	**749,667**	**767,103**
	Share of Traditional exports in total exports						
	(coffee, spices, sugar, %)	58.1	63.7	42.5	31.5	18.3	18.2

Average annual growth rate of total exports	**1980-84**	**1985-90**	**1990-94**	**1995-99**
	-5.5	0.2	10.0	7.8

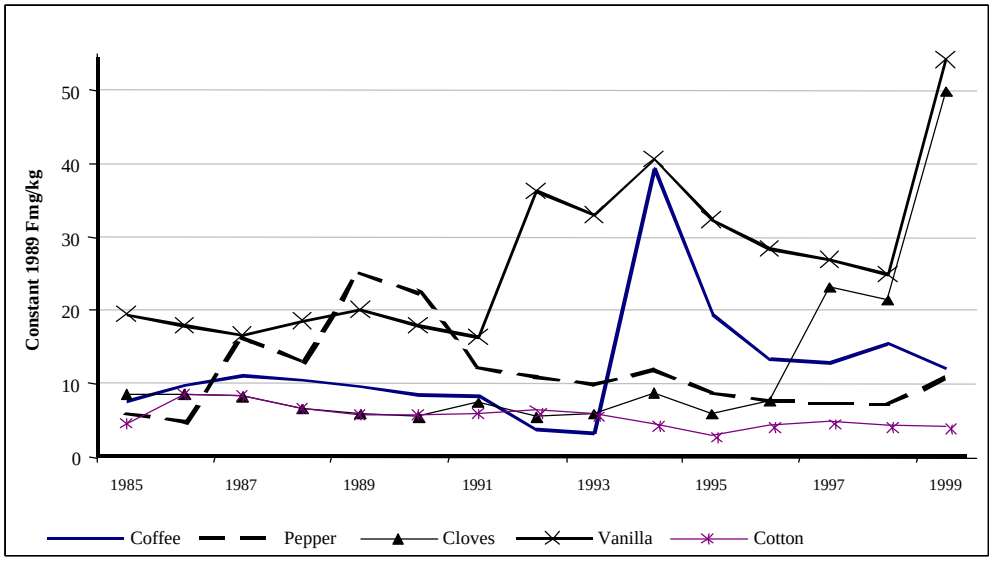
Source: UN COMTRRADE data base.

Malagasy exports are defined as imports of the rest of the world from Madagascar.

3.4 THE ROLE OF PRICE INCENTIVES AND NON-PRICE OBSTACLES TO AGRICULTURAL DEVELOPMENT

Chapter 2 showed that rural households obtain 50 percent of their income (including imputed income for subsistence farming) from agriculture, with only 10 percent from salaries. It also showed that remoteness and small plot sizes are both associated with high poverty incidence. If the typical rural household is insulated from world price fluctuations, trade and other reforms that affect border prices will have little impact on farmer's incentives. It is therefore important to trace the evolution of producer prices, especially the evolution of the prices received by farmers in comparison to border prices.

FIGURE 3.1 PRODUCER PRICES OF MADAGASCAR'S MAIN TRADITIONAL EXPORT CROPS 1985-99 (CONSTANT 1989 PRICES)

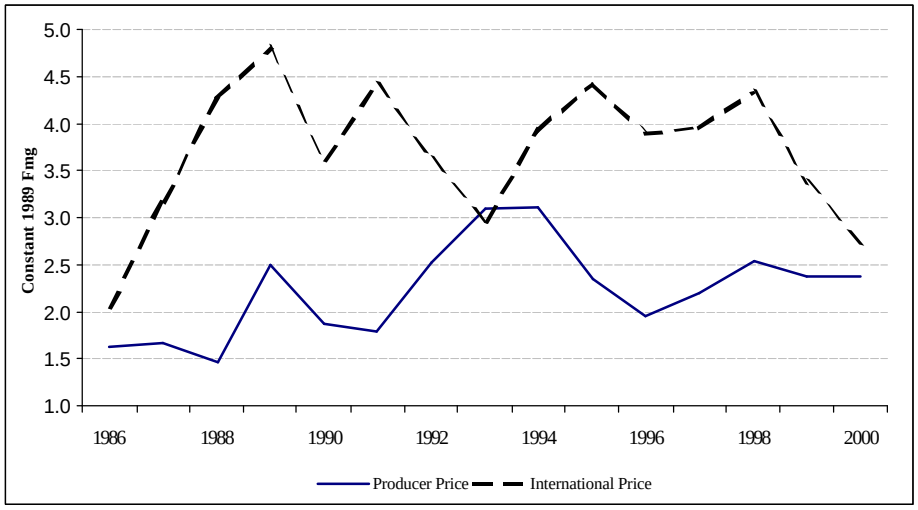


Source: Based on data from Ministry of Agriculture.

Figure 3.1 displays the evolution of producer prices for the main traditional export crops. Excluding 1998 and 1999, which were unusually good years for vanilla (see below) and for cloves, there is no sustained upward trend in real producer prices for these export crops. For cotton, producer prices have been on the decline throughout the period. It is noteworthy that, starting in 1993, only a small portion of the changes in the international price of cotton have been transmitted to producers. This is due partly to price intervention in the sector but this may also reflect problems with the data. However, the magnitude of price fall remains smaller than that of world cotton prices, indicating that ginning units must have absorbed shocks from external prices[23].

[23] Continuing in 2000 and 2001 though not appearing on the Figure 3.2.

FIGURE 3.2 PRICES OF RICE: PRODUCER VERSUS INTERNATIONAL (CONSTANT 1989 PRICES)



Source: Based on data from Ministry of Agriculture.

With regard to rice, Madagascar's main subsistence crop, official statistics suggest that real producer prices have grown at an average rate of 5.3 percent per year over the period 1987-2000. Figure 3.2 shows that much of this growth occurred in the first part of the period. It is, however, difficult to interpret the evolution of this index since producers in different regions (Lake Alaotra, Antanarivo, Mahajanga, Fianarantsoa) may face different prices; the production periods differ between some parts of the country, and off-season prices are about three times higher than those during the harvest period.

The steady decline of agriculture has a number of causes that extend beyond rising trade and price protection. A careful study of these impediments shows that *an improvement in trade policies may not be sufficient to restore sustained growth to the agricultural sector*. Some of the obstacles identified here can be mostly attributed to market failure rather than to bad trade polices. Hence, the recommended policies are those that address the market failures themselves. In addition to the constraints noted here, the array of constraints inhibiting private sector investment, more generally, (which are examined in detail in Chapter 4) are also pertinent to a strategy for accelerating agricultural growth. After all, companies in the private sector owe it to themselves to provide linkages between Madagascar's farmers and domestic and international markets. Such private investment—in agro-processing and trading activities—will be needed as an engine for agricultural growth. The recent emergence of the *Tranoben'ny Tantsaha* (Chamber of Agriculture), decentralized organizations that bring farm people together, should facilitate the links between producers and middlemen by developing internal market integration through improvements in the dissemination of information.

Major structural and other non-price constraints on Madagascar's agriculture include:

Poor transport infrastructure. In addition to the low frequency of paved roads, it is estimated that 80 percent of the rural road network is currently in bad or very bad shape. The inadequacies of rural infrastructure lead to higher input prices and lower output prices at the farm-gate level, as well as higher transportation and transaction costs for farmers acquiring seeds and fertilizer. Higher travel time to outlets lead to more extensive land use, lower input expenditures, and less orientation towards cash crops, especially of perishable commodities.

Degradation of natural resources. Over the past forty years, Madagascar has lost nearly 80 percent of its forest cover. This has lead to high rates of erosion, lower productivity in the lowland areas, and the spread of cropping to increasingly marginal agricultural lands, with disastrous effects on yields.

Production-related risks. The household survey conducted by IFPRI/FOFIFA (1998) mentions that 80 percent of the planted rice area faced production water-related problems, (such as late rains, floods, and droughts), crop diseases, or losses due to insects or animals. Some agricultural export regions are regularly devastated by cyclones. The frequency and severity of covariant risks leads to crop failures or severe declines in yields that discourages risk-averse farmers, who invest little in inputs for fear of the downside risk of realizing low or negative gross margins as a result of higher input use.

Lack of modern input use. Recent research indicates that improved rice varieties do not play a significant role in increasing on-farm yields. Only a small proportion of farmers use improved seeds for rice, and even then, planted them on a portion of their fields. The low adoption rate of improved seeds indicates that the varieties currently on the market do not offer much benefit over the locally produced, recycled seed. Mineral fertilizer use is extremely low in Madagascar—among the lowest used rates in all of sub-Saharan Africa—despite evidence that its use is profitable for many crops. Reasons for this non-fertilizer use include cash liquidity constraints and risk minimizing behavior..[24] Recent measures to address this problem include import-tax exemptions on fertilizer.[25]

Limited access to credit. Access to credit remains a major challenge for the agricultural sector. In terms of the production and marketing of crops, it is widely recognized that: (i) the volume of available credit is too small; (ii) the cost of borrowing is high; (iii)

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[24] This could potentially be addressed by improved vertical integration, including contract farming. Such contractual arrangements can shift some price and production risks to downstream firms, which have a higher risk- bearing capacity as well as higher liquidity to pay for modern inputs at the time that farmers do not have the means. The scope for such contract farming is highest with certain industrial and specialized crops where there is a mutual 'lock-in' between raw material producers and processors.

[25] Some measures to alleviate fiscal burdens have been undertaken and foresee the import duties and taxes on agricultural materials and inputs, among other products.

diversification of methods of finance is minimal; and (iv) institutional development is slow and costly. Cash based activity in rural Madagascar is uncommon and the default-risk adjusted return to lending is low. For example, according to FAO/UPDR (2000), less than 3 percent of rice producers have had access to formal-sector credit in 1999. Institutional arrangements such as micro-credit and mutual savings and credit unions could address this problem, in part, by improving the availability and distribution of information between lenders and borrowers and providing social sanctions against those defaulting on loans (see Box 3.2).

Ill-defined land property rights.[26] As in virtually all other sectors examined in this report, the lack of well-defined property rights in the agricultural sector is an obstacle to development. The absence of land titles acts as a brake on investment and on access to credit since banks do not use untitled land as collateral. It must be noted that there is a demand for land purchases by farmers who would be in the position to use more modern farming methods. For example, in the region of Lake Alaotra, the yearly demand for land title registration is about 2000. However, due to lack of means, the land administration office does not have the capacity to register more than 20 titles a year. Likewise, the capacity to survey and register land at the national level is only 10,000 hectares per year.

BOX 3.2 THE AGEPMF MICRO-FINANCE PROJECT

One strategy has been to establish micro-credit institutions through mutual funds. They benefit from technical assistance under the Agence d'Exécution du Projet Micro-Finance (AGEPMF), financed by lessors and benefiting from an annual US$ 15 million line of credit, and an additional five-year US$ 19 million assistance fund. These are designed to give farmers the incentives to save and securitize their monetary assets, and allows members to borrow an amount proportional to their total savings. Regulated by banking guidelines, they are managed by their own members who set credit to savings ratio for loans as well as interest rates. The latter vary between 30 percent and 40 percent whereas they 17 percent in primary banks. Savings rates among peasants vary between 200,000 and 1,200,000 MGF.

Under the AGEPMF, the average distribution of credit varies by region, but is generally too low to finance an entire agricultural season. Financial instruments are hardly diversified and are not applied to all crops. For example, on the entire east coast of Madagascar, there is no rural credit for rice; they are only allocated to cash crops (FAO/UPDR, 2000). The AGEPMF project reaches 100,000 farmers, and is used for several agricultural and non-agricultural activities. Currently in four provinces[1], it is in an embryonic stage in Mahajanga: where mutuals are envisioned for six provinces and are expected to reach 15 percent of all households, to strengthen them and make them independent. This fifteen-year project is currently in its third year: its institutional development is costly and slow given the problems of infrastructure (communication, access to remote regions, absence of rural electricity grids, etc.).

[26] Poorly defined property rights are a major institutional problem that has been repeatedly pointed out (see FIAS, 1998) including in this report (see Chapter 6 and Chapter 5 of Volume 2).

Deteriorated irrigation infrastructure: The steady deterioration of Madagascar's irrigation system has also undermined productivity. Out of 213,000 hectares irrigated, some 65,000 hectares were rehabilitated between 1997 and 2000, but at a high cost. In areas where the irrigation system has not been rehabilitated, farmers have not been active in maintaining the system. Consequently, except for farms in the Center-West, well over half of all rice fields are insufficiently irrigated. An important step in improving rice yields and promoting crop intensification and diversification, is to improve the irrigation infrastructure. The *Maisons des Paysans* (Chamber of Agriculture) are equally intended to create a framework in which farm people can become more active and participate in programs designed to maintain infrastructure.

3.5 CASE STUDIES

The extent to which increased integration into the world economy affects the allocation of resources and poverty in the rural sector depends largely on (i) how prices are transmitted to farm households; and (ii) the extent of the market, whether it is local, regional or international.[27] The case studies reviewed in this section are:

- a traditional export crop entirely destined to the export market: vanilla;
- industrial cash crops, vital to the national economy, subjected to competition from abroad: cotton and sugar;
  Madagascar's most important food crop: rice;
  a non-traditional export, that is rapidly gaining market share: shrimp; and
- a natural resource still under development: mining.

3.5.1 Vanilla

Vanilla is one of the most expensive spices traded in the world market. It is a pod produced from a species of orchids and is used to flavor food and as an ingredient in cosmetics, cologne, and a variety of cleaning products. The quality of vanilla from Madagascar has long had a reputation of being the best in the world, and in the first half of the 20th century, Madagascar accounted for more than 80 percent of world production.

Price fluctuations in the vanilla market in the 1950s led to an array of interventions by the Malagasy Government to stabilize the market and protect its dominant market share for this product. An elaborate system was developed involving mandatory licensing throughout the supply chain, official prices and a stabilization fund, government purchasing of excess stocks, and quotas allocated to individual exporters. Initially the measures were effective, although the benefits were diverted to a limited number of

[27] Chapter 2 of Volume 2 describes the 'farm household' and gives a framework tracing the channels through which trade policy affects the poor in rural areas.

traders and the large export tax revenues were not re-invested in the industry or in the vanilla growing areas. The international price for vanilla rose substantially and Madagascar's vanilla exports reached a peak in 1987 at $90 million.

The high prices encouraged new market entry, but also led to increased use of synthetic substitutes, called vanilline. Madagascar's market share fell victim to competition from Indonesia. The pricing and tax policies resulted in large-scale smuggling of the crop to other countries, a reduction in product quality, and the accumulation of large unsold (and unmarketable) stocks. The 60,000 plus smallholders who grow vanilla had benefited little from the widespread market interventions by the government.[28]

In 1995, the Government liberalized the sector, abandoning the stabilization fund and the controlled licensing system. The dismantling of an export cartel (along with Comoros and Reunion) and of the government's intervention in the market led to a sharp fall in the world market price, roughly to the level of the production price in Indonesia (about $30/kg for prepared vanilla, which is about three times the cost of Malagasy vanilla).

Other market reforms at the macroeconomic level, including devaluation, have encouraged the private sector to be active in the vanilla market. With the support of the STABEX program funded by the EU, recent reforms have resulted in improved quality, higher yields and improved organization of producers and operators. At the core of the STABEX program was a plan to reorganize the sector through a series of activities that included: (i) the financing of new plantings under semi-intensive methods (using compost and more intense care of the plants, leading to a doubling of its productive life); (ii) the reintroduction of a product marking system to help control quality and theft; (iii) support for producer organizations to increase vertical coordination; and (iv) efforts to establish a more widely recognized label at the international level.

In terms of prices, as shown in Section 3.4 above, producer prices for vanilla have trended upward since 1998. Likewise, world prices for vanilla rose six-fold between 1999 and 2000, and reached 637,500 MGF per ton in 2000.[29] Because of continuing high prices, green vanilla production reached 5,400 tons in 1999, while exports reached 1200 tons that year. Real border prices increased ten-fold between 1997 and 2001. Ratios of producer prices to border prices show that producers have benefited from the reforms. Given that the 60,000 or so vanilla producers are among the rural poor, the end of state intervention in the sector has reduced rural poverty in the vanilla growing regions.

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[28] See the analysis provided by Blarel and Dolinsky (1995), "Market vs. Government Failure: A Case Study of the Vanilla Sector in Madagascar," in Marketing Africa's High-Value Foods, edited by Steven Jaffee and John Morton.

[29] The underlying reasons for the important price increases at both the domestic and international levels are unclear. This is because the price rises might be attributed to several factors: supply difficulties by Madagascar's main competitor, Indonesia; structural changes in the world market resulting in greater demand for high quality (Malagasy) vanilla.

While it is likely that recent price increases are temporary, and that there may be an overreaction on the part of producers, direct interventions in this sector by the government should be avoided. In the past, intervention and monopsonistic power had led to the decline of the sector. Instead, efforts should focus on increasing competition in the export supply chain and strengthening the bargaining position of small-scale farmers. Measures could include: (i) the dissemination of information about the market, (ii) the facilitation of export pre-financing, (iii) the establishment of a vanilla commodity futures exchange, (iv) continued support for producer organizations, and (v) assistance to vanilla growers to enable them to diversify their sources of income.[30]

As a price-maker in the international vanilla market, Madagascar should attempt to maintain its current dominant position by avoiding the mistakes of the past; that is, excessive predatory government intervention whose end result was the decline of the sector and low producer prices because of the monopsonistic positions of intermediaries. In the short term, it should be recognized that the unusually high prices, which are benefiting producers will not last, and that continued high prices will, as in the past, attract new entrants into the market (e.g. India, China and Indonesia). It is also important to ensure that sufficient credit will be available to the small and medium size exporters (there are now over a dozen significant preparators-exporters) to avoid past mistakes whereby the sector was dominated by a cartel of processor-exporters.

3.5.2 Cash Crops: Cotton And Sugar

Cotton

The cotton region in Madagascar is located in the North and South, with two-thirds of the cultivation occurring in the North. Smallholder farmers, organized into producer groups, account for some 90 percent of the cultivated area under cotton and 84 percent of the seed cotton produced. Larger commercial growers provide the remainder.

Three companies gin cottonseed in Madagascar. The dominant firm, accounting for some 74 percent of ginned cotton in 2000 is HASYMA, a parastatal firm owned by the GOM (62 percent) and the French CFDT (38 percent). HASYMA has four cotton-ginning operations, although one in the South is not currently operating due to the breakdown of irrigation facilities in that area. HASYMA has been losing market share in recent years to two private companies, COTONA, and DRAMCO, both of which have operated in the Northwest since 1995.[31] The privatization of HASYMA, which has been anticipated for the last ten years, has still not occurred.

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[30] See Metzel and Mandrara (2000) The Political Economy of Trade Liberalization: The Case of Vanilla in Madagascar.

[3131] HASYMA (and the private companies) operate outgrower programs with smallholder farmers, providing their associations with inputs and purchasing the seed cotton at pre-set prices. Transportation services are provided for the inputs and for the collected crop. Inputs and transport costs supplied by the HASYMA are estimated to be approximately 50 percent of the total production cost of seed cotton.

Seed cotton buying prices are higher in the North than in the South, in part due to quality differences, but also due to the competitive market system in the North where all three ginning firms are operating. Between 1996 and 2000, nominal producer prices of 1st and 2nd quality seed cotton fell by 15 percent and 10 percent, respectively, in the North, while the selling price of cotton lint rose by 18 percent and 15 percent. In contrast, in the South, the price of seed cotton rose by 5 percent, while 1st and 2nd quality lint prices rose by 17 and 14 percent, respectively. In real terms, seed cotton producer prices fell by 23 percent in the South and 34 percent in the North during the period. This decline in producer prices continues a trend of falling real producer prices that began in the mid-1980s. Many commercial farmers have exited the cotton market due primarily to this fall in real producer prices.

HASYMA exports cotton lint and supplies the domestic spinning industry. During the 1980s, it was compelled to supply the needs of the entire domestic spinning industry, which did not leave sufficient volumes to export lint. Its exports began in 1994, with the bulk of sales going to CFDT. Since 1996, cotton lint export volumes have been linked to sales on the domestic market, with export volumes equal to domestic market sales of 1st quality fiber. The local price is set by agreement among local firms [led by HASYMA] and is linked to the world market price.

The remaining market power exerted over the smallholder farmers by HASYMA, the current cotton fiber pricing policy, and the possible constraint on exports created by the 1:1 local/export supply policy have the potential to create serious inefficiencies in the sector. The observed pattern from 1996 through 2000 of falling producer prices and rising cotton lint prices (or producer prices that fall more than fiber prices) protects the margin of the parastatal, but is detrimental to the goal of alleviating poverty.

The cotton sector has the potential for growth in Madagascar. The explosion of the textile sector in the EPZs promises a high demand for cotton fabric, and backward linkages through the supply chain for cotton yarn, cotton lint, and seed cotton. But the current structure of the sector, with significant (although decreasing) market power still exercised by the parastatal, the administered pricing policies, and the linking of export volumes to domestic sales threaten to hamper expansion and the robustness of the sector at a time when EPZ's must soon face up to the end of numerous preferential trade agreements for textiles, and must conform to rules of origin.

Given HASYMA's market power, particularly in the south, it will be important to design a liberalization and privatization plan for the cotton sector that encourages entry of other firms. Merely privatizing it, without any reduction in its market power, might lead to the exploitation of cotton farmers by a single private company. The structure and current economic situation of the cotton sector in Madagascar is not unlike that in other countries in Africa and other parts of the developing world. Cotton makes up a significant portion of the economy, and the sector consists of state-run enterprises that subsidize inputs and guarantee outlets for many rural farmers, and mitigate the impact of world market fluctuations faced by some of the poorest farmers.

