REPUBLIC OF MADAGASCAR Tanindrazana-Fahafahana-Fandrosoana

MINISTRY OF ECONOMY, TRADE AND INDUSTRY ---DIRECTORATE GENERAL FOR PRIVATE SECTOR AND TRADE DEVELOPMENT

INDUSTRIAL POLICY LETTER (2007-2012)

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Acronyms

BNM	Bureau de Normalisation Mauricien (Mauritian Standardization Office)
CAPE	Comité d'Appui au Pilotage de la Relance de l'Entreprise (Committee for
	Supporting Enterprise Steering and Relaunch)
CERDIC	Centre Régional de Développement Industriel et Commercial (Regional Center
	for Industrial and Trade Development)
CVM	Chaîne de Valeur Mondiale (Global Value Chain)
EDBM	Economic Development Board of Madagascar
	(Conseil Economique de Développement)
FMI	Fonds Monétaire International (International Monetary Funds)
GUIDE	Guichet Unique des Investissements et de Développement des Entreprises (One
	Stop Desk for Investment and Enterprise Development)
IDE	Investissement Direct Etranger (Foreign Direct Investment)
JIRAMA	Société Nationale de l'Eau et de l'Electricité (National Utility Company)
LPI	Lettre de Politique Industrielle (Industrial Policy Letter)
MAP	Madagascar Action Plan
	(Plan d'Action de Madagascar)
MNEQ	Métrologie, Normalisation, Essai et Contrôle de Qualité (Metrology,
	Standardization, Trial, and Quality Control)
MPE	Micro & Petite Entreprise (Micro and Small Enterprise)
OCDE	Organisation de la Coopération pour le Développement Economique
	(Organization for Economic Development Cooperation)
ONUDI	Organisation des Nations Unies Pour le Développement Industriel (United
	Nations Industrial Development Organization)
PDSP-2	Projet de Développement du Secteur Privé – Phase 2 (Private Sector
	Development Project – Phase 2)
PIB	Produit Intérieur Brut (Gross Domestic Product)
PIC	Pôles Intégrés de Croissance (Integrated Growth Poles)
PMA	Pays Moins Avancé (Least Developed Country)
PME	Petite & Moyenne Entreprise (Small and Medium Enterprise)
PMI	Petite & Moyenne Industrie (Small and Medium Industry)
S&T	Science et Technologie (Science and Technology)
SISIR	Singapore Institute of Standards & Industrial Research
TIC	Technologie de l'Information et de la Communication [Information and
	Communication Technology (ICT)]
USD	United States Dollar
ZF	Zone Franche (Free Zone)
ZFI	Zone Franche Industrielle (Export Processing Zone)

1. Transforming Madagascar from a (predominantly) subsistence economy into a **dynamic industrial economy that is strongly integrated into the global economy** remains a choice objective in pursuing the economic and social development of the country.

2. With abundant agricultural and mining resources, the biodiversity of the natural heritage, a rich cultural legacy, a hard working population combined to a determined political leadership, Madagascar is in a position to do a forward **quantum leap** and to become a favored destination for industrial investments.

3. The economic reforms initiated in the course of the 1990s and the structural changes which operated in the economy provided the opportunity for the State to leverage the natural resources in order to draw both domestic and foreign investments.

4. Private investment in Madagascar played a key role in triggering growth in recent past, moving from an average level of 3.5% of GDP in the 1980s to 8.5% of GDP over the 1997 to 2004 period, and planned to be in the order of 12.4% of GDP between 2005 and 2008. However, compared to the average investment rate that is in the order of 20% of GDP in Eastern and South Eastern Asia high performance countries, it is still low. Private investment must be significantly increased to sustain accelerated growth, given the low tax revenue level in Madagascar.

5. Diverse studies (*Investment Climate Assessment, Doing Business*, and Study for establishing an Investment Promotion Agency ...) highlighted the major points of investment development in Madagascar. These are: (i) absence of programming; (ii) insufficiency of administrations in charge of supporting/accompanying projects; and (iii) absence of incentive rules which are not particular benefits reserved to certain operators. The latter point was subject to many discussions with IMF which subjects any government initiative to a double condition: no individual decision for tax or customs exemption, no regulatory decision, the nature of which is to weaken the State incomes.

6. *Madagascar Action Plan* (MAP) for the 2007-2012 period was set up to induce **rapid and inclusive** development of the Malagasy economy; and an *Economic Development Board for Madagascar* (EDBM) was simultaneously instituted as an economic and industrial policy tool, in order to promote and facilitate private, domestic, and foreign investment development. It is appropriate to note that the MAP will require *roughly* some US\$ 9 billion investment expenditures, the largest part of which (+80%) will be the State responsibility and will probably be financed by donors.

7. A note relating to the finance of Madagascar and published by IMF in July 2007 blows the whistle on the country very poor performance in tax revenue collection: indeed, Madagascar has among the worldwide lowest collection rates, and such level has tended to stagnate since 2000, conversely to the other Sub-Saharan countries which underwent slight improvements. This must highlight the particularly difficult status of the State finance and, at the same time, put limitations regarding the **future availability of financial/ tax incentives** with a view to sustaining industrial growth.

8. On the other hand, the combined strengths of increasing internationalization of world economy and decentralization (at local level) of national structures for economic governance continue to raise new challenges to political decision makers and call for deep redefinition of the **way** according to which the Government must proceed to efficiently support the development of investment activities.

- 9. In front of this situation, it proved judicious:
 - To win the **trust of economic/ industrial operators** by showing the Government determination and commitment to the implementation of a critical mass of policy reforms;
 - To create a **positive image/perception** of Madagascar as a favored destination for industrial investments;
 - To take up a **new look** at the current policy with a view to the following: (i) consolidate the existing strengths and remove the latent weaknesses; (ii) redefine the objectives and the priorities; and (iii) establish a mechanism /system in order to ensure the real and opportune implementation of the policy.

