Abstract
Madagascar is one of the poorest countries in the world and a very high proportion of the population experiences frequent shocks, whether from natural disasters, economic shocks or internal crises of governance. As a consequence, about half the country’s population is undernourished. Children between the ages of 6 and 14 face the risks of low human capital development, child labor and marginalization. On the other hand, the Government of Madagascar’s commitment to social protection as a national policy was never fully effective. Interventions in social protection have been developed on an ad-hoc basis, often on the initiative of donors. In order to inform the government’s policy development, the report proposes a social protection strategy that increases the protection of the population while decreasing its vulnerability, taking into account the existing programs and the differences in exposure to risks between population groups.

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For more information, please contact the Social Protection Advisory Service, The World Bank, 1818 H Street, N.W., Room MSN G8-803, Washington, D.C. 20433 USA. Telephone: (202) 458-5267, Fax: (202) 614-0471, E-mail: socialprotection@worldbank.org or visit the Social Protection website at www.worldbank.org/sp.
Until recently, most countries in Africa implemented safety nets and social protection programs only on an ad hoc basis. In the wake of the global economic, food and fuel price crises starting in 2008, however, policymakers in Africa began to increasingly view safety nets as core instruments for reducing poverty, addressing inequality, and helping poor and vulnerable households to manage risk more effectively. During FY2009-2013, to support governments in their quest to understand better how to improve the efficiency and effectiveness of safety nets in their countries, the World Bank’s Africa Region undertook social safety net or social protection assessments in a number of countries in Sub-Saharan Africa. By 2014 assessments have been completed or are under preparation for over 25 countries in sub-Saharan Africa. These assessments analyze the status of social protection programs and safety nets, their strengths and weaknesses and identify areas for improvement, all with the aim of helping governments and donors to strengthen African safety net systems and social protection programs to protect and promote poor and vulnerable people. They were all carried-out with the explicit aim of informing governments’ social protection policies and programs. With the results of analytical work like these assessments and other types of support, safety nets and social protection programs are rapidly changing across Africa. For a cross-country regional review, please see "Reducing Poverty and Investing in People: The New Role of Safety Nets in Africa," which pulls together the findings and lessons learned from these assessments and other recent studies of safety net programs in Africa.
Abstract

Madagascar is one of the poorest countries in the world and a very high proportion of the population experiences frequent shocks, whether from natural disasters, economic shocks or internal crises of governance. As a consequence, about half the country’s population is undernourished. Children between the ages of 6 and 14 face the risks of low human capital development, child labor and marginalization. On the other hand, the Government of Madagascar’s commitment to social protection as a national policy was never fully effective. Interventions in social protection have been developed on an ad-hoc basis, often on the initiative of donors. In order to inform the government’s policy development, the report proposes a social protection strategy that increases the protection of the population while decreasing its vulnerability, taking into account the existing programs and the differences in exposure to risks between population groups.