In addition, like in other countries, it is obvious that under present conditions, the cotton sector will not thrive in Madagascar, and that privatization is a viable option. It would

be useful to view privatization in light of international experience, and in the case of the CFDT, its experience in other countries (the CFDT owns significant minority shares in many of the francophone cotton agencies), where CFDT's were active, and move to establish a transitional period in which inputs are guaranteed, and quality control is provided.[32]

Sugar

The state-owned company SIRAMA dominates the sugar sector. Privatization of the company, which had been envisioned for a decade, is currently underway. In the meantime, output and productivity in the sector have continued to decline, the country has become a significant importer of sugar (despite high tariff protection) and SIRAMA's 2500 small-holder farmers face long delays in receiving payment for their crop, which undermines incentives to produce and maintain production infrastructure. Moreover, in the period leading up to the crisis, the domestic distribution of sugar was inefficient, with only five firms licensed to wholesale sugar in the domestic market.

Currently, local production is some 70,000 tons of refined sugar, with SIRAMA operating at about 50 percent of its processing capacity. This low capacity utilization, combine with relatively low sugarcane yields and comparatively high costs for fuel and other inputs and, as a result, sugar production costs in Madagascar are substantially higher than those of several other Southern African countries. Imported sugar, which has exceeded 30,000 tons in recent years, is 50 to 60 percent less expensive than SIRAMA's sugar, even taking account of high tariffs and other taxes applied to imported sugar.[33]

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[32] In Senegal, for example, 30 percent of the shares in the state cotton company were ceded to farmers' associations, with plans to later sell other portions to employees, the general public and an investor (United Nations, 2000, online). In Cote d'Ivoire a privatization plan was originally developed to divide the country's ten gins into three companies, two of which were to be sold to private investors and third to be maintained by the Government. The CFDT was to continue its extension and credit activities and remain the sole purchasing agency for seed cotton for two years. The seed cotton price was to be fixed by an independent committee, and the three cotton companies were to market their cotton individually yet give priority to the domestic mills. Lastly, the privatization plan for this country mandated that private companies be required to participate in the development and expansion of cotton production through the provision of extension services and credit facilities to farmers (FAS online, 1998). In Egypt, a dominant exporter in the world cotton market and known for its long staple high quality cotton, the privatization of two of its five gins have resulted in positive gains to the cotton industry. It has produced improvements in cotton cleaning equipment, new cotton gin presses, specialized export facilities, and increased competition (Abt Associates, 2000). No matter which strategy was adopted, all countries considered privatization with one of the ultimate objectives in mind, which was to enhance seed cotton prices received by farmers, ultimately boosting cotton production and exports for the country.

[33] Note also that according to the statistics provided by SIRAMA, there is discrimination (beyond the 35 percent import tariff) on imported sugar. First, the implicit tax (or 'redevance') is 35 percent on imports while the ad-valorem equivalent on the domestically produced sugar is 4

TABLE 3.7 SUGAR COSTS AND CHARGES BY ORIGIN (1999-2000)

Malagasy Sugar		Imported Sugar		
	Ambilobe			
Brown Sugar			Blanc	Roux
Price at Processing Plant	2,845.92	FOB (USD / t)	120	60
Transport to Tana	380.00	Brazilian Discount Sugar	0.00	20
Rents	100.00	Costs & Insurance	80.00	80
VAT	665.18	Price caf Tamatave	200.00	160
CMCS	30.00	Exchange Rate	6,685.00	6,685
Price in Tana	4,021.10	Price caf (MGF)	1,337.00	1,069.60
		Import Taxes (35%)	414.47	331.58
White blanc		Rents (35%)	467.95	3,743.60
Price at Processing Plant	3,706.17	Port fees, transit	100.00	100.000
Transport to Tana	380.00	Transport Tana	125.00	125.000
Rents	100.00	Rent CMCS	488.88	400,107.2
VAT	837.23	VAT (20%)	30.00	30.00
CMCS	30.00	Importer Margins (5%)	148,165.2	121.53
Price in Tana	5,053.40	Price in Tana	3,111.5	2,552.1

Note: The prices received for white sugar leaving rom the processing plants in Namakaia and Brickaville are slightly higher due to the lower transportation costs (220 and 110 instead of 380 MGF / t)

Source: SIRAMA

Despite the inefficiencies of SIRAMA, and the sector more generally, Madagascar still manages to export a proportion of its sugar under several preferential access agreements. Trade under these agreements is at prices significantly higher than the (residual) free market sugar price. Since 1996, the United States has allocated 7,258 tons a year to Madagascar, which it has generally been able to fill. Madagascar is also one of four less developed countries (the other three being Malawi, Tanzania and Zambia) that

percent. Next, the VAT rate is applied on the price inclusive of this implicit tax. Such taxing is in violation of the GATT principle of equal treatment.

benefit from preferential access to the European Union market under two preferential sugar agreements set forth by the Lomé Convention.[34]

Under the first agreement (a fixed quota), Madagascar is allocated 10,760 tons a year. The second agreement will allow quotas that vary annually. For the 2000-2001 season, Madagascar was allocated 1,606 tons. For 2001-2002, Madagascar only filled 10 percent of its quota. Under both agreements, exporters receive guaranteed minimum prices from the EU that are highly beneficial to the exporting country.

For example, the world price for raw and white sugar in early 2001 was about 264 Euros a ton, while EU intervention prices was about 646 Euros a ton for white sugar and 524 Euros a ton for raw sugar, about two and a half times the world price.[35] Hence, under the current system, the inefficient state-owned company SIRAMA survives largely because it is protected. Furthermore, SIRAMA's high production costs continue to determine local market prices despite the end of the licensing system that allowed wholesalers to charge higher than market prices, at the expense of exporters and consumers.

The current sugar policy should be abandoned. The state-owned companies (SIRAMA and SUCOMA) should be privatized and, because of the potential for monopsony power, which would be detrimental to sugar cane growers, intervention in the sector should end. Any protection should be limited (say 10 percent) and it should conform to WTO guidelines. If the industry survives, because of the preferential agreements with the EU and the US, but more importantly because of more efficient production and upgraded processing facilities, the result would be higher prices for sugarcane growers, and a net increase in welfare because of a reduction in prices to consumers.

3.5.3 Food Crops: Rice

Rice production and trade are the most important economic activities in Madagascar. The total rice supply contributes about 12 percent of nominal value GDP and 43 percent of agricultural GDP. Two out of three people, out of a total population of 10 million, benefit in some way from income generated by rice production. At the same time, only 23 percent of rice cultivators are net rice sellers and draw their main incomes from this product. The others are net buyers, micro-scale producers or subsistence farmers.

Despite its current status as net rice importer, Madagascar might be competitive on the international market due to its low labor costs. There are six rice agriculture systems in

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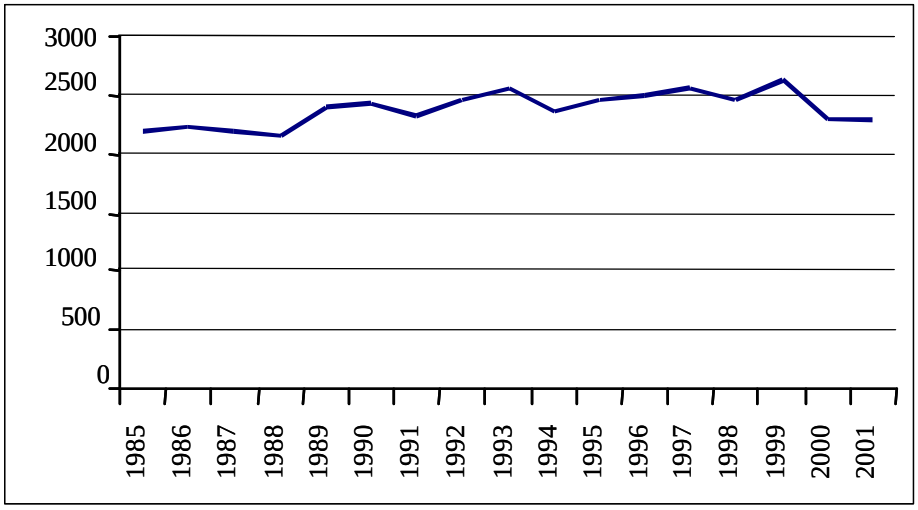
[34] Madagascar is the only African, Caribbean and Pacific (ACP) country that benefits from all four commodity protocols of the Lomé Convention (bananas, beef/veal, rum and sugar), although its participation in each is negligible. (For a detailed explanation on the Lomé Convention and its commodity protocols, see Dunlop 1999, online.)

[35] Currently (1999/2000), the State exports 13, 000 tons of white sugar to the EU (at 3000 FF/t or 430 USD/t), and 7000 t of brown sugar to the US (at 295 USD/t). The corresponding cif landed price of white sugar in Tamatave in 1999/2000 was 200 USD/t and for brown sugar, 160 USD/t.

Madagascar in which production costs were lower in 1996 than the lowest production costs in Vietnam (US$84), which is a rice exporting country. Despite this, rice imports remain competitive on the Malagasy local market, due to relatively high logistic costs between some producing regions and high consumption regions, and subsidies to exports by some supplying countries.

Until the mid-1980s, the state actively intervened in the rice sector by imposing price controls, by providing support services and by conducting wholesale operations and other market transactions. In 1986, Madagascar launched into a liberalization policy, which resulted in a virtually hands-off approach, including suppression of price control. Since its liberalization, rice production has relatively stagnated, with an annual growth rate lower than that of national consumption.

FIGURE 3.3 RICE PRODUCTION (THOUSANDS OF METRIC TONS)

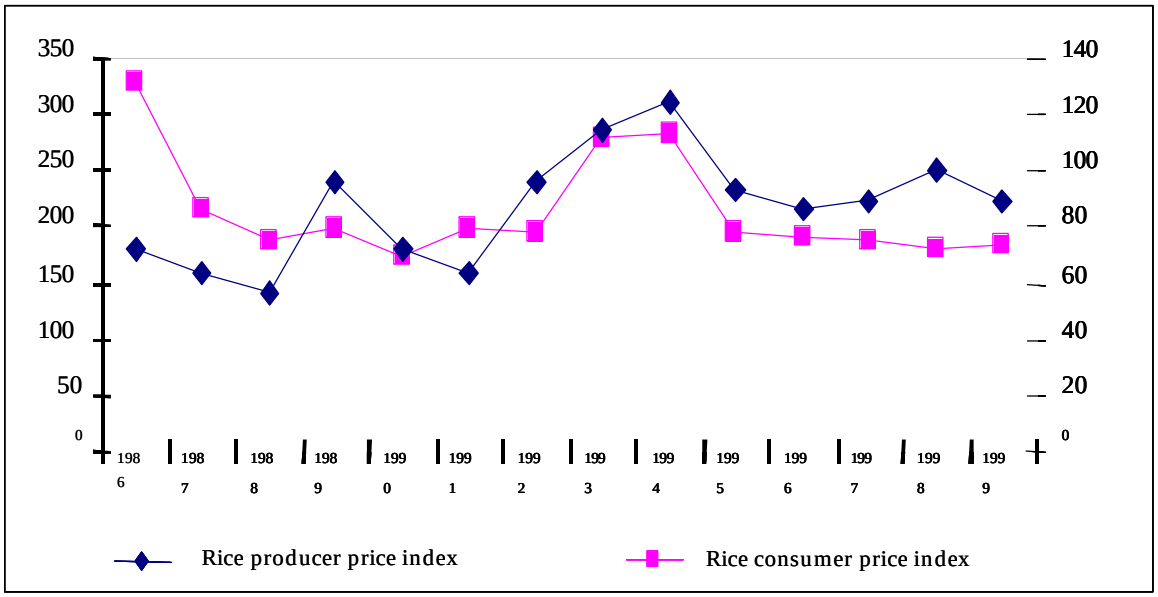


The effects of liberalization on production prices were not linear, due to world price fluctuations and national trade policy. Until the mid-90s, producer prices trended upward, reflecting the growth of world prices and of high tariff barriers. With the world price drop, Malagasy rice imports rose significantly, and producer prices in Madagascar fell. This was exacerbated by the reduction in tariff barriers from 30 percent in 1996 to 10 percent in 1997. Import taxes, which were raised to 15 percent in 2001, and the introduction of a 20 percent VAT on rice sales did not influence rice producer prices. In this period, production prices, in some regions, were 46 percent lower than those recorded in 1999-2000. Given the ineffective border application of customs duties and the VAT, there is a mismatch between tariff policy and domestic prices.

In contrast, consumer prices have dropped by about 80 percent over the last 15 years, even during periods when producer prices were rising. Such decrease was attributable to free competition among intermediaries which caused margins to shrink. With the

majority of rice cultivators in Madagascar being net rice buyers, the estimated fall in consumer prices would have strengthened the purchasing power of rice producing households by 45 percent.

FIGURE 3.4 RICE PRODUCER PRICE AND RICE CONSUMER PRICE INDICES



The immediate objective of authorities should be to maintain internal prices at a level that might protect rice producers from fluctuations in a severely distorted international market, while guaranteeing food security to consumers. To do so, the rice price index has to be raised above its current level. Though a price increase will be harmful to some households, its net impact on national welfare may be positive. It is estimated that a 15 percent increase in the price of rice would, on the whole, raise total income of producer households by 2.8 percent. If the inferred effects of the increase, as well as the effects on other food crops, of salaries in the agriculture sector, which are often expressed in rice equivalent, and on trade activities and services are taken into account, net growth of total income is estimated at more than 5 percent.

In 2001, the price level was estimated at MGF 700-900/kg for producers, which translates into MGF 2,000/kg for consumers. A simulation of the impact of various tariff barriers on internal prices indicates that results would be satisfactory if current taxes and VAT, respectively 15 percent and 20 percent, were actually applied. Hence, if the government means to put an end to production price drop, it will be necessary to immediately address the issue of applied duties and taxes. Such a measure would benefit to the East regions and Highlands, in particular, which are the primary destination of imported rice. The regions in the east have seen an increase in the poverty in recent years (PRSP, May 2003).

TABLE 3.8 IMPACT OF RICE IMPORT TAXES ON RETAIL AND PRODUCTION PRICES

	1999	2000	2001
Production (1,000 mT)	2,637	2,300	2,662
Price to Producer MGF / kg	885	975	900-950
Percentage of operators viable at such a price level	80	90	85
Retail price of local rice MGF / kg	1,750-2,300	2,350-2,577	1,975-2,974
Retail price of imported rice MGF / kg	1,835-2,238	2,088-2,838	
Level of customs duties	5%	15%	15%
VAT	0	20%	20%

The adoption of such a tariff policy would be only provisional, as one single protection would be insufficient to stimulate the growth of a sector facing fundamental structural constraints. The government's long-term strategy should be to encourage the increase of productivity by eliminating the main structural constraints among producers and other operators.

The deterioration of irrigation infrastructures caused by soil erosion and the accumulation of silting in channels should be addressed, rural road networks should be improved [36] and management capacities among farmer organizations should be created.[37] Then, national support programs should be decentralized and organizational enhancements made, and capacities for management of producer groups (Chamber of Agriculture) should be carried out within the context of a policy that structures supply lines through improved and expanded rural road infrastructure and reliable agricultural information distribution channels.

3.5.4 Shrimp

The seafood industry has developed for the last ten years and may become the second biggest generator of foreign exchange after tourism. In 2001, water resource exports reached US $161 million. This sector contributes about 7 percent of national GDP and directly employs on the order of 62,000 people, and an additional 200,000 employees are indirectly tied to the industry. Shrimp accounted for 73 percent of the industry's exports in 2001 (US $118.5 million) with a volume of production of 17,000 tons. With the ongoing development of several aquaculture projects, volume of production should increase by an additional 8,000 tons over the next five years.

[36] see The Sectoral Transportation Program (PST) on its part on rehabilitation of rural paths.

[37] This is the case for many donors who admit having given priority to some themes at the expense of issues related to operators credit or organization.

Madagascar's shrimp industry is competitive by international standards. Malagasy shrimp are considered to be high quality in their primary export markets (France, Portugal and Spain), as are other aquaculture products, which yield more than the competition from East and South Asia. Prices are currently rising, and shrimp exports are creating additional domestic value-added[38]. In addition, Madagascar continues to benefit from preferential access to the EU market, unlike its primary competitors. The EU has effectively implemented a number of tariff adjustments on shrimp imports. Under the new Generalized Preference System (GPS) in 2002-2004, tariffs on goods from Asia have risen from 4.5 to 10.9 percent, while tariffs on shrimp, among others, from Madagascar will remain at 0 percent.

The structure of the industry can be summarized as follows:

- Traditional fishing[39] (19.5 percent of total production). This method uses *pirogues* and other craft using nets, but no motorized equipment. Without electricity on-board shrimp cannot be put into cold storage. The catch is sold to middlemen immediately upon landing, and destined for local markets. No licenses are required. There are roughly 42,500 traditional shrimp fisherman and 400 middlemen.
- Artisanal fishing (2.5 percent of production). This method uses larger boats, ranging from 30 to 60 feet in length, with engines and perhaps other motorized equipment. Shrimp can be cold-stored and sorted. Most boats belong to companies; few are individually owned. Licenses are required. There are an estimated 6,000 artisanal fishermen.
- Industrial trawler fishing (45.5 percent of production). There are approximately one dozen companies operating a fleet of trawlers, most of which are foreign-owned. An estimated 4,500 people work on industrial trawlers.
- Aquaculture (31.5 percent of production). Several French and Japanese companies have invested in aquaculture projects, which in 2001 made up 46 percent of all shrimp exports accounting for 5,400 tons. Two main factors led to the initiation of aquaculture in Madagascar: disease in parts of Asia, mainly the Indian Ocean, and the fact that wild shrimp fishing had reached an estimated sustainable limit of c. 11,500 tons per annum.

The entire catch from the industrial, artisanal, and aquaculture sub-sectors is exported, while virtually all of the traditional catch is consumed locally. Thus, the export

[38] Between 1996 and 1999, average shrimp export prices rose 49 percent, followed by an additional 5 percent rise in 2000. During this period, value-added rose from 35.9 percent to 46.6 percent. This rise in prices is due to several changes : an increase in state duties (from 4 percent to 7.4 percent), a fall in financing costs (from 4 percent to 1.6 percent) and a slights increase in depreciation as a percentage of sales revenue (from 1.2 percent to 1.5 percent, prompting further investment), and most importantly, an 9 percent increase in average revenues, from average losses of 3.4 percent, to a profits of 6.1 percent in 1999.

[39] Many women are engaged in traditional shrimp fishing.

industry's effect on poverty reduction is channeled through employment in medium and large-scale operations[40] rather than through employment in small-scale fishing.

The association representing the interests of shrimp fishing and processing companies is the *Groupement des Aquaculteurs et Pêcheurs de Crevettes de Madagascar* (GAPCM), comprising 12 sea fishing and 5 aquaculture companies. The association's members account for the bulk of Madagascar's shrimp exports. GAPCM has developed a good working relationship with the government, the relevant public sector organizations, and with donor agencies, particularly AFD and EU.

The major issues in the industry relate to the sustainability of the wild shrimp resources, environmental risks associated with aquaculture, and quality control and related standards. Properly managing these issues will require close cooperation between the government and the private sector, through GAPCM's intermediary called *l'Observatoire Economique* (the Economic Observatory), and by the Surveillance de Pêche (SDP), under the Ministry of Fisheries and Maritime Resources.

Research is being undertaken to determine the sustainable level of wild catch, currently estimated at 11,000 tons per annum.[41] The objective of the *Programme National de Recherche Crevettiere* (PNRC) is to provide a scientific basis for the proper management of shrimp fishing in Madagascar, through an effective partnership between the state, the donor agencies, and the private sector. The SDP is mandated to regulate catch and boats, with material support from the private sector.

At the same time, combined efforts are underway to address the problem of aquaculture industry's environmental impact. A regulatory framework has been put into place to assure sustainable development in this area that has, among other objectives, other than transparency, to establish a plan to manage areas destined for use in aquaculture. Research programs to study the ecology and coastal areas should also accompany these plans.

Quality control is a major issue in the shrimp sector. In 1996, aware of the threats facing the sector due to lack of effective controls over quality, GAPCM commissioned a study that concluded that it would cost US$ 15 million to implement a suitable program to address the issue of quality control, 12 million of which would come from the private sector. Before that program could be implemented, the EU imposed a ban on shrimp imports from several countries, mainly for technical reasons, such as clarification of the

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[40] Wages paid to workers in the shrimp sector vary according to tasks: workers on ships usually earn about twice the wages of land-based staff. The lowest-paid factory worker earns MGF 180,000 a month (minimum wage) while the most skilled factory staff with some supervisory responsibility earns about MGF 600,000 a month. Ships' captains and officers earn according to the catch and are usually on annual contracts. Average earnings per active day for a traditional fisherman are estimated at about MGF 50,000.

[41] Taking into account the catch from the traditional sector, the sustainable industrial catch is thought to be about 8,500 tons per annum. The highest industrial catch was in 1997, with about 9,300 tons caught.

responsible authority, nominated laboratories, financing and human resources. GAPCM subsequently obtained financial assistance for its program, which was then implemented. The main result was that GAPCM's members were able to start exporting again to the EU after being approved by the relevant Malagasy authorities. Malagasy quality standards for the sector now exceed those prevailing in the EU.

The success in terms of quality control is not found in other fishing industries. Seafood processing and aquaculture businesses have put into place and enforced their own HACCP[42] systems, but this is not the case in the artisanal fishing industry, where many have had to turn to the local market. In the same way, other fishing commodities (crabs and lobster) caught by traditional methods do not satisfy the required phytosanitary standards conditions to enter into the European market and have therefore been diverted to other markets (Mauritius, and South Africa). The extension of the benefits of the shrimp industry to small-scale fishermen would require the harmonization of standards throughout the seafood industry through the HACCP's procedures and increasing investment in equipment.

Several recent initiatives should contribute further to the competitiveness and sustainability of the shrimp export industry. One was the establishment of a 'Temporary Commission of the Users of the Port of Mahajanga', the project — *'Zone d'Aménagement Concerté''Zone d'Aménagement Concerté'*, will establish more effective monitoring systems in shrimp fishing zones, rehabilitate the infrastructure of some ports, and support environmental protection measures.