10. The *Industrial Policy Letter (2007-2012)* is the result of such an exercise. It illustrates the new role that the State would like to take up as a facilitator of the economic and industrial activity. It includes the major priorities which come out during the *Extraordinary Session of the Conference of African Ministers of Industry* (CAMI) which was held in Midrand, South Africa, on September 24-27, 2007¹. It is the outcome of UNIDO ongoing technical assistance, as well as the fruit of joint will of the State and the private sector to share one same medium/ long term vision that is founded on mutual recognition of capacities and constraints on either side. It includes the following sections:

- Section A: Terms of Mission and Objectives;
- Section B: Policy Initiatives;
- Section C: Operational Actions.

¹ CAMI kept 5 major priorities: (i) Youth Employment; (ii) Trade Capacity Building; (iii) Investment Promotion; (iv) Energy Security; and (v) Industrial Innovation Systems.

11. THE MISSION SET BY the LPI (2007-2012) CONSISTS IN SUPPORTING/ACCOMPANYING THE IMPLEMENTATION OF MAP, PARTICULARLY OF COMMITMENT 6 OF THE LATTER (*COME UP RAPIDLY WITH A HIGH GROWTH ECONOMY*). MORE CONCRETELY, ITS AIMS ARE AS FOLLOWS:

- To provide the fundamental conditions to improve the business environment and to facilitate successes; and
- To encourage the creation and use of better ideas, state of the art technologies, techniques and methods so that Madagascar can meet the challenges of globalization, show high productivity in working places and capitalize on its competitive advantages.
- 12. FOR SUCH PURPOSE, THE GOVERNMENT MEANS TO ENGAGE THE FOLLOWING MAJOR POLICIES:
 - REGARDING BUSINESS ENVIRONMENT AND INVESTMENT PROMOTION

Putting forward an attractive policy for investors by setting up the EDBM (as a policy tool and original structure for investment promotion), applying a new (more practical, transparent, and avant-garde), investment law, recasting new laws in land tenure (enabling access to land property to foreigners), streamlining the tax system, etc....

REGARDING THE NATIONAL BASIS FOR THE PRIVATE SECTOR

Inducing a large scale industrialization which will intensively use surplus labor through audacious initiatives (aiming to free the national potential entrepreneurs) and aggressive actions geared as a priority towards supply (industrial extension services, corporate nurseries, microfinance, etc...) and aiming to stimulate the development of local enterprises, SMEs, MSEs, and handicraft.

REGARDING MADAGASCAR INTEGRATION INTO THE GLOBAL ECONOMY

Upgrading technological and trade capacities of exporting enterprises through programs for industrial restructuring/ upgrading and setting up of technological infrastructures, in the framework of a new industrial strategy which aims to penetrate export markets with higher added value products.

REGARDING THE FAVORED ACTION SECTORS

Favoring development action and fostering the implantation of new investment projects among a number of sectors which are considered high priority for their spin off effect. Such sectors are: tourism, agribusiness, light export industry, mining, infrastructures, and information and communication technologies (ICT).

B1. BUSINESS ENVIRONMENT AND INVESTMENT PROMOTION

13. The Republic of Madagascar wishes to draw investors and to make the private sector into the main engine for developing its economy. Relying on the reference documents which are the *Madagascar Naturally* Vision and the *Madagascar Action Plan* (MAP), the Government has defined among its priorities the pursuit of high economic growth based on the development of a strong and competitive private sector.

- 14. for such purpose and concerned with:
 - Establishing a framework inciting private investments in Madagascar without favoring an investor category in particular, whether they are national or foreign investors, already established in Madagascar or wishing to establish in there,
 - Streamlining a large number of administrative procedures in order to transform the business environment in Madagascar,
 - Strengthening competitiveness among the companies settled in Madagascar,
 - Enabling access to corporate land tenure for companies ruled by the Malagasy Law, whether or not they are controlled by foreign interests,

the Government initiated draft law entitled *Law on Investments in Madagascar*, which should especially provide confidence to investors and secure their investments.

15. The draft law was subject to discussion during the Cabinet meeting held on 11 June 2007 and has still to be approved by the Chambers. But it is already interesting to draw attention on two breaking through points:

- Access of foreigners to land property: the draft law offers, on certain conditions, to facilitate the acquisition of land assets by foreigners;
- **Special Investor Visa**: such visa de facto entitles its holder to reside and to legally work Madagascar, and lasts 3 years.

16. The new law on investments shall provide an **incentive environment that is practical**, **transparent and avant-garde** to all investment activities in Madagascar. The aim is to adapt and boost rapidly the local economic fabric so that it is in line with the particularly competitive international economic context and in which Madagascar must be constantly in agreement with the large global trends so as to effectively attract the capitals required for creating employments and enable the country to become an emerging economy. On account of such law, the State role becomes that of facilitator to the private sector, which is the main wealth creator for the nation and the main engine of economic growth, through created employment, increased productivity and standard of living while contributing to generating a tax base that is broadened and sustained over the medium and long term.

17. In order to face international competition and build its real competitive advantage, Madagascar needs to have a very attractive business environment and must therefore adopt a framework law applicable to all local and foreign investments, the drafting of which would be the fruit of large consultation with the stakeholders in the public sector and the private sector.

18. Regarding the draft law, the private sector may be asking questions on the absence of incentives in taxation. *A priori*, such interrogations are especially grounded for one simple reason: investors are drawn by attractive actions. Upon thinking, however, the question is to know whether a tax incentive policy really provides *«a plus»* for a country such as Madagascar. Indeed, it is nowadays realized that foreign direct investment (FDI) flows are, first and foremost, depending on certain parameters such as market size, labor productivity, and infrastructures. As soon as the fundamentals of the country have the same features, the tax *forum shopping* (choice by a country compared with another one depending on tax incentives granted to investors) is normal. The issue is no longer the same in case of default in fundamentals; tax incentive is no longer a fundamental element to investment but an element among many others.