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Government Fiscal Year

January 1 - December 31

Weights and Measures

Metric System

ABBREVIATIONS AND ACRONYMS

AFAFI “Let’s Protect Family Health Together” (mutual health organization in Antananarivo)
ARI Acute Respiratory Infection
BNGRC Bureau National de Gestion des Risques et des Catastrophes (National Bureau for Risk and Catastrophe Management)
CCPREAS Cellule de Coordination des Projets pour la Relance Economique et des Activités Sociales (Coordination Unit for Economic Recovery and Social Activities Projects)
CCT Conditional Cash Transfers
CEFor Crédit Epargne et Formation (Credit Savings and Training, a micro-finance institution)
CNaPS Caisse Nationale de Prévoyance Sociale (National Insurance Fund)
CNGRC Conseil National de Gestion des Risques et des Catastrophes (National Council for Management of Risks and Catastrophes)
CNLS Comité National de Lutte contre le SIDA (National Council for the Fight against AIDS)
CPR Caisse de Prévoyance de Retraite (Retirement Pension Fund)
CRCM Caisse de Retraite Civile et Militaire (Civil and Military Retirement Fund)
CRENA Centres de Récupération Nutritionnelle Ambulatoire (Mobile Nutritional Recovery Centers)
CRENII Centres de Récupération Nutritionnelle Intensive (Intensive Nutritional Recovery Centers)
CRS Catholic Relief Services
DHS  Demographic and Health Survey
EFA  Education for All
EPM  *Enquête Périodique auprès des Ménages* (Periodic Household Survey)
EFSRP  Emergency Food Security and Reconstruction Project
EU  European Union
FANOME  *Fonds d’Approvisionnement Non-stop en Médicaments Essentiels* (Fund for the Non-Stop Supply of Essential Drugs)
FE  *Fonds d’Equité* (Equity Fund)
FEH  *Fonds d’Equité Hospitalier* (Hospital Equity Fund)
FID  *Fonds d’Intervention pour le Développement* (Intervention Fund for Development)
FPCU  *Fonds de Prise en Charge Universelle* (Universal Care Fund)
FRAM  *Fikambanan’ny Ray aman-drenin’ny Mpianatra* (Parents’ Association)
GRET  *Groupe de Recherches et d’Echanges Technologiques* (Research and Technological Exchange Group)
HIMO  *Travaux Publics à Haute Intensité de Main d’Oeuvre* (Labor-intensive Public Works)
HIPC  Highly Indebted Poor Countries
ILO  International Labor Organization
INSTAT  *Institut National de la Statistique* (National Statistics Institute)
LEAP  Livelihood Empowerment against Poverty
MAP  Madagascar Action Plan
McRAM  Multi-cluster Rapid Assessment Mechanism
MENRS  Ministry of National Education and Scientific Research
MHO  Mutual Health Organization
MTEF  Medium-term Expenditure Framework
NGO  Non-governmental Organization
ONN  *Office National de Nutrition* (National Nutrition Office)
PFM  Public Financial Management
PSA  *Programa de Subsidios de Alimentos* (Food Subsidy Program)
PTF  *Partenaires Techniques et Financiers* (Technical and Financial Partners)
SALAMA  Central Drug Purchasing Agency of Madagascar
SALOHI  Strengthening and Accessing Livelihoods Opportunities for Household Impact
SWAP  Sector-wide Approach
UNFPA  United Nations Population Fund
UNICEF  United Nations Children’s Fund
U5MR  Under-5 Mortality Rate
WFP  World Food Programme
ACKNOWLEDGEMENTS

This report is the outcome of a collaborative process by the international donor community involved in social protection in Madagascar and the World Bank. It was prepared over a period of one year between January 2011 and January 2012 at a time when Madagascar was under Operational Procedures 7.30 “Dealings with De Facto Governments,” which came about as a result of the political crisis that emerged in early 2009. As a consequence, the Government of Madagascar has not been involved in the preparation of this report. However, the process involved the team in continuous cooperation with partners and the government’s technical staff including several missions to Madagascar by World Bank staff and consultants and multiple consultations with donors. A first draft of the report was available in July 2011, and several rounds of discussions with development partners were held in the remainder of 2011. A final draft of the report was completed in January 2012. After a round of internal reviews within the World Bank, the report was finalized in March 2012 and presented to the Working Group on Social Protection, which met in Antananarivo on March 21, 2012 under the leadership of Ms. Christine Weigand (UNICEF). A broader presentation to civil society and development partners is scheduled to take place in mid-2012.