For the shrimp sector, the overall policy framework is largely satisfactory, and it is necessary to pursue, intensify and spread the different measures, arrangements and initiatives to other areas of the seafood processing industry, to sustain the sector in its entirety.

3.5.5 Mining Resources

Madagascar has important mining reserves, be they ores (high grade chrome, graphite, mica, bauxite) or minerals (uranium, quartz, garnet, amethyst, zircon and titanium). The mining industry is focused on chrome and graphite exploration and on extractive operation. Little or no reserves have been exploited. However, the sector is mainly dominated by informal activities and fraudulent exports of fine stones. This results in a very small added value achieved in the country. Illegal exports of fine stones were, according to estimations, on the order of at least US$ 200 million, that is 4.5 percent of the national GDP, which represents a substantial loss of revenues for the state. Declared mining exports increased from US$ 16 million in 1996 to US$ 37 million in 2000.

[42] The HACCP method, which consists of analyzing the risk and managing the critical points, is a certification process intended to trace a product at all stages of production, and the origin of all inputs.

The mining sector groups a total of 2,300 operators, creates 100,000 full-time jobs and provides temporary work for an additional 500,000 persons. It is, however, generally admitted that a large number of artisanal operators work in the mining sector informally, creating impressive activity in areas that have been found to contain precious stones. Such areas create stampedes and a great number of informal activities and provoked, in addition, ecological damage as well as social conflicts on sites.

The Malagasy Government has embarked in a Reform Project of the Mining Sector (PRSM), which aims to improve the legal and regulatory framework of the sector through a redefinition of roles for sustainable development of the sector. A new Mining Code (the fourth, since the country gained independence) aims to have the State as regulator, affected through a decentralized system, to grant an enhanced role to small and large private sector agents, and to attract investments, primarily Foreign Direct Investment (FDI). Elsewhere, a special law on large mining investments defines a specific incentive scheme and an equitable distribution of revenues between the private sector and the state. The Mining Register Office is designed to set up a transparent and non-discretionary system for granting, monitoring, and possibly withdrawing mining permits. It is essential that the set up of such provisions be effective and transparent for harmonious development and structuring of the sector. Between now and September 2003, a new project of governance of the mineral resources (PGRM) will be set in motion and will reinforce the achievements of the PRSM project.

The PRSP identified the mining sector as one of the promising sectors for poverty reduction. The institutional framework administering the sector has thus been designed to adapt to small artisanal operators through simplified procedures for granting mining titles and through marketing schemes for formal integration with the sector's supply chain. The aim is to increase the value of mining products by putting an end to fraudulent exports and by encouraging stone processing activities (cutting, shaping and setting) to increase value-added throughout the country. In this respect, PGRM is intended to structure the internal and export markets for fine stones by setting up a single export desk, a certification and quality control program, a commodity exchange for raw stones and the creation of a Madagascar label that would strengthen the current renown of the country for stones such as sapphires and rubies.

Ultimately, Madagascar has the potential to have a vertically integrated mining sector, and a mineral processing industry with both small and large operations that are likely to provide more jobs than in mineral extraction. EPZ entreprises may provide a framework for such a processing industry with a specific supply system in which transactions would be carried out based on international prices on the local commodity exchange. This, in order to optimize foreign exchange and tax revenues. In that respect, taxes and duties should be established and formulated to guarantee the competitiveness of Malagasy minerals and to dissuade smuggling operations. To this end, the impact of establishing a Special Law on Mining Transactions (DSTM) in the 2003 Finance Law, in order to ensure export controls, remains to be seen.

3.6 CONCLUSIONS AND RECOMMENDATIONS

The goal of assistance provided by the Integrated Framework is to promote agricultural development and to reduce poverty through improved competitiveness of the sector and further integration into the world economy. Goals are specifically aimed at fostering an efficient supply response leading to increased producer incomes, diversification of exports and improved incentives for both domestic and international trade. Therefore the strategy proposed for agriculture, including the fisheries, livestock and mining sub-sectors, is to achieve the aforementioned goals through a combination of policy measures and institutional support programs that seek to eliminate the major constraints to agricultural development and poverty alleviation.

Box 3.3 summarizes the important limitations to agricultural development in Madagascar that have been identified in this chapter and identifies problems, highlights the causes and effects, and offers recommendations to address those limitations. There are two sorts of impediments: policy-related (i.e. in the cotton, rice, and sugar subsectors), and institutional (i.e. infrastructure, credit, property rights, strengthening producer organizations).

The policy-related reforms are relatively easy to design from a technical point of view, although their redistributive effects will inevitably slow their implementation. The institutional reforms and infrastructure investments are longer-term, but are just as important to get the desired supply response. Many of the limitations regarding policy at the institutional and infrastructure levels, such as those related to land reform, information systems and credit, have been highlighted in other chapters of this report, which means they have ramifications for all sectors of the economy. Others, such as privatization of cotton and sugar agro-processing parastatals and the continued involvement of the government in the distribution and sale of inputs, affect only agriculture. The recommendations also take into consideration actions that are planned by the government and laid out in the Action Plan for Rural Development that mainly focuses on the development of an institutional framework for sustainable rural development.

BOX 3.3 IDENTIFICATION OF PROBLEMS AND PROPOSED SOLUTIONS TO REVITALIZE AGRICULTURAL SECTOR IN MADAGASCAR

Problem	Cause	Effect	Proposed Recommendation
(i) Low use of inputs	(i) Tradition, lack of availability in rural areas (poor road network), high prices, lack of credit	A. Production As a sector, low supply response despite increased performance in some sub-sectors, which leads to (i) small surplus to sell on national market, (ii) low revenues for producers, (iii) negative impact on poverty. B. Price Stagnating or slight improvement in producer prices, depending on product. C. Trade • Monopoly in local trading network that limits participation of producers • Weak competitiveness in key exports such as cotton and sugar • Inability to exploit export potential in high value products • Shifts in export structure and production patterns	A. Policy • Improve access to inputs: consider stopping subsidies of donor imports • Privatize state-owned cotton and sugar companies • Revise land tenure policy
(ii) Poor irrigation system, especially for cotton and rice	(ii) Lack of maintenance and new investment		B. Institutional & Regulatory • Redesign and implement extension services • Improve information system • Promote development of rural finance system • Revise Mining Code

Problem	**Cause**	**Effect**	**Proposed Recommendation**
(iii) Inefficient extension services	(iii) Related to low use of inputs, research undertaken not applied		C. Infrastructure • Improve irrigation system • Improve road network
(iv) Deteriorating infrastructure (road network, ports, airport)	(iv) Lack of maintenance and new investment		
(v) Poor information system	(v) Isolation, inadequate road network, lack of information strategy		
(vi) Market structure that does not favor producers	(vi) Absence of rural markets (emphasis on urban markets), lack of roads, lack of programs to promote associations, weak educational system		
(vii) Limited access to land	(vii) Outdated or weak regulatory framework		
(viii) Lack of credit	(viii) Absence of commercial banks in rural markets, high risk for loan repayment, high interest rates, limited collateral		
(ix) Absence of overall sector strategy	(ix) Centralized government planning		
(x) Key sub-sectors of cotton and sugar are non-competitive	(x) Absence of privatization		
(xi) Weak international commodity prices for certain products	(xi) International market conditions, inferior quality of many Malagasy products vis à vis competitors		

CHAPTER 4
INCENTIVE MEASURES AND CONSTRAINTS INFLUENCING TRADE: LESSONS FROM CASE STUDIES IN THE MANUFACTURING INDUSTRY

4.1 INTRODUCTION

A micro-economic environment that lowers transaction costs and facilitates trade is necessary to achieve international competitiveness. Barriers to entry must be removed and the incentive system structured so that capital can be deployed to the most efficient sectors. Government administrative and regulatory requirements that discourage both foreign and domestic investment need to be eliminated. This chapter identifies crosscutting obstacles. That is, those that affect the majority of firms. This is particularly important in Madagascar, where the industrial sector is divided into two groups, each with its own growth trajectory. In one group, rapidly growing export-oriented enterprises are enjoying the privileges of operating in EPZs. The other group is comprised of import-substituting companies, used to being protected by high barriers as they produce for the domestic market. Firms in this latter group are stagnating, however, as they find themselves unprepared for the stiff competition from imports unleashed by liberalization. The specific issues relating to each sector are described in Volume 2, Chapter 5.[43]

These two groups, during the political, economic, and social crisis of the first semester of 2002 faced similar problems, due to a breach in the supply line of local origin or imported inputs, and due to impossibility to export manufactured products or to sell them on the internal market, the breakdown of transportation networks and because of the fall in consumption. 92.7 percent of enterprises either stopped or slowed down their activity, which led to a reduction in either hours worked or hourly wages, or else layoffs; whereas, in the same period, consumer price indexes increased by 21 percent. The proportion of impacts of the crisis is however different according to the two groups. The negative growth rate in 2002 for non free trade zonesector was estimated at –20.3 percent versus –68.2 percent for EPZ sector [44]. Various studies conducted by the private sector[45] on the impact of the crisis reveal a total employment loss of 27 percent, which in EPZ's,

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[43] The firms interviewed in manufacturing fall into three broad categories: (i) labor-intensive manufacturing and service exporters (textile and garments, information technology); (ii) handicrafts (raffia, embroidery) and (iii) import-substituting firms. About 50 firms were interviewed.

[44] For a growth rate of the global GDP of -12 percent, the industrial sector was the most affected by the crisis.

[45]The Emergency Salvage Plan of Economy (PSUE) commissioned by goupings of the private sector and the study on EPZ conducted by GEFP (Grouping of Free Trade Zones and Partners).

81,500 (out of a total of 110,000) were temporarily laid off and 30,000 people were permanently let dismissed.

This chapter is organized as follows: Section 4.2 outlines issues and developments in the common law sector and gives an overview of the firms that qualify for EPZ status. Section 4.3 summarizes crosscutting issues, many of which are covered in detail in other chapters of the report. Section 4.4 lists key recommendations on the regulatory framework.

TABLE 4.1 GROWTH OF INDUSTRIAL GDP IN CONSTANT MFG [46] (IN PERCENTAGE)

Year	1996	1997	1998	1999	2000	2001	Average
Non EPZ sectors	0.9	4.3	4.5	3.5	6.3	4.8	4.1
EPZ	24.8	9.5	19.6	13.3	19.8	40.2	21.2
TOTAL	2.0	4.7	5.3	4.2	7.3	7.6	5.2

Source: Ministry of Economy, Finance and Budget (MEFB, 2003).

4.2 GROWTH AND STRUCTURE OF THE INDUSTRIAL SECTOR

4.2.1 Enterprises Established Under The "Droit Commun"Framework

The Malagasy industry, which accounted in 2001 for 13.3 percent of the total GDP, recorded moderate growth in the course of the second half of the 90s and the early 2000s. Between 1996 and 2001, growth in the industrial sector reached an average of 5.2 percent, or almost twice the annual average population growth of 2.8 percent. However, if EPZ, the growth of which reached 21.2 percent per year between 1996 and 2001, is excluded, this performance falls by more than one point (Table 4.1).

By contrast, imports, excluding those bound for EPZ's, have grown vigorously. They grew in volume by 13.2 percent a year between 1995 and 2001. The fact that imports have grown substantially suggests that the weak growth of Malagasy industrial production outside the EPZ may be due more to import competition rather than to domestic-market stagnation. This hypothesis is confirmed by observing import-penetration ratios in sectors where imports compete with domestic production (see Table 4.2). Although these numbers must be interpreted with caution, they suggest two problems.

First, somewhat surprisingly, between 1995 and 1996 import-penetration ratios fell in all sectors except textiles and wood. Trade statistics show that this fall is attributable to a

[46] 1984 Constant Prices.

drop in measured imports rather than increased local production. This drop may reflect measurement errors or the effect of import-tax evasion, which affects measurement and is considered widespread. Second, if one treats the 1995–96 drop as an aberration, import growth is even stronger between 1996 and 1999 (31 percent a year on average), reinforcing the conclusion that Madagascar's domestic-market growth has been significantly captured by imports and that import penetration is rising.

TABLE 4.2 IMPORT-PENETRATION RATIOS (PERCENT)
(IMPORTS / DOMESTIC SALES)

Branches	1995	1996	1997	1998	1999
Food	31.7	22.2	27.0	21.4	25.6
Beverage and tobacco	30.5	12.4	23.5	25.3	17.1
Textile & clothing	4.0	5.1	8.7	7.8	5.7
Wood	3.2	5.9	4.7	8.2	7.4
Paper & printing	32.1	30.5	39.1	44.3	49.4
Leather goods	8.0	7.1	25.1	28.3	27.4
Electrical equipment	6.1	3.5	4.8	4.0	6.9
Metal products	80.9	67.5	71.8	75.7	71.0
Chemicals	26.5	20.8	33.2	27.8	30.4
Energy	-	-	-	-	-
Construction material	38.7	20.9	20.1	29.5	24.2
Transportation equipment	23.6	15.4	28.7	23.9	30.5
Mining	10.9	10.6	12.4	13.1	9.9

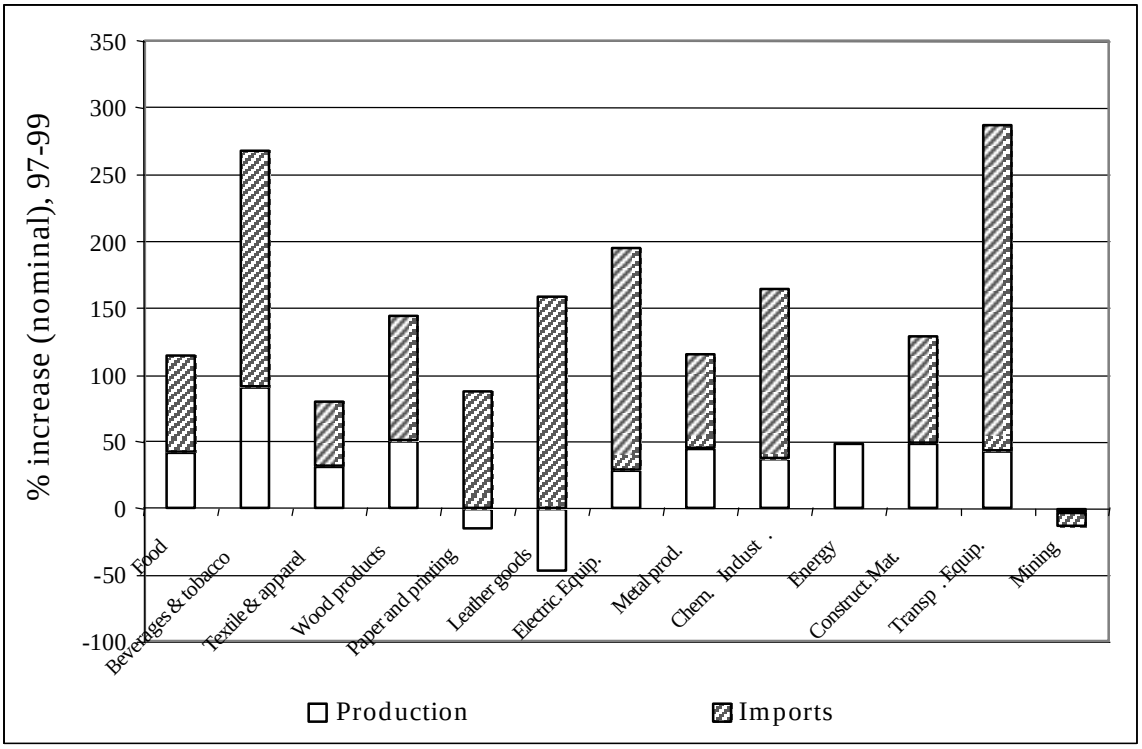
Source: IMF (2000); INSTAT; Ministry of Commerce and Consumer Affairs, authors' calculations.

Figure 4.1 shows the division of nominal domestic-market growth between domestic production and imports. It reveals that much of the growth was captured by imports. For the paper and printing and leather industries, while imports increased strongly (by 88 percent and 159 percent, respectively), domestic output fell (by 15 percent and 47 percent respectively). In agri-food, beverages and textiles, three important sectors in Malagasy industry, less than 40 percent of the market's growth was captured by domestic production, the rest feeding imports.[47] This fact is all the more noteworthy because at the beginning of the period, imports represented only 22 percent of consumption in agri-food products, 12 percent in beverages and 5 percent in textiles.

[47] The agri-food and beverage industries, taken together, account for about half of industrial production.

If the observed trends persist, these preliminary observations portray a growing gap between two sectors of the Malagasy economy poised on different trajectories. On the one hand, a dynamic and expanding export sector, centered on the EPZ, which was growing prior to 2002, has been severely affected by the recent crisis and must now seek to regain the market's confidence in terms of the buyers operating in the European and US markets. In June 2003, 148 out of 180 free trade zone companies that existed in June 2001 are back in operation, and are not operating at full capacity. On the other hand, a domestic sector is struggling to compete with imports and is gradually losing steam. Given that the latter still accounts for more than 11 percent of GDP in 2001 (five times more than the EPZ sector) and provides 195,000 jobs,[48]. the difficulties it has to face must be treated with due consideration, and requires a more in-depth analysis.

FIGURE 4.1 DOMESTIC-MARKET GROWTH, 1997–99



A frequently cited concern of Malagasy industrial firms is the inadequate quality and availability of inputs. This limitation is due to the lack of diversification among

[48] Employment in individual companies and in corporations outside of the textile / garment sector was, in 1997, 146,000 employees (Madio 1999, Table 3). Employment in the textile / garment sector, of which a large part is in the EPZ, was 47,000 people. Most of the employment gains since 1997 have been recorded in the EPZ.

upstream sectors of Malagasy industry, which is not surprising given Madagascar's low level of income. When local sourcing is impossible or unprofitable, importing inputs entails significant transportation costs. Moreover, it limits export opportunities in preferential-access markets with rules of origin.

Several factors explain the weakness of upstream segments of the Malagasy industry. Managers in the processed-food industry point to the deteriorating quality of agricultural products resulting from the lack of plant renewal. Decades of under-investment in agriculture have eroded the sector's ability to produce quality fruits and vegetables, particularly compared with regional competitors like South Africa. This situation was in some cases compounded by government actions. For instance, the sugar industry's production fell by half after its nationalization, and interviews suggest that current production is not of sufficiently high quality for local processed-food producers, who must consequently source abroad. According to some respondents, flour produced by the country's main mill, created as part of a government plan to encourage wheat cultivation, is also of inadequate quality for downstream users. Consequently, producers bypass national sources and import their flour.

Prospects for improvement are largely long-term. A pure market solution (vertical integration) is unlikely to take place on a sufficient scale to alleviate the problem. Improvements in the value chain's efficiency will require a combination of factors, both within and outside of the firm. First, the state must continue to shift its efforts away from direct intervention and toward better provision of basic infrastructure. Second, and perhaps more important, incentives for private investment in agriculture must improve (see Chapter 3). Third, if improvements in the general business climate strengthen upstream sectors of Madagascar's industry, efficiency will also require the substitution of imports for local production in sectors where the latter is structurally noncompetitive, whether because of scale or because of lack of availability of primary factors (physical and human capital, and so on). The regulatory regime covering those imports must be sufficiently favorable to allow cost-effective importation.

4.2.2 Investment In Export Processing Zone

Madagascar has been actively promoting its exports since the early nineties. In particular, it has created and developed EPZs in order to attract FDI. The WTO estimates that about 50 percent of companies licensed to operate within EPZs are concentrated in the apparel and textile industries, with the remainder focused on food processing, footwear, jewelry and information technology (data processing).

Investment in the EPZs comes primarily from six countries: China, France, Hong Kong, India, Malaysia and Mauritius. In 2001, the list of enterprises authorized in the Free Trade Zone Scheme included 33 agro-industrial firms, 158 textile firms, 22 firms in the wood sector, 28 data processing firms de traitement and 17 handicraft firms. The investment volume planned by agro-food enterprises reached about MGF 113 billion, whereas the textile investment amounted to MGF 615 billion. The enterprises for wood processing and data processing planned to invest respectively MGF 43 billion and MGF 21 billion.

Eligibility. Eligibility requirements for location within EPZs are based on the firm's activities. Firms are allowed into EPZs if they are exported-oriented manufacturers, if they develop or manage EPZs, provide services to EPZ companies, produce inputs used by EPZ firms or export at least 95 percent of their output. Customs duties are levied on the 5 percent of production that can be sold domestically. Firms in EPZs pay a refundable VAT of 20 percent on imported inputs. The refund is supposed to be made within one month upon proof of exports, thereby preventing leakage of goods into the domestic market. Implementation of the VAT and its drawback scheme has been difficult, and this remains an area of concern. Measures were taken by the government after the crisis to effectively reimburse due VAT drawbacks and so that companies in EPZ's would, at least temporarily, not have to pay VAT on imports of production inputs. In contrasts, free trade zone companies, like the others, must have their imports subjected to a joint inspection by an international contracting company[49] and customs administration in charge of régimes suspensifs. The costs of this operation are supported in part by the importing companies, on the 0.25 percent level of the value of goods declared.

Incentives. The GOM offers several incentives to firms located in EPZs, including:

- A grace period on corporate income taxes for the first 2 to 15 years of operations.
- A post-grace period tax rate that is reduced by an amount based on 75 percent of subsequent investment.
- Exemption from customs duties and taxes on imported equipment, inputs, spare parts and packaging and building materials.
- Dividend taxes of only 10 percent rather than 25 percent.
- Ninety-nine-year leases for investment in land.
- Free repatriation of profits after payment of taxes, as well as 100 percent foreign ownership.