19. Consequently, the Government thinks that prior to putting forward an incentive scheme; a country must have put in place a modern and moderate overall taxation regime that favors investment in all its forms. Nothing will thereafter prevent it from taking into consideration specific cases in which selective incentives may be justified.

20. This is the spirit in which the Government is **recasting the tax and customs system** to make it simpler, more effective and more equitable. With support from IMF and the World Bank, a comprehensive analysis of the tax law was completed, with participation by the private sector and civil society. More simple and more incentive tax provisions were planned to be in force right from 2008.

21. The Government is aware that the tax and customs reform which is being operated would contribute to slight reduction of the share of tax revenue in the coffers of the State, but it is confident that the formalizing actions will be strengthened and broaden the tax base.

22. IMF has revealed shortcomings in the Malagasy tax system: the prevailing situation indicates that only 3% taxpayers pay taxes; the remaining 97% are right now out of control. Further, the level of tax collection rate is very low in the country: in 2006, tax revenues which were initially set to 11.4% of GDP reached only 10.6%. Such breakdown is explained by the collection procedure and the tax composition in force in the country. In this prospect, a broadened tax base and increased collection rate would provide basic principles to be applied for increased tax revenues.

23. In sum, streamlined and stable taxation also provide a means for encouraging operators to invest and are in keeping, in such case, with enhanced business environment in Madagascar. The currently in force free zone regime has always been quoted as a success as an investment incentive.

B2. NATIONAL BASIS OF PRIVATE SECTOR

24. Three enterprise types co-exist in Madagascar. At one end of the spectrum (A stratum) there are a number of modern national or foreign viable enterprises, which provide full time fixed employment to skilled labor and have links with global markets: these are the enterprises in *Export Processing Zone* (*EPZ*). At the other end of the spectrum (C stratum) there are a multitude of micro and small enterprises (MSEs), sometimes bordering the informal system, which hire the largest part of non skilled labor, too often in the form of occasional employment: such MSEs target the domestic market by providing services or by producing goods accessible to poor people. Between these two activity types there is a thin stratum made up of national enterprises of rather average size that, to some extent, may have export activities (B stratum). One of the features of this activity category is that it is difficult to finance their development on commercial conditions; they were often called the *«missing middle»* in the structure of LDC enterprises and it is namely the Malagasy enterprise category ruled by the ordinary legislation.

25. Generally, the point is to have the three sectors move forward together: the **traditional sector** (C stratum), made up of the MSE multitude, which rely on a traditional technology and on high intensity unskilled labor, has to be encouraged if it is, to the extent possible, to cover the basic requirements such as food, clothing, and housing. The **intermediary sector** (B stratum) which assumes moving to higher knowledge intensity production is made up of national relatively average size enterprises which, to some extent, may have export activities. Finally, it may be foreseen that the **export sector** (A stratum) will meet the challenge in processing and making manufactured products, in order to propel some manufacturers toward prestigious foreign market niches, to urge and welcome foreign investment. This sector will therefore be the engine that will pull the economy as a whole towards higher growth rates and enable the country to acquire a technological know how and some management skills.

26. However, if enterprises (turning to foreign markets), in general, would rather have actions which aim to increase effective working of basic infrastructures, the regulatory framework and institutions in order to improve their performances, similar actions no longer prove to be adequate to provide performance among enterprises which are used to working for the domestic market (SMEs ruled by the ordinary legislation and MSEs).

27. Indeed, except for EPZ, the Malagasy industrial fabric is fragile. The enterprises servicing the domestic market are faced up to very severe constraints. Their production equipment is often obsolete, on account of lack of investment incentives. Because of their low competitiveness, the domestic market power is especially beneficent to importers, which thus creates a vicious circle in which loss of off EPZ producers market share and the resulting decline in capacity use discourages investment and contributes to decreased competitiveness over the long term. Consequently an aggressive action must be consented if these enterprises (SMEs, MSEs and small scale enterprises) are to develop and strengthen.

28. Since 2002, the Government has implemented an **SME development policy** through the Chamber of Commerce and the Chamber of Trade. Regarding handicraft, spaces for promoting handicraft were strengthened; training programs were organized, and some production sectors were restructured through created *clusters*. However, productivity among SMEs and the handicraft sector is low on account of limited modernization. The informal sector is still predominant. Access to international market is restricted. Entrepreneurship is low. A huge potential may still be tapped through vertical integration and clustered manufacturing enterprises.

29. Seeking a strong and equitable economic growth with a high employment level is the central objective of the national strategy of poverty reduction. Obviously the opportunities providing rapid poverty reduction in Madagascar have to go, on the one hand, through **intensified agricultural activities** (which concentrate about 70% of the Malagasy population) and, on the other hand, through **expanded high labor intensity manufacturing activities** (which hire the majority of unskilled labor and generally target the domestic market by providing services or by producing goods accessible to poor people). Both growth engines may serve as a springboard for industrial take off in the country.

30. In this prospect and in order to support the national policy for investment promotion, the Government means to launch **a large scale industrialization that will make intensive use of surplus labor**, through bold initiatives (which aim to free the national entrepreneurial potential) and actions geared as a priority toward supply (industrial extension services, corporate nurseries, microfinance, etc...) and which aims to stimulate the development of local enterprises, SMEs, MSEs, and handicraft. For such purpose, the MAP advocated that the various Regional Centers for Industrial and Trade Development [*Centres Régionaux de Développement Industriel et Commercial* (CERDIC)] are put in place.

B3. MADAGASCAR INTEGRATION INTO THE GLOBAL ECONOMY

31. As for many emerging developing countries, Madagascar must meet a sizable challenge: fostering a sustained growth and creating better employment opportunities to its population that is young and increasing, living essentially in rural areas in which poverty rates are particularly disappointing. Implementing large reforms, economy opening, and enhanced access to OEDC country markets underlay the spectacular momentum gained by Madagascar over these last years. The country GDP experienced a 5% average annual growth over the 2004 to 2006 period, which is an appreciable rate despite natural disasters. Nevertheless, such growth is fragile as it is largely piloted by easily transferable sectors, such as clothing, the international competitiveness of which may be jeopardized by the current restructuring of international production networks.

