

INTERNATIONAL DEVELOPMENT ASSOCIATION AND
INTERNATIONAL MONETARY FUND

MADAGASCAR

**Decision Point Document for the Enhanced Heavily
Indebted Poor Countries (HIPC) Initiative**

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CURRENCY EQUIVALENTS

Currency Unit	=	Malagasy Franc (MGF)
US\$1	=	MGF 6690 (October 31, 2000)
SDR 1	=	US\$ 1.2765 (October 31, 2000)

WEIGHTS AND MEASURES

Metric system

ABBREVIATIONS AND ACROYNMS

AfDB	African Development Bank
BTM	National Rural Development Bank
CAS	Country Assistance Strategy
CIRR	Commercial Interest Reference Rate
CSB	Centre de Santé de Base
CPI	Consumer Price Index
DSA	Debt Sustainability Analysis
ESAF	Enhanced Structural Adjustment Facility
EU	European Union
GDP	Gross Domestic Product
GNP	Gross National Product
HIPC	Heavily Indebted Poor Countries
HIV/AIDS	Human Immuno-deficiency Virus/Acquired Immune Deficiency Syndrome
IDA	International Development Association
IFC	International Finance Corporation
IGE	National Auditing Office
IMF	International Monetary Fund
INSTAT	Institut National de la Statistique
JIRAMA	National Power and Water Company
JSA	Joint Staff Assessment
MINSAN	Ministère de la Santé
MINSEB	Ministère de l'Éducation
NGO	Non Governmental Organization
NPV	Net Present Value
PADR	Action Plan for Rural Development
PNSP	National Program to Support the Private Sector (<i>Programme National d'Appui au Secteur Privé</i>)
PRGF	Poverty Reduction and Growth Facility
PRSP	Poverty Reduction Strategy Paper
SAF	Structural Adjustment Facility
SDR	Special Drawing Rights
SNLCP	Stratégie Nationale de Lutte Contre la Pauvreté
TELMA	National Telecommunications Company
VAT	Value Added Tax

INTRODUCTION

1. This paper presents an assessment of Madagascar's eligibility for assistance under the enhanced HIPC Initiative. The Executive Boards of IDA and the IMF discussed the preliminary HIPC document (IDA/R2000-188 and EBS/00/209) for Madagascar on November 2 and November 8, 2000, respectively. Executive Directors agreed that Madagascar is eligible for assistance under the enhanced HIPC Initiative on the basis of its high debt burden, its track record of performance under IDA and IMF-supported reform programs, and its current status as an IDA-only and Poverty Reduction Growth Facility (PRGF) eligible country. Executive Directors also agreed that Madagascar could reach the decision point in 2000, provided that Madagascar (i) presents a satisfactory interim Poverty Reduction Strategy paper (I-PRSP) to the IDA and IMF Boards, and (ii) remains on-track with its macroeconomic program under the PRGF arrangement. In the opinion of IDA and IMF staff, Madagascar has met the conditions for reaching the decision point.

2. **Poverty in Madagascar.** Fighting poverty is Madagascar's key challenge. Poverty in Madagascar is widespread and deep. Seventy percent of the population live in poverty, some 80 percent of them in rural areas. Ninety percent of the poor cannot afford to purchase a minimum food basket even if they spent everything on food alone. Malnutrition affects half the children under five. One third of the adult population is illiterate, and child mortality exceeds the high average level of Sub-Saharan Africa. Access to basic services as well as primary health and education is low, especially for the rural poor.

3. **The I-PRSP.** Government produced an Interim Poverty Reduction Strategy Paper (I-PRSP) based on consultations with civil society and the donor community. The I-PRSP and the Joint Staff Assessment (JSA) of IDA and IMF staff are being submitted together with this document to the IDA and IMF Boards. The Government's I-PRSP outlines an emerging poverty reduction strategy built on three pillars: (a) higher and more sustainable levels of economic growth that reaches the rural areas; (b) governance and institutional reform; and (c) improved delivery of basic services. This strategy will be developed further and spelled out in detail in a full PRSP, scheduled to be submitted to the IDA and IMF Boards in the second half of 2001.

4. **Government's Program.** In the context of its emerging poverty reduction strategy, Government plans a number of short-term actions. A subset of these actions have been agreed upon as triggers for the floating completion point. The government's short-term actions stress the importance of institutional development and good governance, which is necessary for an investment environment conducive to stable growth and efficient delivery of basic services to the poor. Thus, key elements of the program include: (i) improving budgetary control for public services, financial monitoring mechanisms and information dissemination; (ii) strengthening the natural resource management system, especially in the forestry sector; (iii) strengthening judicial systems; (iv) improving rural infrastructure; (v) increasing access to education for the poor; (vi) broadening the health system; and (vii) establishing a poverty monitoring system.

5. **HIPC Relief and Use of Resources.** Madagascar's external debt would be reduced significantly with the delivery of assistance under the enhanced HIPC Initiative. Debt service savings would amount to about US\$59 million per year (1.1 percent of GDP) on average during

the period 2001-2019. Government has provided IDA and IMF staff with a detailed plan for using those resources in support of its poverty reduction program. The plan allocates the resources to priority areas, among them primary education and health, rural roads, clean water and a poverty monitoring system. It was agreed that IDA and IMF staff will monitor the use of resources by: (a) analyzing the changing composition of public expenditures, (b) using household surveys to study patterns of expenditures, and (c) including a mechanism of expenditure tracking. The use of interim debt relief will be reported and discussed biannually during the PRSP consultative process.

II. BACKGROUND

A. Poverty and Social Development

6. Poverty in Madagascar is among the highest in the world. In 1999, more than 70 percent of the population was classified as poor¹ (Table 1). And poverty is exceptionally deep: nine out of every ten poor Malagasy were extremely poor.

TABLE 1: POVERTY DEVELOPMENTS 1993-1999

		1993	1997	1999
Poverty (headcount index)	National	70.0	73.3	71.3
	Urban	50.1	63.2	52.1
	Rural	74.5	76.0	76.7
Extreme Poverty (headcount index)	National	59.1	63.1	61.7
	Urban	37.6	54.0	43.2
	Rural	64.0	65.6	67.0

Source: INSTAT, Cornell University and World Bank staff estimates.

7. **Changes in poverty over time.** Over the past few years, poverty has fluctuated somewhat. As indicated in Table 1, changes in poverty (and extreme poverty) were largely caused by changes in the urban poverty rate. Over the period 1993-1999, the percentage of the rural population living in poverty increased.

8. **Rural poverty.** While the swings in poverty were largely driven by changes in the urban poverty rate, the vast majority of the poor (more than 80 percent) live in rural areas. Thus, the key to sustained poverty reduction in Madagascar is to raise rural living standards. Rural poverty and living standards are partially related to access to irrigated land. Land distribution remains highly unequal with 1 percent of rural households owning 22 percent of total irrigated land.

9. Poverty analysis also shows that rural poverty is closely linked to limited access to public infrastructure, such as electricity and roads. Although educational performance in rural areas

¹ Based on household surveys conducted in 1993, 1997 and 1999, the poor are defined as those with annual per capita expenditures of FMG 313,945 (US\$ 164) or less in 1993 prices.

improved somewhat between 1993 and 1999, it remains extremely low with on average of only 4.8 years of education for the head of the household (Table 2). Returns to education are low, since many rural areas are so isolated that subsistence farming remains the sole activity of households. In participatory analyses, rural households stress isolation as their major concern, in addition to lack of stable incomes and lack of access to key public services. As presented in Table 2, electricity and water connections are virtually absent in rural areas, and educational attainment is very low.

TABLE 2. SOME CHARACTERISTICS OF THE POOR, 1993 AND 1999¹

	Total	Poor	Non-Poor	Rural	Urban
Electricity connection, %					
1993	9.1	3.1	23.4	2.3	39.5
1999	13.1	5.7	31.5	3.6	46.4
Public Water Supply, %					
1993	18.7	13.1	31.9	7.5	68.3
1999	21.6	14.3	39.7	8.8	65.5
Crowding: square meters per person					
1993	4.5	3.6	6.4	4.3	5.3
1999	4.9	4.0	7.1	4.6	6.0
Education: years per household head					
1993	3.8	2.9	5.2	3.0	6.8
1999	5.3	4.4	6.7	4.5	7.7
Public Health Service Utilization, %					
1993	36.9	36.0	39.3	35.4	43.1
1999	35.1	30.3	36.8	34.7	36.6
Population Distribution, millions					
1993	12.2	8.6	3.6	10.0	2.2
1999	14.6	10.4	4.2	11.3	3.2

Source: INSTAT, Cornell University, and World Bank estimates based on EPM (1993 and 1999)

¹ Small variations to data presented in the I-PRSP are due to weighting procedure used.

10. **Urban poverty.** Some 22 percent of Madagascar's population lives in urban areas. More than 50 percent of the urban population is poor, accounting for 16 percent of the total number of poor in Madagascar. Poverty in urban areas is strongly linked to the labor market and education. Differences in the length and quality of education received explain the bulk of the income gap between the urban poor and non-poor. Access to clean water, sanitation, garbage disposal and shelter are also critical determinants of poverty. While a larger percentage of the urban population has such access compared to rural Madagascar, absolute access rates are still very low. In fact, the percentage of the urban population that had access to public water supply declined between 1993 and 1999 due to a strong increase in the urbanization rate (Table 2, and I-PRSP, section I.2.4, Table 13).

11. **Living standards.** The pervasiveness of poverty is also reflected in other social indicators (Table 3). In 1993, the stunting rate among children under five, an indicator of chronic malnutrition, stood at 51.1 percent, dropping only slightly to 48.3 percent in 1997. The infant, child and maternal mortality rates are around or above those for Sub-Saharan African countries. Malaria and respiratory infections alone make up more than 50 percent of all reported illnesses.

12. **Gender differences.** Poverty rates among male and female-headed households are similar. Enrollment of girls in school is virtually the same as that of boys, although illiteracy rates are higher among adult women than adult men. Women also have significantly more restricted access to credit than men. Existing household surveys do not measure the distribution of resources, so no gender-specific poverty rates are available at the individual but only household-head level.

TABLE 3: SELECTED SOCIAL INDICATORS

	Madagascar	Sub-Saharan Africa
(in percent, unless otherwise specified)	<i>Latest single year (1993-1999)</i>	
Population in millions (1999)	14.6	642
Population growth (1999)	3.1	2.4
Fertility rate (1998)	5.7	5.4
GNP Per Capita in US\$ (1999)	250	500
GNP in US\$ billions (1999)	3.8	321
Stunting among children under five (1997) a/	48.3	38.6
Wasting among children under five (1997) a/	7.4	3.2
Underweight among children under five (1997) a/	40	28.4
Infant mortality rate (per thousand, 1998) ¹	92	91.8
Child mortality rate (per thousand, 1998) ¹	157	151
Maternal mortality (per 100,000 / live births, 1997) ¹	488	...
Life Expectancy at birth (years, 1998)	58	50.4
HIV/AIDS prevalence (1999) b/	0.15	8
Literacy rate (1999)	50	61

¹ Small variation of mortality rates with I-PRSP figures are due to different data sources used.

Sources: Madagascar Poverty Assessment, World Bank, 1996; World Development Indicators.

a/ Sub-Saharan data are from 1995.

b/ Sub-Saharan data are from 1997-1998.

B. Macroeconomic Performance and Structural Reforms

13. After a long period of weak economic performance, Madagascar's economy has begun to show improvement: since 1997 growth averaged about 4 percent a year while inflation has been reduced significantly compared to pre-1997 levels (Box 1). These encouraging results are due to the implementation of a reform program based on stabilization of the economy, privatization of key enterprises and a gradual liberalization. The program, beginning in the late 1980s but interrupted in the early 1990s due to political events, was supported by successive SAF and ESAF arrangements and two structural adjustment credits. However, improved economic performance has not yet led to decisive poverty reduction in rural areas. Madagascar needs to improve basic services for the rural poor and to move to a next generation of reforms. These reforms should focus on capacity building of institutions that are needed to sustain a growing market economy and ensure an equitable distribution of the opportunities and resources brought about by economic expansion.

BOX 1. MACROECONOMIC PERFORMANCE, 1990–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Est. 2000
	(Annual percentage change)										
Real GDP at market prices	3.1	-6.3	1.2	2.1	0.0	1.7	2.1	3.7	3.9	4.7	4.8
Consumer price index (annual average)	11.8	8.5	15.3	9.2	39.1	49.0	19.8	4.5	6.2	9.9	10.9
Consumer price index (end of period)	...	...	...	...	...	...	8.3	4.8	6.4	14.4	7.5
	(In percent of GDP, unless otherwise indicated)										
Tax revenue	9.4	6.8	8.7	8.2	7.7	8.3	8.5	9.4	9.8	11.0	12.2
Overall fiscal balance (excluding costs of structural reform and grants)	-5.1	-7.7	-10.1	-10.7	-11.4	-9.1	-9.1	-7.7	-8.1	-4.8	-5.5
Overall fiscal balance (excl costs of structural reforms, and including grants)	-0.7	-5.5	-6.6	-7.2	-8.4	-5.8	-4.9	-2.4	-4.7	-1.2	-0.8
External current account (excluding official transfers)	-12.4	-10.0	-9.2	-9.9	-10.9	-10.2	-7.1	-7.8	-7.9	-6.3	-8.7
External current account (including official transfers)	-10.7	-8.6	-6.6	-7.7	-9.3	-8.7	-5.0	-5.5	-7.4	-5.4	-7.2
Gross official reserves (in weeks of imports of goods and services)	5.4	6.5	6.1	5.2	3.6	5.4	8.7	10.4	5.0	7.0	7.4

Source: Malagasy authorities; and IMF staff estimates and projections.

14. **The first phase of reforms.** During 1987–1991, Madagascar undertook reforms focusing on price and trade liberalization, and public enterprise restructuring (Box 2). These reforms were supported by two annual SAF arrangements (1987-88) and two annual ESAF arrangements (1989-90) from the IMF. The reforms were successful in eliminating the most acute distortions and rigidities, but public enterprises continued to dominate the industrial sector while the banking system remained largely under state control.

15. **Political instability.** The period from mid-1991 to 1993 was marked by general strikes, civil unrest and political instability that crippled government and commercial activity. This period ended with the adoption of a new constitution based on a multi-party democracy, and general elections. The new democratically elected Government attempted to launch an economic liberalization and privatization program. However, program implementation was weak in 1994-1995, and political pressure led to large budget deficits, inflation and a sharp exchange rate depreciation.

16. **The second phase of reforms.** Tight monetary policy and improved revenue collection resulted in macroeconomic stabilization in 1996 and paved the way for the continuation of a medium-term structural adjustment program, supported by a new three-year ESAF arrangement (approved in November 1996) and a structural adjustment credit from IDA (approved early 1997). Under the first annual ESAF arrangement, virtually all macroeconomic targets were met and an ambitious public enterprise divestiture program as well as improvements in the tax and customs administration were initiated. A second annual ESAF arrangement could not be finalized in 1998 as significant institutional reforms were delayed due to intense political activity associated with a constitutional referendum and parliamentary elections. In spite of these delays macroeconomic performance remained satisfactory during this period with growth rates averaging 3.8 percent in 1997-98.

17. In July 1999, the second annual ESAF arrangement was approved by the IMF Board, while IDA approved a new structural adjustment credit. Performance under the program in 1999 was satisfactory in the areas of economic growth and exports, reducing the external current account deficit (including grants) by 2.0 percentage points of GDP to 5.4 percent (see Table 18). However, due to adverse weather conditions and an increase in oil prices, the rate of inflation was higher than planned at 14.4 percent on an end-period basis. Fiscal performance was better than programmed, with the overall deficit (on a cash basis, including grants but excluding the cost of structural reforms) falling to 1.2 percent of GDP, down from 4.7 percent in 1998, and below the program target of 2.5 percent of GDP. Tax and tax administration reforms raised government revenue to 11.0 percent of GDP, up from 9.8 percent in 1998. For 2000, and in spite of the damage caused by three cyclones earlier in the year, real GDP growth is estimated to have reached 4.8 percent and inflation is projected to have abated to 6 percent on an end-of-period basis. Fiscal performance remained on-track in 2000, with tax revenue rising as programmed to 12.2 percent of GDP and the deficit, including grants but excluding the cost of structural reforms, declining to 0.8 percent of GDP. All quantitative performance criteria for end-June 2000 under the PRGF-supported program were met as were all quantitative benchmarks for end-September 2000 (see Appendix II). While exports continue to perform well, the external current account deficit, including grants, widened by 1 percent of GDP as imports increased significantly due to

reconstruction and food imports in the wake of the cyclones and increased outlays for petroleum imports.

BOX 2. MAJOR STRUCTURAL REFORMS, 1987-2000

Incentive and trade policies

- Coffee, clove, vanilla and rice production and markets liberalized (1987-1997).
- Import restrictions and licensing requirements eliminated (1998-2000).
- Application of increasingly simplified tariff structure in line with regional trade arrangements (1987-2000).
- Price controls abolished (1986-1995).
- Abolition of export taxes (1988-1997).

Exchange and payment policies

- Removal of restrictions on current account transactions and acceptance of the obligations under Article VIII, Sections 2(a), 3 and 4 (1996).
- Establishment of foreign exchange market determining floating exchange rate (1994).

Privatization of public enterprises

- Rehabilitation and liquidation of public enterprises (1986-1987).
- Legislative basis for privatization established (1996).
- Abolition of legal state monopolies in key sectors: power, petroleum, telecommunications, and air transport (1996).
- Licenses issued for cellular telecommunications operations (1996).
- Sale of components of state-owned petroleum company, effectively ending both state control and monopoly in the sector (2000).

Fiscal and public sector reforms

- Introduction of VAT, elimination of ad hoc tax exemptions, and reform of business and excise tax (1994-2000).
- Reform of tax and customs administration (1997-1998).
- Rationalization of civil service and introduction of incentive system (1998-2000).

Monetary and financial sector reforms

- Authorization of private banks (1998).
- Privatization of three state-owned banks (1996-1999).
- Legal provision for central bank independence (1994).
- Establishment of independent supervisory authority for the financial sector (1998).
- Establishment of auction and treasury bill systems required to replace direct methods of monetary control by indirect, market-based methods (1990-1998).

18. Under the 1999–2000 PRGF-supported program, significant progress was made on structural reform in the banking and telecommunications sectors and government administration. The Government's ambitious privatization program has so far resulted in the divestiture of 56 companies including 19 petroleum related companies, which account for US\$110 million of receipts and US\$70 million of investment. The government concluded its divestiture of the banking sector in November 1999 with the privatization of the remaining state bank, BTM. Privatization of the key components of the petroleum sector was finalized in June 2000. The privatization of Air Madagascar is scheduled for completion in early 2001, and that of the

national telecommunication company, TELMA, in the second half of 2001. By end-December 2000, the period of uninterrupted track record under the current PRGF-supported program will have been one and a half years. Discussions for a successor PRGF arrangement are scheduled for December 2000, and a new program is expected to be submitted to the IMF Board in early 2001 together with a request for a new PRGF arrangement.