4.3 CROSS-CUTTING ISSUES

In response to economic reforms and liberalization, Madagascar's economy has recorded slow but steady growth during the past decade. Most of the growth has occurred in transportation, construction and other nontradable sectors. Manufacturing has kept pace with GDP and thus, its share of GDP has remained constant, hovering around 12 percent. The success of numerous export industries in different sectors has amply demonstrated Madagascar's ability to be internationally competitive. Industrial growth

[49] In February 2003, a five-year contract was signed between the government in Madagascar and the Société Générale de Surveillance (SGS), for customs capacity building and to facilitate trade.

has the potential to become more rapid as trade barriers come down and Madagascar becomes more integrated into the world economy. However, its growth is fragile and much of the production for export depends on preferential market access and cheap labor, neither of which is guaranteed to last. Improvements in productivity and competitiveness are critical if growth is to continue and accelerate. Our representative survey of industries has identified a variety of factors that affect productivity in all industries and, taken together, dramatically reduce competitiveness. Of the factors identified in the interviews, customs and infrastructure are covered in detail in Chapter 6. The overall business environment relating to the regulatory environment is covered in detail in Volume 2, Chapter 5.

4.3.1 Infrastructure

As the specific problems of Madagascar's transportation infrastructure are dealt with elsewhere in this report, only a few are mentioned here in passing. If the high cost of physical and electronic communications between Madagascar and the rest of the world affects all sectors of the economy, the run-down inland transportation infrastructure affects particularly the companies serving the domestic market. One survey respondent reported that his transportation costs are raised by one-fourth just because of the excess wear and tear on trucks resulting from bad road conditions. Another respondent producing household equipment goods notes that shipping products to Fianarantsoa, a city served by a recently refurbished road, adds only 10 percent to his factory-door price; however, shipping to Sambava, a shorter distance but with inadequate roads, adds a full 100 percent to his price. At that cost, many households prefer making the equipment themselves, albeit in an economically inefficient way. Thus, an already small market is further reduced by the lack of adequate infrastructure, adding to the pressures that force local producers to operate at sub-optimal scales. The household-equipment maker just mentioned, whose accessible market is limited to the Antananarivo urban community and a few large cities, estimates that his factory's size is at about a third of the minimum efficient scale, the size that would minimize unit costs.

In addition to the poor transportation infrastructure, under-performing public utilities are a handicap to Madagascar's industry. Electricity provision is perceived to be expensive, insufficient and irregular, particularly outside of the capital city. This contributes to a widening gap between the exporting economy (largely centered around Antananarivo and Tamatave) and the local economy, the former enjoying better operating conditions than the latter. In this context, a program to reorganize the electricity sector was initiated by the government with the support of the World Bank and AFD.

4.3.2 Finance And Banking

There are seven banks in Madagascar. Three of them are formerly state-owned banks that were later merged and privatized: BNI-CL (BNI-Crédit Lyonnais Madagascar), born of the merger of two state banks, privatized in 1991 and since then a partner of France's Crédit Lyonnais; Banky Fampandrosoana ny Varotra-Société Générale (BFV-SG), a partner, since its privatization in 1998, of France's Société Générale; and Bankin'ny

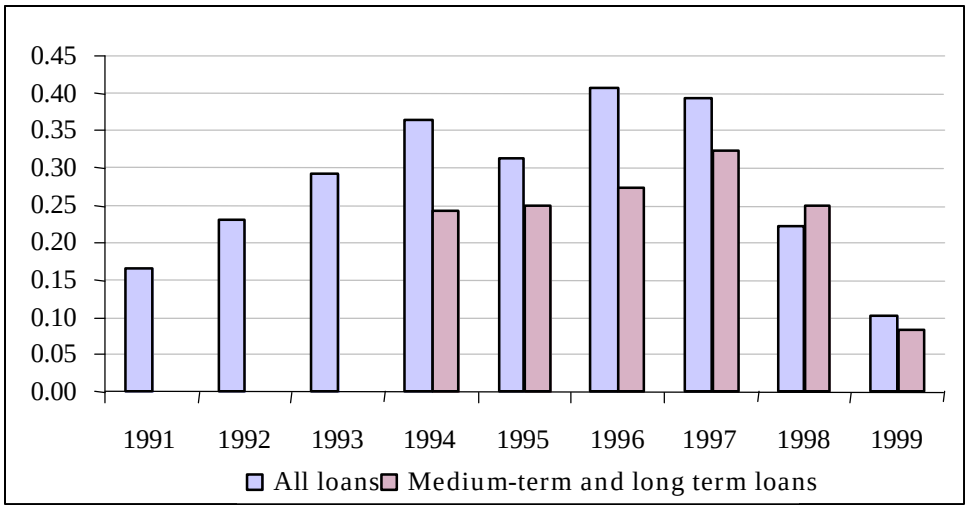
Tantsaha Mpamokatra-Bank of Africa (BTM-BOA), partner since its privatization in 1999 of the African Financial Holding/Bank of Africa. Three other banks have entered the market: La Banque Malgache de l'Océan Indien (BMOI), affiliated with France's BNP-Paribas; Union Commercial Bank (UCB), controlled by the Mauritius Commercial Bank, which entered in 1994; and the State Bank of Mauritius, which entered in 1998, and since January 2003, a bank financed entirely by local private capital, la Compagnie Malgache de Banque (CMB). A number of micro-credit schemes have also appeared to serve the population without access to the commercial banking system. It is fair to say, however, that the Malagasy banking system is very concentrated, even by the standards of SSA. With close to 2.5 million inhabitants per bank, Madagascar in fact ranks at the bottom of a sample of 12 SSA countries surveyed in 1999.[50]

The Malagasy banking system is also recovering from difficult years. A legacy of politically motivated lending left it, up to the mid-1990s, with bad debts that had to be disposed of before privatization. Two state agencies accomplished this at a cost approaching MGF 330 billion. Thus, the sale of the State banks, whose asset values were well below the value of their dubious liabilities (MGF 70 billion for the BFV and 40 billion for the BTM), was costly for the taxpayer. Since then, balance sheets have been cleaned up and the ratio of dubious loans to total credit has dipped below 10 percent (see Figure 4.2). Besides the taxpayer-financed cleanup, the improvement in the Malagasy banking system's balance sheet no doubt also reflects the slow recovery of the national economy from a period characterized by macro-economic distortions and heavy state intervention in the economy. However, in spite of the conservative lending policies, Malagasy banks had a ratio of capital to total liabilities in 2000 that remains relatively low at 8.7 percent, reflecting their under-capitalization.

Credit to the private sector as a proportion of GDP is relatively low (9 percent) even when compared with a sample of SSA countries at comparable levels of development. For instance, Ghana, Burundi, Lesotho and Ethiopia have higher ratios. Moreover, the ratio has been declining for Madagascar. It stood at close to 15 percent in 1994, whereas it has been rising in a number of SSA countries. Figures released by the Central Bank for 2000 and 2001 suggest no major reversal in trends, as total credit to the economy was MGF 2.1 billion (8.9 percent of GDP) in May 2001.

[50] All banking statistics are in P. Andrianomanana et al. (2000). The sample includes Angola, Burkina Faso, Cameroon, Ivory Coast, Ghana, Mali, Malawi, Mozambique, Niger, Uganda, Zambia and Zimbabwe.

FIGURE 4.2 DUBIOUS LOANS IN THE PORTFOLIO OF MALAGASY BANKS



Source: USAID (1999).

Industrialists blame the Malagasy banking system's conservatism for thwarting efforts to increase investment, which is indispensable for economic development. Almost all firms cited financial constraints as the most important problem they face. The only ones that did not complain were the large multinationals that receive the bulk of their funds from their parent companies. Most enterprises are unable to access bank credit and for those that are able to, the costs are high. Banks demand personal guarantees as well as high levels of collateral and generally will not lend to small firms, handicraft companies or any other companies that do not have extensive resources. Banks are unwilling to provide trade finance or make working capital loans secured by letters of credit (L/Cs) to most companies. Obtaining back-to-back L/Cs is possible only if a firm already has access to credit. The lack of working capital severely constrains the ability of firms to expand. The small Malagasy-owned firms, including those in the essential oils and handicraft sectors, are the hardest hit. Small foreign-owned firms also find it difficult to access local credit but often are able to bring in capital from abroad. While short-term capital is difficult to get, long-term financing is even more problematic. Term loans are very rare, and loans of more than five years are non-existent.

Bankers consider the business environment to be too risky to issue anything but large industrial loans. As one manager at a major French-owned bank stated, "There are only 200 people in the country that we consider good risks." Credit is restricted because of the lack of information and enforcement mechanisms. Banks find it difficult to obtain reliable information on borrowers or to accurately assess their creditworthiness. More

important, the legal system is weak and ineffective. If a borrower defaults it is extremely difficult and costly for creditors to obtain recourse. Several years ago, a Chamber for Arbitration and Mediation (Chambre d'Arbitrage et de Médiation de Madagascar, or CAMM) was created and provides an alternative means of settlement, for which enforcement still depends on the legal system. Indeed, some of the industrialists who accuse banks of being too timid recognize that they find it difficult themselves to extend, even short-term, customer credit given the lack of a supportive legal and judiciary system. The land tenure laws make it impossible for foreign banks to take title to land, rendering land, most firms' largest asset, almost worthless as collateral.

Besides the lack of an effective court system, the conservative nature of the Malagasy banking system has its roots in some of the distortions that still affect the national economy. First, at the end of September 2000, more than half of all domestic credit was absorbed by the public sector. Against the alternative of almost riskless investment in Treasury bonds (BTA), albeit at relatively low interest rates (around 10 percent, roughly equal to inflation), the private sector finds it difficult to compete for the attention of bankers. Thus, despite a considerable cleanup in state finances, the crowding-out of private investment is still a problem in Madagascar.

Second, because it is an oligopoly protected by barriers to entry, the Malagasy banking sector enjoys rents, which it is not ready to give up. Margins for intermediation, one measure of the sector's profitability, have been hovering for years at around 8 percent. High intermediation margins reflect substantial interest-rate spreads between loans and deposits (remunerated at less than 2 percent, a negative real rate, at the time of this survey), as well as very profitable operations on the foreign-exchange market, the banks' main profit center (IMF 2000), and high fees for a number of transactions. For instance, one firm reported that bank fees for depositing or withdrawing foreign currency were as high as 1 to 2 percent. The cost of opening an L/C is around 1 percent plus a service charge of about 0.25 percent. This cost compares unfavorably with Ghana, where total charges are only about 0.5 percent, and is closer to the high costs in Nepal, where charges for L/Cs are 0.75 percent to 1.5 percent.

With free entry into the domestic banking industry, international banks would likely enter the market and attract the business of some of the rapidly growing EPZ firms. As long as access to capital, especially working capital, remains difficult, firms in Madagascar will find it problematic to expand and enter new markets. Although numbers up to 1999 show no erosion of these monopoly rents (the contrary would have been surprising as no aggressive entry has taken place), bankers claimed in interviews that margins have been substantially declining in 2000/2001.[51]

[51] Lack of entry is related to the barriers to entry created by the excessive discretionary powers in the hands of the administration, which create uncertainty for potential entrants. Discretionary powers are part of the pervasive rent-seeking activities in the weak regulatory framework. See Volume 2, Chapter 5.

Industrialists also complained in interviews that Malagasy banks are particularly unwilling to extend long-term credit. Medium-term and long-term credit accounted for 23 percent of the banks' total credit to the private sector during the first five months of 2001. The lack of long-term credit in the Malagasy economy is clearly a major drag on investment, but again, there is no single explanatory factor. From the bankers' side, the most frequently cited problem is one of matching terms. Term and savings deposits have had little success on the Malagasy market and represented, for the first five months of 2001, 23 percent of total deposits. This low figure may reflect, *inter alia*, the low rate of domestic household savings. As a result, bankers claim that they find it difficult to transform maturities without violating prudential rules on liquidity risk.

The absence of long-term credit is a substantial problem. Like companies elsewhere, Malagasy firms finance most of their investments with internal funds. However, since they receive little trade credit and are unable to borrow short-term from banks for working capital, they are forced to forgo investing and fund current operations with their internal funds. If the private sector in Madagascar is to become truly competitive, efforts must be made to increase competition in the banking sector and make more short- and long-term funds available to creditworthy firms. In this regard, measures were implemented after the crisis to facilitate access to credit by firms experiencing financial difficulty, following the decline in economic activity. A reserve fund managed by primary banks to make bank guarantees more flexible, and a project of the Centrale de Bilans was formulated to assist financial intermediaries to improve their risk appraisal. In spite of this, small and medium enterprises still encounter difficulties in accessing credit. A number of recommendations have been made in Andrianomanana et al. (2000) to induce the Malagasy banking sector to take a more active part in the economy's growth. They consist primarily of innovations in bank operations, including underwriting commercial paper issuances, international cooperation to create venture-capital firms, and more proactive cooperation with the IFC in the promotion of private investment, particularly in infrastructure. These recommendations have to do with the business policy of private banks, regarding which the State has (and should have) no authority. However, the government can contribute to the improvement of incentives by making an effort to reduce its borrowing requirement, by strengthening the judicial system (which implies, *inter alia*, fighting corruption within the judicial system itself with higher salaries and effective penalties for offenders) and by encouraging entry into the banking sector.

4.3.3 Training And Education

A factor common to all firms is the dearth of trained workers, especially skilled mid-level managers and technicians of any kind. The garments firms are forced to bring almost all of their managers, quality control experts and supervisors with them when they establish operations. Textile and garments manufactures are unable to find enough managers to effectively operate their plants on more than one shift. The under-utilization of capital makes them less competitive than East Asian firms. This problem will become even more pronounced if they attempt to move on to more capital-intensive operations such as spinning and weaving. As noted earlier, the lack of computer software developers is threatening to choke off the information technology (IT) sector

before it even takes off. Vegetable growers have to hire French agriculture experts to live in the countryside and provide training and expertise. The lack of training and skills is a major impediment in all industries and all sectors, including the handicrafts sector.

Training. There are very few technical training institutions, and most are inadequate. In the eyes of the firms we interviewed, FORMACO, the only trainer of garments and textile workers, is not very useful. When it was established it was provided with some of the best available equipment. It has good facilities, but it never taught the skills to meet the needs of industry. The original French instructors have left FORMACO, and many of the best local instructors have been hired away by industry. The textile firms are forced to conduct all of their own training in-house. This expensive process is made more so when trained employees are likely to be "poached." FORMACO needs to be revitalized, but it must be done in a way that includes the private sector so that the latter is a full partner to and ensures that the training meets its needs. SYMA is considered good at training workers for the embroidery companies, but it is too small to meet demand.

The IT industry, through GOTICOM, and FASP (Fonds d'Appui au Secteur Privé) supported the start up of a collective training center, the l'Association pour le Développement des Formations de Pointe (ADFP), which became operational in 2001. It plans to train people from other sectors to become IT professionals and also produce technicians, programmers and graphic designers. GOTICOM has already sent two students to France so that they can return to Madagascar and become instructors for database management systems. Such a comprehensive training program will be expensive, but the fact that the impetus is coming from the private sector itself suggests that the training will be appropriate and bodes well for its success.

Government support. The government does not appear to support industrial training. No funds are available to firms (or at least none that they know about) for training, and the government does not offer any tax breaks or other encouragement. Given the fact that trained workers are easily poached and that the benefits of training spill over beyond the firm that does the training, it is almost certain that the amount of training is below the social optimum. The FASP matching grants program that subsidizes the use of external consultants was used by a number of the best firms and appears to have been quite successful. Unlike matching grants in some other countries, the FASP program seems to have met the requirement of "additionality" that marks a successful intervention.[52] Firms reported that they used the grants to fund projects that they would not have been able to undertake without assistance and that most of the projects successfully met their goals. A few firms also suggested that some of their competitors might have copied their innovations. Clearly there is scope for more interventions designed to diffuse technical knowledge and improve management skills.

[52] See T. Biggs (1999). "Additionality" is a term coined by the author and refers to the need for a successful program to create additional technology transfer and not merely fund projects that would have taken place in the absence of any subsidies.

4.3.4 Business Environment[53]

Investors stated repeatedly that their decision to establish operations in Madagascar was largely based on the incentives provided by the EPZ legislation. Successful implementation of the laws reduced the costs resulting from government bureaucracy and red tape, thus helping to make the operations internationally competitive. Despite the success of the EPZ system, government bureaucracy is still a burden and imposes high costs on business. For example, the manager of a major garments group estimated that 20 to 25 percent of his time was spent dealing with customs, taxes, labor permits and other government-related issues instead of running his firm. He also had many lower-level managers who did nothing but deal with the government. Firms are afraid that the business environment may be deteriorating, just when industry needs to be taking advantage of the opportunity provided by preferential market access to become more competitive. The burden imposed by government bureaucracy is particularly heavy for companies producing for the domestic market and unable to benefit from EPZ incentives. High taxes, capricious enforcement of laws and regulations and corruption have made it difficult for these firms to restructure to meet the challenge of imports.

Customs. Customs and the import/export regime continue to be burdensome. Corruption and inefficiency have resulted in high costs and slow turnaround times. Import-substituting firms complain that customs does not enforce tariff duties so that they are at a disadvantage. They have to pay VAT and import taxes on their inputs, yet they face competition from smuggled goods and goods coming in duty-free from other members of COMESA that have been trans-shipped. Delays in customs clearance and long turnaround times are a significant cost burden to firms in Madagascar. Recent measures have been taken to reform customs administration internally, by restructuring the general management of customs, accompanied by the hiring of the Société Generale de Surveillance (SGS) in charge of putting into effect the capacity building program. Forming a partnership between customs and the trading community to reduce the cost and time of clearing would be a major step toward improving international competitiveness. Measures to take are detailed in Chapter 6, section 6.2.

Taxes. Taxes are not much of a concern for EPZ firms because most of them are still operating within a five-year tax holiday. For those that do pay taxes, the rate is low enough that it is not a major concern. However, for firms producing for the domestic market, it is a different story altogether. The small firms, such as the handicrafts firms, do most of their business in cash and do not attract the attention of tax officials. The larger manufacturers are prime targets for corruption and rent-seeking behavior. They are not mobile, they are too big to hide and they are seen as rich by the tax authorities. Therefore, they suffer many tax audits, inspections and other forms of harassment seeking money for both the tax collectors and the government. The tax burden is around

[53] Volume 2, Chapter 5 reviews the regulatory environment and suggests reforms that would improve the business environment in the following (broad) areas: startup costs for new firms (e.g., procedures to obtain a license) and operation costs (e.g., competition policy, taxation, legal/judicial).

30 percent for these firms, which is quite high even by regional standards. Delays in VAT refunds squeeze export firms' cash flow and reduce their working capital. Any program in which the government is supposed to refund money does not appear to work well. Exporting firms have no problem importing inputs for goods that they know they will export; for this they use the Admission Temporaire.[54] If they are not sure of their plans, however, and then export, they must seek a refund of duties. The delays under this system are so long that the program is effectively useless. Steps must be taken to reduce the government's negative impact on firms' cash flow. Several recommendations are contained in Volume 2, Chapter 5, section 5.3.3.

Labor laws. Firms are worried that government requirements are hindering the labor market's operation. Interviewed firms pointed to the process of getting expatriate work permits and permission for overtime as prime examples. Recently it has become increasingly difficult to obtain permissions from the Ministry of Labor in a timely manner. Many firms report that getting an expatriate work permit can now take almost a year. So far, expatriates have not been stopped from working, even without permits, but the situation makes investors uneasy. Given the lack of skilled Malagasy workers and managers, making expatriates unwelcome sends investors the wrong signal. In this vein, recent measures have been taken to create a "guichet unique", a window to shorten the time it takes to process each file, without getting rid of the numerous steps required by each department involved with monitoring foreign workers. Measures to simplify the process of obtaining work permit visas are described in Volume 2, Chapter 5, sections 5.2.6 and 5.3.1.

Regional differences. There are large differences in the business environment across regions. For example, VAT refund takes far longer in Mahajanga than in Antananarivo. One firm in Mahajanga has been unable to get a work permit or permanent visa for one of its expatriate managers. In the past three years, the firm reports using 58 photos to obtain a series of temporary authorizations for him. The biggest concern expressed by all firms, both foreign and domestic, is the devolution of power to the provinces. This development is so new that no one knows what to expect; but companies worry that the extra layer of government will double the bureaucracy and taxes as the new provincial governments enact their own regulations and demand new taxes to support their operations. The central government must take steps to reassure investors and prevent provincial governments from imposing additional high costs on firms.

4.3.5 Concluding Remarks

Firms serving the domestic market, accustomed to an inefficient and distortion-ridden but protected environment, must now go through a difficult transition to operate in a market whose protective barriers have largely been eliminated. Our analysis has highlighted the need for recapitalization and modernization of the common law sector, and the competitive pressure faced by incumbents, combined with the banks' prudence,

[54] A system by which inputs can be imported duty free as long as the final product is exported within a specified period of time.

makes it difficult for them to mobilize the financial resources needed for an effective turnaround.

If no major layoffs or plant closures are announced, at least openly, the question bound to arise is when will production units that serve the domestic market reach their break-even point. If the EPZ provides employment opportunities, whose growth can mitigate the shock of the common law sector's restructuring, it is still too small to offset it entirely. From this perspective, developing a favorable investment climate in the common law sector should be one of the public authorities' priorities. A number of measures would contribute toward the establishment of such a climate:

- A major rehabilitation effort for the highway infrastructure and what remains of the railway network (essentially the Tamatave-Antananarivo line, currently under the management of MADARAIL).

- A consultation and cooperation effort based on the contracts approach suggested above, for a more equitable spread of the fiscal burden and for better "readability" of government initiatives in this area.

- Improvements in incentives for productive investment through, for instance, tax exemptions on profits used for investment spending, so as to compensate for the high cost and the unavailability of investment credit.

- A more effective competition policy, based on stable rules rather than discretionary powers, in sectors where cartels are present.