32. One of the largest changes observed in international trade over the last 20 years lies in the emergence of a new production sharing, which translates from the passage of a structure relying on vertically integrated multinationals into stratified networks of independent enterprises that are linked by market transactions. As pilot enterprises (multinationals which are global scale purchasers or retailers) control key assets such as technology, concept or brand, they can coordinate and control complex production systems at global scale, without, for that, holding them directly. The micro computer sector is a typical example of such evolution. Production processes are increasingly interconnected along the **global value chain** [*chaîne de valeur mondiale* (CVM)] which expands over several countries, of which each specializes in one production phase. The improvements brought by information and communication technologies, combined with search for less costly sites, better quality logistics, preferential access to markets and means for bypassing trade barriers are at the origin of such geographical fragmentation of the production process.

33. Establishing relation with foreign partners creates to developing country producers opportunities to escape from social limits because it provides access to remote markets, to know how, and to possible industrial modernization. Nevertheless, **such participation in CVMs is no way easy and does not at all provide the guarantee for successful modernization**. Often developing country enterprises do not have the capacities to comply with the pilot enterprise requirements and remain at the lower part of the value chain, undertaking simple and low added value assembly tasks. Pilot enterprises generally invest in order to build capacities among their suppliers, but such modernization type has its limitations. Indeed, these tend to bring selective support, which will enable to enhance capacities for undertaking production and delivery functions, but much less for strengthening other potentially more remunerating skills, such as design and marketing.

34. To be able to enter most CVMs, producers must observe standards for quality, security, environment protection, and even social standards. More and more stringent standards provide a double edged sword for developing country exporters. If such standards make entry to the market more difficult, they also entail restructuring of the local logistic chain and increase, by so doing, the possibility of being part of CVM and to secure other benefits.

35. In some cases, international purchasers help suppliers to secure their certification and to be modernized. Such trends are particularly obvious in clothing and electronics sectors. At the same time, such purchasers impose to their suppliers very stringent requirements regarding flexibility in production, deadlines, product type and quality. Along with total trade liberalization, purchasers are less incited to a multitude of suppliers and strengthen their relations with the best performing ones. These are evolutions which may compromise prospects for participation and industrial modernization among small scale manufacturers. In parallel, such worrying evolutions – there are successful diversification and modernization examples - evidence thereby that there still exist various possibilities of developing from small scale suppliers. But to seize such opportunities, diverse technological and management challenges must be met, which is very often beyond the enterprise possibilities.

36. Adequate support policies **(industrial restructuring and upgrading, technological infrastructure development ...)** are required for export oriented enterprises to pursue their industrial modernization and penetrate export markets with higher added value products. Apart form the necessity to put in place a stable macroeconomic environment and to improve the business environment, the Government must occupy the forefront to foster such capacity building and to form interdependencies. Such interventions, the cost and feasibility of which must be carefully assessed, must be designed and implemented in close cooperation with the private sector.

37. Strengthened by such conviction, the Government eminently means to kick start a **national debate**, in the prevailing situation, in order to look for the best ways of intervening in favor of building corporate capacities to be successfully integrated into CVMs and thereby to find the most adapted strategy to penetrate export markets with higher added value products. It is only thanks to well structured strategic collaboration among the public powers, the private sector, and the civil society, that

we can manage to highlight the priority action areas, identify possible inconsistencies and legitimate the State intervention.

B4. FAVORED ACTION SECTORS

38. Within the national development strategy, the highest priority was granted by the Government to policies that contribute to developing **growth poles** and to strengthening export capacity among the latter. In that respect, four sectors (EPZ, mining, tourism, and shrimp sector) were granted particular attention, and the *Integrated Growth Pole* [*Pôles Intégrés de Croissance* (PIC)] was rapidly put in place with the purpose of accelerating the national economic development by supporting the emergence of poles to draw the best possible advantage from high growth potential regions and by stimulating public/ private partnership in order to develop the strategic activities in poles. The main initiatives projected under the PIC Project include, among others, the implantation of industrial free zones on the axis Antananarivo-Antsirabe, tourism development in Nosy Be, and mining in Tolagnaro. Several other activities are planned in each and every pole to support the priority sector (it is industrial development in the case of Antananarivo-Antsirabe pole), particularly the setting up and rehabilitation of urban and port infrastructures.

39. In the light of the PIC Project, the originality of which indeed lies in the multiple facets which it deals with in order to maximize the spin off effects, the Government means to favor the development action and to foster the implantation of new investment projects in a number of areas deemed of high priority regarding their spin off effect. Such areas are: tourism, *agribusiness*, light export industry, mining, infrastructures, and information and communication technologies (ICT).

40. In the tourism area, Madagascar assets are no longer to be exhibited, given that the professionals in the sector agree to highlight the huge potential in the country, which may massively meet the most varied demands. More particularly, tourism may help to open up isolated areas which have been so far inaccessible to industrial development. It may have positive impact on the most underprivileged population segments by creating dynamic links with other sectors, such as handicraft and services. To provide the harmonious and sustained development of this sector, a related *«master plan»*.should absolutely be established.

41. Regarding *agribusiness*, the point is from now on to put the sector onto export, and the Government means to engage large communication and sensitization actions in order to earn in terms of traceability, phytosanitary standards and other criteria required on the international market. Finally, such actions should emerge together with activity segments such as essential oils or bio fuels.

42. In light export industry, the point is especially to promote competitiveness for exporting a number of light industries, in sectors such as clothing, footwear, watches, toys, sport items, etc...

43. Madagascar has an important mining potential, but it has been long neglected. From now on the focus will be on accelerating its development to produce tangible benefits in terms of employment creation, tax revenues, infrastructures, or social services. The Government will support the ongoing mining projects; will urge them to enter rapidly the production phase by respecting the surrounding communities and environment. It will trigger off its potential in extractive industry by drawing more explorers and championing its natural heritage.