III. OUTLOOK FOR POVERTY REDUCTION

19. The Government, in consultation with civil society and donors has prepared an I-PRSP that outlines a broad strategy for poverty reduction and includes a detailed plan for preparing the full PRSP through a broad participatory process plan. To achieve the ambitious poverty reduction targets outlined in its strategy, the Government is beginning to implement a new generation of reforms focusing on pro-poor growth and institutional development. At the same time, it continues to implement sound macroeconomic policies to maintain financial stability, growth and poverty reduction.

A. Formulation of the Poverty Reduction Strategy

20. The foundation of a poverty reduction strategy in Madagascar was laid in March 1999, when the Government developed a comprehensive anti-poverty strategy "Stratégie Nationale de Lutte Contre la Pauvreté" (SNLCP) with technical assistance from UNDP. Consultations on the preliminary SNLCP were held in the first half of 2000 predominantly at the regional level.

BOX 3: PILLARS OF MADAGASCAR POVERTY REDUCTION STRATEGY

Higher and Sustainable Rates of Economic Growth that also Reaches the Rural Poor

- Sustain stable macroeconomic environment
- Introduce additional supply side measures which are conducive for private initiative
- Expand rural income while protecting Madagascar's environment

Governance and Institutional Reform

- Ensure wider participation of the population in the decision making process through decentralization
- Streamline budgetary procedures
- Increase the accessibility and confidence in the legal system

Improved Delivery of Basic Social Services

- Increase enrollments in primary education while reducing repetition and drop-out rates
- Enlarge community health facilities to improve fight against malaria, render generic drugs available widely, and accelerate effort to contain HIV/AIDS prevalence at low levels
- Expand substantially the rural roads network

21. The formulation of the I-PRSP builds on the analytical work undertaken in the SNLCP. In September 2000, the PRSP process was officially launched with a large workshop held in Antananarivo that brought together around 500 participants from the government, non-governmental organizations (NGOs), donors, and the private sector. Following consultations on

this draft of the I-PRSP with civil society groups and the donor community, the final version of the I-PRSP was produced in November 2000. To develop the full PRSP, the Government intends to hold regional consultations and interact with a large number of stakeholders. The presentation of the full PRSP is expected in the fall of 2001.

22. The emerging poverty reduction strategy, as described in the I-PRSP (Chapters II and III), is based on three pillars: (i) the adoption of policies to attain higher and more sustainable rates of economic growth that reach the poor, especially in rural areas; (ii) the implementation of a governance and institutional reform strategy; (iii) improved delivery of basic services in sectors that are key for poverty reduction, such as education, health, nutrition, and basic infrastructure, including efforts to reduce the incidence of malaria and contain the spread of HIV/AIDS (Box 3).

23. Donors have worked closely together in supporting the PRSP process to date. Eleven of Madagascar's multilateral and bilateral partners have drafted two joint aide memoires which commented on the I-PRSP process and provided feedback to Government (one after the first large consultation in September, one after the draft I-PRSP was circulated end October). All donors actively support the process through active participation in PRSP working groups, technical assistance, or financial contributions (See Joint Staff Assessment, paragraphs 8 and 29).

B. Higher and More Durable Levels of Economic Growth

24. To accelerate growth and ensure that it is sustainable, macroeconomic stability must be maintained. Investments need to increase from about 15 percent of GDP in 1999 to 19½ percent in 2003. As the large number of poor people live in rural areas, special emphasis is being placed on rural development. However, given Madagascar's ecological richness and the fragility of its environment special care needs to be taken that rural development is environmentally sustainable.

25. **Macroeconomic policy.** The main macroeconomic objectives for the period 2001–2003 consist of: (i) increasing real GDP growth to about 6 percent per year, sustained by the expansion of export-oriented manufacturing, and higher growth in agriculture, fishing, mining and tourism; (ii) reducing inflation, as measured by the GDP deflator, from around 7½ percent to 4-5 percent, a level comparable with those of key trading partners; and (iii) reducing the external current account deficit (including grants), from 7.2 percent of GDP in 2000 to close to 6 percent, and increasing gross international reserves of the Central Bank to the equivalent of at least four months of imports.²

² Baseline assumptions of growth and inflation in the coming years are broadly similar to those underlying the I-PRSP but staff has taken a slightly more conservative view (6 percent GDP growth versus 7 percent in the I-PRSP; 4-5 percent inflation versus 5-6 percent in the I-PRSP).

BOX 4: MAIN MACROECONOMIC OBJECTIVES, 2001-2003

Fiscal policy: The main objectives are to widen the revenue base, increase progressively the revenue-GDP ratio from 12.6 percent in 2000 to over 13 percent in 2003, and reallocate expenditure toward the priority sectors. HIPC Initiative resources will be used to increase the provision of social services for the most vulnerable groups, and to improve infrastructure and the institutional base, especially in rural areas. Monitoring of budgetary execution and the auditing function is to be strengthened, while procedures for committing expenditures will be streamlined, to avoid delays in budget execution.

Monetary policy: The main objective will be to contain inflation to the range of 4 to 5 percent. Money demand is expected to grow in line with nominal GDP. Bank credit to government is expected to decline, providing adequate room for expansion of credit to the economy. Credit expansion would be consistent with an increase in official external reserves of the central bank.

Exchange rate policy: A flexible exchange rate policy will continue to be pursued, so as to maintain competitiveness with the main trading partners

26. The government's objective of a GDP growth rate of 6 percent per year over the medium term is ambitious yet achievable. It will require the continued pursuit of appropriate financial policies and improvements in the environment for private sector development so as to boost private investments. In the debt sustainability assumption section, the baseline scenario is presented assuming a real GDP growth of about 6 percent per year. An alternative scenario with lower export and real GDP growth is also presented in paragraph 63. A less ambitious assumption of GDP growth in the range of 4 would make it more difficult, however, to reduce poverty significantly.

27. To support the public programs that focus on poverty reduction, Government intends to increase tax revenue from about 12 percent of GDP in 2000 to about 13 percent in 2003. The government plans to achieve this target mainly through improved tax administration. Hence its reform program includes recruitment and training of tax and customs inspectors; restructuring of the tax and customs administrations; reinforcement of the system of revenue monitoring and control; and the strengthening of the large taxpayers unit.

28. **Supply Side Measures.** Madagascar has a substantial growth potential. Many opportunities in the areas of tourism, export-oriented manufacturing, mining, and fishing remain untapped. Given its low base and assuming continued changes in the policy environment, Madagascar should be able to achieve significantly higher rates of growth by bringing the level of private investments well above the current level of 8 percent of GDP. To this end, the Government produced a "National Program to Support the Private Sector" (*Programme National d'Appui au Secteur Privé—PNSP*). Among potential growth sectors, tourism is one of the most dynamic ones, growing at a rate of 14 percent a year over the last four years. The country's significant potential (bio-diversity, eco-tourism) remains largely unexploited (Box 5). The Government has identified "tourism development zones" and plans to offer them to investors through a competitive process. Export processing zones were created in Madagascar in 1992 and today they include 130 companies employing 40,000 workers. The country's competitiveness

together with preferential treatment of its exports in the U.S., resulting from the 2000 Africa Growth and Opportunities Act, and the European Union (EU) Lomé Convention, augur for a continued rapid increase of exports.

29. **Rural and Environmental Policies.** Agriculture provides about 35 percent of Madagascar's GDP and 40 percent of exports, almost 75 percent of the population derive their livelihood from agriculture. Four out of every five poor live in rural areas. Madagascar commands favorable conditions for growing and relatively low labor costs. Domestic resource cost calculations for earning foreign exchange indicate that both traditional and improved rice as well as the cash crops, vanilla and coffee, could be highly competitive. However, agricultural productivity has remained almost stagnant over the last decades. Deep rooted structural constraints, primarily lack of rural infrastructure, resource degradation, poorly functioning rural institutions, including land tenure and rural finance, and negligible use of new technology, need to be overcome to get the desired supply response. A key ingredient to boosting rural incomes is the rehabilitation and improvement of Madagascar's infrastructure and access to credit.

30. In response to the above problems, the Government prepared in June 2000 an Action Plan for Rural Development (*Plan d'Action pour le Développement Rural, PADR*) which underlies the I-PRSP. The PADR emphasizes (i) institutional and regulatory reforms, (ii) rural development partnerships, (iii) sustainable growth in agricultural production, (iv) regional food security, and (v) access to rural social services (see I-PRSP, section III.1.3). Regarding this last point, much of basic service delivery crucially hinges on extending the very rudimentary rural transport infrastructure (roads, culverts, foot bridges), often made impassable during the rainy season. Government is currently elaborating a rural transport policy through a participatory process. This policy will define the institutional and financing framework for rural roads (provincial and communal roads), define promotional strategies for rural transport services and intermediate

BOX 5: ENVIRONMENT, GROWTH, AND POVERTY

Madagascar is considered one of the ecologically richest countries in the world, with an estimated 80 percent of its living species unique to Madagascar. However, its unique ecology is under threat from high rates of environmental degradation. The country has already lost 80 percent of its original forest cover, more than half in the past forty years. Environmental degradation and low soil fertility are major contributing factors to the stagnating yields. In the east, under the *tavy* agricultural system, rice is grown on steep slopes after the slash and burn of virgin or secondary forests. In the central highlands, increasing population pressures are forcing people from the valley bottoms to the hillsides, resulting in a dramatic increase in rain-fed agriculture and increased erosion. In the west and south, about 1-3 million hectares of savanna grasslands are burned each year to encourage new succulent grass growth after the fire or to plant corn. Total annual costs of environmental degradation from soil erosion, silting, declining soil fertility and loss of forests has been estimated at 5-15 percent of GDP (see I-PRSP, Section I.3).

The Government is taking urgent actions to deal with the problems of environmental degradation and deforestation. As of November 2000, all extractive activities in sensitive zones have been halted and the export of logs from primary forests is prohibited. The Government is now revising the regulation of logging permit allocation to ensure transparency and limit abuse. To ensure compliance with new regulations, it is strengthening the Ministry of Forestry and Water, particularly its policing function. Finally, it has also been decided to create a "forestry observatory" (*Observatoire Forestier*) to maintain and disseminate information on logging permits issued, the extent of losses due to slash and burn agriculture, and other forest-related issues.

means of transport, will set out guidelines for service levels of rural roads and for the selection of appropriate interventions. The new strategy will place specific emphasis on maintenance of rural roads through the Roads Maintenance Fund and how this fund can be appropriately financed on a sustainable basis.

C. Governance and Institutional Reform

31. Madagascar faces a major challenge in improving the performance of its institutions. This is particularly important as the crosscutting nature of institutional reform affects the rate of sustainable growth and the provision of social services. The government is aware of the importance of good governance and has detailed its reform agenda in the I-PRSP. The authorities intend to implement a number of well-focused actions to strengthen the institutional framework, transparency, and social accountability. The main focus of the Government's agenda is on: budgetary reform, decentralization, and legal reform.

32. **Budgetary reform.** While the Malagasy public expenditure system remains weak in budget execution, transparency, auditing, and data availability, key reforms were introduced over the past few years. Budget reform remains high on both the government's and donors' development agenda. These reforms need to continue before a Medium-Term Public Expenditure Framework can be contemplated.

33. Major improvements will be made in budgetary execution, control and monitoring procedures, and ex post auditing to increase transparency, and efficiency in spending. To that end, the key priorities are to: (i) strengthen budgetary procedures to enhance timely budgetary execution at both the central and decentralized levels; (ii) improve the monitoring of budgetary execution, through preparation of comprehensive periodic reports; (iii) strengthen the treasury accounting system so as to ensure that the government accounts are closed in a timely manner, can be audited in a comprehensive fashion by the national audit court (*chambre des comptes*), and reviewed and approved by parliament through annual budgetary execution laws (*loi de règlement*) as provided by the constitution.

BOX 6: PLANNED BUDGETARY REFORMS	
Categories	Status
Expenditure codification and data system installation	<ul style="list-style-type: none"> • New budgetary nomenclature consistent with the Treasury account nomenclature allowing budget and execution data to be matched for the first time (adopted in 1999). • Introduction in 2001-02 in the key ministries (at least six) of a system permitting the monitoring of budget lines on a monthly basis and at various stages of the expenditure cycle (already operational for health and education expenditures).
Budgetary execution	<ul style="list-style-type: none"> • Decentralization of the Ministries of Primary Education and Health budgets; 111 school and health districts are executing their assigned budgets since 1999. • Direct transfer of budgetary resources to the municipalities (introduced in 1999/2000). • Acceleration of the execution of expenditures at the decentralized level to reduce irregularities and cumbersome procedures (under study).
Treasury accounts	<ul style="list-style-type: none"> • Regional principal treasurers do not submit their balances in time; consolidation at the level of the central accounting office is only done on an annual basis, and is not comprehensive. As a result, treasury has embarked on an action program ensuring a rigorous compilation and consolidation of accounts on a quarterly basis (ongoing, to be achieved in 2002).
Control and auditing	<ul style="list-style-type: none"> • Control and auditing within the budget system are weak. Execution laws tend to be submitted very late: for 1993-97 the government has submitted it in 1999; for 1998 it shall be prepared before end-2000 and submitted thereafter to parliament, and that for 1999 will be prepared in 2001. • Strengthening of national auditing court (<i>Chambre des Comptes</i>) and national auditor office (<i>Inspection Générale d'Etat, IGE</i>); recruitment of 34 additional national auditors (under way).

34. The government intends to make public finance management more transparent as budgetary processes suffer from problems in execution speed and accountability. As a result, ex-post controls and audits will be increased and procedures for reporting operational results strengthened. As a first concrete step, the government is reinforcing the role of the national auditing office (*Inspection Générale d'Etat, IGE*), and is recruiting 34 new national auditors from competitive national training programs. The number of judges of the national audit court will be increased. Measures to reinforce the *IGE* and the national audit court will be identified before end-April 2001 (see I-PRSP, Section III.3.2.1)

35. **Decentralization.** The main framework law for decentralization at the provincial level was adopted in August 2000, and elections of provincial councils to be held in December 2000. The restructuring of responsibilities will provide effective decision-making powers to local officials who, in turn, will be fully accountable to the elected provincial councils. The transfer of responsibilities to the six provinces will take place over the next 18 months, on the basis of bilateral agreements with the central government. Relations between provinces, municipalities, and departments will be defined by provincial statutes and administrative tribunals will oversee provincial acts.

36. The objective of decentralization is to bring Government closer to the people. Hence, the government will transfer responsibility for delivery of services such as local roads, primary

health and education to the provinces, and to some extent justice and police. The government recognizes that the success of decentralization will depend upon its ability to put in place a viable system of intergovernmental fiscal relations and strengthen local institutions (e.g. I-PRSP, Section III.3.1).

37. **Justice and security.** The confidence of the citizens will be increased by improving the accessibility and effectiveness of the legal system (See action plan described in I-PRSP, Section III.3.2.3). Legal reform will, therefore, be implemented in conjunction with the decentralization agenda to give the whole population the opportunity to access the legal system. To begin, the government has introduced a training program for both new and existing magistrates and distributed eight law compilations enabling magistrates to work more efficiently. Administrative and financial courts will be established in each of the provincial capitals, to ensure legal and budgetary control. Appeal courts will be decentralized and district courts will be increased in number to facilitate public access. The security forces will also be strengthened to enhance territorial coverage.

D. Improved Delivery of Basic Services

38. **Education.** In the education sector, Madagascar's main challenge lies with increasing enrollments in primary education by universalizing entry to grade 1 (currently about 81 percent), raising survival rates to the end of the cycle (currently only at 32 percent), and reducing grade repetition in all grades (currently averaging 31 percent for the cycle). Given student flow indicators, Madagascar's education system is one of the least efficient among low-income countries. The system's poor performance has adverse implications for equity, as reflected in the wide disparities in enrollment across income groups, urban and rural areas, and among provinces. Because non-attendance and dropping occur much more often and are higher among children from poor families, the incidence of public spending is predictably inequitable: the share received by the top expenditure quintile in the population is currently more than five times the share received by the bottom quintile, one of the highest ratios among developing countries.

39. Many factors contribute to the poor performance of the system, including the modest level of public spending on education throughout the past decade. Total public spending on education sank as low as 1.8 percent of GDP in 1995, but has since recovered to about 3.1 percent of GDP in 2000, the level at the start of the 1990s. While the recovery is salutary, the level of spending on education remains very low relative to the average of about 4.0 percent in most countries benefiting from the HIPC Initiative. To the government's credit, the squeeze on overall public spending on education during 1990s also saw a re-prioritization of spending toward the lower levels, as reflected in the decline in the share of higher education from 32 percent of the total in 1990, to about 13 percent in 2000. The shift reflects successful reforms in higher education, including the removal of large numbers of chronic repeaters from public universities, reduced public spending on student welfare, and the application of tighter criteria to determine eligibility for student aid. The reform agenda is incomplete, however, because the shift in spending towards the lower levels of education has tended to benefit secondary rather than primary education. Indeed at the primary level, the lack of funding to hire teachers and to provide incentives for teachers to accept rural posts has created severe teacher shortages in rural

schools. In many rural localities, poor families take on the financial burden of hiring teachers on their own to make up for the shortfall of publicly-paid teachers.

40. The key objective of the government's education strategy, which has been formalized in its National Education Program (PNAE II), is to expand access to primary schooling and improve learning outcomes. Specific targets in the next few years include the following: (i) a reduction in the repetition rate by about 10 percentage points between 1999 and 2002; (ii) a reduction of the number of students older than 10 years of in primary schools, creating room for new entrants to the system; and (iii) an increase at the rate of at least 3 percent a year in the number of children admitted to first grade in primary school (see I-PRSP, section III.2.1, and Annex 4).

41. As first steps to achieve these goals, the government has committed itself build over 3,000 new classrooms and to recruit at least 3,500 teachers before 2003 and allocate them to schools with a deficit of teachers. The expansion of education facilities will be complemented by decentralization of the decision-making power and responsibilities to the provinces, school districts and schools. Schools will gain direct control over funds to buy basic teaching materials. Both measures should help to improve the conditions for teaching and learning in primary schools, particularly in rural areas.

42. **Health.** Madagascar's main challenge in the health sector relates to the provision of basic health facilities to majority of the rural population. This entails training of additional paramedical staff and redeployment of the existing medical health personnel and increase in the coverage of basic and essential drugs. Madagascar's poor coverage in health facilities in rural areas accounts for its high rates of infant, child and maternal mortality.