- A more regular collection of border taxes, at current rates, on final products; a lightening of the fiscal burden on imported inputs.

- Replacing direct state intervention in agro-industrial transformation industries by a policy of incentives for private investment in agriculture.

In the end, improving the investment climate will make it possible for Madagascar not just to attract foreign investors, but also to encourage the emergence of local investors.

4.4 RECOMMENDATIONS

The constraints identified from the firm interviews point to a weak regulatory framework. These weaknesses are examined in greater detail in Volume 2, Chapter 5, which also gives recommendations that are summarized below:

- Lower protection (say a maximum rate of 20 percent to be brought down to 10 percent uniform) to make markets more contestable.
- Develop the fiscal pools that have vastly improved tax collection rates and will make it possible moving to lower taxation that is more uniform.

- Encourage entry into the banking system to make it easier for firms to restructure. However, this will occur only if the transparency of the regulatory framework is improved (see below).
- Adopt a competition law that does not give excessive power to the administration and implements the checks and balances that will prevent the privatization of key infrastructure sectors (air transport and telecommunications) from resulting in the replacement of a public sector monopoly by a private sector monopoly.
- Replace direct state intervention in agro-industrial transformation industries by a policy of incentives for private investment in agriculture.

To stabilize foreign direct investment flows the actual regulatory environment must be improved. The recommended measures to address this problem includes:

- Delegating the level of decision-making authority needed to obtain EPZ status.
- Streamlining company registration procedures, including those required to obtain work permit visas for foreigners and those for environmental compliance.
- Reducing the length of time (currently four to six months) to obtain EPZ status to the 21 days, as specified by law, and adopting a new law that will make it easier to obtain EPZ status.

- Recognizing the fact that well-specified and enforced property rights are a *sine qua non* of long-term development (in the short term, stop "spontaneous" occupation of unregistered land).

CHAPTER 5
TOURISM DEVELOPMENT PLAN

5.1 INTRODUCTION[55]

This report's assessment of Madagascar's tourism sector suggests that the current small size of the sector and its assets reflects a substantial unrealized potential. Madagascar's varied attractions appeal to numerous and often growing segments of tourists including, for example, the niche markets that comprise eco-tourism (birdwatching, whale watching) and adventure travel (sport fishing, diving, and sailing). Tourism can be a powerful development tool that generates economic growth and stimulates other production and service sectors (agriculture, arts and crafts, and transportation). Most important, in Madagascar, where rural poverty is widespread and the poor put pressure on natural resources, tourism could generate positive externalities. First, because its assets extend throughout the island, tourism creates pockets of economic growth in regions that have no alternative sources of income and employment. In remote regions in particular, tourism helps to alleviate poverty by diversifying income sources.[56] Second, tourism, properly managed, can help to preserve the environment, whether for ecotourism or for resort-based activities.

Volume 2, Chapter 7 analyzes the status of the tourism sector in Madagascar. It reviews the assets, analyzes the demand and supply sides of tourism and assesses the quality of the database. Constraints are identified, as is the role of the private and public sectors in overcoming these constraints. This chapter summarizes the main recommendations that emerge from this analysis.

5.2 STRENGTHS AND WEAKNESSES OF THE TOURISM SECTOR

5.2.1 Comparative Advantage

Madagascar's extraordinary natural assets, land-based and marine, make it a target destination for a diverse group of tourists. As one of the world's few mega-biodiversity countries, 95 percent of its animal and plant species are endemic. Its 32 species of lemurs are among the country's main tourist attractions, along with its baobab trees.

[55] This chapter has benefited from and draws from a UNDP document: Ecotourisme. Prepared by Jacqueline Randriamanantena and Herintsalama Rajaonarivelo.

[56] The Annex to Volume 2, Chapter 6 on Tourism and Poverty explores the concept of pro-poor tourism (PPT) and the targeted policies and projects that are required to "tilt the tourism cake" toward the poor. The chapter summarizes a few of the several projects in Madagascar that provide models for PPT.

Madagascar, the world's fourth largest island, has nearly 5,000 km of coastline and a continental shelf that offers greater marine and coastal biodiversity than any other Western Indian Ocean country. Its spectacular marine mega-fauna is another tremendous resort asset.

The variety of the country's assets is reflected in its World Heritage Site in the west, Tsingy Bemaraha Strict Nature Reserve. The 16 national parks, as well as other protected areas, cover 3 percent of Madagascar's land surface and are distributed throughout the island. Four marine parks are clustered around Mananara Nord, a biosphere reserve, on the northeast coast. Private reserves also are spread around the island and are frequented by tourists. Because of its high endemism, Madagascar's ecotourism assets are unique and place it among the prime ecotourism destinations in the world. The sun, sea and sand, while indeed outstanding, compete with other better-known and better-developed resort destinations in the Indian Ocean such as Mauritius and the Seychelles.

Madagascar's abundant assets are in danger of environmental degradation, however. Each year, about 150,000 hectares of forest disappear. At this rate, the forest will vanish in 40 years. As forests are the natural habitat for most of Madagascar's unique biodiversity, the degradation threatens Madagascar's status as a mega-biodiversity destination. Addressing this problem more systematically and strategically is an important component of any tourism strategy.

5.2.2 The Knowledge Base

Madagascar's natural resources, and, therefore, its asset base for tourism, have been studied extensively and have received considerable international financing and technical assistance (TA) for their conservation. Data on the demand side for tourism are poor, however. Information about numbers of bona fide tourists (as opposed to foreign visitors), their expenditures, average length of stay, distribution around the country and their socio-economic characteristics is generally unreliable. Such information is essential to:

- assess the current size of the sector and calculate present benefits from tourism;
- understand better what type of accommodation should be built and where;
- identify which related services and products are essential; and
- direct promotion and marketing at existing and potential tourists.

Few countries can claim to have perfect tourist statistics because of the innate problems of asking foreign visitors to define the reason for their visit (i.e., tourism, business, visiting friends and relatives and, in the case of Madagascar, research and missionary work). Madagascar's two sample visitor surveys, carried out with EU assistance, reveal much about the characteristics of tourists. However, immigration data, which still provide the most efficient way of assessing the size of the sector, must be improved. The study team's estimates suggest that the number of tourists was between 68,000 and 100,000 in 2001, compared with official estimates of foreign visitors of over 170,000.

French tourists (including those from Réunion) dominate arrivals (60 percent), partly for historical and cultural reasons and partly because it is easier for them than for others to travel to Madagascar (there is a direct flight from Paris). The number of tourist arrivals increased in the nineties, possibly at the same or a slightly higher rate than the World Tourism Organization's estimate of 7.2 percent for Africa as a whole in the 1988–97 decade. Because of its varied asset base and distance from supplier markets, the average length of stay in Madagascar is unusually long—20 days, according to official statistics, which may be slightly inflated.

On the supply side, the country had 787 hotels with 8,248 rooms in 2001, of which 111 were classified as meeting international standards and were rated with stars. Another 109 met local standards and were rated with palm trees (ravinala). The remaining 336 were unclassified, with many of these containing no more than five rooms, operating as family businesses. A survey of international standard hotels that welcome tourists was conducted in accordance with the rules of package tours. There are few on the entire island. They are often located along typical routes (South and North) and show high occupancy rates with peaks which go up to 95 percent in high season. All interviewees mentioned a very lively competition to obtain accommodation capacity allocations in these establishments. When accommodations are unavailable, tour operators modify routes or even cancel tours for tourist groups during the high season. Groups are the most difficult to manage due to the limited capacities of establishments themselves (11 rooms on average) and to the scarcity of establishments meeting acceptable standards.

Data on hotel investments and number of rooms indicate a substantial increase in hotel investments between 1999 and mid-2001, mainly in anticipation of increased arrivals because of the country's vantage location for viewing the solar eclipse in June 2001. (The absence of any increase in airplane capacity ultimately limited arrivals for the event.) The new investments led to a decline in average hotel size from 13 to 11 rooms per hotel.

Currently, tourism is included in sectoral GDP in Madagascar as "Trade, Hotels and Restaurants." When trade is lumped with tourism, neither one's contribution can be estimated properly. Estimates of employment are limited to workers in hotels and restaurants and to travel and tour operators (some 20,000). These figures do not account for employment generated by tourism in agriculture, fishing and agro-industries; manufacturing to supply inputs to accommodate tourists, in transportation and other tourism-related services (such as scuba diving, guides); and by handicrafts sold to tourists. Job creation in tourism is estimated to have grown by 8 percent annually in the past few years. Wages in the hotel industry have a 40 percent premium over the minimum wage, partly reflecting the scarcity of trained hotel staff. Given the difficulties related to defining who is a tourist, estimates of foreign exchange and taxes from tourism cannot be reliable. Nevertheless, the GOM states that tourism is one of the country's top three foreign-exchange earning sectors. The other two sectors are EPZs and fisheries.

In 1993, the United Nations, with the objective of informing public and private sectors' decisions on tourism, called on all countries to develop a national Tourism Satellite

Account (TSA)[57] to provide a credible measure of their true contribution to the national economy. Because of poor data, a TSA for Madagascar is not available yet. The government should focus on calculating TSA as a short-term objective, but more generally, it should improve the rest of the tourism database for planning purposes.

5.3 CONSTRAINTS ON THE GROWTH OF TOURISM

Several of the constraints on the growth of tourism in Madagascar are linked to infrastructure weaknesses and government policies.

5.3.1 Infrastructure

Transport. Air transportation costs are among the highest in the world due to the lack of competition. Consequently, the airfare amounts to approximately 60 percent of the cost of a tourist package. Moreover, international access to Madagascar is inconvenient for most visitors (the French being an exception) because of the few gateway cities in tourist supplier markets. Domestic flights are equally expensive (notably after the increase in 2002) and flights are often late or cancelled. The crisis in 2002 made matters worse for the national airline, Air Madagascar, for which the privatization process was suspended by the government, for various reasons (suspension of long-haul flights due to maintenance problems, the disappearance of managers). Air Madagascar has since begun to restructure its flight-plans and price schedule, and has begun operating again.

With respect to internal travel, the wet season, which extends from January to March, brings heavy rain and floods and sometimes seriously damages roads, making some overland travel impossible. Rough seas can delay or make inter-island travel dangerous. Only 7,000 kilometers of the 35,000 km road network are paved, which makes the transportation network inadequate, even on the roads most frequently traveled. Many potential tourist attractions are barely accessible.

Accommodation. There are too few good hotels, lodges and camps in the main tourist destinations. Group travel is a characteristic of international tourism today, and hotels outside Antananarivo cannot accommodate even small groups of 16 people or fewer that travel to Madagascar. The presence of a single internationally recognized flagship resort hotel or ecotourism lodge in Madagascar would bring name recognition, raise standards through technology transfer and promote the island.

Telecommunications. The item that received the most criticism in the 2000 visitor survey was "communications," with 21 percent of visitors rating them "bad" and 23 percent rating them "very bad." Local tour operators note that, with the widespread use of cell phones and e-mail, communications have improved greatly compared with five years

[57] A "satellite account" measures the size of economic activities that are not included in their own right in national accounts.

ago. However, charges are high and quality is erratic. Moreover, outside the capital, access is increasingly scarce.

5.3.2 Government Policies And The Business Environment

Investors, whether foreign or local, will invest in the tourism sector only if the macro-economic framework encourages private sector investments and offers stability, confidence and predictability.

The GOM actively promotes and provides incentives for its export zones for industry but does not extend these incentives to tourism, which it does not classify as an "export industry." Tortuous and uncertain procedures for land acquisition, the lack of transparency in investment incentives, the absence of financing and the lack of a one-stop tourism investment shop continue to discourage new investors.

Several factors contribute to high and variable costs for the tour packages. Local tour operators and hotel managers must commit to prices listed in their brochures and contracts with international tour operators one year in advance. Consequently, they often have to incur the costs of any sudden changes in their cost structure. In the past, the private sector has seen investment incentives revoked suddenly because of purported abuses among a minority. They had to adjust to the VAT without sufficient lead-time to allow them to pass the increased costs on to clients. This situation created a climate of uncertainty among existing investors and discouraged new investments.

In 1999, for example, local inflation and a depreciating exchange rate led to an increase of up to 50 percent in the cost of the packages advertised by local operators. The rise in cost was completely absorbed by the local tourist sector.

Today, the industry complains about the sheer number of taxes applied to its businesses. The impact of duties and taxes on vehicles, mainly four-wheel drives, can increase the free on board (f.o.b.) price by as much as 130 percent. These costs are passed on to the consumer, which increases the total cost of the tourism package.

Red tape and unpredictable and arbitrary decision making also discourage investors from pursuing new investment opportunities in the country or even maintaining existing ones. For example, work permits for expatriates are withdrawn unexpectedly and without warning, leading managers to drop everything until the issue is resolved. Given the quality of Madagascar's tourism assets, the absence of international investors, particularly South Africans, who are investing heavily in nearby regions, is surprising. Interviews in Madagascar suggest that investors find the constraints discussed in this section insurmountable.

5.3.3 The Institutional Framework

The ministry of Tourism has the capacity to inject the required dynamism into the sector. With such a low budget, however, its actions are limited. Tourism is one of the most promising sectors for poverty reduction; yet , the other ministries of the government are

not convinced about the importance of its contribution in the national economy. Currently, tourism is not even considered an export industry and has not attracted additional resources for infrastructure or the promotion of the island as a tourist destination. The National Committee for Tourism Development (CNDT), which was barely active for years, was put back to work to coordinate government actions for a rapid development of the sector.

The Association Nationale pour la Gestion des Aires Protegées (ANGAP) plays an important role in managing the national parks and reserves and has built a solid reputation. It faces budget shortfalls in the short term and must redirect its activities. Given the critical role of the national parks for conservation and for tourism, ANGAP urgently needs resources to enable it to continue its operations. Such resources include budgetary support, self-generated resources such as increased park entrance fees and donor support for specific activities.

The private sector consists of a large number of small enterprises, which reduces its capacity to act in unison on issues affecting the tourism sector. Nonetheless, the Maison du Tourisme, set up as a private sector umbrella organization with EU support, can potentially bring the various branches of the industry together if its organization is streamlined and its financing is set on firm ground. Part of its functions (and of its resources) might, however, be taken over by a National Tourism Board and by Regional Tourism Boards, who are called to provide an operational action platform, and to group the public and the private sectors in order to regulate the sector and promote Madagascar as a tourist destination.

The tourism sector lacks effective partnerships between the public and private sectors. To enhance sector dialogue, resolve roadblocks and build a vision for the future, the public sector needs to forge partnerships with for-profit firms, representatives of civil society and local communities. Tourism is, indeed, a sector extending across the board, and its development requires optimal coordination.

5.3.4 Promoting Madagascar As A Tourist Destination

The absence of a public-private partnership campaign to promote Madagascar as a tourist destination prevents this sector from benefiting from larger market. The absence of reputable international hotels (with the exception of the Hilton and the Venta Club in Nosy Be) further prohibits efforts to promote this industry. Also problematic is the lack of strategy regarding the type of tourist that the industry should try to attract – backpackers or the upper end of the tourist market. The State has demonstrated its willingness to address this issue by commissioning the development of a study called "Concept for the Malagasy Tourism" to a German consultancy firm, GATO AG, whose works should be presented at the end of October 2003.

5.3.5 Health, Safety And Climate

Medical and safety. The absence of medical facilities in a destination where diseases such as malaria and cholera exist, and where adventure travel is significant is of concern to

international tour operators. Personal safety is not regarded as a serious problem in most of Madagascar, except in Tana, where tourists frequently experience petty theft. In the period following the crisis from January to July 2002, no major problems, in terms of tourist safety, have occurred, despite the fact that the country is still attempting to restore the peace.

Climate. The winter season in the main supplier countries generates an exodus of tourists to warmer climates. This critical first quarter of the year, which is the peak season for many islands in the vicinity, unfortunately coincides with the rainy season in Madagascar, which makes tourist activities and travel difficult (from February to March).

5.4 POSITIVE SIGNS

5.4.1 Political Will

The State has recently developed a policy aiming to resolve some constraints, which act to limit the expansion of tourism. Furthermore, macro-economic policies have helped to create sustained economic growth and to provide an improved business environment. Regarding air transportation, domestic lines have been liberalized for about ten years, but Air Madagascar remains the only carrier, apart from a few charter companies that have limited capacity, and it benefits from a de facto monopoly status. Measures should be taken by the regulatory body (Madagascar Civil Aviation) to facilitate and stimulate the creation of other regular airlines that will provide domestic flights. Concerning international travel, virtually all airlines have resumed their pre-crisis flight plans (long and medium haul)[58]. The exceptions include, Corsair, whose status has changed from a charter company to a full airline, and Air Austral's regional flights from Reunion to Malagasy high tourist potential towns, following a travel ban to the Comoros (including Mayotte) for security reasons. The delay in the process to privatise Air Madagascar restricts authorized seating capacity on long haul flights on the single route Paris-Antananarivo for a price, which is accordingly unchanged and always high. An "open skies" policy and privatization, over time, of Air Madagascar should contribute to reduce transportation costs and introduce more flexibility over routes, and thus open Madagascar to other tourist providing countries. In addition, as Madagascar has signed bilateral contracts with neighboring countries (such as Kenya), it would be interesting to explore the possibility of having other destinations inside Madagascar for flights coming from such partner countries.

The management of state-owned hotels is now being leased out; but this is not sufficient to address the issue of investments required for their rehabilitation. In addition, the

[58] Air Madagascar and Air France suspended all their medium and long haul flights for a certain period between February and July 2002.

state is resolutely committed to a program to rehabilitate infrastructure with support from various donors through, among others, the Sectoral Transportation Program (PST) providing for repair of the road network and the standardization of airport infrastructure. Such provisions can only have positive effects on tourism, the needs of which have been partly integrated in the PST. However, the planned management program of airports does not seem to take into account a consequential passenger inflow increase and is limited over the next five years to a maximum flow corresponding to that of 2001.

Some more specific policies addressed the more important constraints, but with limited success. The Madagascar Chamber of Tourism (MTM), which is in charge of promoting the island abroad, encountered operational problems. Such a failure, despite substantial assistance from donors, led to the set up of a National Board for Tourism. Such a project should however capitalize on the experiences of MTM. The Ministry of Tourism wanted to bypass the land tenure issue by creating tourism land reserves (RFTs) next to the most visited national parks (Isalo, Amber Mountain, Ankarana). The first competitive bidding procedure on Isalo RFT did not have the expected results, due to the lack of a well-defined and realistic management plan. The RFTs project is still on the agenda, but it is also essential to learn lessons from the past.

5.4.2 Future Growth

In the absence of targeted interventions in the sector, Malagasy tourism may continue to grow at a moderate pace until it bumps into the limits imposed by current capacities (transportation and accommodation). Without a detailed study of the primary tourist destinations, it might be very difficult to foresee when Malagasy tourism will reach its saturation level. It is, in that regard, important to define priorities in terms of tourist sites in order to determine where to focus resources and actions. Such a decision will, in addition, make it possible to establish guidelines providing management plans and physical zoning of sites to put an end to the anarchic development of hotel infrastructure.

It is an outstanding tribute to Malagasy natural resources and to the people of Madagascar to note that, despite various structural problems, tourists report a high degree of satisfaction after their stay; the number of tourists who come back for repeated stays confirms this satisfaction.

If the constraints hereby presented find solutions, the growth potential would be practically unlimited. Madagascar has, indeed, many varied assets, which are capable of gradually being exploited to meet a wide variety of tourist demands. However, seaside tourism remains the most competitive market segment at the international level. On this segment, Madagascar is in competition with destinations such as the Caribbean, the South Pacific and in other “island paradises”, let alone the other Indian Ocean islands. Madagascar must meet the challenge of maintaining its dominant position as a destination for discovery and adventure, while developing niche markets, such as eco-tourism or sport tourism (fishing, windsurfing, surfing, diving). Seaside resorts, and other tourist destinations, come as a bonus.

5.5 TOURISM AND POVERTY

Three organizations, the Center for Responsible Tourism, the International Institute for the Environment and Development, and the Institute of Cooperation and Development, have joined together to develop a Website on pro-poor tourism[59], which they define in their first lead article: " TFP is not a specific product or sector of tourism, but a general approach. Rather than enlarging the size of the sector TFP strategies aim to free opportunities—for economic gain, other livelihoods, or commitment in decision making—*for poor people*."

The Malagasy State, through the PRSP, considers tourism as a prime tool to reduce poverty. The Government has noted that the sector has on average grown at more than 14 percent in recent years, and rates are expected to reach 15 percent per year between 2001 and 2003. Tourism is the first on the list of sectors likely to produce sustainable economic growth. The PRSP presupposes that a high growth rate of tourist revenues will by itself alleviate poverty. This might be the case in Madagascar due to a grassroots rural eco-tourism; but economists have noted that the induced effects are limited. International experience suggests that targeted interventions are required to ensure that tourism benefits poor people. In other words, TFP or eco-tourism remains a sub-sector of tourism and requires specific guidelines; but it can only really develop if the entire tourism sector itself grows substantially.

Indeed, growth in Madagascar is not evenly distributed. Are there incentive measures that would encourage growth in areas, which are far removed from high population density areas? Land often belongs to communities and communities themselves often have little exposure to the outside world. This may be transformed into an opportunity for a more equitable growth, if it is well managed. The first stages often include providing social services (schools, health infrastructures) to establish confidence, and address the fundamental local concerns. The way in which citizens, as citizens, consumers, employees and owners, are involved in projects must absolutely be understood; and it has to be explicit that their participation is essential for the sustainability of the resources on which tourism is based. It is important to put forward the links with agriculture and handicrafts (to quote two among several possibilities) to minimize the leaks and the effects of an increase. There are tour operators and NGOs who specialize in equitable tourism / in favor of poor people, and they often guarantee in their contracts that salaries be at least set equal to the minimum salary and that a percentage (say 75 percent) of total expenditures by tourists will support the local economy. And if they are non profit, all funds in excess are often transferred as charitable contributions to local activities such as conservation, or the building of a school or community health center, and they may propose voluntary programs (such as teaching a language) as part and parcel of the global tourism experience.