44. Infrastructures require considerable investments in view of the size of the country. Apart from roads, there must be airports, ports, and also energy to ensure an accelerated and sustained pace of economic growth. As it was noticed in the PIC Project, the Government grants quite particular attention to the development infrastructures affecting the growth poles in order to maximize the spin off effects.

45. With regard to the transportation network, road construction and rehabilitation have since 2002 provided the majority of activities. Progress was noted regarding the railways, ports, and airports, but the activities were also restricted to the rehabilitation of existing infrastructures. The Government from now on means to make sure that: (i) long term infrastructure planning is directly related to the development of key high economic growth potential; and (ii) there is a better commitment towards the private sector, on account of the fact that what is at stake does not only consist in building new roads but also in maintaining in good condition the existing ones.

46. In the area of energy, the reliability and supply of electricity decreased, the energy cost has increased in the last four years, the national coverage rate is about only 15%, and access rate in rural areas is less than 5%. Until 2006, the national company JIRAMA has never been restructured in order to meet the predictable increase in energy needs. However, the Government is undertaking a series of important actions, and JIRAMA announced that in the course of this year, all the main consumption centers will be equipped with new energy stations which will be able to meet the anticipated increase of demand in the next 3 to 5 years.

47. Last, with regard to information and communication technologies (ICT), the development of this area has a double effect on the capacity of a country such as Madagascar to integrate into the global trade. On the one hand, such technologies lower transportation costs and contribute to remove the country from insularity at the geographical level ; therefore they open up the way to projects for support services to trade (database creation and management, information system setting up, information distribution, on line processing, etc.), for which Madagascar has a comparative advantage in the francophone world. On the other hand, such technologies require at the same time a more effective administration and a quality infrastructure. Integrating such area is therefore both an opportunity and a challenge. It will provide a stride for progressing towards a *knowledge based economy* (see in the following box Vietnam experience regarding progress in building the knowledge based economy)

Vietnam's Development and Knowledge Economy (KE) Elements

Vietnam was able to tap into global knowledge through trade liberalization, foreign direct investment supported by institutional reforms (notably property rights in agriculture), and the encouragement of private investment. Through more efficient use of public funds in education, primary enrolment rates increased to nearly 100 percent of the eligible population, and secondary enrolment rates expanded from 32 percent in the early 1990s to 70 percent in 2002. Thanks to a strong market-focused reform agenda, Vietnam's average annual GDP grew 5.3 percent from 1993 to 2002.

In the 1990s, the government decentralized economic management; explicit subsidies to state-owned enterprises (SOEs) were reduced, and the number of SOEs decreased from more than 12,000 in 1990 to around 6,200 by 2002. Productivity levels rose by an average of 11 percent a year from 1997 to 2002. The government replaced various administrative measures with economic measures, including a market-oriented monetary policy. It allowed state-and privately owned industries to deal directly with foreign markets. Vietnam's export policy led to a rise in trade from around 60 percent of GDP in the early 1990s to more than 100 percent in 2002. Following the 2001 bilateral trade agreement with the United States, trade between the two countries doubled in both 2002 and 2003.

One-third of the total population of Vietnam has emerged from poverty since the early 1990s: the percentage in poverty fell from 58 percent in 1993 to 29 percent in 2002. This occurred initially because of the redistribution of agricultural land to rural households, and later because of the modernization of agriculture and the development of private enterprise. Industry is now the driving force behind growth in the areas of food, mining, chemicals, textiles, and clothing. Industrial growth has been funded largely by foreign investment in joint ventures and foreign-owned subsidiaries. Industrial output rose by nearly 17 percent annually between 1999 and 2003. In traditional production, Vietnam is the second-largest Asian exporter of rice and coffee.

The hardware and software industries have grown steadily thanks to rising demand abroad. Japan is a major importer of Vietnam's software products. Hardware production grew by 27 percent between 2002 and 2003, and software production by 40 percent. By the end of 2003, there were 2,500 registered ICT businesses-including 570 software companies-and 12,000 ICT workers. The ICT sector contributed 0.3percent to GDP growth from 1993 to 2001. The government wants to build up clusters and software parks in Ho Chi Minh City boasts online education facilities, a ready ICT workforce, and local software development operations, companies that manufacture personal computers, and a university and colleges.

<u>Sources</u>: World Bank 2005b, "Promoting Innovation in Developing Countries – A Conceptual Framework", World Bank Policy Research Working Paper 3554. Also in "Building Knowledge Economies – Advanced Strategies for Development", WBI Development Studies, 2007. 48. To implement the Industrial Letter Policy (LPI), the Government resorts to the following instruments and actions:

C1. EDBM: ECONOMIC AND INDUSTRIAL POLICY TOOL AND ORIGINAL INVESTMENT PROMOTION STRUCTURE

49. The *Economic Development Board of Madagascar* (EDBM), instituted through Decree of 31 May 2006 as an economic and industrial policy instrument of the State, at the same time serves as a structure for promoting investments. As such, it takes over the work by two structures of the second Project for the Private Sector Development [Projet de Développement du Secteur Privé (PDSP-2), namely the *Committee for Supporting the Steering of Enterprises* [*Comité d'Appui au Pilotage de la Relance de l'Entreprise* (CAPE)] and the *One Stop Desk for Investments and Enterprise Development* [*Guichet Unique des Investissements et de Développement des Entreprises* (GUIDE)]. It has been effective as of 1st January 2007 after putting in place its Board of Directors. It operates under the World Bank financing up to US\$7 million for the first three activity years. Beyond such government entity, it will be self financed through other financing sources. It has the following features:

- It is directly steered by the President's Office of the Republic.
- The interface role between the private sector and the public sector, which used to be played by CAPE, is from now on partly taken over by the *Board*, and partly by the Ministry in charge of the private sector.
- Unlike that of GUIDE which was an administrative structure grouping representatives from the existing administrations, the mission of the *Board* consists in promoting Madagascar abroad as an investment friendly destination, in supporting/accompanying investment projects the most upstream possible, and in making proposals for improving the business climate.
- In the present stage, the *Board* more particularly focuses on six favored action sectors: tourism, *agribusiness*, light export industry, mining, infrastructures, and information technologies.
- 50. In its current status, the *Board* is managed by:
 - Four administration representatives (The Minister in charge of Economy, Planning, Private Sector, and Trade; the Minister in charge of Finance and Budget; the Minister in charge of Agriculture; and the Minister in charge of Decentralization and Land Management);
 - Four representatives of the private sector; and
 - One representative of the President's Office of the Republic.