43. The government aims to increase accessibility to basic health services by 4 percent in order to reduce child and infant mortality by an average of 4.5 percent in each of the following years. Thus far, it has completed a comprehensive health policy framework reflecting the priorities set forth in the I-PRSP, which are to (i) increase budget allocations and subsidies for community health centers continuously until 2003, (ii) decentralize sector management, and (iii) increase the involvement of the private and non-profit sectors (See I-PRSP, Section III.2.2 and Annex 5).

44. Progress has been made over the last four years in upgrading and expanding the network of health centers and making drugs available more widely. By the end of 2000, the network of health centers will have a total of 2,087 units (970 with a doctor and nurse, 1,117 only with a nurse). In addition, 1,000 medical doctors have been recruited and assigned to rural health centers. The expansion of rural health facilities should result in overall increased vaccination from 72 percent to 76 percent by the end of 2001 (DPT3 for infants under age 1; vaccination against diphtheria, pertussis and tetanus). The transformation of 36 district hospital centers of first level (*centres hospitaliers de district de niveau 1, CHD1*) in district hospitals of second level (*CHD2*) will significantly reduce the maternal mortality and respond to emergency surgery needs. Of significant importance for the poor is also the availability of generic drugs at primary health care centers and for outpatients in hospitals. As one of the short-term actions, the government intends to expand the availability of generic drugs also to hospital outpatients.

45. Despite the low HIV/AIDS prevalence rate, when compared to other sub-Saharan countries, the rapid progression from 0.07 percent in 1996 to 0.15 percent in 1999 is troublesome. This increase coupled with the high prevalence of sexually transmitted diseases (16 percent active syphilis in pregnant urban women in 1995-96) suggests the need for more proactive measures to prevent HIV/AIDS rates from reaching epidemic levels. Government is aware of this risk and decided in November 2000 to create a special entity under the Prime Minister's office to develop a multi-sectoral national strategy for fighting HIV/AIDS and coordinate its implementation.

46. The expansion of health facilities and the decentralization of administrative structures facilitates a multi-sector approach to prevent the spread of communicable diseases and, in particular, to stabilize the HIV/AIDS prevalence rate. To this end, the authorities intend to place 207 laboratory assistants with special training in 159 community health centers and district hospitals (See I-PRSP, Section III.2.2). In addition, information, education and communication (IEC) campaigns addressing priority health problems and communicable diseases have already been launched countrywide. Social marketing of bed nets will be one step to control the incidence of malaria. Tuberculosis control is planned to be strengthened by ensuring short course treatment for every patient. Plague control will benefit from the introduction of a confirmatory field test that will allow preventive measures to be promptly initiated. Thanks to a rapid assessment method recently developed, control of schistosomiasis, based on mass treatment of hyper-endemic villages, will be expanded to most endemic areas.

E. Short- and Medium-Term Government Program

47. Given the available poverty diagnostics included in the I-PRSP and the Government's plan to develop the full PRSP around the three main pillars outlined above, the Government is planning an ambitious program of actions to be carried out over the next eighteen to twenty-four months. A sub-section of the measures – important for improving governance and poverty reduction – will form the triggers for the floating completing point (see section IV, Box 8).

48. The Government plans to undertake a number of immediate and key actions closely connected to the emerging poverty reduction strategy as outlined in the I-PRSP. These measures are included in Box 7. In part, they reflect ongoing reforms and measures; some flow from the discussions leading up to the I-PRSP, and others are included as a follow-up to recent important analytical work, such as the financial audit completed by the EU.

BOX 7: SHORT- AND MEDIUM-TERM GOVERNMENT ACTION PROGRAM**I. Governance and Institutional Reform**

- (1) *Improvement of budget control for public services*
 - (a) Strengthen control systems through (i) adoption of an appropriate legal and constitutional framework; (ii) adoption of procedures and internal control systems that conform to international technical standards; and (iii) increase staffing and resources of the national auditor office (*IGE*); and the budgetary directorate for expenditure commitment control (*CDE*).
 - (b) Strengthen the national auditing court (presently the *Chambre des Comptes*).

- (2) *Improvement of financial monitoring mechanisms and information diffusion*
 - (a) Review, update and simplify the rules and regulations for the complete budgetary cycle (public procurement, inventory assessment and nomenclature of documentary evidence);
 - (b) Design and implement a general monitoring system for the budgetary cycle (*engagement, liquidation, mandatement, paiement*) to reinforce the existing system for monitoring social sector expenditures;
 - (c) Prepare biannual reports on education and health sector activities at the central and decentralized level including: (i) budgetary allocation and expenditure execution; (ii) physical achievements.
 - (d) Install and use Sydonia version 3 software for customs operations in the 6 priority sites at the beginning of 2002, after the system version 2.7 has been implemented;
 - (e) Implement a public and transparent information system on granting of licenses (beneficiary list, geographical zone, amount) in the mining, forestry and fishing sectors. The list will be published biannually;
 - (f) Starting in 2001, improve the centralization procedures and consolidation of all balances of the Principal Treasurers by the central treasury accounting office (*ACCT*) through the formation of a consolidation and audit unit, constituting a step towards the establishment of general balance sheet statements and of reliable opening and closing accounting balances. The budgetary execution law (*loi de règlement*) for 1999 will be prepared during the course of 2001 and the 2000 budgetary execution law will be prepared before the end of June 2002.

- (3) *Justice*
 - (a) Increase budget of the national magistrates training school (*ENMG*)
 - (b) Improve the efficiency of the judicial system through creation of additional district and appeal courts, and the establishment of administrative and financial courts in the autonomous provinces' capitals;
 - (c) Increase budget of the ministry of justice to strengthen its control function

BOX 7: SHORT- AND MEDIUM-TERM GOVERNMENT ACTION PROGRAM*Cont'd***II. Improved Basic Service Delivery****(1) Rural Infrastructure;**

- (a) Adopt and implement the rural transport strategy
- (b) Achieve full cost recovery of the Road Maintenance Fund
- (c) Cover 100 % of current maintenance needs through the Road Maintenance Fund of which at least 10 % for rural roads.

(2) Education

- (a) Increase the non-salary current expenditures budget allocation to primary public schools (*EPP*) from 54.3% (2000) to 63.1% (2001) (and to leave it at least at that level in 2002) and to obtain as high budget execution rates at the *EPP* level as those witnessed in 1999 (over 95%);
- (b) Expand teacher availability in rural areas by (a) formalizing and implementing new financial incentives for teachers to serve in rural public primary schools; and (b) recruiting at least 3,500 new teachers for public primary schools and deploying 60 percent of them to schools with either FRAM-paid teachers or with a ratio of pupils to publicly-paid teachers in excess of 50;
- (c) Improve student flow in primary education by designing and implementing a time-bound action plan to reduce the repetition rate in public primary schools from its current level 32 percent (school year 1999/2000) to 22 percent (school year 2001/2002).

(3) Health

- (a) Increase the immunization coverage of DPT3 for children below one year of age from 70.9 percent (1999) to 76.0 percent (2002);
- (b) Render the generic essential drug supply system of district pharmacies by the existing central drug procurement agency operational, (including the startup of generic drug availability for hospital outpatients), as measured by an increase in the annual gross revenues of the central purchasing agency;
- (c) Plan and start a multi-sectoral national AIDS awareness and prevention campaign, comprising a national HIV/AIDS workshop, establishment of baseline data and selection of indicators on prevalence and behavior which will be closely monitored;
- (d) Introduce social marketing system of bed-nets.

III. Poverty Monitoring System

- (a) Elaborate a *tableau de bord social* (social indicator monitoring system) for monitoring of the PRSP;
- (b) Implement a full-scale welfare household survey in 2001;
- (c) Develop a baseline, detailed poverty map, if quality of data sources permit.

49. In conjunction with the implementation of the tangible measures described in Box 7, the Government aims to establish a Poverty Monitoring System to follow progress in implementing the PRSP (See I-PRSP, Annex VIII). This includes, foremost, the finalization of an indicator system (and the corresponding data sources), the implementation of a multi-topic household survey (for example, of the Living Standard Measurement type) in the year 2001, and the construction of a detailed poverty map which could combine different data sources now available in Madagascar. Such a poverty map might then be useful in allocating sectoral expenditures to the poorest districts and could be an additional planning tool for the current decentralization process.

IV. THE FLOATING COMPLETION POINT

A. Completion Point Triggers

50. IDA and IMF staff have agreed with the Government on several conditions which constitute major steps forward in improving governance and improving service delivery to the poor. These are presented in Box 8. These conditions form part of the short- and medium-term program of the Government discussed above.

51. The first three completion triggers consist of the overall conditions for eligibility for HIPC. They constitute the anchor against which overall progress will be evaluated. Central to this is the development of a full PRSP and its satisfactory implementation.

52. Triggers four to six focus on governance and better public resource management – key to fighting poverty in Madagascar. Detailed measures as formulated in the fourth trigger were proposed by Government, discussed extensively and agreed upon with the donor community. Through these detailed measures Government commits itself to very tangible steps towards better and more transparent use of public resources. The fifth trigger builds on the fourth one and places emphasis on areas of public spending that have a direct impact on the poor. The objective of greater transparency, accountability and effectiveness in the area of environmental management, drove the choice of the sixth trigger. This trigger is important for poverty reduction in two respects. First, the rapid pace of deforestation needs to be at least slowed because it erodes the base for sustainable livelihoods of the rural poor. Open and transparent license distribution for logging is the first important step to assess the pace and impact of commercial logging. Second, proper license distribution and accounting increase public income which can then be used to support the Government's poverty reduction strategy.

53. Government, in close consultation with donors, also considered it desirable to specify concrete and verifiable interventions in the education and health sectors as a way to illustrate joint commitment to these critical sectors for poverty reduction. The key role of the rural sector and the key constraint posed by quickly deteriorating rural roads and lack of funds for high return maintenance underlie the inclusion of the ninth trigger.

54. While it is recognized that these triggers exceed the number included in decision points of other HIPC eligible countries, those most directly involved with the I-PRSP consultation process consider the choice as truly representative of a consensus reached as the result of prolonged and intense consultation between all parties represented in the I-PRSP process.

BOX 8: COMPLETION POINT TRIGGERS**GENERAL CONDITIONS**

- (1) A full PRSP is completed and satisfactorily implemented for at least one year as evidenced by a joint staff assessment of the annual progress report.
- (2) Budgetary savings from interim debt service relief have been used in accordance with the criteria set forth at the decision point.³ The use of interim debt relief has been reported and discussed biannually during the PRSP consultative process.
- (3) Macroeconomic stability has been maintained through satisfactory implementation of a new PRGF-supported program.

GOVERNANCE AND INSTITUTIONAL REFORM

- (4) Financial monitoring and control have been improved as follows:
 - (a) Control systems have been strengthened through (i) adoption of an appropriate legal and constitutional framework; (ii) adoption of procedures and internal control systems that conform to international technical standards; (iii) an increase in staffing and resources of IGE and CDE
 - b) A monitoring system for the budgetary cycle (*engagement, liquidation, mandatement, paiement*) has been designed and implemented in at least six ministries, including the ministries of basic education and health
 - (c) Starting in 2001, the centralization procedures and consolidation of all balances of the Principal Treasurers by the ACCT have been improved through the formation of a consolidation and audit unit, constituting a step towards the establishment of general balance sheet statements and of reliable opening and closing accounting balances
 - d) The 1999 budgetary execution law (*loi de règlement*) has been prepared during 2001 and the 2000 budgetary execution law has been prepared before end-June 2002
- (5) Biannual reports on education and health sector activities at the central and decentralized level have been prepared including: (i) budgetary allocation and expenditure execution; (ii) physical achievements
- (6) A public and transparent information system on granting of licenses (beneficiary list, geographical zone, amount) in the mining, forestry and fishing sectors has been implemented. The list will be published biannually

IMPROVED BASIC SERVICE DELIVERY

- (7) Teacher availability in rural areas has been expanded by (a) formalizing and implementing new financial incentives for teachers to serve in rural public primary schools; and (b) recruiting at least 3,500 new teachers from 2000 for public primary schools and deploying at least 60 percent of them to schools with either FRAM-paid teachers or with a ratio of pupils to publicly-paid teachers in excess of 50
- (8) The generic essential drug supply system of district pharmacies has been rendered operational (including the startup of generic drug availability for hospital outpatients), as measured by an increase in the annual gross revenues of the existing central purchasing pharmacy.
- (9) Current road maintenance needs are covered 100% through the Road Maintenance Fund of which at least 10 % are used for rural roads.

³ The use of HIPC funds is spelled out in Tables 5 and 6.

TABLE 4: MONITORING INDICATORS¹

	Reference Value 1999	Planned/ Estimated Realization 2000	Target 2001	Target 2002t
Budget allocation of the Ministry of Primary and Secondary Education assigned to primary schools, percent of total non-salary current expenditures	43.3	54.3	63.1	≥63.1
Budget allocation of the Ministry of Health assigned to district health administrations and district hospitals, percent of total non-salary current expenditures	20.0	30.0	32.5	35.0
Ratio of public sector procurement prices and equivalent private sector procurement prices, Ministries of Education and Health	172.0	n.a.	135	125
Curative medical consultation rate of public and private primary health care centers, number per person/ year	0.46	0.52	0.58	0.64
Professionally attended births in all health care institutions, percent of total expected births	30.4	33.4	35.4	36.4
Caesarian births in all health care institutions, as percentage of total expected births	0.41	0.46	0.51	0.56
Immunization rate of DPT3 for infants under age 1, percent ³	70.9	72.0	74.0	76.0
Realization rate of medical prescriptions in primary health centers, percent ²	86.4	87.4	88.4	89.4
Gross Revenue of the central drug procurement agency, billion of FMG	22.9	20.3	32.5	35.6
Total enrollments in public and private primary schools ⁴				
- number of pupils in grades 1-5	2,018,700	2,208,300	2,329,500	2,456,900
- number of non-repeaters in grades 1-5	1,348,800	1,573,760	1,737,000	1,901,000
Number of new first grades in public primary schools ⁵	375,000	409,200	466,000	498,100
Repetition rate, public primary schools, percent	33.0	32.0	25-30	20-25
Pseudo Cohort Survival Rate at the end of primary cycle, public primary schools, percent ⁶	28.0	n.a.	30-35	35-40
Percentage of Road Maintenance Fund spent on rural roads	n.a.	1.0	2.0	10.0

1 See I-PRSP, Annex II, III and IV.

2 Percentage of all given prescriptions actually used by patients to obtain drug.

3 Vaccination rate against diphtheria, pertussis and tetanus.

4 Education indicators refer to the preceding school year (e.g., '2001' refers to school year '2000/2001')

5 The I-PRSP (Annex IV) spells out an aggregate target for public and primary school first graders which is consequently higher than the public school target in this list.

6 The cohort survival rate measures the percentage of all children entering primary school who also complete it. It is 'pseudo' as it is derived from cross-sectional data and not from time-series data.

B. Monitoring of the Government Program

55. Staff and the Government have agreed on a list of specific indicators that will follow the implementation of the Government's planned policy measures. These will be monitored in addition to the structural measures to be taken. Table 4 presents these input, process and output indicators, including their baseline in 1999, estimated performance in 2000 and targets for the year 2001 and 2002. This list does not include outcome indicators (e.g, poverty rate, malnutrition rate etc.) since the time period between the onset of HIPC assistance and the possible completion point was judged too short to achieve measurable results on the ground. Further, many outcome (and specific access) indicators are based on household surveys and while an in-depth welfare survey is planned in the year 2001, none is available for the year 2000 which would have been the appropriate baseline. In the I-PRSP, Government does specify a number of concrete outcome indicator targets (e.g. prevalence of malnutrition and illiteracy rate) for a three year period, however.

56. In the completion point document, staff will thus assess the success or failure of the Government's short- and medium-run action program against output, indicators which could be directly linked to the government's actions.

V. DEBT SUSTAINABILITY ANALYSIS AND ASSISTANCE UNDER THE ENHANCED HIPC INITIATIVE

57. The debt sustainability analysis (DSA) presented here was prepared jointly by the authorities and the staff of IDA and the IMF, based on macroeconomic projections up to 2019 and on the basis of loan-by-loan data provided by the authorities and creditors for debt outstanding at end-1999. The debt estimates and the net present value (NPV) calculations have been revised downward from those presented in the Preliminary HIPC document⁴, based on new information gathered during the reconciliation process.⁵ Debt toward multilateral creditors and Paris Club creditors, accounting for 87 percent of total debt, have been reconciled. Data for some bilateral and commercial debt remain to be reconciled, and in such cases, the DSA is based on the authorities' debt figures. Small revisions were also made to the balance of payments, where some misclassification of data understated the exports and imports of goods for 1999. The baseline projections for end-1999 and beyond simulate the hypothetical impact of a stock-of-debt operation from Paris Club creditors on Naples terms as of end-1999, and comparable treatment from all other bilateral and commercial creditors. The exchange rate and the discount rates used for calculations of the debt data are given in Table 15.

⁴ IDA/R2000-188; and EBS/00/209, October 25, 2000.

⁵ Main revisions in the debt data involved: 1) correction of debt service projections for all African Development Fund loans, 2) deletion of commercial loans that have been bought back through the London Club but still remained on the authorities' database, 3) recalculation of imputed late interest on Iraqi loans to correct for double-counting, and 4) consolidation of Russian claims based on the bilateral agreement signed in October 2000.

A. The Structure and Evolution of External Debt

58. **Madagascar's external debt structure.** At end-1999, Madagascar's public and publicly guaranteed external debt stood at estimated US\$4,358 million in nominal terms, of which US\$1,830 million or 42 percent was owed to multilateral creditors, and US\$2,528 million or 58 percent to bilateral creditors (Table 8). In NPV terms and after assumed full use of traditional debt relief mechanisms, the debt was estimated at US\$2,058 million, equivalent to 56 percent of GDP, or 248 percent of exports of goods and services.⁶ The stock of arrears at end-1999 was estimated to be US\$1,014 million. Over half of this represented technical arrears on Russian claims prior to the finalization of bilateral debt relief agreement on Naples terms,⁷ while the remaining US\$440 million were mostly on bilateral debts for which the authorities have been seeking debt relief on terms comparable to those granted by the Paris Club.⁸

59. **Reschedulings.** Madagascar has benefited from eight rescheduling operations with the Paris Club since 1981. The eighth Paris Club agreement was concluded in March 1997, and provides a rescheduling of obligations falling due from January 1997 to end-November 2000 on Naples terms (67 percent reduction in NPV terms). All Paris Club creditors have granted Madagascar the flow relief on Naples terms. Comparable actions from Madagascar's other bilateral creditors have been requested with virtually no positive response. Madagascar also secured reschedulings, including debt swaps, on commercial debt through the London Club in the 1980s, and currently has only very small amount of such debt remaining on the books.