The preparation of this report was led by Philippe Auffret. The first volume of the report is based on background papers prepared during the first half of 2011 by a team comprising Mr. Anthony Hodges, Mr. Francis Hary Soleman Kone, Mr. Jimmy Rajaobelina, Mrs. Josiane Robiarivony Rakotomanga, Mr. Maminirinarivo Ralaivelo, Mrs. Brigitte Jalasoa Randrianasolo, Ms. Tahiana Randrianatoandro, Ms. Niaina Randrianjanaka, Mrs. Rachel Ravelosoa, and Mr. Tiaray Razafimanantena. The background papers are presented in the second volume of the report. The first volume was written by Philippe Auffret and draws extensively on the background papers. Mr. Steven Farji Weiss and Ms. Joséphine Gantois assisted in the preparation of the report. Ms. Nadege Nouviale and Mrs. Ana Makiesse
Lukau provided much-needed editorial and logistical support. Ms. Joséphine Gantois translated the first volume of this report into French.

Comments on the preliminary versions of the report were provided by the working group on social protection, which was created by development partners as a platform to discuss social protection in Madagascar. The members included Mrs. Charlotte Adriaen (European Union), Ms. Miaro-zo Hanoa Andrianoeelina (GIZ), Mr. Nicolas Babu (World Food Programme), Mr. Danny Denolf (GIZ), Mr. Pablo Isla Villar (European Union), Ms. Dorothée Klaus (UNICEF), Mr. Louis Muhigirwa (Food and Agriculture Organization), Ms. Joelle Rajaonarison (European Union), Mr. Adria Rakotoarivony (World Food Programme), and Ms. Olga Ramaromanana (UNICEF). In particular, the report benefitted from the workshop for sharing experiences on social protection that was held in Antananarivo in May 2011. This workshop was jointly sponsored by the European Union (EU), International Labour Organization (ILO), United Nations Children’s Fund (UNICEF), Fonds d’Intervention pour le Développement (FID), the World Health Organization (WHO), the World Food Programme (WFP), and the German Gesellschaft für Internationale Zusammenarbeit (GIZ). Members of the FID including Mr. Rasendra Ratsima (General Director) and Mr. Mamisoa Rapanoelina also contributed to the production of this report.

The report also benefitted from comments from World Bank colleagues. Mrs. Maureen Lewis, Human Development Advisor for the Africa Region, provided critical inputs on an earlier version of the report. The report greatly benefitted from comments provided by peer reviewers including John Elder, Jacques Morisset, Nadine Poupart, and Ruslan Yemtsov. Comments were also received from Mrs. Harisoa Danielle Rasolonjatovo Andriamihamina, Ms. Fadila Caillaud, Mr. Qaiser Khan, Ms. Jumana Qamruddin, Ms. Maryanne Sharp, and Mrs. Voahirana Hanitrinala Rajoela. Mr. Antoine Simonprietri reviewed and commented on the chapter on risk and vulnerability. Mrs. Lynne Sherburne-Benz, Sector Manager, and Mr. Yasser El-Gammal, Sector Leader, provided much support and guidance throughout the preparation process. The report was developed under the management of Mrs. Haleh Bridi,
Country Director, Mr. Adolfo Brizzi, Country Manager, and Mrs. Ritva Reinikka, Human Development Sector Director.

The report contains original research on vulnerability conducted by INSTAT. We are particularly grateful to Mr. Paul Gérard Ravelomanantsoa (General Director of INSTAT) who kindly made the 2010 Household Survey available for the preparation of this report.
Over the past 25 years, impressive strides have been made in protecting people affected by adverse shocks, with many countries having implemented social protection programs to protect vulnerable households. However, considerable disparities exist across families and countries. Some households are able to mitigate the impact of shocks, while others remain largely unable to reverse the negative effects of bad contingencies that may lead them into states of hunger, destitution, or death.

In Madagascar, the situation has become critical. While a large segment of the population has always experienced frequent shocks originating from natural disasters, international economic shocks, malnutrition, or sickness, the situation has considerably deteriorated as the result of the political crisis that emerged in early 2009. This crisis of governance is currently having a devastating effect on an already impoverished population.