- 51. It consists of three departments:
 - The Department «Promotion and Public Relations » (« Promotion et Relations Publiques»), with three main missions: (i) defining the image of Madagascar (this department will also engage public relation actions at the international level by participating and organizing events to draw investments); (ii) strategic watch; and (iii) operational marketing;
 - The Department *«Facilitations and Services («Facilitations et Services»)*, the double mission of which consists in supporting/accompanying and helping investors all along the project; and in putting forward and implementing improvements in the procedures that are likely to act as a brake to investments; and
 - One Administrative Department.

52. It is appropriate to note that the Department *Facilitation* deals especially with streamlining the procedures and acts as a *«One Stop Desk»*. Inside this department, there is the *Front Office* which is in direct contact with investors and the *Back Office* which works especially with the ministries involved in granting permits, visas and authorizations. The *Promotion* Department, for its part, is in charge of marketing Madagascar as a destination for investments. As these promotion activities are structured, they are completely disengaged from the central industry administration, which must provide the *Board* with working flexibility and a service quality which the administration is typically in a bad position to provide. Indeed, exercising functions for promoting and regulating investments requires, at both management and staff levels, very different motivations and talents and, in practice, the regulation aspect often tends to take precedence over promotion.

53. With a view to streamlining the processes, the *Board* was empowered by the ministries to grant authorizations and approvals. For the purpose of monitoring the achievements by the entity, performance indicators would be put in place with annual objectives over three years.

54. Finally, the *Board* is still responsible for kick starting and monitoring the studies over four development: (i) kick starting a Development Bank; (ii) continuing the development of industrial zones and free zones in order to benefit from the competitive advantage of Madagascar in terms of labor costs; (iii) favoring the development of SMEs and SMIs for an intensive use of surplus labor; and (iv) promoting the development of microfinance (through the financial institutions) to accelerate the development of SMEs/ SMIs.

C2. INCENTIVES AND INSTITUTIONAL SUPPORT SERVICES FOR PROMOTING EXPORTS

55. In the area of export promotion, what seems to be missing the most in Madagascar is access to consultancy services in prospecting and exploring external markets, product packaging, improved systems for product inspection and quality control, research for cost reduction at all supply stages, pre investment studies regarding export projects, sale and distribution operations on export markets, or acquisition of know how in design and *process*. In such conditions, success in export development would largely depend on the government will to implement the two facets of a strategy of export incentives which includes, on the one hand, the **design and efficient setup of export services**. Regarding the latter point, it is appropriate to consider the creation of a committee which would be put under the presidential authority and which, in the light of the South Korean model, would set to listening to reports on malfunctioning in export policies and services (marketing, procedures ...) and to making proposals to improve export promotion.

56. Right now, the Government is concerned with putting in place a *One Stop Desk for Exports* in order to facilitate the export procedures; under the incentives it planned the establishment of a **special fund** for exports. An export promotion agency, of the same kind as CEPEX (*Export Promotion Center*) in Tunisia is also under study. CEPEX in Tunisia is an entity completely separate from FIPA, which for its part is the investment promotion agency; but in terms of representation abroad, both entities share the same premises abroad.

C3. METROLOGY, STANDARDIZATION, TRIAL, AND QUALITY CONTROL (MNEQ)

57. Traditional exports account for a large part of Madagascar international trade. Lack of compliance with quality and standards required at international level remains one of the main factors limiting the development of exports.

58 Further, competition, namely in textile and clothing industries, has nowadays taken up new forms which somehow mitigate the importance of low salaries as a benefit. Indeed, for products, the sale niche of which is measured in week number, the factor indispensable to their competitiveness is less the attraction of labor costs than the reliability of logistics in the supply chain and the capacity of complying with extremely short delivery periods. The same type of consideration applies to agribusiness sector in which the crucial factors are reliable cold chain and rapid logistics, as well as quality control. Such industries require not only a high quality infrastructure but also good understanding of needs and effective collaboration on the part of parent administrative authorities.

59. It is therefore appropriate to improve infrastructure in metrology, standardization, trial, and quality control (MNEQ), so that enterprises may address the organizations approved for purposes of trial, certification, and standardization. It would be desirable that the national MNEQ services meet at least 60 to 75% of corporate needs in this area.

60. The establishment of a national system for metrology, standardization, trial, and quality control is a large scale work, and the actions to be conducted involve both the setting up of the national certification system and the creation of analysis laboratories, after identifying the existing or planned industrial products and after judicious selection of the laboratory material. It would be convenient, for a good conduct of the operations, to take inspiration from the experience acquired by Mauritius regarding the development of such technological infrastructures (see next box). UNIDO, which has a long experience of assistance in the area, may bring in an important contribution.

Mauritius : Experience in technological infrastructure development

The rapid growth in Mauritius manufactured good export was supported by a technological support scheme which includes a number of strengths. Such scheme involved several institutions involved in metrology, standardization, trial, and quality control, enhanced productivity, training, help to SMEs, and technology distribution – and which have been considerably strengthened in recent years. Among such institutions, it is appropriate to quote the Mauritian Standardization Office [Bureau de Normalisation Mauricien (BNM)] and the Plan for Distributing Technology [Plan de Diffusion de la Technologie (PDT)].