B. Debt Sustainability and HIPC Initiative Assistance

60. The macroeconomic projections used in this analysis and agreed with the authorities are based on continued sound macroeconomic policies, further structural reforms, and the improvement of key social indicators through the implementation of a poverty reduction strategy. During the projection period 2001-2019, real GDP is assumed to grow at just over 6.3 percent per year, with export volume growing at 6.5 percent per year and import volume at 6 percent per year. The key assumptions underlining the baseline scenario are presented in Box 9 and quantified in Table 7 and 10.

⁶ The NPV of debt-to-export ratio is measured using the backward looking three- year average of exports of goods and services (including the current year), whereas the debt service ratio is calculated on the basis of current year exports. Discounting is based on currency specific CIRR (commercial interest reference rate) for the six month period ending December 1999.

⁷ The bilateral agreement was signed with Russia in October 2000 involving an upfront discount of 70 percent on loans disbursed prior to 1992, followed by a rescheduling of the pre-cutoff date debt on Naples terms. Further discussions are expected at end-2000 on the post-cutoff date debt, including possible concessional treatment of post-cutoff date arrears representing about US\$76 million.

⁸ These include arrears on debt owed to Algeria, Angola, China, Iraq, Libya, Saudi Arabia, and the United Arab Emirates, as well as some commercial creditors.

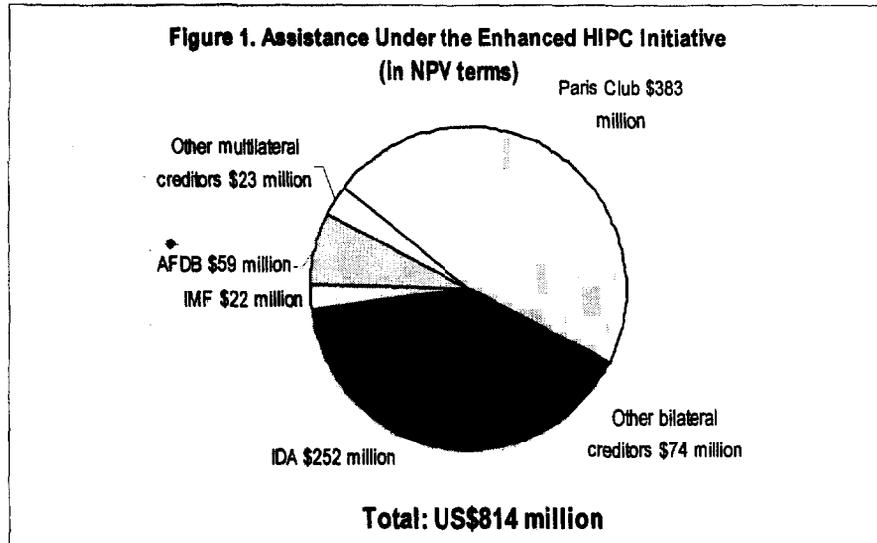
BOX 9: MAIN ASSUMPTIONS USED IN THE DEBT SUSTAINABILITY ANALYSIS

The following macroeconomic assumptions are used for the 20-year baseline DSA Projection:

- Real GDP growth is assumed to be about 6.3 percent in the period 2001–2019.
- The terms of trade, after an average decline of 6.4 percent a year in 1999–2000, are projected to remain stable through the period, after a modest increase in 2001–2003.
- Export volume is projected to increase by 6.5 percent per annum, spurred by rapid growth of free trade zone manufacturing exports, which are projected to increase by 8.5 percent per annum. Traditional exports (coffee, vanilla, cloves) would increase by 6 percent per year, after a decline in 2000–2001 because of the damage of the cyclones in early 2000.
- Import volume is projected to increase at a rate of about 6 percent per year.
- Gross domestic investment would increase from 17 percent in 2000 to about 18 percent by 2008 and 20 percent by 2015. Government investment is projected to remain broadly stable at about 8.5 percent of GDP, with foreign financed investment at about 6 percent of GDP; the externally financed investment program would be funded 60 percent by grants, and for the remainder by concessional loans, of which 2/3 on IDA terms.
- Foreign direct investment is projected to increase from 2.6 percent of GDP in 1999 to about 3 percent in 2010.
- Official budgetary grants and balance of payments support loans are expected to decline gradually to about US\$ 20 million per year after 2005.
- The external current account deficit, excluding grants, is projected to decline from 8.7 percent of GDP in 2000 to 7.7 percent in 2003, and further to 5.8 percent by 2010.
- Gross international reserves would increase gradually to the equivalent of 16 weeks of imports by 2006, up from 9.8 weeks at end 1999.

61. On the basis of these assumptions, Madagascar's external debt situation would remain unsustainable even after full application of traditional debt relief mechanisms, with NPV of debt-to-exports ratio at 248 percent in 1999 and remaining above 150 percent until 2008. The debt service on public and publicly guaranteed debt would decline marginally from 11.7 percent of exports in 2000 to 8.7 percent in 2009. The ratio of debt service to revenue would decline from 23.1 percent in 2000 to 13.3 percent in 2009 (Tables 12, 13, 14).

62. **HIPC Initiative Assistance.** Based on the NPV of debt-to-exports ratio of 248 percent, Madagascar would require a debt relief of US\$814 million in NPV terms to reduce its debt burden to 150 percent of exports at the decision point. Under **proportional burden-sharing**, assistance to be provided by bilateral creditors is estimated to be about US\$457 million in NPV terms, with the Paris Club creditors providing about US\$383 million. Assistance required from multilateral agencies would amount to about US\$357 million, with IDA providing about US\$252 million and IMF about US\$22 million (Figure 1). The implied **common reduction factor** for all creditors would be about 39.5 percent of their NPV of debt exposure at the decision point after full use of traditional debt relief mechanisms.



63. **Sensitivity analysis.** Madagascar's balance of payments is subject to considerable uncertainties with regard to export volume growth. The export base includes several agricultural commodities, most of which are subject to sharp supply shocks (such as for cyclones and droughts) and price fluctuations. Therefore, sustainability of debt outlook needs to be assessed regularly even after Madagascar receives HIPC assistance so as to adjust to possible adverse exogenous shocks, which could result in a lower growth path. To illustrate this point, Table 12 presents an alternative scenario with a growth of real GDP of 4 percent during the projection period, with correspondingly lower export and import growth. The lower export growth would raise the overall NPV of debt-to-exports ratio by an average of 32 percentage points relative to the baseline in the period 2000-2009. The debt service ratio would also be higher under this scenario, by 1.2 percentage points on average during this period, due to the lower export denominator. A second alternative scenario illustrates the impact of lowering the share of grants in the public investment external financing; this share is assumed to decline from 60 percent in 2003 to 50 percent in 2010. As a result, the NPV of debt-to-export ratio would increase by 23 percentage points relative to the baseline on average during the period 2000-2009.

C. Assumed Modalities of HIPC Initiative Assistance

64. **Status of creditor participation.** Based on the initial findings contained in the Preliminary HIPC document, IDA and IMF staffs have initiated consultations with the multilateral creditors and the Paris Club regarding their willingness to support the debt relief to Madagascar under the enhanced HIPC Initiative. During the Multilateral Development Bank (MDB) meetings held in October 2000, all multilateral creditors with exposure to Madagascar indicated their willingness, in principle, to deliver their share of debt relief, pending endorsement of the enhanced HIPC Initiative by their respective Boards. It is assumed that the Paris Club will grant flow rescheduling to Madagascar for a three year period, following the attainment of the enhanced HIPC decision point and the finalization of a new PRGF-supported arrangement in

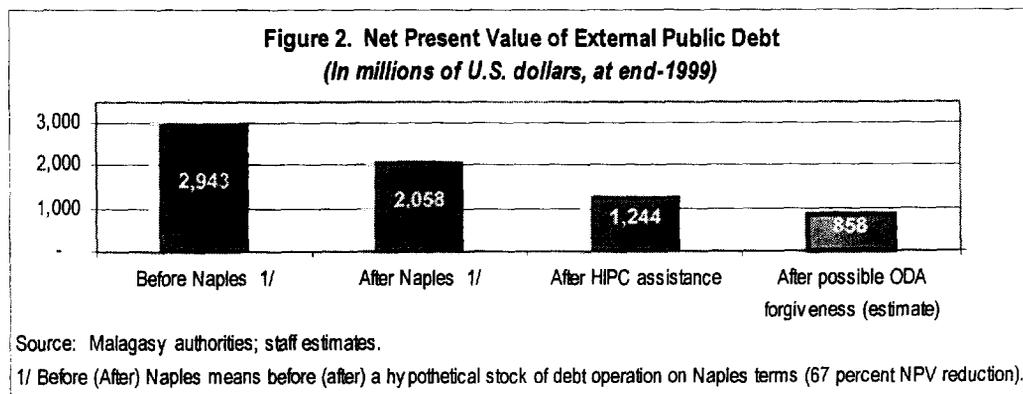
early 2001. Thus satisfactory financing assurances have been provided by creditors holding 87 percent of total debt in NPV terms.

65. While the **modalities and timing of the delivery of HIPC assistance** will be decided by each creditor following the approval of the decision point, certain assumptions are made in the DSA in order to assess the impact of HIPC assistance:

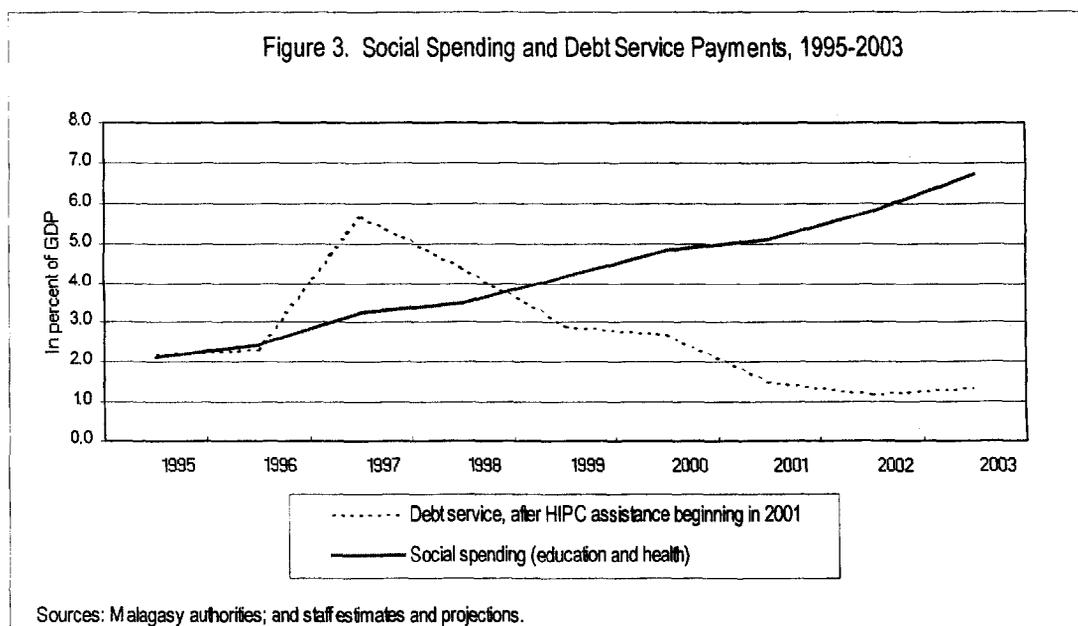
- IDA would provide the relief (US\$252 million in NPV terms) by forgiving 50 percent of debt service due on credits outstanding and disbursed at end-1999, during the interim period and following the completion point for a total period of about 19 years. Cumulative debt service reduction would exceed US\$440 million over this period (Table 17).
- The total amount of IMF assistance is US\$22 million in NPV terms, which would be delivered over a period of seven years. The IMF is expected to deliver interim assistance (US\$2.8 million, of which US\$0.9 million would be made available at the decision point to cover repayments falling due until end of 2001) from end 2000 onwards, and the full amount of assistance at the completion point. The delivery drawdown of assistance is expected to follow a profile which smoothens the debt service due to the Fund (Table 16).
- African Development Bank and European Union are assumed to provide interim assistance in the form of debt service reduction, while IFAD, OPEC Fund and BADEA are assumed to provide debt service reduction or concessional refinancing starting at the completion point.
- Paris Club creditors are assumed to grant a flow rescheduling on Cologne terms (90 percent NPV reduction) during the interim period; the remaining amount of assistance by the Paris Club creditors would be delivered through a stock-of-debt operation on Cologne terms at the completion point.
- At least comparable treatment to the Paris Club creditors is assumed for non-Paris Club bilateral creditors and commercial creditors.

D. Impact of HIPC Assistance

66. Madagascar's external debt will be significantly reduced after the delivery of HIPC assistance, and after possible additional voluntary ODA cancellation by bilateral creditors.



The NPV of debt-to-exports ratio would decline to 125 percent by 2004, 101 percent by 2009, and remain below 100 percent thereafter. The debt service to exports ratio would decline from 11.5 percent in 1999 to 5.6 percent in 2004, and remain at around 6 percent throughout the projection period; the debt service to revenue ratio would fall from 25 percent in 1999 to 10 percent in 2004 and average about 6 percent during 2010-2019. Debt service savings would amount to over US\$62 million per year on average (1.2 percent of GDP on annual average) during the projection period. The chart below illustrates how debt service savings could intensify the momentum of resource shift toward priority social sectors recently observed in Madagascar.



E. The Use of HIPC Funds

67. The Government has provided IDA and IMF staff with a detailed plan of how funds freed by the HIPC initiative will be used. Since the Budget Law for the year 2001 will be discussed by parliament before the Boards of the Bretton Woods institutions formally decide on Madagascar reaching the HIPC decision point, the Government plans to prepare a supplementary budget including specific budget lines for activities and programs to be financed with debt relief in 2001. In 2002, the relief would be integrated in the normal budget framework.

68. Tables 5 and 6 provide a detailed breakdown of the planned use of HIPC funds in the next three years. The use of funds is geared largely to the third axis of the government's poverty reduction strategy, basic delivery of services. Primary education and primary health as well as rural roads, rural water and direct support to communities feature prominently. Additionally, the Government plans to use some of the resources to establish a strong poverty monitoring system. Table 6 presents provisional data on social expenditure for 2001-03 before and after HIPC assistance.

TABLE 5: PLANNED USE OF HIPC FUNDS

	2001	2002	2003
Total (%)	100	100	100
Of which:			
Current Expenditures	60	60	60
<i>Education</i>	25	25	27
- recruitment of new teachers	9	10	12
- pedagogical material	3	2	2
- technical material	3	2	2
- school feeding	3	3	3
- incentive system for rural teachers	3	4	4
- literacy campaigns	2	2	2
- fund for cultural development centers (libraries etc.)	2	2	2
<i>Health</i>	20	20	20
- recruitment of medical personnel	4	4	5
- supply of drugs	4	3	3
- incentive system for rural medical staff in CSBs	3	4	4
- small equipment in CSBs and CHDs	3	3	3
- Anti-HIV/AIDS campaign	3	3	3
- immunization program	3	3	2
<i>Institutional Reinforcement</i>	5	5	5
- justice system	2	2	2
- public control organizations	2	2	2
- implementation of decentralization strategy	1	1	1
<i>Other (including environment, gender programs)</i>	10	10	8
Investment Expenditures	40	40	40
Road Maintenance Fund (FER), rural roads, improvement of access to isolated areas	20	18	18
Infrastructure for Drinking Water	3	6	7
Monitoring System, including full household survey	4	4	4
Safety Net support to communities	10	8	7
Other (including electrification)	3	4	4

Source: I-PRSP, Table 15.

**TABLE 6. TENTATIVE MEDIUM TERM FRAMEWORK FOR SOCIAL EXPENDITURE,
BEFORE AND AFTER INTERIM HIPC ASSISTANCE ¹**
(In billions of Malagasy francs, unless otherwise indicated)

	1998 Actual	1999 Actual	2000	2001 Projections	2002	2003
Social spending before HIPC assistance						
Social spending	711.3	980.0	1272.1	1347.3	1751.5	2276.9
Health	199.0	287.9	487.3	464.0	603.2	784.1
Education	512.3	692.1	784.8	883.3	1148.3	1492.8
of which: primary and secondary education	413.8	496.3	600.0	719.2	934.9	1215.4
Social spending (in percent of GDP)	3.5	4.2	4.8	4.5	5.3	6.2
Health	1.0	1.2	1.8	1.6	1.8	2.1
Education	2.5	3.0	3.0	3.0	3.5	4.1
of which: primary and secondary education	1.8	2.3	2.4	2.4	2.8	3.3
HIPC assistance				328.0	340.0	374.0
HIPC-financed spending						
Total	...	...	...	328.0	340.0	374.0
Health	...	...	...	85.3	81.6	86.0
Education	...	...	...	82.0	85.0	101.0
Of which: primary and secondary education	...	...	...	82.0	85.0	101.0
Institutional development and PRSP monitoring				29.5	30.6	33.7
Rural roads				65.6	61.2	67.3
Water supply, environment and other				65.6	81.6	86.0
Total (in percent of GDP)	...	...	...	1.1	1.0	1.0
Health	...	...	...	0.3	0.2	0.2
Education	...	...	...	0.3	0.3	0.3
Of which: primary and secondary education	...	...	...	0.3	0.3	0.3
Institutional development and PRSP monitoring	...	...	...	0.1	0.1	0.1
Rural roads	...	...	...	0.2	0.2	0.2
Water supply, environment and other	...	...	...	0.2	0.2	0.2
Social Spending including HIPC-financed expenditures						
Social spending	...	...	...	5.1	5.8	6.7
Health	...	...	...	1.9	2.1	2.4
Education	...	...	...	3.3	3.7	4.3
Of which: primary and secondary education	...	...	...	2.7	3.1	3.6
Memorandum items:						
Nominal GDP	20,343	23,379	26,350	29,629	33,070	36,736

Sources: Malagasy authorities, and staff estimates and projections.

¹ Social spending estimates are Fund staff projections. The allocation of Interim HIPC assistance is therefore tentative, pending approval of the 2001 budget as well as broad allocative decisions by the government of Madagascar and discussions in the context of a participatory I-PRSP, followed by approval by the National Assembly (expected in early 2001).

F. Tracking of HIPC Funds

69. IDA and IMF staff are planning to monitor the use of resources freed by the enhanced HIPC Initiative in three ways which are detailed below. The use of interim debt relief will be reported and discussed biannually during the PRSP consultative process.