Who are these Malagasy who have been affected by the current lingering political crisis? These are the direct testimonies of a few:

Mrs. Herifanja Rajaomampianina lives in the fokontany\(^1\) of Andranomanalina in Antananarivo. “I am married, and we have three children. My husband used to work as a computer specialist for a firm in the Forello free-trade zone. However, the firm closed in February 2010. He looked for another job and was hired in a hotel. The number of customers and tourists progressively decreased. Three months later, the hotel closed and he lost his job. Then, we decided to move to the area of Andranomanalina where rents are lower. We also moved the children to a public primary school as we could no longer afford sending them to a private school. Currently, we try to pay the rent as a priority. We face considerable difficulties to

\(^1\) Originally, a fokontany was a traditional Malagasy village. Today, there are over 17,500 fokontany, which represent the smallest administrative unit in Madagascar.
afford enough food. The children do not eat before they go to school. They only eat at noon and sometimes in the evening when we can afford it. Otherwise, we go to sleep without eating. When we are sick, we go to the basic health center in Isoty, but we can rarely afford the medication.”

Mrs. Voahirana Radrimalanja lives in the fokontany of Ankasina also in Antananarivo. “I am married, and we have seven children between the age of 8 and 24. We do not own a house and need to pay rent. Before, we could send our children to school and afford to see Mr. Claude, the local doctor, and buy some medication when we were sick. We could also eat three times a day. Before the crisis, I had a little shop and I was planning to expand my activities. However, due to the political crisis and the difficulties it generated, I ran out of funds and had to close my shop. Now, we eat only once a day. Currently, we can only afford to send our younger child to school. The other six do not go to school any longer. When we are sick, we can only afford the basic medication to cure fever and malaria.”

Mrs. Farasoa Ravaonirina lives in a peri-urban area situated in the north of Antananarivo. “I am married, and I have two sons who both go to school. We live in Ilafy where we have a very difficult life because we rent. Our living conditions were more or less acceptable before the crisis. I was working for a Chinese owner. However, he went back home after the 2009 crisis started. This is when we started to face difficulties. Since then, our living conditions have considerably deteriorated. Our child has been operated on and is sick. I am often sick too. I owe Ar20,000 to the doctor. We have not paid him yet and we need to pay him in installments. We had to ask our landlord to wait as we currently cannot pay the rent and are trying to prioritize the expenses related to school. Before the crisis, we were eating normally and we even considered buying a piece of land to build a house. We are looking forward to the end of this crisis as we are suffering enormously.”
Mr. Jean-Claude Randrianasolo is a carpenter who lives in Toamasina (Tamatave). “I am 57. I am married, and I have three children. They all go to school for the time being. Despite some help from family members, the expenses related to their education are increasingly difficult to bear. Before the crisis, I was working in a firm as a handyman but I was fired because of the crisis and, since that time, life has become very difficult for us. My wife is a seamstress but she makes very little money. On my side, I have more and more difficulties to find work. I am currently looking for some temporary positions working as a carpenter. The little I earn goes towards buying rice and paying for the children’s education. We told the children that we need to live frugally. Before the crisis, we wanted to buy a small piece of land and build a house but now we cannot even rehabilitate our house, which has been damaged by a cyclone. Also, credit is more difficult to get and, when it is available, it needs to be repaid in a short period of time. We live day-to-day, but we cannot make any long-term plans.”