BNM is the official body in metrology, standardization, trial, and quality control. It includes a 63 employee staff (including 30 scientists, engineers, and technicians), and its current budget is US\$0.8 million in 1995/96. Towards the mid 90s, BNM received assistance from the World Bank Project « Technical Assistance to Enhance Competitiveness» with a US\$ 3.5 million and a US\$1.5 million input from the government. A twinning agreement was passed with the *Singapore Institute of Standards and Industrial Research* (SISIR) to enhance the expertise level. The accumulation potential via collaboration with best practice institutions was skillfully tapped by Mauritius: the World Bank Project and the twinning agreement together largely contributed to enhance BNM capacities.

BNM has six divisions (Standard Development, Quality Assurance, Metrology, Engineering, Chemistry, Documentation and Information), and it means to reach soon the objective of 50% self financing. In the light of industrial countries, the trial and quality control services are already fee paying services. BNM is planning to set up a national accreditation scheme for trial and calibration laboratories, which appear to be a pressing need for more than 25 private laboratories in the country, most of which showed interest in accreditation. According to the involved enterprises, the level of services provided by BNM is high. BNM quality and efficiency certainly explains the increasing number of Mauritian firms which secured ISO certificates (92 at end 1999 and 210 at end 2002), the second highest number certificates in Sub Saharan Africa, just after South Africa and despite the smaller size of the Mauritian economy.

The Plan for Technology distribution (PDT) is a project founded by the World Bank, which aims to create a market for technology services through temporary reduction in the cost of such services. The underlying idea is to come and support the demand in consultancy services from private firms, by subsidizing the cost of such services. The hope is to urge such firms to resort to the services provided by many organizations existing in the country, and therefore to increase the acceptance of the latter in the industrial world.

The project started in 1994 with a US\$ 2.7 million financing distributed over four years. It was set up by the Ministry of Industry, and managed by a private contracting entity. It subsidizes firms up to 50% of costs for acquiring competitiveness services such as: enhanced productivity, quality and design services, and information/investigation on new technologies. Each firm may receive one subsidy per service and will have to pay the full market price thereafter. According to preliminary assessments, the project has experienced much success. A comprehensive project assessment has not taken place yet but there is sufficient evidence to conclude that the enterprises which were subsidized that way have most of them multiplied their turnovers and their exports.

Source : Lall and Wignaraja (1998), taken over in Industrial Development Report 2004, UNIDO

C4. INDUSTRIAL RESTRUCTURING/ UPGRADING

61. In anticipation of the opening of regional and international markets, the restructuring and the upgrading of the Malagasy industry have from now on become priority programs for the Government, with the purpose of promoting and developing a competitive industrial sector endowed with institutional and human capacities and skills.

62. In order to avoid that the liberalization process now or over time produces perverse effects, and even a deindustrialization as was the case in some countries, namely African ones, which were not able to implement in time the required safeguarding and supporting actions, it is urgent and indispensable that:

- The Government discusses, sets with representatives from the private sector, and implements for a transitory period, a number of appropriate supporting and help actions;
- Any industrial enterprise, having a real added value, accepts to make indispensable adaptation
 efforts, and commits into a program for upgrading and improving on a continued basis in order to
 reach and keep the minimum competitiveness level required at the international level.

63. Supporting actions must be limited in time and must not look for guaranteeing to enterprises such or such profit margin, nor such or such market share, because subsidies typically delay adjustments and innovation instead of promoting them.

64. The restructuring and upgrading approach was designed and kick started by UNIDO in 1995 to respond to various requests formulated namely by some countries in the area South of the Mediterranean, Eastern Europe, and Asia. Such assistance is part of the main services provided under he module «quality and productivity». The module provides a set of flexible services to help create and develop the national capacities that will serve as a basis to stimulate and enhance productivity, competitiveness, and growth.

65. The issue of **human capacity building** will be addressed within the previous section and the present one.

UNIDO Overall Restructuring and Upgrading Program

First	Assistance to Design, Implementation, and Monitoring of a National Program for Industrial Restructuring and		
Component	Assistance to Design, Implementation, and Monitoring of a National Program for Industrial Restructuring and Upgrading (Recipient: Ministry of Industry)	C.T	M.T
Output I	Formulation and Assistance to Implementing a Restructuring Program		
Activity 1	Formulate, and assist in, implementation of an upgrading program	х	
Activity 2	Identify the steering committee and the structure in charge of implementing the program; identify other structures and organization that provide the interface	x	X
Activity 3	Develop a communication and sensitization program	Х	х
Activity 4	Build a body of specialists in charge of implementing the restructuring/ upgrading program	х	х
Output II	Design and Formalize Procedures and a Regulatory Framework		
Activity 1	Formalize the procedures for implementing the upgrading program	X	
Activity 2	Update the legislative or regulatory texts having a direct relation with corporate upgrading	х	
Output III	Study and Creation of a Restructuring and Upgrading Funds	v	
Activity 1	Analyze the current status in financing of material and human investment	X X	
Activity 2 Activity 3	Study the opportunities and the feasibility of creating a restructuring/ upgrading funds Assist in creation of funds and development of working procedures	~	х
ACTIVITY 5	Assist in creation of runus and development of working procedures		^
Output IV Activity 1	Study for the Creation of an Upgrading Management Chart Specify the needs through a survey among actors	х	
Activity 2	Outline the scheme for keyboarding, processing and presenting information; specify the technical, financial,	Â	
Activity 2	and regulatory conditions for its working	~	
Activity 3	Validate the project by the steering committee and implement it	х	
Second	Capacity Building among Structures of Support to Industry		
Component	(Recipients: Support structure)	C.T	M.T
Output 1	Capacity Building among Consultancy Firms and Banks		
Activity 1	Organize a training session on strategic diagnosis and upgrading plan	х	
Output II	Capacity Building among Standardization, Certification, and Accreditation Bodies		
Activity 1	Assess the current status of the quality of infrastructure regarding material and human resources	х	
Activity 2	Formulate a program for upgrading and build capacities among standardization, certification, metrology, and	х	
	accreditation structures		
Activity 3	Assist standardization, certification, metrology, and accreditation structures so that they obtain international recognition		x
Output III	Capacity Building among Technical Centers		
Activity 1	Assess needs and supply in technical assistance	X	
Activity 2	Organize training sessions for the technical staff in centers	х	X
Activity 3	Assist in setting up technical and trade data banks		x
Output IV Activity 1	Strengthening the Scheme for Supporting Foreign Trade Assess the current status of the scheme for supporting and export incentive, and access to international	x	
A ativity 2	market	v	
Activity 2 Activity 3	Formulate an assistance program aiming to facilitate international trade (Trade Facilitation) Assist in implementation of program	X X	х
Third	Program of Support to Restructuring and Upgrading of Pilot Enterprises Selected among Priority Sectors		
Component	(Recipients: Enterprises)	C.T	M.T
Output I	Diagnosis Report for the Upgrading of each Selected Pilot Enterprise		
Activity 1	Diagnosis of market products and of strategic positioning	х	
Activity 2	Financial Diagnosis	х	
Activity 3	Diagnosis of management skills	X	
Activity 4	Diagnosis of technical skills and quality diagnosis	X	
Activity 5	Formulate a diagnosis report	х	
Output II	Choice of Upgrading Strategy for each Enterprise		
Activity 1 Activity 2	Studies of possible strategies Choice of an upgrading strategy for each selected enterprise	X X	
Output III	Implementation Plan		
Activity 1	Formulate a bankable upgrading plan	х	
Output IV	Direct Assistance in Implementation		
Activity 1	Training Action	х	х
Activity 2	Assistance in execution and monitoring of immaterial investments, including: ISO certification, introduction of	Х	Х
	HACCP [,] partnership prospecting, etc.		