- (a) **Changing Composition of Public Expenditures.** Given the new nomenclature in the budget process in Madagascar, staff expect to obtain reliable data on budget execution by function for the year 2000 so that the changing composition of expenditures can be assessed;
- (b) **Incidence of Public Expenditures.** While executed budgets by geographic area is not available from administrative data, household survey data (from the 1999 *Enquête Prioritaire*) will be used to derive education and health expenditure allocations by region. A new survey is planned for 2001 or 2002 so that staff can assess (at least in broad terms) whether the regional distribution of expenditures has improved in a pro-poor way during the interim period of debt relief. Similarly, staff will also use quintile incidence analysis over time to determine if marginal expenditure incidence analyses can be conducted. This will depend on whether household surveys are comparable over time;
- (c) **Expenditure Tagging.** A supplementary budget will be prepared by the Government and submitted for approval by the National Assembly after the attainment of the decision point; this would indicate as resources the savings on the debt service. A number of supplementary credit lines for the different Ministries and sub-services would be opened. The supplementary budgetary lines will be specifically identified with a special code. The responsibility for expenditure commitment and payment orders will be attributed to specific credit managers (*gestionnaires de crédits*) under the authority of the Minister of Finance; these will be the ministers of the key social sectors, and transportation and rural development for the large centralized expenditures, and the provincial directors (*directeurs provinciaux*) of these ministries for more decentralized expenditures. The monitoring of these expenditures will be carried out in the same manner as other expenditures through the centralized budgetary system. Staff are aiming to monitor the commitment, liquidation and payment orders carried out on these budgetary lines on a quarterly and even on a monthly basis.

VI. ISSUES FOR DISCUSSION

70. The staff seek decisions from Executive Directors on the following issues:

Eligibility and decision point. The staff and management believe that Madagascar is eligible for relief under the enhanced HIPC Initiative and recommend approval of a decision point. Do Executive Directors agree?

Amount and delivery of assistance. Consistent with a reduction in Madagascar's NPV of debt-to-exports ratio to 150 percent, total assistance under the enhanced HIPC Initiative is estimated to amount to US\$814 million in NPV terms. Of this amount US\$252 million is to be provided by the IDA and US\$22 million (SDR 17.6 million) by the IMF. Satisfactory financing assurances

have been provided by creditors holding about 87 percent of total debt (NPV terms). In view of the above and in order to accelerate debt relief, the staff and management recommend that the IDA and the IMF provide interim assistance in line with the guidelines.⁹ Do Executive Directors agree?

Floating Completion Point. The staff and management recommend a floating completion point, which would be reached when the conditions in Box 8 are met. Do Executive Directors agree?

Creditor Participation. Some multilateral institutions may require bilateral financial support in order to deliver their share of assistance under the enhanced HIPC Initiative to Madagascar. Do Directors agree that the staff of the Bank and IMF continue working with other multilateral creditors toward securing their participation?

⁹ IDA/R200-4 (1/10/2000) entitled "Heavily Indebted Poor Countries (HIPC) Initiative" Note on Modalities for Implementing HIPC Debt Relief Under the Enhanced Framework"; and Section III, Paragraph. 3(d) of the HIPC Instrument (EBS/00/9, 1/20/00).

Table 7. Selected Economic and Financial Indicators, 1996-2003

	1996	1997	1998	1999		2000		2001	2002	2003
				Prog. 1/	Actual	Rev.	Proj.			
(Annual percentage change, unless otherwise indicated)										
National accounts and prices										
Real GDP at market prices	2.1	3.7	3.9	4.5	4.7	4.8	4.8	6.3	6.3	6.3
GDP deflator	17.8	7.3	8.4	5.5	9.8	7.3	7.6	5.8	5.0	4.5
Traditional consumer price index										
Average 2/	19.8	4.5	6.2	6.6	9.9	9.5	10.9	4.1	3.8	3.0
End of period 2/	8.3	4.8	6.4	6.4	14.4	8.5	7.5	3.8	3.4	2.8
Overall consumer price index (average) 3/	20.0	5.4	7.8	7.1	9.7	9.9	11.0	4.1	3.8	3.0
Money and credit 4/										
Net foreign assets, excluding long-term external liabilities	20.6	18.6	-15.6	20.1	12.2	9.0	5.0	16.1	...	...
Net domestic assets	-1.6	1.9	24.1	-11.0	8.5	1.1	-0.2	-3.8	...	...
Of which: net domestic credit	0.3	3.4	12.3	-8.1	11.2	2.6	2.3	-1.3	...	...
government	-1.0	-3.3	4.9	-19.5	2.8	-7.7	-3.2	-8.5	...	...
economy	1.3	6.7	7.4	11.3	8.4	10.3	5.5	7.2	...	...
Broad money (M3)	18.1	19.8	8.4	8.8	19.5	10.0	4.8	12.1	...	...
Velocity of money (GDP/end-of-period M3)	5.1	4.7	4.9	5.0	4.7	4.8	4.8	4.8	...	...
External sector (in terms of SDRs)										
Exports, f.o.b.	4.6	1.7	4.3	9.0	11.3	5.0	8.5	9.6	8.9	10.3
Imports, c.i.f.	7.2	11.6	0.0	8.0	9.7	18.0	22.0	6.1	5.1	7.2
Terms of trade (deterioration -) 5/	-17.3	-2.7	5.9	-2.9	-7.9	-10.3	-11.6	2.1	5.6	1.9
Nominal effective exchange rate 6/	-4.2	-8.8	-6.9	...	-4.5	...	...	...	...	...
Real effective exchange rate 6/	1.2	-6.0	-1.9	...	5.9	...	...	...	...	...
(In percent of GDP)										
National accounts										
Gross domestic investment	12.2	12.8	14.8	...	14.9	...	17.0	18.5	18.4	19.6
Public sector	7.3	6.5	7.9	...	6.9	...	8.7	10.4	9.7	9.1
Private sector (including public enterprises)	5.0	6.3	6.9	...	8.0	...	8.3	8.1	8.7	10.5
Gross national savings	7.2	7.3	7.3	...	9.5	...	9.8	11.1	11.6	13.2
Public sector	0.2	1.1	0.8	...	3.1	...	4.7	4.5	4.5	5.7
Private sector (including public enterprises)	7.0	6.2	6.5	...	6.5	...	5.1	6.7	7.1	7.5
Central government financial operations										
Total revenue	8.7	9.7	10.6	11.9	11.4	12.7	12.6	12.7	12.9	13.2
Of which: tax revenue	8.5	9.4	9.8	11.4	11.0	12.2	12.2	12.4	12.6	12.8
Total expenditure	17.8	17.4	18.8	17.9	16.2	18.9	18.1	20.6	19.7	18.0
Interest obligations	4.7	3.0	2.7	2.6	2.1	2.5	2.0	1.9	2.1	1.0
Noninterest current expenditures	5.7	6.9	7.4	7.3	7.2	7.0	6.9	7.0	6.7	6.6
Capital expenditure	7.3	6.5	8.2	8.1	6.9	9.0	8.7	10.4	9.7	9.2
Primary balance 7/	-0.2	0.6	-1.9	0.1	0.9	1.0	1.2	-1.4	-0.3	0.4
Overall balance (commitment basis; excl. restructuring operations)										
Excluding grants	-9.1	-7.7	-8.1	-6.0	-4.8	-6.3	-5.5	-7.8	-6.7	-4.8
Including grants	-4.9	-2.4	-4.7	-2.5	-1.2	-1.5	-0.8	-3.3	-2.4	-0.6
Overall balance (cash basis; excl. restructuring operations)	-4.9	-3.2	-5.2	-2.7	-0.9	-1.9	-1.2	-3.7	-2.4	-0.6
Net balance of structural reforms	0.0	0.0	-1.2	-2.2	-1.6	-2.7	-2.1	-2.1	-0.5	-0.4
Total balance (cash basis; including restructuring operations)	-4.9	-3.2	-6.3	-4.9	-2.5	-4.6	-3.3	-5.8	-2.9	-1.1

Table 7. Madagascar: Selected Economic and Financial Indicators, 1996-2003 (concluded)

	1996	1997	1998	1999		2000		2001	2002	2003
				Prog. 1/ Actual	Actual	Rev. Prog. 1/ Prog. 1/	Proj.			
(In percent of GDP)										
External current account										
Excluding official transfers	-7.1	-7.8	-7.9	-7.3	-6.3	-9.1	-8.7	-8.9	-8.3	-7.7
Including current official transfers	-5.0	-5.5	-7.4	-3.6	-5.4	-7.7	-7.2	-7.4	-6.8	-6.4
External capital account	1.2	3.0	2.7	3.6	3.5	4.2	3.4	3.3	3.2	3.1
Public domestic debt	9.7	9.6	12.0	9.2	11.7	8.2	8.2	8.2	0.0	0.0
Net present value (NPV) of external debt 8/ 9/	...	...	...	...	57.2	55.5	57.8	54.2	...	54.2
External debt (after debt relief) 8/ 9/	...	...	...	...	101.2	101.5	101.5	...	...	...
(In percent of exports of goods and services)										
Scheduled external debt service 8/										
Before debt relief	41.3	29.7	29.2	22.7	18.1	18.2	17.1	17.3	19.4	14.8
After debt relief 8/ 10/	11.3	21.8	22.8	16.5	12.0	15.4	10.8	17.3	19.4	14.8
NPV of external debt 8/ 9/	...	...	...	...	255.9	...	251.9	...	...	...
(In units indicated)										
Gross official reserves (in millions of SDRs)	114.8	154.3	78.3	225.0	117.5	245.5	146.4	227.8	260.8	308.3
In weeks of imports of goods and nonfactor services	8.7	10.4	5.0	13.6	7.0	12.6	7.4	10.5	11.5	12.8
Exchange rates (period average)										
Malagasy francs per SDR	5,882.4	7,016.1	7,381.7	...	8,585.8	...	...	...	...	...
Malagasy francs per French franc	792.5	874.3	922.9	...	1,020.4	...	...	...	...	...
Nominal GDP at market prices (in billions of Malagasy francs)	16,224	18,051	20,343	22,501	23,379	26,274	26,350	29,629	33,078	36,736
GDP per capita (U.S. dollars)	291	251	258	264	255	263	258	277	300	322

Sources: Malagasy authorities; and Fund staff estimates and projections.

1/ EBS/99/116 (7/8/99) for 1999-2000; and EBS 100/105 (6/12/00).

2/ Based on the traditional household consumption basket.

3/ Based on the overall consumption pattern, 75 percent of which is represented by the traditional basket and 25 percent by the modern consumption basket.

4/ In percent of beginning-of-period stock of broad money.

5/ Based on 1993 trade weights.

6/ Depreciation (-). Effective exchange rates have been revised to reflect base 1990=100.

7/ Overall balance, including grants, excluding interest obligations.

8/ Reflects Paris Club flow rescheduling on Naples terms obtained for the period January 1997 - November 2000 and assumes similar terms for non-Paris Club creditors.

9/ Provisional. NPVs of debt from debt sustainability analysis (DSA), which assumes stock-of-debt operations at end-1999.

10/ Actual cash debt-service payments in 1996; Madagascar had no rescheduling agreements in place in 1996. Actual debt service in 1999 was less than programmed because of i) savings on interest payments as a result of delays in concluding rescheduling agreements and ii) overestimated interest on new loans.

Table 8. Nominal and Net Present Value of External Debt Outstanding at End-1999

	Nominal Debt 1/			NPV of Debt 1/			NPV of Debt After Traditional Debt Relief Mechanisms 2/		
	US\$ millions	Percent of total debt	Percent of category	US\$ millions	Percent of total debt	Percent of category	US\$ millions	Percent of total debt	Percent of category
Total	4,357.8	100.0		2,943.4	100.0		2,058.2	100.0	
Multilateral creditors	1,830.1	42.0	100.0	902.0	30.6	100.0	902.0	43.8	100.0
IDA	1,359.8	31.2	74.3	637.7	21.7	70.7	637.7	31.0	70.7
IMF	62.9	1.4	3.4	55.5	1.9	6.2	55.5	2.7	6.2
African Development Bank	312.7	7.2	17.1	149.5	5.1	16.6	149.5	7.3	16.6
<i>of which: African Development Fund</i>	288.5	6.6	15.8	123.7	4.2	13.7	123.7	6.0	13.7
EU/EIB	37.2	0.9	2.0	23.9	0.8	2.6	23.9	1.2	2.6
BADEA	7.1	0.2	0.4	6.4	0.2	0.7	6.4	0.3	0.7
IFAD	40.0	0.9	2.2	20.5	0.7	2.3	20.5	1.0	2.3
OPEC Fund	10.4	0.2	0.6	8.4	0.3	0.9	8.4	0.4	0.9
Bilateral creditors	2,527.7	58.0	100.0	2,041.4	69.4	100.0	1,156.2	56.2	100.0
Paris Club	2,049.3	47.0	81.1	1,572.1	53.4	77.0	968.5	47.1	83.8
Austria	51.9	1.2	2.1	25.8	0.9	1.3	19.2	0.9	1.7
Belgium	43.3	1.0	1.7	27.7	0.9	1.4	18.1	0.9	1.6
Canada	22.1	0.5	0.9	20.6	0.7	1.0	15.2	0.7	1.3
France	462.2	10.6	18.3	252.2	8.6	12.4	232.3	11.3	20.1
Germany	58.6	1.3	2.3	52.9	1.8	2.6	42.8	2.1	3.7
Israel	2.1	0.0	0.1	0.8	0.0	0.0	0.8	0.0	0.1
Italy	190.6	4.4	7.5	95.0	3.2	4.7	75.4	3.7	6.5
Japan	364.1	8.4	14.4	362.4	12.3	17.8	343.2	16.7	29.7
Russia	590.4	13.5	23.4	589.0	20.0	28.9	120.1	5.8	10.4
Spain	166.8	3.8	6.6	97.4	3.3	4.8	63.5	3.1	5.5
Sweden	8.5	0.2	0.3	8.6	0.3	0.4	6.4	0.3	0.6
Switzerland	7.0	0.2	0.3	3.6	0.1	0.2	2.9	0.1	0.2
United Kingdom	43.2	1.0	1.7	19.0	0.6	0.9	15.3	0.7	1.3
United States	38.4	0.9	1.5	17.2	0.6	0.8	13.1	0.6	1.1
Non-Paris Club	453.1	10.4	17.9	444.0	15.1	21.7	179.4	8.7	15.5
Algeria	95.9	2.2	3.8	95.9	3.3	4.7	31.7	1.5	2.7
Angola	3.7	0.1	0.1	3.7	0.1	0.2	1.2	0.1	0.1
China	46.6	1.1	1.8	40.3	1.4	2.0	15.6	0.8	1.4
Iraq	114.2	2.6	4.5	114.2	3.9	5.6	58.9	2.9	5.1
Kuwait	13.6	0.3	0.5	12.3	0.4	0.6	9.4	0.5	0.8
Libya	167.4	3.8	6.6	167.4	5.7	8.2	55.3	2.7	4.8
Saudi Arabia	9.2	0.2	0.4	7.7	0.3	0.4	5.5	0.3	0.5
United Arab Emirates	2.5	0.1	0.1	2.5	0.1	0.1	1.7	0.1	0.1
Commercial debt	25.3	0.6	1.0	25.3	0.9	1.2	8.4	0.4	0.7
AGIP	7.9	0.2	0.3	7.9	0.3	31.1	2.6	0.1	31.1
ENI International Ltd Bank	9.8	0.2	0.4	9.8	0.3	38.6	3.2	0.2	38.5
Hong Kong CITO Bank	4.2	0.1	0.2	4.2	0.1	16.8	1.4	0.1	16.8
London Club Debt	3.4	0.1	0.1	3.4	0.1	13.6	1.1	0.1	13.6

Sources: Malagasy authorities; and staff estimates.

1/ Before full use of traditional debt-relief mechanisms. Data for Russia do not reflect the 70 percent up-front discount agreed in the context of the Paris Club. This discount is taken into account in the column showing NPV of debt after application of traditional debt-relief mechanisms.

2/ After full use of traditional debt relief mechanisms and comparable treatment by non-Paris Club official bilateral and commercial creditors.

Table 9: Debt Service Paid, 1995-1999

	1995	1996	1997	1998	1999
Debt service paid (US\$ million) 1/	69.9	92.8	202.0	166.1	106.3
Debt service ratio (percent) 2/	9.2	11.3	26.2	20.7	11.5
Debt service paid as percent of GDP	2.2	2.3	5.7	4.4	2.9
Debt service paid as percent of government revenue	25.9	26.7	59.0	41.7	25.0

Sources: Malagasy authorities and staff estimates

1/ The increase in debt service in 1997 and 1998 is due to payments of late interest and post cutoff arrears following the Paris Club agreement of March 1997.

2/ Debt service paid as a percentage of exports of goods and nonfactor services.