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[59] In the Malagasy context and for the needs of this report, the term "tourism in favor of poor people", tourism based on communities- or villages and rural tourism are used interchangeably. www.propoortourism.org.uk .

In the framework of its policy, ANGAP shares half the entrance fees collected in national parks with the local communities living near these parks, for development objectives. The total amount used to support 458 mini-projects between 1992 and 1999 was MGF 5.06 billion. The annual amount collected increased from MGF 53 million in 1992 to MGF 1.78 billion in 1999. The policy to distribute the revenues from national parks to local communities aims to raise their standard of living. Its aim is also to lead those who live next to parks to contribute to preserving the fauna and the flora of the parks and, in particular, to reduce animal poaching and destroying forests for fuel. Taking account the importance of such entrance fees in areas in which income-generating activities are often limited and in which activities to conserve the parks depend heavily on such fees, their amount should be reviewed periodically.

The ongoing TFP initiatives in Madagascar are in the hands of NGOs, which have considerable experience dealing with local communities to encourage them to introduce tourism as a vital economic activity. Basic criteria for success may be learned by looking into the enormous variety of eco-tourism projects that have been undertaken around the world. There are essentially two types of tourism that rely on local communities. In one case, a promoter invests in an area in which the local population have traditionally considered their tourist capital. The promoter adds value—by attracting tourists— to the capital and to a greater or lesser extent, involves the local community in various activities. In the other case, the local community, on its own initiative, but generally with support from a government agency or an NGO, provides facilities to tourists in their own community. The facilities may include accommodation, but may be limited to providing a reception facility and guides for tourists to enjoy the local population's cultural capital.

Many tourists are still looking for a "unique Malagasy cultural experience". Currently in Madagascar, as in other societies, the preservation of a distinct culture is a never-ending battle in a world in which there is continuous contact with dominant cultures through the radio, the television, cassettes, CDs, videos, DVDs, and the Internet. Madagascar is highly motivated through tourism to strengthen and coordinate the national effort to preserve a rich and varied traditional culture. With an integrated and well-designed policy on cultural heritage and arts, set up at a national and provincial level, Madagascar should be capable of providing tourists with an exciting cultural experience. This would generate visitor spending and, along the way, generate value and contribute to preserving the living cultural heritage unique to the island and to initiating income-generating activities in villages, especially for the remotest.

If the tourism sector expands, and if more and more rural communities take part in the expansion, quality control of the end product will be essential, especially if villages become intermediary or final destinations for adventure tourism, which might cause considerable physical damage. In addition to security concerns, a basic condition for a successful tourist activity, which falls back on the local community, is that the experience should be positive and unique in such a way that it creates value at a national level. The Support Committee for Eco-tourism Development (CADE), which was created in 2002, includes, in addition to the Ministry of Tourism, representatives from leading NGO's that are currently engaged in eco-tourism with the aim of sharing their

technical experience. Whether or not the committee must work to resolve the crucial problem of land tenure conflicts arising between owners and village-based tourist initiatives is a topic for debate. Clearly, the committee should have a relatively simple mandate to optimize the work of experts who are too busy; but if the land tenure issue continues to be a serious problem for the development of tourism, the committee should again represent the first stage of the mediation process.

Eventually, the committee might design authorized "eco-tourism" guidelines and issue a symbol (such as a star, national flower or a lemur) to those whose activities comply with those guidelines. To avoid the potential for conflicts of interest among NGOs in the committee, which should assist villages in developing eco-tourism facilities, such a function will be attributed to a sub-committee or to appointed experts. Such an emblem might fill two roles as a quality control label and a marketing tool.

5.6 A PROPOSED STRATEGY FOR TOURISM

Tourism may be the ideal development tool for Madagascar. It can operate as a catalyst for economic growth and poverty alleviation, while creating a number of positive externalities including environmental protection. Few governments have the resources to design a tourism development plan that also considers its potential externalities and that integrates tourism within the macro-economic framework to create linkages to other production and service sectors.

Several countries have undertaken a Tourism Master Plan (TMP) with donor financing that can provide a 20-year perspective for the sustainable growth of the sector. TMPs traditionally focus on ways to eliminate constraints to growth, on sustainability through physical planning for tourism zones and community participation and on an analysis of demand and proposals for appropriate tourist accommodation and services. A TMP for Madagascar should also address the financing of tourism, the “greening” of the island, pro-poor tourism (PPT) and the creation of clusters of high-quality accommodation and services to upgrade the product. The TMP should also spell out more explicitly the country’s strategic approach to tourism. The ongoing deforestation highlights the fact that mega-biodiversity may not be sustainable. Targeting a more exclusive clientele willing to pay a premium for a unique and less crowded experience has two advantages: it requires less infrastructure and is low impact, making it more environmentally attractive. The TMP should explore these alternatives and their requirements. The government may wish to study how other countries, such as Bhutan, have tried to capture this type of niche market.

Financing of tourism. Park entrance fees in Madagascar are low by international standards. Many “willingness to pay” studies indicate that tourists can be tapped to support environmental or cultural protection through entrance fees, departure or other taxes and voluntary contributions. Such tourists always require assurances that their contributions will be earmarked for a specific use and will not become a part of general budgetary revenues.

Development of the coastal zone in Madagascar, particularly on its fragile island sites and near national parks, should ensure that the economic rents from that development would benefit local and state coffers rather than the developer. (Scarce public assets, such as beachfront land, tend to generate above-normal rates of return when developed.) The government should ensure that returns are sufficient to monitor the use of the asset and the upkeep of any infrastructure or other related public sector investments, as well as to create development opportunities for local residents so that they too benefit from tourism.

The greening of Madagascar. To enhance the island's image, as well as help preserve the natural resource base, the larger accommodation units, particularly those in sensitive ecological areas, should aim for hotel accreditation that signifies that the unit has met clearly defined environmental standards. A major benefit from accreditation is that a large number of awards or "ecolabels" are now offered for good environmental management of hotels and other accommodations. These awards receive wide publicity and can become an effective marketing tool.

Environmental impact assessments (EIAs). *EIAs* should be applied rigorously and guidelines developed for the different types of tourist accommodations (resort and lodges) to assist in the evaluation and monitoring of the EIA.

Pro-poor tourism. Interest in PPT has grown in the past few years. The UK Department for International Development (DFID) commissioned a major study in 1999. Tourism has substantial pro-poor potential—it can be labor-intensive, inclusive of women and the informal sector, based on natural or cultural assets of the poor and suitable for poor areas (Center for Responsible Tourism / Overseas Development Institute). Examples of PPT abound. In South Africa, the government creates incentives for investors to incorporate local communities in their projects. In both Tanzania and Madagascar, the governments share national park fees with local communities for development purposes. In Ecuador, a small commercial company, Tropical Ecological Adventures, runs tour packages with remote Amazon communities. As mentioned, Madagascar already has valuable experience "tilting the tourism cake" toward the poor. Including local communities in distribution of the proceeds from tourism, and, to the extent possible, in its management will be an essential tool in alleviating poverty and in protecting the resources on which tourism is based.

Clusters of excellence. The TMP should identify high-priority areas for new tourism investments (clusters), which would set quality control, environmental and community development standards for the accommodation and services to be provided. As a first step, a cluster should be developed in a national park, a beach resort area and a major transit destination to act as pilot projects for future clusters. Physical planning norms should be designed for a pilot cluster that includes land-use planning, zoning and accommodation densities. The TMP should assess the carrying capacity of each area and determine the optimal size of the accommodation that should be constructed to permit profitability in each of the three pilot clusters.

The TMP should assess the RFTs for their appropriateness as a priority cluster for development and suggest any changes that would ensure that the existing RFTs be so used, including the proposed number of units and the rooms in each. The TMP should stagger the introduction of RFTs to investors, as their simultaneous promotion would exceed absorptive capacity.

The TMP should identify the type of infrastructure needed within each cluster and create access to the cluster. The TMP should also determine how costs for this infrastructure could be shared between the public and private sectors.

Expected outcome of the TMP. At the conclusion of preparation of the TMP, which should last a year, the major constraints that currently hold back the growth of tourism will have been identified and be in the process of being eliminated. At the same time, expansion in selected areas, such as the creation of accommodation clusters, services and infrastructure that set high standards combined with improved transportation access, and the initiation of an effective promotion campaign, will raise the rate of tourist arrivals. Because of the spread of tourism throughout the island and the targeting of local communities as beneficiaries and participants in the process of tourism expansion, a stimulus will be given to regional development and to poverty alleviation in these areas. The planning for environmental conservation should also raise revenues for that purpose, as well as to ensure the preservation of the natural resource base. Achieving these objectives will also require effective management by the public sector and a good partnership with the private sector, donors and nongovernmental organizations (NGOs).

CHAPTER 6
TRADE SUPPORT INFRASTRUCTURE

6.1 INTRODUCTION

In order to take advantage of the opportunities for increased trade, the private sector requires a properly functioning regulatory environment, because a lack of regulatory transparency and stability raises transaction costs. In Madagascar, transaction costs are significant:

- *Intra-private* transactions are high because of a poorly functioning customs administration and inadequate infrastructure for an expanding economy.

- *Public-private* transactions have high costs because of poorly functioning regulatory framework (legal and judiciary, competition policy).

High transaction costs reflect a crosscutting source of inefficiency that affects all private sector activities, particularly export sectors where time-based competition is of critical importance (see Volume 2, Chapter 5 of this report).

This chapter focuses on two sources of high transaction costs: customs administration (section 6.1) and a poorly functioning infrastructure (section 6.2). Other sources of high transaction costs relating to the regulatory framework (the legal and judiciary system, the lack of competition policy to ensure the contestability of markets and the weaknesses of the fiscal administration) are discussed in Volume 2, Chapter 5.

The constraints imposed by inefficient customs administration largely offset the competitive advantage that Madagascar has as a manufacturing and export base due to low labor costs. This chapter argues that an effective customs reform will help anchor EPZ companies in Madagascar and integrate their forward and backward linkages. It will also encourage further FDI.

The chapter also argues that a more powerful infrastructure will generate two distinct types of benefits for Madagascar's economy, which have to do with domestic and international trade, respectively. First, as the analysis of poverty in Chapter 3 shows, poverty is intimately linked to remoteness. In other words, access to markets (via highways) and to information (via telecommunications) is crucial to create opportunities to trade that are capable of lifting households out of poverty. In this sense, infrastructure investment may ultimately prove to be the most effective poverty-alleviation strategy. Another related benefit for the poor is that a more efficient customs administration will generate greater revenues to finance pro-poor government programs, be they in infrastructure or the social sectors.

Second, well-developed infrastructure enables the development of high-performance trade-support services (TSS), which are necessary to ensure time-based competitiveness (as argued in Volume 2, Chapter 8). Sophisticated TSS generate positive spillovers and

externalities by encouraging the upgrading of exporter capability in terms of delivery speed and regularity, quality standards, reliance on information technologies and familiarity with remote markets and first-world trading procedures. In turn, the upgrading of exporter capability, which essentially concerns EPZ companies, contributes to the development of a pool of sophisticated managers and skilled technicians whose expertise ultimately spills over to other sectors of the economy.

6.2 CUSTOMS

6.2.1 The Twin Objectives Of Customs Administration

In low-income countries, customs administration typically has two simultaneous objectives: to raise revenue and facilitate trade. It is argued in Chapter 3 that as part of fiscal reform, it is desirable to replace discriminatory border taxes by direct taxes that do not discriminate between sources of supply, thereby progressively eliminating the role of customs as a source of revenue. However, these twin objectives are inevitably sometimes in conflict. The issue then is how to mitigate those conflicts. This section concentrates on reforms to customs administration that will help it achieve its objective of facilitating trade while, for the time being, raising revenue.

In a world where many potentially attractive manufacturing locations compete for limited amounts of FDI, the effect of customs administration performance is considerable. With the spread of global sourcing, cross-border supply chain management becomes more important to multinational companies. International supply chains, in contrast to domestic ones, introduce greater complexity into the process in terms of time, distance, language, infrastructure and culture. Companies that operate on a global scale require "programmable" environments characterized by high predictability and minimal variance in delays. These companies, which compete on the efficiency of their supply chains, make decisions on trade, sourcing and the location of manufacturing and distribution centers based, to a large extent, on the performance of customs and other trade support infrastructure and services.

While there is enormous pressure on customs to facilitate trade, it is also under increasing pressure to raise the level of compliance with import and export laws, to improve border-tax revenue collection and to enforce various import restrictions, in particular, those concerning environmental, sanitary and phytosanitary matters. Moreover, complex and burdensome rules of origin attached to preferential trading arrangements also impose escalating demands on customs resources. These challenges are compounded by an increasing problem of international crime and criminal organizations involved in narcotics trafficking, money laundering and car theft.

6.2.2 Positive Developments

Several factors tend toward possible improvement. First, The General Director of Customs clearly stated a long-term commitment to enhance the performance of customs. An ambitious program of restructuring the services was established in April 2003. Its objective is to build capacity (modernization, computerization, training and accountability) for this administration so that it is able to fulfil its role as a transparent revenue collector and facilitator of trade. The good relationship that exists between the General Directorate of Customs and the Secretariat to the World Customs Organization (WCO) provides the prospect of a permanent assistance program of this organization in favor of Madagascar.

At a technical level, a contract was signed in February 2003, forming a partnership between customs in Madagascar and a service provider, to build capacity. This new contract represents a significant improvement in the process itself in that the business community and the government developed it jointly, notwithstanding the contribution by importers to finance the program through payments of charges equivalent to 0.25 percent of the fob value. This five-year contract goes well beyond providing service for Pre-Shipping Inspections (d'Inspection Avant Embarquement, or IAE), as was previously the case. It provides, in addition to IAE procedures with inspection rates progressively decreasing from 100 percent to 10 percent over 37 months, assistance in applying the provisions in force regarding the transaction value, the tariff classification, and the rules of origin. In addition, a risk analysis tool (Profiler) and a computer reference on values will gradually be set up, jointly with customs departments by means of support and training services. Such a new approach will ultimately make it possible to focus inspection on high-risk imports, and thus eliminate repetitive inspections for companies having a high degree of compliance and appropriate systems for management of imports and exports. All parties involved in the transaction will save time and money. The customs departments and the service provider will thus be able to focus on importers and on goods from countries that have a low compliance rate and for which fraud might lead to substantial revenue losses.

The customs administration and the contractor providing services also exchange their internal documents and information, and maritime or air bulletins, as specified in the contract. Such precise internal control will make it possible to track potential contradictions between information provided at IAE at exporting time, and that declared to the customs at importing time. The previous contract also provided such a measure but was not applied. Within the new framework for import procedures, the minimum value of a pre-shipping inspection moves to US$3,000. Goods valued at between US$1,000 and US$3,000 may be subject to inspection at their destination place. Exemption and warehousing schemes are also followed up by the contractor with the aim of updating the database used for risk analysis via Profiler. A technology transfer and information exchange scheme is planned between the Customs and the customs departments to strengthen the institution to the extent that it will operate autonomously in the future.

Similarly, efforts are underway by the Customs Administration and various financial partners to implement the SYDONIA (automated custom data processing system) software, which will enhance the processing of customs operations. Six offices are currently equipped with the SYDONIA version 2.7. Six additional offices will later receive this software, while the initial six offices will receive the ++ version upgrade. UNCTAD, a UNO agency in charge of ASYCUDA design, also developed an Advanced Freight Information System (ACIS)[60], which measures clearance time for goods from the time of their arrival to their reception at the entry port. The ACIS system is currently implemented in other COMESA countries and can be used on a regional basis. WCO also has its own tools to measure clearance time. Recourse to either tool will contribute to enhance the efficiency of import and export procedures in Madagascar, beyond the performance indicators quoted in the contract signed with the service provider company.

6.2.3 The Primary Constraints

The new provisions mentioned in the previous paragraph are intended to remedy serious problems in the Malagasy customs system. The International Chamber of Commerce (ICC) has published a handbook known as the ICC Customs Guidelines (see Volume 2, Annex 1). This useful tool outlines 60 recommendations for streamlining the import/export process. The ICC Customs Guidelines are consistent with the conventions and instruments proposed by the WCO and form the basis for a cooperative relationship between the ICC and the WCO. They provide a useful checklist that the government, the customs administration and the business community can use to evaluate customs performance.

An informal analysis of the conformity of customs operations to ICC guidelines reveals that customs in Madagascar does not permit the pre-filing of entries, does not provide binding pre-import classifications and has not established standards and measures for the release of merchandise. Moreover, it does not use risk management techniques to improve compliance and enforcement while facilitating legitimate trade. It has no independent appeals process to resolve disputes between customs and businesses. However, the WCO Kyoto Convention on the Harmonization and Simplification of Customs Procedures requires all these.

In addition, customs' operations remain inefficient in spite of technical assistance (TA) and investments in IT during recent years. Excessive use of physical inspections and devannings, compounded by red tape, slows down the clearance process. At the same time, significant trans-shipment, under-valuation and outright smuggling seem to go largely unchecked. Observers suspect a large gap between theoretical and collected border-tax revenue. Carriers, brokers and importers unanimously characterize the behavior of customs officials as arbitrary and complain that unofficial payments are necessary to get goods through. Retaliation is feared against those who bring such activities to the attention of higher authorities, who are widely perceived to condone

[60] NDTR: ACIS is the acronym for *Advanced Cargo Information System.*

current practices, however deleterious. Moreover, in spite of its limited resources, it seems that there is intent on expanding customs' reach to exports, creating new and unnecessary harassment. More generally, the private sector complains about the absence of any forum for public-private dialogue on such issues and concerns. The support committee to promote businesses (CAPE) could eventually play this role but is not yet operational. A committee director, together with the contractor assisting with customs reform, is expected to supervise the program to strengthen customs' capacity. It seems however, that the private sector is not involved in this process. In this regard, an unfortunate misunderstanding regarding the application of the new system to exemptions (including EPZ's): for good being re-exported, some EPZ's must make payments of 0.25 percent on goods used in work orders that they do not own, and the delays associated with customs clearance were increased by one day, less than two months after the operation was put into effect.

Lack of measures and standards. Monitoring is a necessary first step required to establish a credible customs reform. Performance indicators were created for the contractor assisting with the reform process, but not for customs. It is, however, important to verify the level of performance as well as the efficiency of the import/export process. Currently there are almost no standard measures of performance or transparency on issues such as delays in customs clearance, the frequency of inspections (especially devanning) and trends in revenues, which could be disseminated to traders and the public.

6.2.4 AGOA And Customs

Customs' performance in dealing with manufacturers under AGOA is particularly problematic in Madagascar. AGOA has been well received by government and business in Madagascar as an engine promoting economic growth and development. New and additional investments in the textile industry were undertaken both before and after the crisis. Recognizing the need to ensure compliance and qualification for textile exports to the United States under AGOA, customs in Madagascar created a large organization for the oversight of textiles and their export to the United States under AGOA.

Interviews with textile exporters and their service providers suggest that the controls established by customs to comply with AGOA are intensive and intrusive, causing shipment delays and additional official and unofficial payments. Physical inspections of textile shipments are supplemented by "audits" of manufacturers' facilities to review import/export documentation, purportedly to identify potential trans-shipment and fraudulent AGOA claims.

These practices fail to account for the measures that major textile manufacturers have already subjected themselves to, to ensure compliance with AGOA and with sweatshop and labor regulations. Major exporters have extensive programs to ensure compliance with U.S. import requirements. They should therefore, be considered low risk. Customs should, for these companies, adopt the following measures:

- a review of their import/export compliance procedures;

- an examination of their production capacity;
- periodic reviews of import and export documentation and systems to ensure compliance; and
- elimination of physical inspections.

For new entrants with unknown levels of compliance, reviews of import/export procedures and documentation should be more extensive. Verification of production capacity and selective checks of export shipments should be undertaken to reconcile documentation and ensure compliance with AGOA rules of origin.

U.S. Customs already has an agreement with Madagascar for on-site visits of its Textile Production Verification Units. The World Bank team has verified the compliance approach described above with U.S. Customs and has agreed it is the best approach for achieving compliance. In its reply, the team indicated that they "encourage Madagascar to take a 'risk management' approach to their enforcement, i.e., do factory profiles, know their industry, resort to sampling based inspections rather than complete physical inspections, look very carefully at goods coming from 'high risk' countries, e.g., China, Taiwan, Hong Kong, India, and Pakistan to make sure that fully assembled goods are not being shipped into Madagascar. It is probably more important to see what is coming in as opposed to what is going out."[61]

6.3 THE STATE OF MALAGASY INFRASTRUCTURE

The development, rehabilitation, and maintenance of infrastructure is part of the Malagasy State's priorities as expressed in the last version of the May 2003 Poverty Reduction Strategy Paper (PRSP). This sector is under the parenthood of the Vice-President's Office, which is in charge of technical programs, transportation, public works and land development. This section provides a diagnostic study of the condition of Malagasy infrastructure in four key sectors: road networks (urban and interurban), ports, airports and telecommunications.

Tables 6.1 and 6.2 compare the time and cost performance of Madagascar-based producers with that of producers from competing countries. As the figures show, Madagascar-based producers incur greater transport and insurance costs than their competitors for similar products traveling equal distances. For example, comparing children's clothes coming from Sri Lanka with those coming from Madagascar (both destined for Paris) indicates a transport cost about a third higher for those originating from Madagascar, in spite of a lower shipment value. Interestingly, the cost from Hong Kong, the better-connected location, is less than half the cost from Madagascar even though the distance is about the same between both sources. Similar results hold for blue jeans and woven hats. Also noteworthy are the higher "order to arrival time"

[61] The quote is from the U.S. Customs executive responsible for AGOA compliance.

figures in the last column (35 days for Madagascar and Sri Lanka, 15 for Hong Kong) and for "shipment to arrival time" (5 days Paris + 7 days New York City for Madagascar vs. 3 days Paris + 4 days New York City for Sri Lanka).