Source: «Methodological Guide: Restructuring, Upgrading, and Industrial Competitiveness», UNIDO 2002.

C5. INDUSTRIAL EXTENSION SERVICES AND STRENGTHENING OF REGIONAL CENTERS FOR INDUSTRIAL AND TRADE DEVELOPMENT [CENTRES REGIONAUX DE DEVELOPPEMENT INDUSTRIEL ET COMMERCIAL (CERDIC)

66. With a view to triggering off the population entrepreneurship dynamics (especially in rural areas), there is a need to consider the setting up of industrial extension services. This is the purpose for which the MAP planned the creation of the various *Centres Régionaux de Développement Industriel et Commercial* (CERDIC). Such Centers will naturally be **strengthened** in order to provide supervision to SMEs/ MSEs. They will work as a development agency without executive power for regulatory controls in no industrial activity sphere. They will also be called upon to intervene in favor of developing corporate *nurseries* and *clusters*.

67. In order to promote the industrial extension services on a large scale, there is a need to consider an effective institutional support that will provide information on technology sources and identify, as well as negotiate, technology transfers to enterprises/ developers that would like to start in new activities. Such institutional support may also take up the form of an interface structure to favor the introduction of technologies adapted to the context of Malagasy SME/SMI. The interface function may also be effectively assumed by CERDICs.

C5. FINANCIAL TOOLS

68. The Malagasy financial system is not quite deep and has not been efficient to promote growth on a large scale. The Malagasy economy is little monetized; credit to the private sector is limited, and the economy is still largely cash oriented (see following table); it is obvious that all this does not at all foster private sector induced growth.

	Iı	In money base %	
	Money Base	Credit to private sector	Circulating money
Madagascar	21.6	09.9	27.5
Mozambique	28.4	13.9	16.9
Mauritius	85.8	58.2	
South Africa	71.2	74.1	04.9
Bangladesh	39.0	28.7	
Vietnam	82.4	66.0	19.0
Jamaica	37.6	16.9	12.2

69. The Malagasy financial system suffers from lack of competition and low level of access to medium and long term financing. The existing financial institutions prefer to protect themselves against risks, and financial intermediation cost is high. Consequently, private sector financing needs are largely unmet; even SME access to short term financing is limited. Several microfinance institutions support small private initiatives, but the borrowing rate (3% per month) is very high.

70. It is useless to remind of the crucial importance of a performing financial market for promoting growth and economic development. The fact that Madagascar does not even have a bank for agriculture, and that microfinance is of limited access, was singled out as the main obstacle to agriculture growth and development of processing activities in rural areas. The Government is now examining the **means to considerably increase private operator access to credit**. One of the suggestions put forward consists in levying a tax on liquidity surplus dormant in banks. Other actions, which consist in urging banks to increase credit to rural sectors by obliging them to open a number of rural branches for each branch opened in metropolitan areas, are also under study.

C7. THE NATIONAL SYSTEM FOR INDUSTRIAL INNOVATION

71. Reports by UNIDO on industrial development highlighted that it was important to strengthen competitiveness thanks to innovation and to learning, to rely on industrialization to reduce poverty and to build capacities to catch up the delay. In an ideal industrial innovation system, universities produce new knowledge that is put into practice by laboratories and commercially used by dynamic enterprises. Such an interactive framework is of crucial importance.

72. Knowledge is one source and innovation, strength. It is imperative to innovate to free Madagascar whole development potential. In order to define a **national project for strengthening the industrial innovation system** in Madagascar, the following are recommended:

- To undertake a diagnosis study on the scope and effectiveness of the existing industrial innovation system in order to spell out the major principles of a science and technology (S&T) policy fostering sustainable industrial development;
- To optimize the use of data at disposal on S&Ts and R&D, in order to define the actions to be conducted in order to seize the upcoming opportunities;
- To create worldwide level technological, including by networking in work with foreign universities;
- To create an environment favorable to enterprises, which encourages resort to S&Ts to boost growth;
- To promote a Foreign Direct Investment (FDI) regime favorable to trade partnerships, with more
 effective technology transfer by strengthening the adaptation capacities required for acquiring
 technologies, assimilating, adopting, and adjusting them to local needs;
- To create a social climate that values those who hold scientific knowledge;
- To encourage scientists to publish their research work;
- To support the initiatives which involve local innovations.

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