Table 10. Main Assumptions on Macroeconomic Framework, 1999-2019 /1

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	1999-2009 Average	2010-19 Average
(In percent of GDP, unless otherwise indicated)													
Economic growth													
Real GDP (percentage change)	4.7	4.8	6.0	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.4
Real GDP per capita (percentage change)	1.6	1.8	3.1	3.5	3.6	3.7	3.8	3.8	3.8	3.8	3.8	3.3	3.8
National accounts													
Gross domestic investment	14.9	17.0	18.5	17.7	17.1	17.2	17.4	17.6	17.8	18.0	18.3	17.4	19.6
Of which: public	6.9	8.7	10.4	9.7	9.1	8.5	8.5	8.5	8.5	8.5	8.5	8.7	8.5
Gross domestic savings	7.2	6.8	8.2	8.8	8.9	10.5	11.3	11.8	12.1	12.3	12.9	10.1	14.5
Gross national savings	9.5	10.4	10.7	10.8	11.2	12.1	12.5	12.9	13.1	13.3	13.7	11.8	16.1
(In millions of US dollars, unless otherwise indicated)													
Balance of payments													
I. Current Account, excluding official transfers 3/ (in percent of GDP)	-236.1	-317.2	-375.1	-368.9	-384.7	-346.4	-348.2	-365.2	-399.7	-433.1	-458.1	-366.6	-575.3
Exports of goods and services 2/ (in percent of GDP)	-6.3	-8.1	-8.8	-7.7	-7.3	-6.0	-5.5	-5.2	-5.3	-5.2	-5.1	-6.4	-3.8
Imports of goods and services 2/ (in percent of GDP)	24.4	24.9	24.4	23.8	23.5	24.3	24.0	23.6	23.3	23.0	22.8	23.8	21.1
Net factor income (excluding interest payments)	11.9	13.4	9.8	1.5	-8.5	-9.1	-9.7	-10.3	-11.0	-11.7	-12.4	-3.3	-17.6
Interest payments 3/	-54.0	-35.1	-51.0	-51.2	-52.1	-51.9	-53.7	-57.8	-56.6	-57.2	-61.0	-52.9	-67.9
Net current transfers	129.3	162.9	147.4	147.6	181.9	152.9	141.9	143.6	143.7	145.8	146.6	149.4	174.9
Of which: Official transfers	35.3	59.4	42.2	39.7	70.2	49.8	37.9	39.2	39.2	39.2	39.2	44.7	38.7
II. Current account, including official transfers (in percent of GDP)	-200.8	-257.9	-332.9	-329.2	-314.4	-296.6	-310.3	-325.9	-360.4	-393.9	-418.9	-321.9	-536.6
(in percent of GDP)	-5.4	-6.6	-7.8	-6.9	-5.9	-5.1	-4.9	-4.7	-4.7	-4.7	-4.6	-5.6	-3.5
III. Capital transfers (project grants)	128.8	134.0	139.6	151.4	164.2	209.0	229.5	250.6	273.5	298.6	326.0	209.6	396.4
IV. Financial operations	47.7	173.0	279.9	200.4	205.1	140.4	150.6	142.1	143.4	157.6	169.2	164.5	277.9
Net foreign direct investment	58.4	72.2	71.4	53.2	60.2	37.0	41.0	45.1	49.6	54.5	54.8	54.3	103.0
Net long-term borrowing	-12.3	96.8	204.6	133.9	130.2	89.9	96.1	83.5	80.3	89.6	100.9	99.4	161.4
Disbursements	93.1	148.2	260.6	192.9	194.0	153.3	166.0	153.1	167.2	182.5	199.2	173.6	304.6
Program	15.9	52.3	133.5	59.9	60.2	25.6	25.7	0.0	0.0	0.0	0.0	33.9	0.0
Project	77.2	95.9	127.0	133.0	133.8	127.7	140.3	153.1	167.2	182.5	199.2	139.7	304.6
Amortization 4/	-105.4	-51.4	-56.0	-59.0	-63.8	-63.4	-69.9	-69.6	-86.9	-92.9	-98.3	-74.2	-143.2
Other net long-term flows	1.6	4.0	4.0	13.3	14.7	13.5	13.5	13.5	13.5	13.5	13.5	10.8	13.5
Errors and omissions and net short-term flows	17.8	8.6	-10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0
V. Overall balance	-6.6	57.8	76.3	22.5	54.9	52.8	69.8	66.7	56.5	62.4	76.4	53.6	137.6
VI. Financing	6.6	-57.8	-76.3	-22.5	-54.9	-52.8	-69.8	-66.7	-56.5	-62.4	-76.4	-53.6	-137.6
Change in net foreign assets	-53.5	-122.3	-153.3	-111.8	-108.7	-105.2	-125.1	-124.2	-113.8	-120.6	-137.3	-116.0	-210.9
IMF (net) 5/	13.3	45.3	28.3	26.6	23.1	-7.3	-15.3	-21.2	-17.6	-13.9	-13.9	4.3	-0.6
Gross official reserves	-66.7	-167.7	-181.6	-138.4	-131.8	-97.8	-109.8	-103.0	-96.2	-106.6	-123.4	-120.3	-210.3
Debt relief 6/ 7/	55.8	61.9	466.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.1	0.0
Net change in arrears 7/	4.2	-6.5	-466.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-42.6	0.0
VII. Financing gap 8/ Enhanced HIPC assistance	0.0	9.2	77.0	89.3	53.8	52.4	55.3	57.5	57.3	58.2	60.9	51.9	73.3
Enhanced HIPC assistance	0.0	9.2	77.0	89.3	53.8	52.4	55.3	57.5	57.3	58.2	60.9	51.9	73.3
Memorandum items													
Gross official reserves (in weeks of imports) 9/	7.0	10.8	15.3	18.3	20.4	22.0	24.1	25.8	26.6	27.2	28.1	20.5	34.8
Export volume growth (percentage change) 10/	11.4	5.2	6.1	6.9	7.8	12.0	6.6	5.8	6.1	6.5	6.5	7.4	6.1
Import volume growth (percentage change) 10/	7.8	12.7	6.7	3.6	5.8	5.7	4.9	5.0	6.3	6.4	5.8	6.4	6.1

Sources: Central Bank of Madagascar; and staff estimates and projections.

1/ Data for 2000 are projections which differ from the IMF PRGF program presented in EBS/00/105

2/ Exports (imports) of goods and services as defined in IMF, *Balance of Payments Manual* (5th ed., 1993).

3/ After full application of traditional debt relief mechanisms; includes interest due to the IMF.

4/ After full application of traditional debt relief mechanisms; excludes amortization due to the IMF.

5/ Reflects disbursements under current PRGF arrangement through end-2000.

6/ In 1999 reflects flow rescheduling under Naples terms under the current Paris Club agreement.

7/ In 1999 reflects simulation of a stock of debt operation at end-year.

8/ The financing gap in 2000 will be covered by the debt relief provided in the 1997 Paris Club agreement.

9/ Imports of goods and nonfactor services.

10/ Merchandise imports and exports.

Table 11. Possible HIPC Initiative Assistance Under a Proportional
Burden-Sharing Approach 1/
(in millions of U.S. dollars in end-December 1999 NPV terms, unless otherwise indicated) 2/

	Total	Bilateral 3/	Multilateral	Common Reduction Factor at Decision Point 4/ (Percent)	Memo Item: Required NPV debt Reduction on Comparable Treatment of Bilateral Debt Based on Overall Exposure 5/ (Percent)
NPV of debt-to-exports target (in percent)	150				
Debt relief under baseline scenario	814	457	357	39.5	
NPV of debt 6/	2,058	1,156	902		
Paris Club	968				79.8
<i>Of which: pre-cutoff date non-ODA debt</i>	500				92.2
Non-Paris Club bilaterals	188				79.8
<i>Of which: pre-cutoff date non-ODA debt</i>	102				89.2
<i>Of which: commercial creditors</i>	8				
Three-year average of exports	830	...	...
Current-year exports	910	...	...
NPV of debt-to-exports ratio 7/	248	...	...

Sources: Malagasy authorities and staff estimates and projections.

1/ The proportional burden-sharing approach is described in "HIPC Initiative--Estimated Costs and Burden Sharing Approaches" (EBS/97/127; 7/7/97) and IDA/SEC M 97-306; 7/7/97).

2/ Using six-month backward-looking discount rates at end-December 1999 and end-December 1999 exchange rates.

3/ Includes official bilateral creditors and commercial debt.

4/ Each multilateral's NPV reduction at the decision point in percent of its exposure at end-December 1999.

5/ Includes traditional debt relief; a hypothetical stock-of-debt operation on Naples terms at end-December 1999.

6/ Based on latest data available at decision point after full application of traditional debt-relief mechanisms.

7/ Based on the three-year export average (backward-looking average) ending in the year preceding the decision point (i.e., 1997-1999)

Table 12. External Debt Indicators, 1999–2019 1/
(in percent, unless otherwise indicated)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Averages	
	Actual	Estimate										2000-2009	2010-2019
After traditional debt relief													
NPV of debt to GDP ratio	55.3	55.0	52.2	48.5	45.3	42.3	39.5	37.0	34.6	32.4	30.4	41.7	22.5
NPV of debt to exports ratio 2/ 3/	248.1	239.7	229.0	220.4	210.0	194.4	180.7	168.5	159.9	151.8	143.9	189.8	113.9
NPV of debt to revenue ratio 4/	484.6	435.6	409.4	375.4	343.1	313.3	286.3	262.1	240.3	220.7	202.7	308.9	136.5
Debt service ratio	...	11.7	11.2	10.2	9.8	9.3	9.0	9.5	9.2	8.9	8.7	9.8	7.3
Debt service to revenue ratio 4/	...	23.1	21.4	18.8	17.4	16.7	15.5	15.9	14.9	14.0	13.3	17.1	9.4
After enhanced HIPC assistance													
NPV of debt to GDP ratio	...	...	49.5	30.1	28.7	27.2	25.9	24.6	23.4	22.3	21.3	28.1	17.6
NPV of debt to exports ratio 2/ 3/	...	...	217.2	136.7	133.1	125.1	118.3	112.0	108.1	104.4	100.8	128.4	89.3
NPV of debt to exports ratio (existing debt only)	...	...	197.7	110.7	101.8	91.2	81.8	73.7	67.6	62.1	56.8	93.7	37.9
NPV of debt to revenue ratio 4/	...	...	388.4	232.8	217.5	201.6	187.3	174.3	162.5	151.8	142.1	206.5	106.3
Debt service ratio	...	...	6.2	5.0	5.5	5.6	5.3	6.0	6.0	5.9	5.8	5.7	4.9
Debt service to revenue ratio 4/	...	...	11.8	9.2	9.7	10.0	9.3	10.1	9.7	9.2	8.8	9.8	6.3
After enhanced HIPC assistance assumed committed unconditionally 5/													
NPV of debt to GDP ratio	33.4	33.5	32.0	30.1	28.7	27.2	25.9	24.6	23.4	22.3	21.3	26.9	17.6
NPV of debt to exports ratio 2/ 3/	150.0	146.1	140.4	136.7	133.1	125.1	118.3	112.0	108.1	104.4	100.8	122.5	89.3
NPV of debt to revenue ratio 4/	293.0	265.4	251.0	232.8	217.5	201.6	187.3	174.3	162.5	151.8	142.1	198.6	106.3
Sensitivity analysis													
Lower growth scenario 6/													
NPV of debt to exports ratio	...	282.3	221.7	143.0	143.0	136.7	130.8	125.9	123.2	120.7	118.0	154.5	110.1
Debt service ratio	...	10.8	6.5	5.4	6.0	6.2	6.1	7.0	7.1	7.0	7.0	6.9	6.3
Debt service to revenue ratio 4/	...	21.2	12.3	9.9	10.8	11.4	10.7	11.9	11.6	11.2	10.9	12.2	8.2
Lower project grants scenario 7/													
NPV of debt to exports ratio	...	281.6	217.2	136.7	133.1	125.9	119.8	114.4	111.4	108.7	106.1	145.5	97.3
Debt service ratio	...	10.8	6.2	5.0	5.5	5.6	5.4	6.1	6.1	6.0	5.9	6.2	5.4
Debt service to revenue ratio 4/	...	21.2	12.3	9.9	10.9	11.5	10.9	12.2	12.0	11.7	11.5	12.4	9.8
Memorandum items:													
	(in millions of U.S. dollars)												
NPV of debt after traditional debt relief	2,058	2,147	2,235	2,316	2,397	2,456	2,519	2,573	2,630	2,691	2,754	2,472	3,264
Debt service after traditional debt relief	...	114	117	116	122	131	137	156	163	171	180	141	229
NPV of debt after HIPC assistance	...	...	2,120	1,436	1,519	1,581	1,649	1,711	1,778	1,851	1,930	1,731	2,591
Debt service after HIPC assistance	...	...	64	56	68	79	82	99	106	112	120	87	156
GDP	3,722	3,906	4,283	4,773	5,291	5,806	6,376	6,960	7,598	8,295	9,055	6,234	15,138
Exports of goods and services 2/	910	972	1,046	1,135	1,242	1,412	1,528	1,641	1,767	1,910	2,065	1,472	3,160
Exports of goods and services (3-year mv. avg.) 2/	830	896	976	1,051	1,141	1,263	1,394	1,527	1,645	1,773	1,914	1,358	2,941
Government revenue 4/	425	493	546	617	699	784	880	982	1,094	1,220	1,358	867	2,553

Sources: Malagasy authorities; and staff estimates.

1/ All debt indicators refer to public and publicly guaranteed (PPG) debt and are defined after rescheduling, unless otherwise indicated.

2/ As defined in IMF, *Balance of Payments Manual*, 5th edition, 1993.

3/ Based on a three-year average of exports on the previous year (e.g., export average over 1997-99 for NPV of debt-to-exports ratio in 1999).

4/ Revenue is defined as central government revenue, excluding grants.

5/ Entire assistance assumed to be delivered unconditionally in 1999.

6/ Growth of real GDP is assumed at 4 percent per year from 2000 onwards, instead of 6.3 percent in the baseline. Export and import volume have been lowered, consistently with the lower GDP growth.

7/ The share of grants in external project financing declines gradually from 60 percent in 2000 to 50 percent in 2010.

Table 13. External Debt Service After Full Use of Traditional Debt-Relief Mechanisms, 2000-2019

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2000-2009	2010-2019
	Projections										Averages	
	(In millions of US dollars, unless otherwise indicated)											
Total debt service after traditional debt relief 1/	113.7	117.1	116.1	121.7	131.1	136.8	156.3	163.3	170.5	180.5	140.7	229.5
Multilateral	54.6	51.6	54.3	58.1	56.7	60.5	63.7	63.7	62.9	65.4	59.2	65.0
<i>Of which</i>												
IIDA	27.6	30.0	31.1	32.9	34.8	36.8	39.9	43.7	46.7	48.4	37.2	52.5
IMF	6.6	3.1	5.0	8.7	8.7	12.4	12.3	8.5	4.8	4.8	7.5	0.0
African Development Bank	12.4	12.0	11.7	10.8	8.4	6.8	6.9	7.3	7.8	8.5	9.3	9.6
Others	7.9	6.5	6.5	5.7	4.9	4.6	4.6	4.3	3.6	3.7	5.2	2.8
Official bilateral	56.5	60.3	54.3	53.9	62.7	62.5	63.3	63.6	64.1	64.0	60.5	65.9
Paris Club	46.3	48.2	44.1	43.0	52.2	51.7	51.8	51.9	52.1	51.6	49.3	51.1
<i>Of which</i>												
Official Development Assistance	18.0	23.1	21.3	19.7	28.5	27.5	26.5	25.4	24.3	22.4	23.7	10.5
Non-Paris Club	10.2	12.2	10.2	10.8	10.5	10.8	11.4	11.7	12.0	12.4	11.2	14.8
<i>Of which</i>												
ODA	3.7	5.6	3.7	4.3	4.0	4.3	4.6	4.6	4.6	4.6	4.4	4.5
Commercial	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.5	0.8
New debt	2.1	4.7	7.0	9.3	11.2	13.3	28.9	35.4	42.9	50.6	20.5	97.8
Total debt service after enhanced HIPC assistance 2/	104.5	64.5	56.5	68.0	78.7	81.6	98.9	106.0	112.3	119.5	89.0	156.2
Multilateral	54.6	30.1	25.1	25.9	26.5	28.2	30.7	32.3	32.2	33.4	31.9	34.2
<i>Of which</i>												
IIDA	27.6	14.9	15.5	16.4	17.3	18.4	19.9	21.8	23.3	24.1	19.9	26.2
IMF	6.6	2.2	2.4	3.4	4.5	5.9	6.8	6.5	4.8	4.8	4.8	0.0
African Development Bank	12.4	7.4	2.5	3.1	3.1	2.5	2.6	2.7	2.9	3.2	4.3	6.1
Others	7.9	5.6	4.6	3.0	1.5	1.4	1.4	1.3	1.2	1.3	2.9	1.9
Official bilateral	47.8	29.5	24.3	32.7	40.9	40.0	39.3	38.2	37.2	35.6	36.5	24.1
Paris Club	45.1	22.4	19.0	27.7	36.3	35.1	34.0	33.0	31.9	30.3	31.5	19.3
<i>Of which</i>												
ODA	23.0	13.0	12.0	16.8	15.9	15.6	15.2	14.9	14.5	13.3	15.4	10.3
Non-Paris Club	2.7	7.2	5.3	4.9	4.6	4.9	5.2	5.2	5.2	5.3	5.1	4.8
<i>Of which</i>												
ODA	2.7	5.2	3.3	4.3	4.0	4.3	4.6	4.6	4.6	4.6	4.2	4.0
Commercial	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
New debt	2.1	4.7	7.0	9.3	11.2	13.3	28.9	35.4	42.9	50.6	20.5	97.8
Memorandum items:												
Exports of goods and nonfactor services	971.8	1,046.1	1,135.3	1,242.4	1,412.1	1,527.6	1,641.0	1,767.4	1,910.4	2,065.3	1,471.9	3,160.1
Debt-service ratio after tradit. debt relief (percent) 3/	11.9	11.4	10.3	9.8	9.7	9.4	10.0	9.7	9.4	9.3	10.1	7.8
Debt-service ratio after HIPC assistance (percent) 3/	11.0	6.3	5.0	5.5	5.8	5.6	6.3	6.3	6.2	6.1	6.4	5.2

Sources: Malagasy authorities; and staff estimates and projections.

1/ Assumes a stock-of-debt operation under Naples terms at end-December 1999.

2/ Completion point is assumed to be reached at end-2002. The debt service in 2001 and in 2002 shows only the effect of interim assistance.

3/ Debt service in percent of current-year exports of goods and nonfactor services.