Mr. Eugène Noro lives in Toamasina (Tamatave). He is currently unemployed. “I am 57. I am married, and I have seven children. I live off occasional small works. We live in deplorable conditions, without access to water, no fixed source of income. My wife does not earn a living either, she takes care of the children. I make about Ar2,000 per day, which we use to buy rice, coal to cook, and a few other basic necessities. Between 1978 and 1989, I was working in a small firm but it closed. I managed to buy a small parcel of land and tried to revert back to agriculture. But there was a drought and then a flood in the Ampasimbe Manantsatrana area that damaged all the banana trees we had planted. We came back to the city. I would like to raise chickens to produce eggs. But this is very unlikely to happen if the political situation does not improve.”
Mr. Arinesta lives in the commune of Ampanihy in the southwest region of Madagascar. “I am married. I have five children. I am 48. I made my living as a carpenter but I am now the fokontany chief. In Ampanihy, there is a food crisis, while a cyclone recently hit us. Almost all activities have been affected, including carpentry, as people cannot afford to buy furniture. The crisis is currently deepening in the south of Madagascar. I had six zebus but I had to sell four of them. The remaining two enable me to make some money by carrying stones and wood to Ampanily. My five children used to attend a private Catholic school but now only two of them attend this school while we moved the other three to a public school. Before, when we were eating manioc at noon, we would have rice in the evening. Now we eat manioc for lunch and dinner. In the morning we do not eat anything.”

Mrs. Haova lives in the fokontany of Erada Ambaninato in the commune of Ambovombe in the Androy Region, south of Madagascar. “I am 46. I have five children, and I am a single mother. My oldest child is 16. It is not easy to be a single mother. I do not cultivate any land. I have a small stall and sell deadwood, which I collect in the area. When a cash-for-work program is available, I try to participate and life changes a bit for the better. I buy food and some items for school as my five children attend school. When I have some money, I buy sweet potatoes. In the morning, we wake up and do not eat anything. It is painful. In the evening we go to bed without eating if I do not earn anything during the day. Sometimes I rush to the fields to look for manioc leaves, which I pound and then cook, and this is all we eat in the evening.”
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THE MALAGASY POPULATION FACES A WIDE VARIETY OF RISKS THAT HAVE BEEN ACCENTUATED BY THE DEEP AND PROLONGED POLITICAL CRISIS THAT STARTED IN EARLY 2009

1. In Madagascar, a very high proportion of the population experiences frequent shocks. Madagascar is highly exposed to natural disasters including repeated cyclones, floods, droughts, locust infestations, and animal and plant diseases while global warming is leading to climatic disturbances that further increase the vulnerability of the population. Madagascar is also exposed to international economic shocks that have a substantial impact on the welfare of households. Sudden spikes in international food prices, especially the price of rice, the main staple, or the international price of oil have a negative impact on sizable segments of the population.

2. That being said, history shows that the recurrence of internal crises of governance may be the major systematic risk faced by the Malagasy population. The socialist experiment of the Ratsiraka period (1975-1991) led to a major decline in real per capita GDP. Since then, three major political crises have erupted (in 1991, 2002, and 2009) and have seriously disrupted economic activities. As a consequence, over the last two decades, per capita GDP decreased while poverty increased. In 2010, with a poverty rate of 77 percent (representing 15.6 million people), Madagascar shared with Haiti the highest poverty headcount in the world based on national poverty lines.
3. In addition to systematic risks, the Malagasy population also faces considerable individual risks. Episodes of illness occur frequently and particularly affect infants and young children. The risk of nutritional deficiency is very high. Currently, about half the population is undernourished, meaning that their caloric intake is less than the minimum caloric requirement. Children between the ages of 6 and 14 face the risks of low human capital development, child labor and marginalization. The risk associated with childbirth is also very high and is exacerbated by cultural discriminatory practices that increase women’s vulnerability. Unemployment and underemployment are both prevalent, while the main risk faced by the elderly is the lack of any support to ensure their survival. These high levels of vulnerability have been accentuated since the inception of the deep political crisis that followed the change of government in February 2009.