TABLE 6.1 COMPARATIVE COSTS
FOR SELECTED CLOTHING/FOOD PRODUCTS BY AIR FREIGHT

Products	Primary competing sources (locations)	Destination	f.o.b. value of products	Transport price from origin to destination	Other logistics costs	Total transport, insurance and other logistics costs	Key imported components	Source of supply of key imported components	Total inbound transport, insurance and other logistics costs	Order to arrival time and Shipment to arrival time	Mode of Transport
Children's clothes	Madagascar	Paris	5,400	820	59	879	Cotton cloth and accessories	Paris	200	35 days	Air
		New York		1,350		1,409		Hong Kong	200	5 days Paris 7 days NYC	
Children's clothes	Colombo, Sri Lanka	Paris	6,100	675	40	715	Cotton cloth and accessories	Paris	200	35 days	Air
		New York		1,395		1,435		India	150	3 days Paris 4 days NYC	
Children's clothes	Hong Kong	Paris	6,426	400	30	430	None	Local	none	15 days	Air
		New York		1,000		1,030				3 days Paris 2 days NYC	
Children's Clothes	Caribbean	New York	6,260	450	40	490	Cotton cloth and accessories	Hong Kong	300	35 days / 3 days	Air
Jeans	Madagascar	New York	6,000	1,350	59	1,409	Denim / buttons / zippers	Hong Kong	90	28 days / 7 days NYC	Air

Products	Primary competing sources (locations)	Destination	f.o.b. value of products	Transport price from origin to destination	Other logistics costs	Total transport, insurance and other logistics costs	Key imported components	Source of supply of key imported components	Total inbound transport, insurance and other logistics costs	Order to arrival time and Shipment to arrival time	Mode of Transport
Jeans	Colombo, Sri Lanka	New York	6,780	1,200	40	1,240	Denim / Buttons / Zippers	India	80	28 days / 4 days NYC	Air
Jeans	Hong Kong	New York	7,140	1,000	30	1,030	None	Local	none	15 days / 2 days NYC	Air
Woven hats Artifacts	Madagascar	Paris	3,900	925	59	984	None	Local	none	90 days / 5 days Paris	Air
Woven hats Artifacts	Ghana	NYC	3,900	800	30	830	None	Local	none	90 days / 3 days NYC	Air
Woven hats Artifacts	Caribbean	NYC	5,200	450	40	490	None	Local	none	90 days / 3 days	Air
Green beans	Madagascar	Paris	700	620	300	920	None	Local	none	10 days / 5 days	Air
Green beans	Burkina Faso	Paris	700	750	300	1,050	None	Local	none	10 days / 3 days	Air
Green beans	Kenya	Paris	700	700	300	1,000	None	Local	none	10 days / 3 days	Air
Lychees	Madagascar	Paris	800	1,200	600	1,800	None	Local	none	10 days / 5days	Air

NYC = New York City

TABLE 6.2 COMPARATIVE COSTS FOR SELECTED CLOTHING/FOOD PRODUCTS BY OCEAN SHIPPING

Products	Primary competing sources (locations)	Destination	f.o.b. value of products	Transport price from origin to destination	Other logistics costs	Total transport, insurance and other logistics costs	Key imported components	Source of supply of key imported components	Total inbound transport, insurance and other logistics costs	Order to arrival time and Shipment to arrival time	Mode of Transport
Children's clothes	Madagascar	Paris	5,400	925	65	990	Cotton cloth and accessories	Paris	200	40 days	Ocean
		New York		1,550		1,615		Hong Kong	200	24 days Paris 30 days NYC	
Children's clothes	Colombo, Sri Lanka	Paris	6,100	675	40	715	Cotton cloth and accessories	Paris	200	40 days	Ocean
		New York		1,395		1,435		India	150	20 days Paris 24 days NYC	
Children's clothes	Hong Kong	Paris	6,426	400	30	430	None	Local	None	30 days	Ocean
		New York		1,000		1,030				20 days Paris 20 days NYC	
Children's clothes	Caribbean	New York	6,260	450	50	500	Cotton cloth and accessories	Hong Kong	300	30 days 20 days	Ocean
Jeans	Madagascar	New York	6,000	1,550	65	1,615	Denim / buttons / zippers	Hong Kong	150	40 days 30 days NYC	Ocean
Jeans	Colombo, Sri Lanka	New York	6,780	1,395	40	1,435	Denim / Buttons / Zippers	India	80	30 days 24 days NYC	Ocean
Jeans	Hong Kong	New York	7,140	1,000	30	1,030	None	Local	None	30 days 20 days NYC	Ocean

Products	Primary competing sources (locations)	Destination	f.o.b. value of products	Transport price from origin to destination	Other logistics costs	Total transport, insurance and other logistics costs	Key imported components	Source of supply of key imported components	Total inbound transport, insurance and other logistics costs	Order to arrival time and Shipment to arrival time	Mode of Transport
Woven hats Artifacts	Madagascar	Paris	3,900	925	65	990	None	Local	None	90 days / 24 days Paris	Ocean
Woven hats Artifacts	Ghana	NYC	3,900	800	30	830	None	Local	None	90 days / 24 days NYC	Ocean
Woven hats Artifacts	Caribbean	NYC	5,200	450	50	490	None	Local	None	90 days / 20 days	Ocean
Green beans	Madagascar	Paris	700	na	300	na	None	Local	None	na	Ocean
Green beans	Burkina Faso	Paris	700	na	300	na	None	Local	None	na	Ocean
Green beans	Kenya	Paris	700	na	300	na	None	Local	None	na	Ocean
Lychees	Madagascar	Paris	800	221	600	821	None	Local	None	30 days / 24 days	Ocean

NYC = New York City
na = not available

6.3.1 Highway Network

Urban roadways. As noted in the previous section, most of Madagascar's export-oriented manufacturers are located within the urban center of Antananarivo. The physical condition of roads within the city ranges from good to fair. Urban roadway system maintenance is less of an issue than capacity, and absolute capacity is less of an issue than capacity management.

Within the city, traffic is slow and heavily congested. Gridlock occurs frequently. The productivity of carriers that deliver urban goods is extremely low. Drivers of four- to six-ton trucks typically make two deliveries per day. To date, the government's efforts to manage congestion and its adverse environmental side effects have been partial and incomplete. On-street parking is legal and prevalent in Antananarivo. A night-time curfew has been imposed in Antananarivo to ration available capacity. This solution, however, tacitly imposes much of the social cost resulting from limited roadway capacity on manufacturers and exporters. Because the primary intra-urban road system passes through downtown Antananarivo, the curfew effectively shuts down freight movements not only to and from the city itself, but also transit movements across the city as well.

The effect of the traffic generated by new EPZs or new industries has not been assessed or integrated into the development and zoning license allocation process. As a result, new marginal users of the road system impose a very large incremental cost on existing users. Moreover, the highpoints of congestion such as railway terminals, truck terminals, courier facilities and customs inspection stations are not effectively managed from the perspective of demand impacts on the already constrained intra-urban road system.

Inter-city highways. Madagascar has a low population density (26.7 inhabitants/sq km) and a corresponding low-density roadway structure (0.06 km/sq km). A low-density dispersed road network is more difficult and costly to maintain than a high-density, concentrated network. Moreover, the island suffers from monsoons during the rainy season and frequent typhoons that further complicate efforts to maintain roads.

At independence, Madagascar had 50,000 km of roads. Because of poor maintenance and under-investment, the country has been losing between 300 and 1,000 km of roads per year. At present, the national road network consists of approximately 31,600 km, of which 7,300 km are national roads, an additional 16,750 km are provincial roads and approximately 7,500 km are local roads. Of this total, only 12,000 km can be used year-round and only 4,075 km are paved. The inter-city road network is thus not sufficiently developed to allow year-round access to all portions of the island. Indeed, even during the dry season, portions of the island on the west and south coasts cannot be accessed by truck. Consequently, the island economy is sub-divided into separate economic islands that are sometimes accessible by road, and sometimes by air or water transport. Even the primary arteries within the country on which export trade depends—the Antsirabe-Antananarivo Road, the Airport-Antananarivo Road and the Toamasina-Antananarivo Road—do not have the capacity to handle current traffic levels without delays.

Trucks can operate over the improved roadways at 60 km/hr during the dry season but at only 20 km/hr during the rainy season. On congested roadways like the one between Toamasina and Antananarivo, trucks operate at only 42 km/hr during the dry season. It takes nine hours to complete this 370 km, one-way trip. Low operating speeds, long delay times and frequent interruptions of service for repairs all result in low levels of asset utilization (less than 60,000 km per year) and correspondingly high unit operating costs for freight-moving vehicles. Truck operating costs in Madagascar are three times higher than those in the EU despite the low labor costs.

A Roadway Trust Fund (Fonds d'Entretien Routier, or FER) was set up in 1999 to collect fuel taxes[62] and to disburse them for road maintenance and construction under the National Road Maintenance Program (Programme National d'Entretien Routier, or PNER). The FER was conceived as an open and transparent user-fee funding mechanism to support the development of a 12,000 km national, provincial and local road network. The idea of internalizing the cost of roadway network development in the cost of transportation is sound. The World Bank, however, has recently expressed its concern about the FER's transparency, accountability and governance, and the government in Madagascar has implemented a reform package to improve the management (through decentralized operations, as well as technical and financial auditing), and to address criticisms about its financing.

6.3.2 Ports

Madagascar has 17 ports, including a primary port (Toamasina, which handles 68 percent of total port traffic), 3 secondary long-haul ports (Antsiranana, Mahajanga and Toliara, handling 23 percent of all traffic) and 13 secondary coastal shipping ports (handling 9 percent of all traffic). In secondary ports, the state fills the role of the port authority, with all services to users being leased out.[63] Following the uncertainties due to a poorly defined decentralization program, the government policy's new focus aims to distinguish between ports of "national interest" and ports of "provincial interest". The former will be granted an autonomously managed port status (PGA). Management will be undertaken by a majority public enterprise and port services will be leased out. In terms of management and operations, the latter will be leased out globally. In addition, in 2003, a regulatory board will be set up, of which the Board of Directors will chosen from the private sector, and the Sea and River Port Agency (Agence Portuaire Maritime et Fluviale, or APMF).

Toamasina is the largest port of the country and the main point for transhipping of goods from or to secondary ports. Over the year 2001, Toamasina handled 80,350 containers. It handled, in total, 1.5 million tons of dry goods and 900,000 tons of petroleum. Toamasina is currently classified as a "servicing port", and is managed by an autonomous national port authority. The infrastructure and the handling equipment are

[62] Petroleum Product Taxes (Taxe sur les Produits Pétroliers, or TPP) and Road Usage Tolls (Redevance d'Usage des Routes, or RUR).

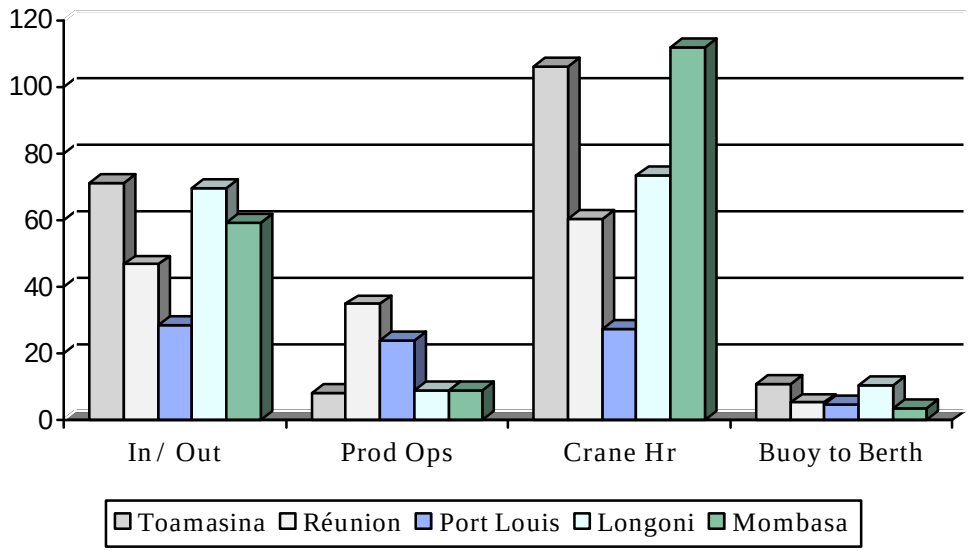
[63] Handling, warehousing, and ship services.

the property of the port authority, which provides, by its own means, all terminal and maritime services.

With its existing capacity, the Port of Toamasina has little difficulty coping with existing traffic levels. Unfortunately, portions of the port have been leased to manufacturers, distributors and the railway, displacing capacity that could be used for cargo handling and storage. These manufacturers occupy space that could, otherwise, have been devoted to handling and warehousing. Figure 6.1 shows that the Port of Toamasina is the least efficient in the Indian Ocean. On average, 800 to 1,000 TEU (20-foot equivalent unit) vessels require more than two full days to discharge their cargoes. Loading and unloading productivity is low, less than 6.3 containers per hour. Slow vessel turnaround time translates into higher ocean shipping costs, longer port-to-port transit time and low asset utilization. In recent years the quality of cargo-handling equipment has gradually deteriorated, increasing vessel arrival-to-release times.

As the Port Authority is not subjected to regulatory oversight, it has complete discretion regarding price and leasehold negotiations. Net prices are comparable to those in Réunion, although turnaround times are much slower. The port's financial condition is not entirely transparent, as it is difficult to obtain a statement of funding sources and uses. The last audit of its accounts occurred in 1990. The port has 2,700 full-time employees and another 2,000 stevedores who work on a daily basis. Personnel costs account for 33 percent of total turnover. Given the level of compensation paid to port workers, port fees are extremely high (comparable to those at Réunion in spite of wage costs that are lower by a factor of ten). A recent study estimated that only 800 workers would be needed to operate the port were run by the private sector.

FIGURE 6.1 BENCHMARK COMPARISONS OF TOAMASINA WITH OTHER INDIAN OCEAN PORTS



6.3.3 Airports

Madagascar has 155 airports of which, 26 have paved runways. Among the airports with paved runways, only one (Ivato) is over 3,047 m. Air Madagascar provides scheduled commuter services to and from 28 of these airports but uses Ivato as its primary commercial hub. It holds the exclusive right to provide ground-handling services in all airports. Located 25 km from the capital, Ivato Airport is Madagascar's primary international gateway. A public enterprise called ADEMA (whose privatization is in the works) runs the cargo terminal, which is well managed, at Ivato. Skills are high and productivity is good. Ground handlers are unionized but are unconstrained by union work rules. Individual "general utility handlers" can perform multiple duties with no contract constraints and few skills constraints.

Ivato Airport's major problem is its extremely limited cargo storage capacity. With 11,500 sq. m. of enclosed capacity, the terminal is barely able to handle the 13,600 tons of airfreight that move through it (5,850 tons come in, and 7,750 tons go out). Moreover, during the two peak airfreight seasons—May/June to August and September/October to January—the terminal is highly congested and barely functional. Express airmail and air courier services provide their own personnel to receive inbound shipments and to usher them through clearance and release without having their freight touch the floor of the terminal. Amazingly, the airport has no cold storage capacity.

A second major problem is the lack of competitive options in getting passengers and freight through Ivato Airport to the rest of the country. This problem, largely explained by market-structure, is related to Air Madagascar's historical legacy as the sole air carrier for the entire country. Air Madagascar operates three separate businesses: a domestic commuter airline, a ground-handling company and an international carrier. This structure would be difficult for any company, but is made even worse by Air Madagascar's financial difficulties, which were further aggravated by the crisis in 2002. Demands on management time and on limited cash flows may well exceed the benefits of any synergies that can be realized—at least in theory—through the simultaneous operation of all three businesses. A privatization program for Air Madagascar is being implemented, following the signing of a management contract by Lufthansa Consulting, which is responsible for restoring its financial condition and restructuring.

Within the framework of this program, Air Madagascar is planning to eliminate about 20 low-density commuter lines. If no commuter airline replaces Air Madagascar in these markets, a significant loss of connectivity and market access will result for the 20 affected communities. However, since 1994 when the commuter airline business was opened to competition, no private company has entered the market. The reason is clear. As long as Air Madagascar continues to control ground-handling operations at all of Madagascar's commuter airports, and as long as its fees are not controlled, private investors are not likely to start up a new commuter airline. Entry will be attractive only when Air Madagascar becomes willing to commit contractually to prices and ground service levels together with an aircraft leasing agreement for new entrants. Thus, instead of simply exiting markets, Air Madagascar could sell franchise rights to replacement carriers, including ticketing, joint marketing and ground-handling services provided by

Air Madagascar and small-aircraft leases. Such agreements would make entry much more attractive.

6.3.4 IT Infrastructure

Three Internet service providers (ISPs) compete with one another in Madagascar. The price of services is high relative to international standards due to their unreliable nature, largely a product of poor infrastructure. The fledgling ISP industry has been developing rapidly and is now positioned to provide a sturdy platform for commercial e-business ventures (B2B) and for contract software developers.

Market access. The first ISP in the country, DTS (Data Transmission Services), began operations in 1995 as a joint venture between TELMA (51 percent) and France Telecom (49 percent). Today, the company serves 10,000 customers (up from 200 at its start), employs 50 people and generates MGF 16 billion in revenues. The company, which switched to the Internet protocol in 1996, offers real-time digital services via three digital gateways (Tamarind, Mahayana and Antananarivo) and dial-up services via TELMA's analog lines throughout the country with the exception of the east and southeast coasts, where reliability is too low to support data transmission. DTS is currently adding digital data gateways in Morondava, Nosy Be and Fort Dauphin, attempting to expand its geographical reach in order to support the requirements of its customers in the banking sector. It is also preparing to increase its transmission frequency to 4 megabytes. The company's network operating center is in Antananarivo, and its network is linked to the Internet backbone via a French satellite (2C) through Paris and then via France Telecom's fiber optics network to the World Wide Web.

Two competing ISPs—Simicro and Blue Line—also offer satellite links to the Internet via Intelsat satellites and U.S. Telecom's fiber optics links to the World Wide Web.

Customers. DTS's customers fall into several categories in terms of needs and access charges. Sophisticated commercial users like DHL, SCAC (Service de Coopération de l'Ambassade de France) operate 24 hours a day via corporate intranets. Other commercial customers operate their own servers. These companies include the 20 or so Mauritian companies that operate digital data entry companies in Madagascar. Recently, companies that develop customized software and write computer programs have emerged as a new customer category that is of critical importance to the island's development.

Public policies. The new information technology sector is regulated by OMERT (or L'Office Malagasy d'Etudes et de Régulation des Télécommunications), which lies within the Ministry of Telecommunications. A Telecommunications Development Fund was initiated in 1999 by OMERT to finance the provision of telephone service to remote areas. It is partly financed by clients through a duty of 2 percent on turnover. FAIs, in addition to the aforementioned duties, are also subject to a regulation tax of 1 percent of their annual revenues. Competition among suppliers is such that it no longer has to overcharge. A national policy for developing TIC is currently underway and provides for a restructuring and a decentralization of OMERT, as well as the set up of a Support Committee in e-strategy, especially with the aim of creating incentives for investors in

this area. In the mean time, forgone opportunities are causing substantial losses to the Malagasy economy. For example, the project to set up a direct fiber optic link to the Internet network via the SAFE-SAT3/WASC project has yet to materialize (see Chapter 5). This is due to a disagreement with TELMA regarding the use of its internal network, after much confusion about the decision making process during the design of the project at the regional level. A fiber optic link would definitely resolve capacity issues and lower connection costs in a spectacular way.

Skill development. Basic IT skills development has been assisted by two educational institutions to date:the Information Technology and Applied Sciences Department at the University of Madagascar, and the National Information Technology School located in Fianarantsoa. Both schools together graduate 100 students per year, which corresponds to only 50 percent of current demand. At the beginning of 2001, the Association pour le Développement des Formations de Pointe (ADFP) was created to provide technical skills that this growing industry requires. The outlines of a high-tech industrial cluster appear to be taking shape.

Two primary factors constrain the growth of the ISPs:

- TELMA's provision of new telephone connections to prospective residential customers who want Internet access has been slow. TELMA provides only analog connections to residential users. Only a limited number of professional firms are able to secure Integrated Services Digital Network (ISDN) connections. The ISPs provide their own digital networks (local area networks, or LANs) and data gateways to their commercial clients. Six cities are currently linked via LANs.

- Liquidity constraints. Checks deposited in the ISP's account require three weeks to clear, and many customers abuse their use of credit. Like other local service providers, the ISP industry has a serious collections problem.

6.4 CONCLUSIONS AND RECOMMENDATIONS

Customs. Given the failure of past attempts to reform Madagascar's customs administration, future reform efforts need to be pursued energetically and with a clear road map in order to be credible. From this perspective, the implementation, interpretation and integration can only be achieved successfully through cooperation between the government and industry, perhaps with mediation by independent third parties such as the donor community. Such reforms are possible, as illustrated by the Peruvian case, discussed in Box 6.1.

BOX 6.1 CUSTOMS REFORM IN PERU

Peru is a country with a weak fiscal administration and a customs administration that had many of the problems encountered in Madagascar. Yet, as the indicators below show, customs reform achieved significant improvements. In addition, note that performance-monitoring indicators such as percentage of cargo inspected and clearance time for cargo are not readily available for Madagascar.