Table 14. Net Present Value of External Debt After Full Use of Traditional Debt Relief Mechanisms, 1999-2019 1/
(In millions of U.S. dollars, unless otherwise indicated)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	1999-2009	2010-2019
	Actual	Estimate	Projections										Averages
I. After Traditional Debt Relief													
1. NPV of total debt (2+5) 2/	2,058.2	2,146.9	2,234.8	2,316.2	2,396.7	2,455.9	2,519.1	2,573.0	2,630.2	2,691.2	2,754.2	2,434.2	3,263.9
2. NPV of outstanding debt (3+4)	2,058.2	2,050.3	2,044.7	2,043.6	2,039.1	2,026.9	2,010.2	1,988.5	1,965.0	1,940.4	1,911.9	2,007.2	1,737.6
3. Official bilateral and commercial	1,156.2	1,150.9	1,145.1	1,146.6	1,148.7	1,142.1	1,135.2	1,127.1	1,118.1	1,107.9	1,097.2	1,134.1	1,039.1
4. Multilateral	902.0	899.4	899.6	897.0	890.4	884.8	875.0	861.3	846.9	832.4	814.6	873.0	698.5
5. NPV of new borrowing	..	96.5	190.1	272.6	357.6	429.1	508.9	584.5	665.2	750.8	842.4	469.8	1,526.3
Memorandum items:													
Exports of goods and services 3/	921.4	951.8	1,025.4	1,128.8	1,240.1	1,348.0	1,456.2	1,564.7	1,680.8	1,808.6	1,945.4	1,370.1	2,979.7
Three-year export average 4/	831.6	891.4	966.2	1,035.3	1,131.4	1,239.0	1,348.1	1,456.3	1,567.2	1,684.7	1,811.6	1,269.3	2,772.9
Government revenues 5/	909.9	971.8	1,046.1	1,135.3	1,242.4	1,412.1	1,527.6	1,641.0	1,767.4	1,910.4	2,065.3	1,420.8	3,160.1
GDP	424.7	492.8	545.8	617.0	698.5	784.0	880.0	981.6	1,094.4	1,219.5	1,358.5	827.0	2,553.3
NPV of debt-to-exports ratio 6/	247.5	240.8	231.3	223.7	211.8	198.2	186.9	176.7	167.8	159.7	152.0	199.7	120.8
Total debt (2+4)	55.3	55.0	52.2	48.5	45.3	42.3	39.5	37.0	34.6	32.4	30.4	43.0	22.5
Outstanding debt (3+4)	55.3	52.5	47.7	42.8	38.5	34.9	31.5	28.6	25.9	23.4	21.1	36.6	12.4
NPV of debt-to-exports ratio (percent) 3/													
Total debt (2+4)	248.1	239.7	229.0	220.4	210.0	194.4	180.7	168.5	159.9	151.8	143.9	195.1	113.9
Outstanding debt (3+4)	248.1	229.0	209.5	194.4	178.7	160.5	144.2	130.2	119.4	109.4	99.9	165.8	62.6
NPV of debt-to-revenue ratio (percent)													
Total debt (2+4)	484.6	435.6	409.4	375.4	343.1	313.3	286.3	262.1	240.3	220.7	202.7	324.9	136.5
Outstanding debt (3+4)	484.6	416.0	374.6	331.2	291.9	258.5	228.4	202.6	179.6	159.1	140.7	278.8	76.0
II. After enhanced HIPC assistance 7/													
1. NPV of total debt (2+5) 2/	2,448.4	2,521.4	2,119.9	1,436.3	1,519.3	1,580.8	1,648.6	1,710.6	1,778.0	1,851.2	1,929.9	1,867.7	2,590.7
2. NPV of outstanding debt (3+4)	2,448.4	2,424.9	1,929.8	1,163.7	1,161.7	1,151.8	1,139.7	1,126.1	1,112.8	1,100.4	1,087.5	1,440.6	1,064.3
3. Official bilateral and commercial	1,636.7	1,618.1	1,104.7	633.2	627.0	612.1	597.2	582.1	567.0	552.0	537.7	824.3	508.7
4. Multilateral	811.6	806.8	825.1	530.5	534.7	539.7	542.5	544.0	545.8	548.3	549.9	616.3	555.7
5. NPV of new borrowing	..	96.5	190.1	272.6	357.6	429.1	508.9	584.5	665.2	750.8	842.4	469.8	1,526.3
Memorandum items:													
NPV of debt-to-GDP ratio (percent)													
Total debt (2+4)	65.8	64.5	49.5	30.1	28.7	27.2	25.9	24.6	23.4	22.3	21.3	34.8	17.6
Outstanding debt (3+4)	65.8	62.1	45.1	24.4	22.0	19.8	17.9	16.2	14.6	13.3	12.0	28.5	7.5
NPV of debt-to-exports ratio (percent)													
Total debt (2+4)	295.1	281.6	217.2	136.7	133.1	125.1	118.3	112.0	108.1	104.4	100.8	157.5	89.3
Outstanding debt (3+4)	295.1	270.8	197.7	110.7	101.8	91.2	81.8	73.7	67.6	62.1	56.8	128.1	37.9
NPV of debt-to-revenue ratio (percent)													
Total debt (2+4)	576.5	511.6	388.4	232.8	217.5	201.6	187.3	174.3	162.5	151.8	142.1	267.9	106.3
Outstanding debt (3+4)	576.5	492.0	353.5	188.6	166.3	146.9	129.5	114.7	101.7	90.2	80.1	221.8	45.9
III. After unconditional delivery of enhanced HIPC assistance 8/													
1. NPV of total debt (2+5) 2/	1,244.4	1,307.9	1,370.1	1,436.3	1,519.3	1,580.8	1,648.6	1,710.6	1,778.0	1,851.2	1,929.9	1,579.8	2,590.7
2. NPV of outstanding debt (3+4)	1,244.4	1,211.4	1,179.9	1,163.7	1,161.7	1,151.8	1,139.7	1,126.1	1,112.8	1,100.4	1,087.5	1,152.7	1,064.3
3. Official bilateral and commercial	699.1	688.6	655.3	633.2	627.0	612.1	597.2	582.1	567.0	552.0	537.7	613.8	508.7
4. Multilateral	545.4	522.7	524.6	530.5	534.7	539.7	542.5	544.0	545.8	548.3	549.9	538.9	555.7
5. NPV of new borrowing	..	96.5	190.1	272.6	357.6	429.1	508.9	584.5	665.2	750.8	842.4	469.8	1,526.3
Memorandum items:													
NPV of debt-to-GDP ratio (percent)													
Total debt (2+4)	33.4	33.5	32.0	30.1	28.7	27.2	25.9	24.6	23.4	22.3	21.3	27.5	17.6
Outstanding debt (3+4)	33.4	31.0	27.6	24.4	22.0	19.8	17.9	16.2	14.6	13.3	12.0	21.1	7.5
NPV of debt-to-exports ratio (percent)													
Total debt (2+4)	150.0	146.1	140.4	136.7	133.1	125.1	118.3	112.0	108.1	104.4	100.8	125.0	89.3
Outstanding debt (3+4)	150.0	135.3	120.9	110.7	101.8	91.2	81.8	73.7	67.6	62.1	56.8	95.6	37.9
NPV of debt-to-revenue ratio (percent)													
Total debt (2+4)	293.0	265.4	251.0	232.8	217.5	201.6	187.3	174.3	162.5	151.8	142.1	207.2	106.3
Outstanding debt (3+4)	293.0	245.8	216.2	188.6	166.3	146.9	129.5	114.7	101.7	90.2	80.1	161.2	45.9

Sources: Malagasy authorities; and staff estimates and projections.

1/ Refers to public and publicly guaranteed external debt only and assumes a stock-of-debt operation on Naples terms (67 percent NPV reduction) at the end of 1999, and at least comparable action by other official bilateral creditors.

2/ Discounted on the basis of the average commercial interest reference rate for the respective currency, derived over the six-month period prior to the latest date for which actual data are available (base date). The conversion of currency-specific NPVs into U.S. dollars occurs for all years at the base date exchange rate.

3/ As defined in IMF Balance of Payments Manual, 5th edition, 1993

4/ Backward-looking average (e.g. average over 1997-99 for exports in 1999)

5/ Revenues are defined as central government revenues, excluding grants

6/ NPV of debt in percent of three-year average of exports of goods and services.

7/ The completion point is assumed to be reached in December 2002; HIPC Initiative assistance is assumed to be committed and delivered unconditionally from then. The NPV of debt for 2001 shows only the effect of interim assistance

8/ The NPV of debt shows the results of the (hypothetical) unconditional commitment of HIPC Initiative assistance.

Table 15. Discount Rate and Exchange Rate Assumptions 1/

Currency	Discount Rates 1/ 2/ (In percent per annum)	Exchange Rates 2/ (Currency per U.S. dollar)
Austrian schilling	5.47	13.70
Belgian franc	5.47	40.16
Canadian dollar	6.67	1.44
Swiss franc	4.27	1.60
Chinese yuan	5.59	8.28
Deutsche mark	5.47	1.95
Danish kroner	5.32	7.40
Domestic currency: Malagasy franc	5.59	6,543.20
European currency unit	5.47	0.995
Spanish peseta	5.47	165.62
Finnish markkaa	5.47	5.92
French franc	5.47	6.53
Indian rupee	5.59	43.49
Iraqi dinar	5.59	0.31
Italian lira	5.47	1,927.40
Japanese yen	1.98	102.20
Kuwaiti dinar	5.59	0.30
Netherland guilder	5.47	2.19
Norwegian kroner	6.64	8.04
Portuguese escudo	5.47	199.56
Russian rubble	7.04	0.60
Saudi Arabian rial	5.59	3.75
Special drawing rights	5.59	0.73
Swedish kroner	5.80	8.53
UAEDirhams	5.59	3.67
United Kingdom pound sterling	6.70	0.62
United States dollar	7.04	1.00
Memorandum item:		
Paris Club cut-off-date is July 1, 1983		

Sources: OECD; and IMF, *International Financial Statistics*.

1/ The discount rates used are the average commercial interest reference rates (CIRRs) for the respective currencies over the six-month period ended December 1998.

2/ For all currencies for which the CIRRs are not available, the SDR discount rate is used as the proxy.

Table 16. Possible Delivery of IMF Assistance under the HIPC Initiative 1/

(In millions of US dollars, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Delivery schedule of IMF assistance (in percent of total assistance)	0.0	4.0	8.4	20.0	11.0	26.0	22.6	8.0	0.0	0.0
Debt Service due on IMF obligations 2/ <i>Of which:</i> Principal	0.1	3.1	5.0	8.7	8.7	12.4	12.3	8.5	4.8	4.8
Interest	0.0	1.8	3.7	7.4	7.4	11.2	11.2	7.4	3.7	3.7
	0.1	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.0
IMF assistance—deposits into Madagascar's account										
Interim assistance 3/	0.9	1.9								
Completion point assistance 4/			19.3							
IMF assistance under the HIPC Initiative—drawdown schedule 5/ <i>Of which:</i> IMF assistance without interest	0.0	0.9	2.6	5.3	4.2	6.5	5.5	2.0	0.0	0.0
Estimated interest earnings	0.0	0.9	1.9	4.4	2.4	5.7	5.0	1.8	0.0	0.0
	0.0	0.0	0.7	0.9	1.7	0.7	0.5	0.3	0.0	0.0
Debt service due on current IMF obligations after IMF assistance 5/ 6/	0.1	2.2	2.4	3.4	4.5	5.9	6.8	6.5	4.8	4.8
Share of debt service due on current IMF obligations covered by IMF assistance (in percent) 5/	0.0	28.8	51.5	60.6	47.8	52.3	44.6	23.7	0.0	0.0
<i>Memorandum items:</i>										
Proportion of each repayment falling due during the period to be paid by HIPC Initiative assistance from the principal deposited in Madagascar's account	0.0	50.1	49.8	59.2	32.6	51.3	44.6	23.7	0.0	0.0
Total debt service due 7/	113.7	117.1	116.1	121.7	131.1	136.8	156.3	163.3	170.5	180.5
Share of total debt service covered by IMF assistance (in percent) 5/	0.0	0.8	2.2	4.3	3.2	4.7	3.5	1.2	0.0	0.0
Debt service due on current IMF obligations after IMF assistance 5/ (in percent of exports)	0.0	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2

Sources: Fund staff estimates.

1/ Total IMF assistance under the HIPC Initiative is US\$ 22.1 million calculated on the basis of data available at the decision point, excluding interest earned on Madagascar's account and on committed but undisbursed amounts as described in footnotes 4 and 5.

2/ As of December 31, 1999 using end-1999 exchange rate. For 2000, covers obligations falling due after December 15, the expected decision point.

3/ Interim assistance to be deposited into Madagascar's account in December 2000 and December 2001, to cover obligations to the Fund falling due for the coming two years. As Madagascar has no principal obligation falling due in December 2000, the first repayment of obligations takes place in 2001.

4/ Remaining amount of assistance assumed to be disbursed into Madagascar's account at the assumed completion point in December 2002, which is reflected in the calculation of interest.

5/ Includes estimated interest earnings on: (1) amounts held in Madagascar's account; and (2), up to the completion point, amounts committed but not yet disbursed. It is assumed that these amounts earn a rate of return of 5.25 percent in U.S. dollar terms; actual interest earnings may be higher or lower. Interest accrued on (1) during a calendar year will be used toward the first repayment obligation(s) falling due in the following calendar year except in the final year, when it will be used toward payment of the final obligation(s) falling due in that year. Interest accrued on (2) during the interim period will be used toward the repayment of obligations falling due during the three years after the completion point.

6/ Total obligations less HIPC Initiative assistance.

7/ After traditional debt relief mechanisms.

Table 17. Possible Delivery of IDA Assistance Under the Enhanced HIPC Initiative, 2000-2020 1/

(In millions of U.S. dollars, unless otherwise indicated)

	NPV relief required	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Annual averages		Cumulative
													2001-10	2011-20	2001-2020
Debt service to IDA before HIPC Assistance		27.6	30.0	31.1	32.9	34.8	36.8	39.9	43.7	46.7	48.4	49.6	39.4	52.9	922.6
of which principal		17.5	20.0	21.2	23.2	25.2	27.5	30.8	34.8	38.0	40.0	41.6	30.2	46.7	769.2
of which interest		10.2	10.0	9.9	9.7	9.5	9.3	9.1	8.9	8.6	8.3	8.0	9.2	6.2	153.4
Debt Service to IDA after HIPC Assistance		27.6	14.9	15.5	16.4	17.3	18.4	19.9	21.8	23.3	24.1	24.7	19.6	29.0	485.9
of which principal		17.5	9.9	10.6	11.6	12.6	13.7	15.3	17.3	19.0	20.0	20.7	15.1	25.7	407.2
of which interest		10.2	5.0	4.9	4.8	4.8	4.7	4.6	4.4	4.3	4.2	4.0	4.6	3.3	78.6
Savings on debt service to IDA	252	0.0	15.0	15.6	16.5	17.4	18.5	20.0	21.9	23.4	24.3	24.9	19.8	23.9	436.7
of which principal		0.0	10.0	10.6	11.6	12.7	13.8	15.4	17.4	19.1	20.1	20.9	15.2	21.0	362.0
of which interest		0.0	5.0	5.0	4.9	4.8	4.7	4.6	4.5	4.3	4.2	4.0	4.6	2.9	74.7
Savings as percent of debt service due		0	50	50	50	50	50	50	50	50	50	50	50	45	47

Source: Staff estimates.

1/ Enhanced HIPC assistance proposed to be delivered over about 19 years through a 50 percent relief on the debt service falling due to IDA on credits outstanding at end-1999.

Table 18. Central Government Accounts, 1996-2003 1/
(In billions of Malagasy francs)

	1996	1997	1998	1999		2000		2001	2002	2003
				Prog.	Est.	Rev.	Prog.				Projections
Total revenue and grants	2,091	2,703	2,873	3,455	3,510	4,577	4,560	5,121	5,720	6,389
Total revenue	1,407	1,747	2,165	2,670	2,667	3,325	3,325	3,776	4,275	4,850
Budgetary revenue	1,405	1,747	2,077	2,646	2,667	3,311	3,311	3,776	4,275	4,850
Of which: tax revenue	1,374	1,688	1,984	2,567	2,580	3,214	3,214	3,674	4,175	4,700
Extrabudgetary and capital revenue 2/	3	0	0	24	0	14	14	0	0	0
Grants	683	956	708	786	843	1,253	1,235	1,344	1,445	1,539
Current grants	116	378	60	64	172	326	326	379	396	399
Of which: HIPC assistance 3/	...	...	...	...	...	...	...	169	170	0
Project grants	567	579	648	722	671	927	909	966	1,049	1,140
Total expenditure	2,883	3,137	3,819	4,026	3,791	4,968	4,772	6,097	6,505	6,612
Current expenditure	1,704	1,960	2,146	2,203	2,175	2,590	2,478	3,006	3,296	3,216
Budgetary expenditure	1,679	1,802	2,052	2,232	2,172	2,476	2,363	2,628	2,911	2,821
Personnel	523	670	826	917	1,001	1,058	1,058	1,251	1,332	1,425
Other noninterest expenditure	397	583	672	722	679	770	770	816	881	1,011
Foreign interest obligations 4/	629	504	467	461	325	467	355	371	501	183
Domestic interest obligations	131	45	87	133	168	181	181	190	196	202
Treasury operations 2/	25	120	94	-29	3	45	45	45	45	45
Emergency expenditure 5/	0	39	0	0	0	69	69	25	26	28
Priority HIPC Initiative funded spending	...	...	...	...	...	...	...	197	204	212
Capital expenditure	1,180	1,177	1,673	1,823	1,616	2,377	2,295	3,091	3,208	3,396
Of which: reconstruction 5/	...	...	...	...	...	200	200	200	200	200
Domestic financing	284	275	466	492	430	725	730	1,145	1,102	1,165
Foreign financing	895	902	1,208	1,332	1,186	1,653	1,564	1,946	2,106	2,230
Priority HIPC Initiative funded spending	...	...	...	...	...	...	...	131	136	162
Overall balance (commitment basis)										
Including grants	-793	-434	-947	-571	-281	-390	-213	-976	-784	-222
Excluding grants	-1,476	-1,390	-1,654	-1,357	-1,123	-1,643	-1,448	-2,321	-2,230	-1,762
Changes in domestic arrears	3	-139	-102	-28	68	-99	-90	-115	0	0
Overall balance (cash basis)	-790	-573	-1,048	-599	-213	-490	-303	-1,091	-784	-222
Net cost of structural reforms 6/	0	0	-237	-495	-370	-721	-562	-613	-165	-165
Exceptional revenue	0	0	0	76	46	39	28	24	35	35
Cost of structural reforms	0	0	237	570	415	760	591	637	200	200
Total overall balance (cash basis)	-790	-573	-1,285	-1,094	-583	-1,211	-865	-1,704	-949	-387
Financing	790	573	1,285	1,094	583	1,211	865	1,704	949	387
Foreign (net)	805	692	379	878	285	1,007	738	1,688	1,165	1,239
Drawings	329	1,029	672	641	516	1,081	1,008	1,821	1,290	1,310
Of which: projects	...	...	...	...	...	566	655	879	922	929
Amortization due 4/	-604	-509	-662	-555	-608	-653	-640	-843	-848	-218
Change in external arrears	1,080	-5,460	89	-5,708	28	-6,886	-43	-3,229	0	0
External debt relief	0	5,632	281	5,721	349	7,074	413	3,938	723	148
Of which: HIPC assistance 7/	...	...	...	...	...	...	...	159	170	0
Financing gap	0	0	0	780	0	391	0	0	0	0
Domestic (net)	-15	-119	902	-541	246	-391	-55	-393	-276	-912
Banking system	-45	-146	741	-673	167	-382	-155	-443	-326	-962
Nonbanking system	30	27	160	132	79	-9	100	50	50	50
Divestment revenue	0	0	4	758	52	595	182	410	60	60
Memorandum items:										
NPV of total HIPC debt reduction	...	...	...	...	...	...	...	...	...	...
Total HIPC debt relief	...	...	...	...	...	...	...	328	340	374
Total HIPC debt relief (percent of GDP)	...	...	...	...	...	...	...	1.1	1.0	1.0

Sources: Ministry of Finance and Economy; Ministry of Budget and Development of Autonomous Provinces; and staff estimates and projections.

1/ This table is for illustrative purposes only, pending the decision point and further discussion with the Malagasy authorities during the negotiation of a successor PRGF-supported program.