4. The risk of falling into extreme poverty is a daily reality for a significant segment of the population. Extreme poverty is a state of commodity deprivation in which the individual cannot afford enough calories to be able to function. In Madagascar, 57 percent of the population lives in extreme poverty. This is associated with certain geographic locations, large household size, the presence of young children, female-headed households, and lower levels or constrained use of key assets, including labor, education, physical assets, basic services, credit, and social capital. Traditional societies, including Madagascar, have historically developed layers of social protection against extreme poverty that were reflected in social norms and support systems. However, these measures and support systems tend to break down with the process of modernization, population growth, urbanization, and migration and the opening of new markets. Therefore, the state has a key role to play in providing social protection interventions that are an adequate substitute for the loss of these traditional support mechanisms.
MADAGASCAR’S COMMITMENT TO SOCIAL PROTECTION AS A POLICY WAS NEVER FULLY EFFECTIVE

5. Before the inception of the current political crisis in early 2009, the Government of Madagascar’s overall social protection policy was outlined in the 2007-12 Madagascar Action Plan (MAP). However, the mechanism for translating the policy into action, the Risk Management and Social Protection Strategy, was drafted but was never officially adopted. Since early 2009, MAP – which is associated with the former regime – has ceased to guide the current government’s actions, and its commitment to initiatives with social protection components (such as the National Nutrition Policy or the National Policy for the Management of Risks and Catastrophes) remains uncertain.

6. The institutional responsibility for social protection never became fully effective either. One of the weakest ministries in terms of capacity, influence, and resources, the Ministry of Population, Social Protection, and Leisure was originally responsible for social protection. When it was dissolved in January 2007, the responsibility was moved to a Directorate of Social Protection within the new Ministry of Health, Family, and Social Protection. Following the change in government in 2009, however, this ministry was reorganized to become the present Ministry of Population and Social Affairs. This institution does not have the expertise or the capacity to lead the design and implementation of a national social protection strategy.

THEREFORE INTERVENTIONS IN SOCIAL PROTECTION HAVE BEEN DEVELOPED ON AN AD HOC BASIS, OFTEN ON THE INITIATIVE OF DONORS

7. The absence of government leadership on social protection has had several consequences. First, ad hoc forums called “clusters” have been created by donors to discuss and coordinate selected social protection programs. For example, there is a cluster for food security and livelihoods and a social protection cluster. These clusters provide a valuable forum for discussion and coordination among donors, NGOs, and other actors, but their
decision-making power is limited and they cannot be a substitute for government action. Second, the country’s interventions in the area of social protection have been developed outside the context of any policy framework, often at the initiative of individual donors and prompted by their own agendas. As a result, Madagascar’s social protection programs have been overseen by a variety of different ministries and agencies and have depended upon the donors’ own financing.

8. This situation has worsened as a result of the current political crisis. As donors do not recognize the transitional authority, their activities are being financed at arms’ length from the government. This has undone much of the progress previously made in implementing the Paris Declaration on Aid Effectiveness and is leading to a severe erosion of state systems. It has also expanded the role of NGOs, which have become prominent in the implementation of donor-funded social protection programs.

9. Furthermore, the political crisis has halted the decentralization process. In early 2009, communes were expected to take increasing responsibility for the provision of core social programs including the delivery of basic services (such as schools, health posts, water systems, and communal roads). With the suspension of donor aid, not only did the decentralization process not materialize but their expected substantial financial support to communes was also cut off. In practice, Madagascar remains a highly centralized state with limited public sector services provided at the local level.

10. Paradoxically, the political crisis has increased the role of communities (fokontany). The de facto power and influence of communities has increased since 2009 due in part to the channeling of external aid to local services via NGOs, which work closely with communities. These structures are, thus, playing a critical role in the implementation of social protection programs. For example, the fokontany issues solidarity cards to the most deprived, with which they can get access to free drugs and subsidized basic commodities under the newly created Tsena Mora program.
WHILE TOTAL EXPENDITURES ON SOCIAL PROTECTION HAVE ALWAYS BEEN LOW IN MADAGASCAR, THEY HAVE FALLEN DRAMATICALLY SINCE THE INCEPTION OF THE CURRENT POLITICAL CRISIS, AS A SLIGHT INCREASE IN DONOR AID TO SOCIAL PROTECTION HAS BEEN LARGELY OFFSET BY DRASTIC CUTS IN GOVERNMENT EXPENDITURES

11. Madagascar’s government expenditures on social protection are very low compared with those of other African countries. Comparisons between countries are difficult due to differences in the definition of social protection. However, in 2007, expenditures on social protection in nine other African countries averaged 4.4 percent of GDP and showed an upward trend over the previous 10 years. This compares to only 1.5 percent in 2008 in Madagascar, the year prior to the political crisis.