Peru: Customs' Performance on Key Measures Before and After Reform

	Before Reform	**After Reform**
Number of Employees	3,800	2,600
Clearance Time for Cargo	15 to 30 days	2 Hours to 2 days
Value of Imports	$US4 billion	$US7.5 billion
Customs Collections	$US626 million	$US2,723 million
Tariff Rates	10 to 84%	15 to 25%
% of Cargo Inspected	70 to 100%	15% maximum

In Peru, the percentage of Customs' physical examination of goods was substantially reduced, along with reductions in tariff rates while trade clearance times through Customs were significantly improved and the number of employees was reduced. Still, customs collections quadrupled while the value of imports doubled. Before reform, Peru's Customs' performance was comparable to Madagascar, illustrating that reform can work to the benefit of government and business. Peru was the subject of a World Bank case study on customs reform.[1]

[1]The rationale for the reforms proposed here, and which were implemented in Peru, is discussed at length in Lane (1999). The book provides a framework for customs modernization for developing countries with similar characteristics as Madagascar.

The difficulty with reform is compounded by the fact that Madagascar's private sector lacks coordination and strong associations, capable of representing public and business interests when policy decisions are made. The development of strong and committed industry associations representing international carriers, freight forwarders and customs agents, importers, exporters and EPZ operators is required to ensure that reforms go in the right direction (see Chapter 8).

The following steps are recommended to improve customs performance and to reengineer the import/export process:

Overall. Implementation of the ACIS (together with COMESA). ACIS is a tool that measures and monitors clearance from arrival of conveyance to release from port of entry. It is being implemented in other COMESA countries.

Clearance time. Establish a goal to continuously improve clearance times by 25 to 50 percent per year for compliant imports until same-day clearance for 90 percent of legitimate imports is achieved at the airport and 90 percent of compliant seaport shipments are cleared in one to two days.

Revenue gap. Examine the figures and processes used to calculate the gap between customs revenue collected versus revenue that should have been collected, agree on a methodology for calculating the revenue loss and use that number as a baseline for an initiative to improve revenue collection.

Establish a goal and timeframes for closing the revenue gap; for example, reduce the revenue gap by 50 percent each year until the amount collected approaches 100 percent of revenue due.

AGOA. Take immediate remedial action to cease the harassment of compliant AGOA exporters, stop the intensive inspections of AGOA exports and implement a program of AGOA compliance that is consistent with the U.S. Customs requirements outlined above.

Risk management. Monitor the steering committee's effectiveness regarding the SGS follow-up program, and the implementation of the customs administration program to measure the number and types of inspection (e.g., document reviews, tailgate examinations, full devanning).

Noncompliance. Identify one important issue of noncompliance with government and customs laws, such as trans-shipment or false declaration, and establish a team that represents various interests to better define the problem, develop measures of success and adopt a plan to address the problem and monitor progress. Use this methodology to address other problems of noncompliance.

Prioritization. Among the agencies and ministries charged with managing infrastructure, projects should be prioritized according to their "time of arrival", by their "ability to be financed", by the "degree of influence" that project advocates have with respect to decision makers, rather than on any systematic assessment of commercial and social needs or whether such projects adequately meet the needs of. Infrastructure projects need to be prioritized based on cost-benefit analysis.

Dialogue. A meaningful dialogue with private sector users (e.g., shipping lines and freight forwarding agents) at the port of Toamasina. A similar dialogue with commercial users needs to be established in the case of Ivato Airport or the intra-urban roadway system serving Antananarivo (in particular regarding the development of a "beltway" road system around the city).

Financing. Fiscal management and controls of trust funds set up to fund road and port improvements need to be made more transparent and efficient. Co-financing and private sector involvement, based on build, operate and transfer (BOT) contracts, must be systematically explored.

Privatization and restructuring. Institutional realignments and parastatal restructurings have been slow to move forward, and several key service-sector privatizations have been pending for more than five years, which has negatively affected capital spending, strategic realignments of markets, service networks and operating systems. Significant progress must be made toward privatizing Air Madagascar, TELMA, Ivato Airport and the Port of Toamasina. Even more important, these privatizations must not simply involve the transfer of monopoly rights to the private sector, but must also be accompanied by a competition policy ensuring market contestability whenever economically feasible.

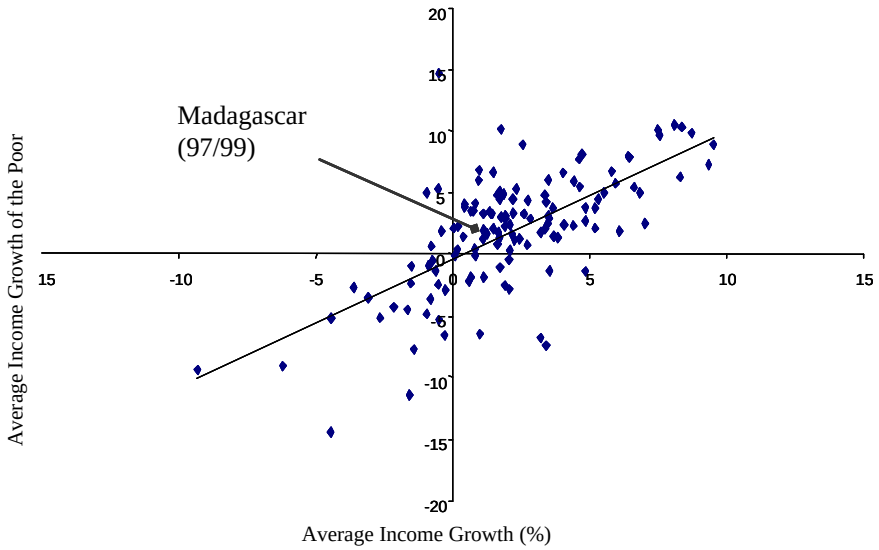
CHAPTER 7
TOWARD A PRO-POOR TRADE STRATEGY

7.1 OPENNESS, GROWTH AND POVERTY

Figures 7.1 and 7.2 give the correlation between average household income growth and the growth of the 20 percent poorest households for a sample of 129 growth episodes including Madagascar. These episodes lasted, on average, 6 to 8 years with the following geographic distribution: 31 in East Asia, 50 in Latin America and the Caribbean, 15 in the Middle East, 15 in South Asia and 15 in Sub-Saharan Africa. The household survey evidence in both figures confirms that growth is a powerful way to reduce poverty. In most cases as well, including Madagascar, the poor improve their relative position during episodes of economic growth, and lose relatively more during periods of economic decline. Hence, the evidence is strong that growth should be an important catalyst of a pro-poor trade strategy.

FIGURE 7.1 HOUSEHOLD INCOME GROWTH AND AVERAGE INCOME GROWTH

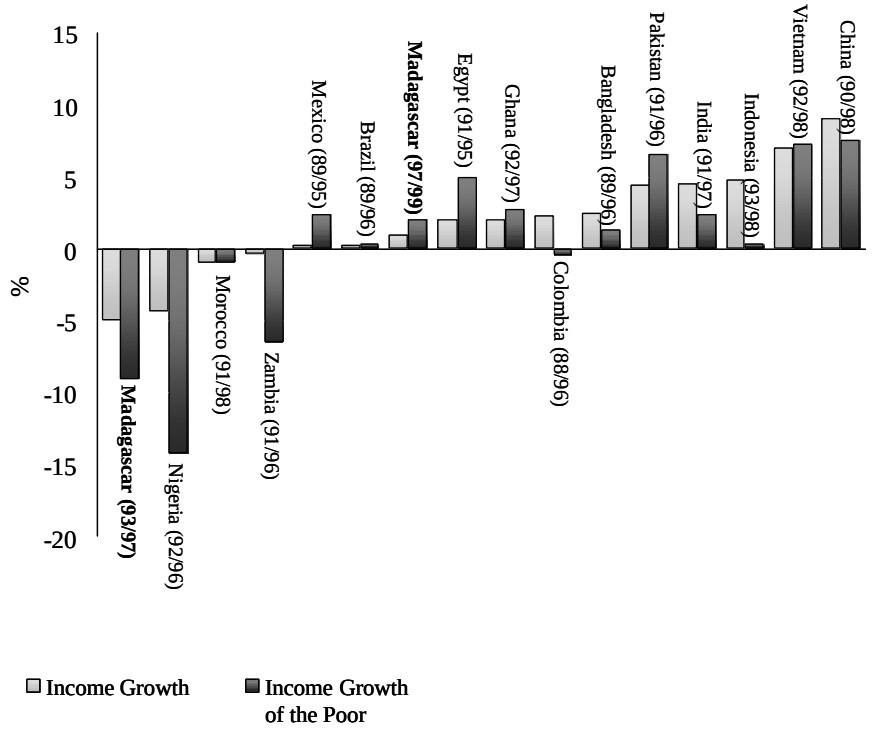
(20% poorest households)



Source: Dollar and Kraay (2001b).

The relatively good fit in Figure 7.1 shows that, on average, the income of the poorest 20 percent of households grows as much as average income. Figure 7.2 shows the relation between growth, trade orientation and the income of the poorest 20 percent for the same 129 episodes. On average, the income of the poorest 20 percent has kept up with the average in economies / periods of fast growth. On the contrary, in economies / periods of declining outward orientation (in the sense of slow growth), the poor have tended to fall behind. This is also the case of Madagascar in the period from 1993 to 1997.

FIGURE 7.2 INCREASING POVERTY: SELECTED COUNTRIES (HOUSEHOLD DATA)



Source: Dollar and Kraay (2000).

7.2 EVALUATING THE EFFECTS OF GROWTH AND TRADE ON POVERTY

A recent study assessed the impact of growth on poverty in Madagascar.[64] It found that a growth rate similar to the recent Sub-Saharan African average of 4.5 percent could be attained with responsible macroeconomic policies and a commitment to structural reforms, but would still fail to have a meaningful impact on Madagascar's poverty levels. From the headcount poverty level of 74 in the base year of the exercise (1997), poverty falls only to a level of 69 by the year 2010.[65] The same study provides an alternative scenario, in which far-reaching reforms introduced in the economy allow Madagascar to grow at 7.5 percent per year without exceeding the external financing constraint. In that scenario, poverty can be reduced 15 points by the year 2010 (to a headcount index of 58). The scenarios were respectively called "African Performance Scenario" and "Ambitious Reform Scenario". For short, they will be referred to as "Low Growth" and "High Growth" scenarios, respectively.

As Figures 7.1 and 7.2 illustrate, the relationship between growth and poverty reduction is not perfect. Depending on the pattern and type of growth, different groups and income deciles can have differential rates of poverty reduction. This is especially important in a country like Madagascar where economic growth has been accelerating in a subset of sectors and activities.

In this section, we use an updated version of the "Low Growth" scenario as our base scenario to estimate the impact of growth on poverty (scenario 1). We refine previous estimates of the effect on poverty by considering different growth rates for key sectors of the economy and by allowing for different configurations in the labor market. In what follows, the estimates of the impact on poverty of these different scenarios is presented. The simulations capture only partial and extremely simplified impacts of reforms on households. Nonetheless, the dimension of the impacts simulated as well as the distribution across households provides a first approximation for the potential effect of different economic policy scenarios on poor people in Madagascar.

Underpinning faster growth is the need for action on the pro-poor trade agenda. This encompasses strengthening the incentive framework and improving infrastructure as argued in detail in previous chapters. To recap, the main elements of a pro-poor trade strategy are:

- Strengthening the incentive framework:
  - Macroeconomic and exchange rate stability.
  - Transparency and simplicity in the incentive system.

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[64] *Madagascar: An Agenda for Growth and Poverty Reduction*, World Bank, 1998.

[65] The study assumed that *per capita* expenditure of households grows at the same rate as GDP *per capita*.

- Improve tax collection by expanding the 'gisements fiscaux'.

- Reducing transactions costs and increasing the competitiveness of markets:

  - A reduction of the intrusiveness of customs and improvements in the effectiveness of customs administration.
  - Increased availability of long-term credit.
  - A reduction of the extent of discretion in the regulatory framework.
  - Development of roads, ports, and air infrastructure and IT connections.
  - A reduction of transport costs.

7.2.1 Growth Effects

What are the transmission channels through which growth can affect poverty? Since unskilled labor is the main (and often the only) asset the poor have, one of the main impacts of growth on poverty will be channeled through the labor market for unskilled workers. McCulloch et al.'s (2001) presentation, which is detailed in Chapter 3 of Volume 2, is adapted here. In particular, it is assumed that subsistence wages are paid in the informal and subsistence agriculture sectors, and that people employed in the formal sector earn relatively higher wages. This is due, for instance, to the fact that formal employment grants access to social services, or because of the presence of sector specific skills or wage policies. Then the impact of growth on poverty is simulated under two alternative (extreme) assumptions about the labor market. In one setting, there is little or no labor mobility across activities (due, for instance, to the presence of few transferable skills and/or other labor market rigidities). This implies that the increased demand for labor in the formal sector resulting from higher growth will be translated directly into higher wages (this effect is akin to an increase in labor productivity). The effect will be to decrease poverty only to the extent that poor households are already participating in the formal labor market. In the other labor market setting, it is assumed that the expanding formal sectors can draw virtually infinite amounts of labor out of the informal sector or out of subsistence agriculture (i.e. there is a perfectly elastic labor supply). In the latter setting, as wages in the formal sector are higher than the subsistence wage paid in the informal sector and in subsistence agriculture, the transfer of labor from the subsistence to the formal sector will reduce poverty.

To summarize, when analyzing the growth effects of the pro-poor growth strategy, we consider the two polar extremes to bracket the likely effects on poverty reduction: (a) through wage increments with no effect on employment [the "a" scenarios], and (b) through switches in employment from informal to formal (better-paid) jobs [the "b"

scenarios].[66] In reading the simulations, it is useful to look at simulations (a) and (b) together because the poverty outcomes will most probably lie between them.

Simulations are carried out over a 10-year period. For reference, in the initial year of the simulations (1999), poverty as measured by the Head-count Index was 71 percent.

7.2.2 Growth Assumptions

Base Scenario (Scenario 1)

The "base scenario" forms the benchmark case, and corresponds to trends in the economy, especially after 1996.[67] The details of the growth numbers are given in Chapter 3, Volume 2 (Table 3.1). Here are the key characteristics:

- The agricultural sector grows at the same rate as it has grown over the previous decade (1.5 percent per year), and the non-EPZ industrial sector, especially food and other import substituting industries, grows at 2 percent per annum.
- The dynamic sectors such as garments, continue their 20 percent growth each year until 2004 due to AGOA, and then slow down to 10 percent annually.
- Tourism grows at 10 percent per year, transportation at 8 percent and other service activities grow at 6 percent per year.

Thus, this scenario incorporates both recent positive developments occurring in the economy, as well as the previously detailed dual growth structure that currently exists in Madagascar.

Pro-poor Trade Scenario (Scenario 2)

This scenario modifies the growth rates of the "base scenario" to those believed to be attainable if most of the recommendations in this report are adopted (see Table 3.2 of Chapter 3, Volume 2). Under this scenario, the biggest difference takes place in the agricultural sector due to both policy changes in key products as well as improvements in transport and other rural infrastructure. The growth rates accelerate first to 4 and then to 5 percent annually. More specifically:

- In garments, policy reforms in the customs, ports and so on anchor the garment and other export sectors and growth rates remain at 20 percent annually even after 2004 when preferential arrangements are phased out.

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[66] The methodology is described in Chapter 3 of Volume 2.

[67] However, as indicated above, it still assumes that responsible macroeconomic policies and some commitment to structural reforms are followed. It also reflects the current business expectations in some sectors (i.e. the garments sector growing faster than the other sectors).

- With the expansion in agriculture and improved policy environment for the non-EPZ industrial sector, agro-food processing and other industries grow at 5 percent to 7 percent each year (compared to 2 percent in the base case).

- Tourism growth accelerates to first 15 percent then to 20 percent (compared to a peak of 10 percent in previous scenario), the transportation sector grows at 10 percent (compared to 8 percent) and other services grow at 8 percent (compared to 6 percent in the base scenario).

7.2.3 Assessing The Impact Of Growth On Poverty

The effects of growth on poverty are presented in Table 7.1, which also reports the breakdown of the headcount index for rural and urban areas. As indicated earlier, two assumptions about the labor market are used. In one, the labor supply is fixed and all the increased labor demand due to growth is reflected in higher wages. In the other, wages are fixed by sector (formal and informal) and labor moves from the subsistence sector to a particular formal sector, taking into account the probability that each individual can participate in that labor market.

The simulations involve the following steps:

- First, a measure of per capita household expenditure is constructed and households are classified as poor or non-poor according to the poverty line. This gives the Headcount Index of poverty.
- Next, the sources of income by sector of employment are identified for the members of each household.
- The growth rates of agriculture, industry and services coming from GDP growth scenarios (see discussion above and Chapter 3, Volume 2, Tables 3.1 and 3.2) are then taken as given.
- For the simulations that assume the labor supply is fixed, the rise in wages coming from growth is weighted by each individual's contribution to total household income.
- After obtaining the new household income, a new Headcount Index of poverty is calculated.
- For the simulations that assume that labor can be reallocated between sectors, we estimate the probability that each person has of participating in the formal labor market. This probability is a function of age, education, family composition and location, among other factors. Those that are not participating in the formal labor market and whose wages are lower than those paid in the formal sector, are ranked by their probability of participating in the formal sector. As formal sectors grow, laborers from the subsistence sectors are assigned new jobs according to their probability. The impact on household income comes from the wage premium paid by the formal sectors.

- After obtaining the new household income, a new Headcount Index of poverty is calculated.

Table 7.1 describes the simulations and the primary effects on the Headcount ratio, as well as their implications for rural and urban households.

TABLE 7.1 DESCRIPTION OF SIMULATIONS AND IMPACT ON POVERTY

Simulation	**Description**	Impact on Poverty after 10 years (Base Level=71 in 99) 76.7 (Rural) 52.1 (Urban)
Simulation 1a **"Base scenario"**	▪ Sectoral growth rates from Chapter 3, Volume 2. ▪ Labor assumed to be fixed supply by sector (i.e., the effect of growth on poverty comes from increasing wages).	Headcount constant Rural increases: 81.0 Urban falls slightly: 51
Simulation 1b "**Base scenario**"	▪ Sectoral growth rates from Chapter 3, Volume 2. ▪ Labor is reallocated from the informal sector to formal sector at constant wage differential and according to its probability of working in that particular sector.	Headcount constant Rural increases: 80 Urban falls: 46
Simulation 2a **"Pro-poor trade scenario"**	▪ Sectoral growth rates from Chapter 3, Volume 2. ▪ Labor assumed to be fixed supply by sector (i.e., the effect of growth on poverty comes from increasing wages).	Headcount falls to 67.5 Rural falls: 73.9 Urban falls: 45.0
Simulation 2b "**Pro-poor trade scenario**"	▪ Sectoral growth rates from Chapter 3, Volume 2. ▪ Labor is reallocated from the informal sector to formal sector at constant wage differential and according to its probability of working in that particular sector.	Headcount falls to 58 Rural falls: 64.9 Urban falls: 34.6

These results, however limited, indicate how insignificant is the effect of the existing growth pattern on the poverty headcount. As long as the agricultural sector does not accelerate its growth, faster growth in a few sub-sectors has a much smaller impact on poverty reduction than would faster growth in agriculture.

There are substantial differences in the poverty outcomes between urban and rural areas. In the pro-poor trade scenario (scenario 2a where labor is fixed and growth is translated into higher wages), poverty falls in urban areas (from 52.1 percent to about 45 percent). This reduction in poverty is even greater if labor is mobile (urban poverty falls to 34 percent). In cities, workers have more opportunities to benefit from the higher wages paid in the industrial and service sectors. In rural areas, only simulation 2b (a pro-poor trade strategy with mobile labor) has a dramatic effect on the poverty headcount index. Rural poverty falls from 76.7 at the beginning of the simulation period to 64.9. Thus, a significant reduction in poverty can be achieved by addressing the constraints that exporters face in transportation, other infrastructure, and customs administration and in the incentives framework with a view to accelerating growth. However, these benefits fall in an environment where labor is less mobile.

7.3 CONCLUSIONS: THE IMPORTANCE OF TRADE POLICIES AND GROWTH

International evidence, and evidence from Madagascar suggest that growth will alleviate poverty. Nevertheless, other factors also emerge, such as redistributive policies and a "pro-poor" economic and business environment that creates important multiplier effects, through which the benefits of growth can be distributed to the poorest segments of the population. However, the present business and economic environment in Madagascar is characterized by an abundant supply of unskilled labor that receives low and stagnant wages. Such an environment prevents most of the poor from fully benefiting even from high rates of economic growth. This situation reflects the dilemma of a labor-surplus economy attempting to globalize. On the one hand, the plentiful supply of low-wage workers is the asset and provides an opportunity for successful globalization. On the other hand, the plentiful supply of labor means that the poverty-alleviating effects of growth may be small.

This chapter corroborates the recommendations made elsewhere in the report. First, growth is important, since higher growth is needed to generate the same effects on poverty in an economy with a labor surplus than in an economy with a fixed supply of labor. Second, government policies should also focus on increasing the productivity of urban and agricultural workers because wages ultimately reflect labor productivity. In this vein, it is important to attract FDI to achieve this objective because the national savings rate is low.

Second, a prerequisite for any poverty reduction strategy is to integrate the poor into the economy via a redirection of public resources to improve services (such as education, health care, and credit) and provide better infrastructure (such as all-year roads, electricity, and telecommunications), since rural poverty is a phenomenon related to isolation from markets.

Finally, in the long run, an improvement in the regulatory framework that leads to better governance will also be important in defining a pro-poor trade strategy. Any improvements in governance will contribute to a better allocation of resources and to

increased economic growth. It has just been shown that growth can have a significant effect on poverty levels if resources are devoted to pro-poor macroeconomic policies.

To conclude on a positive note, it is worth recalling that because of the stimulatory effects of implementing such an extensive reform package, suggested in the pro-poor trade strategy under the Integrated Framework, the growth simulation scenarios are based on conservative estimates. These estimates suggest that the recommendations can result in a greater than one percent per year reduction of the headcount index. Over a ten-year period, this could make a difference for roughly two million individuals.

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