2/ Beginning in 1999, treasury revenue is classified as a negative outlay in treasury expenditures, which from then on are reported on a net basis.

3/ Interim HIPC assistance of multilateral financial institutions for 2001-02.

4/ Beginning 2003, interest and amortization calculated after HIPC and an assumed Paris Club stock-of-debt operation and comparable treatment from non Paris Club creditors.

5/ For 2000, the government budgeted FMG 69 billion to address exceptional developments related to the resurgence of a cholera epidemic and the devastating effects of recent cyclones, and an additional FMG 200 billion for post cyclone reconstruction.

6/ The net cost of structural reforms comprise (i) as receipts, loan recovery by the debt-recovery unit that holds the nonperforming loans of the two (former) public banks (BFV and BTM) after their assets have been financially restructured; and (ii) as expenditures, those related to civil service reform (i.e. training, bonuses, and wage decompression); to the upgrading of pay and equipment in the justice services; to privatization (severance pay, administrative costs, transfers to the regional development fund that provides grants and concessional loans for basic social infrastructure purposes or to employees affected by privatization, and indemnization payments to formerly expropriated owners); and to the capital transfers for the asset restructuring at the two insolvent banks (BFV and BTM).

7/ Interim HIPC assistance provided through Paris Club flow rescheduling on Cologne terms for 2001-02, prior to the assumed end-2002 stock-of-debt operation.

Table 19. Central Government Ratios, 1996-2003 1/
(In percent of GDP, unless otherwise indicated)

	1996	1997	1998	1999		2000		2001	2002	2003
				Prog.	Est	Rev.	Proj.				Projections
Total revenue and grants	12.9	15.0	14.1	15.4	15.0	17.4	17.3	17.3	17.3	17.4
Total revenue	8.7	9.7	10.6	11.9	11.4	12.7	12.6	12.7	12.9	13.2
Of which: tax revenue	8.5	9.4	9.8	11.4	11.0	12.2	12.2	12.4	12.6	12.8
Grants	4.2	5.3	3.5	3.5	3.6	4.8	4.7	4.5	4.4	4.2
Current grants	0.7	2.1	0.3	0.3	0.7	1.2	1.2	1.3	1.2	1.1
Of which: HIPC assistance 2/	..	..	..	..	..	..	..	0.6	0.5	0.0
Project grants	3.5	3.2	3.2	3.2	2.9	3.5	3.5	3.3	3.2	3.1
Total expenditures	17.8	17.4	18.8	17.9	16.2	18.9	18.1	20.6	19.7	18.0
Current expenditure	10.5	10.9	10.5	9.8	9.3	9.9	9.4	10.1	10.0	8.8
Noninterest expenditure	5.7	6.9	7.4	7.3	7.2	7.0	6.9	7.0	6.7	6.6
Personnel	3.2	3.7	4.1	4.1	4.3	4.0	4.0	4.2	4.0	3.9
Other noninterest expenditure	2.4	3.2	3.3	3.2	2.9	2.9	2.9	2.8	2.7	2.8
Interest obligations 3/	4.7	3.0	2.7	2.6	2.1	2.5	2.0	1.9	2.1	1.0
Treasury operations 4/	0.2	0.7	0.5	-0.1	0.2	0.2	0.2	0.2	0.1	0.1
Emergency expenditures 5/	0.0	0.2	0.0	0.0	0.0	0.3	0.3	0.1	0.1	0.1
Priority HIPC Initiative-funded spending	..	..	..	..	..	..	..	0.7	0.6	0.6
Capital expenditure	7.3	6.5	8.2	8.1	6.9	9.0	8.7	10.4	9.7	9.2
Of which: domestically financed expenditure	1.8	1.5	2.3	2.2	1.8	2.8	2.8	3.9	3.3	3.2
reconstruction expenditure	..	..	..	..	..	0.8	0.8	0.7	0.6	0.5
priority HIPC Initiative-funded spending	..	..	..	..	..	..	..	0.4	0.4	0.4
Primary balance 6/	-0.2	0.6	-1.9	0.1	0.9	1.0	1.2	-1.4	-0.3	0.4
Overall balance (commitment basis)										
Including grants	-4.9	-2.4	-4.7	-2.5	-1.2	-1.5	-0.8	-3.3	-2.4	-0.6
Excluding grants	-9.1	-7.7	-8.1	-6.0	-4.8	-6.3	-5.5	-7.8	-6.7	-4.8
Excluding grants and externally financed capital expenditure	-14.6	-12.7	-14.1	-11.9	-9.9	-12.5	-9.9	-13.4	-13.3	-11.4
Changes in domestic arrears	0.0	-0.8	-0.5	-0.1	0.3	-0.4	-0.3	-0.4	0.0	0.0
Overall balance (cash basis)	-4.9	-3.2	-5.2	-2.7	-0.9	-1.9	-1.1	-3.7	-2.4	-0.6
Net cost of structural reforms 5/	0.0	0.0	-1.2	-2.2	-1.6	-2.7	-2.1	-2.1	-0.5	-0.4
Exceptional revenue	0.0	0.0	0.0	0.3	0.2	0.1	0.1	0.1	0.1	0.1
Cost of structural reforms 7/	0.0	0.0	1.2	2.5	1.8	2.9	2.2	2.1	0.6	0.5
Total overall balance (cash basis)	-4.9	-3.2	-6.3	-4.9	-2.5	-4.6	-3.3	-5.8	-2.9	-1.1
Financing	4.9	3.2	6.3	4.9	2.5	4.6	3.3	5.8	2.9	1.1
Foreign (net)	5.0	3.8	1.9	3.9	1.2	3.8	2.8	5.7	3.5	3.4
Drawings minus amortization 3/	-1.7	2.9	0.1	0.4	-0.4	1.6	6.3	3.3	1.3	3.0
Change in external arrears	6.7	-30.2	0.4	-25.4	0.1	-26.2	-0.2	-10.9	0.0	0.0
External debt relief	0.0	31.2	1.4	25.4	1.5	26.9	1.6	13.3	2.2	0.4
Of which: HIPC assistance 8/	..	..	..	..	..	..	..	0.5	0.5	0.0
Financing gap	0.0	0.0	0.0	3.5	0.0	1.5	0.0	0.0	0.0	0.0
Domestic (net)	-0.1	-0.7	4.4	-2.4	1.1	-11.5	-0.2	-1.3	-0.8	-2.5
Divestment revenue	0.0	0.0	0.0	3.4	0.2	2.3	0.7	1.4	0.2	0.2
Memorandum items:										
Total HIPC debt relief	..	..	..	..	..	..	..	1.1	1.0	1.0
Education expenditure, after HIPC	1.7	2.2	2.4	2.0	3.0	2.2	3.0	3.3	3.7	4.3
Health expenditure, after HIPC	0.7	1.0	0.9	1.4	1.2	1.6	1.8	1.9	2.1	2.4
Nominal GDP (in billions of Malagasy francs)	16,224	18,051	20,343	22,501	23,379	26,274	26,350	29,629	33,070	36,736

Sources: Ministry of Finance and Economy; Ministry of Budget and Development of Autonomous Provinces; and staff estimates and projections;

1/ This table is for illustrative purposes only, pending the decision point and further discussion with the Malagasy authorities during the negotiation of a successor PRGF-supported program.

2/ Interim HIPC assistance of multilateral financial institutions for 2001-02.

3/ Beginning 2003, interest and amortization calculated after HIPC assistance and an assumed Paris Club stock-of-debt operation and comparable treatment from non Paris Club creditors.

4/ Beginning in 1999, treasury revenue is classified as a negative outlay in treasury expenditures, which from then on are reported on a net basis.

5/ For 2000, the government budgetized FMG 69 billion to address exceptional developments related to the resurgence of a cholera epidemic and the devastating effects of recent cyclones.

6/ Overall balance (including grants) less interest payments.

7/ The net cost of structural reforms comprise (i) as receipts, loan recovery by the debt-recovery unit that holds the nonperforming loans of the two (former) public banks (BFV and BTM) after their assets have been financially restructured; and (ii) as expenditures, those related to civil service reform (i.e., training, bonuses, and wage decompression); to the upgrading of pay and equipment in the justice services; to privatization (severance pay, administrative costs, transfers to the regional development fund that provides grants and concessional loans for basic social infrastructure purposes or to employees affected by privatization, and indemnization payments to formerly expropriated owners); and to the capital transfers for the asset restructuring at the two insolvent banks (BFV and BTM).

8/ Interim HIPC assistance provided through Paris Club flow rescheduling on Cologne terms for 2001-02, prior to the assumed end-2002 stock-of-debt operation.

Table 20. HIPC Initiative: Status of Country Cases Considered Under the Initiative, November 14, 2000

Country	Decision Point	Completion Point	Target		Assistance Levels 1/					Percentage Reduction in NPV of Debt 2/	Estimated Total Nominal Debt Service Relief (In millions of U.S. dollars)
			NPV of Debt-to-Gov. revenue		(In millions of U.S. dollars, present value)						
			Export (in percent)	Gov. revenue	Total	Bilateral	Multi-lateral	IMF	World Bank		
Completion point reached under enhanced framework											
Uganda					1,003	183	820	160	517		1,950
<i>original framework</i>	<i>Apr. 97</i>	<i>Apr. 98</i>	202		347	73	274	69	160	20	650
<i>enhanced framework</i>	<i>Feb. 00</i>	<i>May 00</i>	150		656	110	546	91	357	37	1,300
Decision point reached under enhanced framework											
Benin	Jul. 00	<i>Floating</i>	150		265	77	189	24	84	31	460
Bolivia					1,302	425	876	84	194		2,060
<i>original framework</i>	<i>Sep. 97</i>	<i>Sep. 98</i>	225		448	157	291	29	53	14	760
<i>enhanced framework</i>	<i>Feb. 00</i>	<i>Floating</i>	150		854	268	585	55	141	30	1,300
Burkina Faso					398	56	342	42	162		700
<i>original framework</i>	<i>Sep. 97</i>	<i>Jul. 00</i>	205		229	32	196	22	91	27	400
<i>enhanced framework</i>	<i>Jul. 00</i>	<i>Floating</i>	150		169	24	146	20	71	27	300
Cameroon	Oct. 00	<i>Floating</i>	150		1,260	874	324	37	179	27	2,000
Guyana					585	220	365	74	68		1,030
<i>original framework</i>	<i>Dec. 97</i>	<i>May 99</i>	107	280	256	91	165	35	27	24	440
<i>enhanced framework</i>	<i>Nov. 00</i>	<i>Floating</i>	150	250	329	129	200	40	41	40	590
Honduras	Jun. 00	<i>Floating</i>	110	250	556	215	340	30	98	18	900
Mali					523	162	361	58	182		870
<i>original framework</i>	<i>Sep. 98</i>	<i>Sep. 00</i>	200		121	37	84	14	44	9	220
<i>enhanced framework</i>	<i>Sep. 00</i>	<i>Floating</i>	150		401	124	277	44	138	28	650
Mauritania	Feb. 00	<i>Floating</i>	137	250	622	261	361	47	100	50	1,100
Mozambique					1,970	1,235	736	140	434		4,300
<i>original framework</i>	<i>Apr. 98</i>	<i>Jun. 99</i>	200		1,716	1,076	641	125	381	63	3,700
<i>enhanced framework</i>	<i>Apr. 00</i>	<i>Floating</i>	150		254	159	95	16	53	9	600
Senegal	Jun. 00	<i>Floating</i>	133	250	488	193	259	45	124	19	850
Tanzania	Apr. 00	<i>Floating</i>	150		2,026	1,006	1,020	120	695	54	3,000
Decision point reached under original framework											
Côte d'Ivoire	Mar. 98	Mar. 01	141	280	345	163	182	23	91	6 3/	800
Total assistance provided/committed					11,343	5,070	6,175	883 4/	2,928		20,020
Preliminary HIPC document issued 5/											
Chad	...	...	150		157	34	123	15	65	27	250
Ethiopia	...	...	200		636	225	411	22	214	23	1,300
Gambia, The	...	...	150		72	20	52	2	24	29	102
Guinea	...	...	150		638	256	383	37	173	34	1,150
Guinea-Bissau	...	...	200		300	148	153	8	73	73	600
Madagascar	...	...	150		880	502	378	23	264	41	2,000
Malawi	...	...	150		629	163	466	29	323	43	1,100
Nicaragua	...	...	150		2,507	1,416	1,091	32	188	66	5,000
Rwanda	...	...	150		447	56	391	43	227	71	800
Zambia	...	...	150		2,468	1,121	1,326	600	491	62	4,500

Sources: IMF and World Bank Board decisions, completion point documents, decision point documents, preliminary HIPC documents, and staff calculations.

1/ Assistance levels are at countries' respective decision or completion points, as applicable.

2/ In percent of the net present value of debt at the decision or completion point (as applicable), after the full use of traditional debt-relief mechanisms.

3/ Nonreschedulable debt to non-Paris Club official bilateral creditors and the London Club, which was already subject to a highly concessional restructuring, is excluded from the NPV of debt at the completion point in the calculation of this ratio.

4/ Equivalent to SDR 677.9million at an SDR/USD exchange rate of 0.768.

5/ Figures are based on preliminary assessments at the time of the issuance of the preliminary HIPC document, and are subject to change. Assistance levels for Ethiopia and Guinea-Bissau were based on the original framework and applied at the completion point; for Chad, The Gambia, Guinea, Madagascar, Malawi, Nicaragua, Rwanda, and Zambia, targets are based on the enhanced framework and assistance levels are at the assumed decision point.

Quantitative Performance Criteria and Benchmarks Under the Second Annual PRGF Arrangement
(In billions of Malagasy francs, unless otherwise indicated)

APPENDIX I

	1999 Stock Dec.	2000 1/ 2/								
		March			June			September		
		Bench- mark	Bench- mark Adj.	Act.	Perf. Crit.	Perf. Crit. Adj.	Act.	Bench- mark	Bench- mark Adj.	Act. Prov.
I. Quantitative benchmarks and performance criteria 2/										
Ceiling on external arrears (in millions of SDRs) 3/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floor on net foreign assets (NFA) of the central bank 4/ 5/ 6/ 7/	864.4	134.5	323.6	117.3	-120.6	-534.1	-126.3	-80.3	-377.7	-80.3
Ceiling on domestic financing of the government 6/ 8/	99.3	0.4	-182.9	-70.3	168.6	156.1	82.0	374.1	...	...
Ceiling on net domestic assets (NDA) of the central bank 6/ 7/ 9/	1,404.0	-189.6	-378.7	-211.2	-88.2	-325.3	-77.7	-56.6	240.8	-139.0
Ceiling on nonconcessional external public borrowing 10/ 11/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floor on tax revenue	2,580.1	605.9	640.0	658.9	1,450.2	1,450.2	1,456.0	2,299.2	...	...
II. Indicative limits										
Minimum petroleum tax payments to the treasury	340.0	49.0	49.0	50.8	173.0	173.0	207.0	298.0	...	...
Ceiling on reserve money	2,322.0	-54.0	-54.0	-175.3	-238.4	-238.4	-175.0	-180.9	...	...
Ceiling on broad money (including foreign currency deposits) (M3) 5/	4,972.5	-19.6	-19.6	-136.5	-169.2	-169.2	11.3	187.2	...	...
III. Memorandum items: 1/										
Disbursement of balance of payments support (in millions of SDRs) 12/		-32.1	-32.1	-9.4	7.2	7.2	-22.6	9.7	9.7	-1.4
Balance of payments grants and loans (in millions of SDRs)				0.0	37.1	37.1	0.0	55.3	55.3	37.1
Cash debt service (in millions of SDRs)				-9.4	29.9	29.9	22.6	45.6	45.6	38.5
Privatization proceeds	105.6	12.2	12.2	9.2	366.5	366.5	11.0	366.5	366.5	11

1/ Cumulative change since the beginning of each year.

2/ The benchmarks and criteria for September 2000 are indicative.

3/ Excludes all debt service outstanding that is subject to rescheduling. During the program period, the government will not accumulate any new arrears.

4/ Net foreign assets of the Central Bank of Madagascar (BCM) are defined as gross reserves minus all foreign liabilities of the BCM, both long and short term, including use of Fund credit.

5/ This amount should be valued at the exchange rates that were set for the purposes of this program.

6/ The floor on NFA of the central bank will be adjusted upward, and the ceilings on NDA of the central bank and on domestic financing of the government will be reduced, by the amount of any excess disbursements of balance of payments assistance relative to the cumulative timetable indicated in III. In case of a shortfall in balance of payments assistance at end-June and end-September 2000, the floor on NFA of the central bank will be reduced by a maximum amount of SDR 20 million, and the ceilings on NDA of the central bank and on net domestic financing of the government will be raised on a cumulative basis by the same maximum amount.

7/ NFA and NDA of the central bank will be adjusted for any deviation from programmed amounts of privatization receipts from abroad, net of privatization-related outlays.

In case of a shortfall in net privatization receipts, the downward adjustment of the NFA (and the upward adjustment of the NDA) at end-June and end-September 2000 will be capped at the equivalent of SDR 40 million.

8/ The ceiling on domestic financing of the government will be adjusted for deviations from programmed privatization-related outlays; the ceiling is defined to exclude the impact of foreign currency adjustments on bank financing of government.

9/ NDA of the central bank are defined to exclude the foreign currency adjustment.

10/ Excluding normal import-related credits.

11/ Defined as debt with concessionality level of less than 35 percent, calculated using the 10-year average of the OECD's commercial interest reference rate (CIRR)-based discount rate for loans of a maturity greater than 15 years, and the 6-month average CIRR-based discount rates for maturities below 15 years.

12/ Defined as nonproject funding in the form of loans and grants minus external debt service on a cash basis.

EXTERNAL DEBT MANAGEMENT ISSUES

Madagascar's debt monitoring and management system is managed by the Central Bank of Madagascar. It provides for a comprehensive accounting of medium- and long-term public and publicly guaranteed external debt on a loan-by-loan basis that proved useful for deriving the net present value (NPV) of external debt in the context of the DSA. Nevertheless, some areas for improvement are needed, including enhanced data processing capacity, improved debt management techniques, and the extension of coverage to include private nonguaranteed and short-term debt, so as to provide a comprehensive view of debt obligations. To these ends, the authorities are in contact with UNCTAD with a view to have installed, as soon as possible, the SYGAD debt management system and have their personnel trained in its use. The staff welcome these initiatives, but would recommend that debt managers also receive training in other debt management techniques, especially the technical evaluation of new loans and rescheduling agreements. The authorities are also considering how to strengthen the integration of the debt management function into macroeconomic policy making and their capacity to make medium-term projections. The Malagasy authorities have been briefed and given access to all software files used in the preparation of the debt sustainability analysis.