12. From these low levels, government expenditures on social protection have fallen dramatically since the emergence of the current political crisis (from an estimated US$145 million in 2008 to US$56 million in 2010) as the government struggles to maintain budgetary stability in the face of a sharp decline in domestic revenues and grants. The relative share of social protection in total expenditures has also dramatically declined from 13.4 percent in 2007 to 2.9 percent in 2010, suggesting that a lower priority is now being given to social protection.

13. Moreover, the composition of government expenditures on social protection has dramatically changed since the beginning of the crisis. Since 2009, they have consisted almost exclusively of payments to public pension schemes while all other social protection expenditures, including those in the areas of health and education, have been dramatically cut. In 2010, contributions to public pension schemes represented 86 percent of the government’s social expenditures, up from 44 percent in 2007.
14. The *Tsena Mora* program is now the main government social protection program. It was launched in October 2010 to provide subsidized basic food commodities to the poor in six key urban centers. The President of Transition initially allocated US$12 million to *Tsena Mora* in 2011. However, *Tsena Mora* has been scaled back considerably since July 2011 due to fiscal constraints.

15. Since 2009, the decline in government spending has been very partially offset by increased donor aid. Aid disbursement for social protection increased from an estimated US$26 million in 2008 to US$37 million in 2010 due in part to increased aid for labor-intensive public works programs.

**AS THE VULNERABILITY OF THE POPULATION HAS BEEN SHARPLY INCREASING AND THE PROVISION OF SOCIAL PROTECTION DRAMATICALLY DECLINING, THE GOVERNMENT THAT COMES TO POWER AFTER THE CURRENT POLITICAL CRISIS MAY WANT TO URGENTLY DEVELOP A COMPREHENSIVE SOCIAL PROTECTION STRATEGY**

16. In Madagascar, the longstanding low priority of social protection on the government’s agenda means that the average Malagasy has to face a wide range of residual risks unmitigated by efficient and effective government-run programs. Donors and NGOs have been trying to fill the social protection provision gap that is not being filled by the government, but the end result has been a large number of scattered and generally small initiatives driven by the donors’ own financing and agendas.

17. In this context, the post-crisis government may want to develop a comprehensive social protection strategy founded on sound principles with clear objectives and priorities for translating this strategy into action. The preparation of such a strategy under the government’s leadership using a participatory approach could provide a strong signal to the population of the new government’s political commitment to social protection.
18. The social protection strategy proposed in this report is designed to increase the protection of the population while decreasing its vulnerability, taking into account the existing programs and the differences in exposure to risks between population groups. A few core principles might underlie this strategy, including: (i) resolving the current political crisis in the short term and the deep-rooted governance issues in the longer term; (ii) establishing macroeconomic stability to create the foundation for strong and sustainable economic growth; (iii) adopting measures to increase domestic revenues to generate the fiscal resources necessary to finance an effective social protection strategy; (iv) implementing economic reforms to promote sustained broad-based economic growth and thus to enhance social protection and reduce vulnerability; (v) prioritizing poverty groups, evaluating and rationalizing existing social protection programs, and reallocating the resulting savings to priority groups; (vi) decentralizing decision-making authority and financial resources for the delivery of social services; (vii) establishing links between the public and private sectors; (viii) developing and using targeting mechanisms to reach priority groups; and (ix) monitoring vulnerability and the implementation of the strategy itself.

19. The resolution of the current political crisis and the establishment of a more viable social contract among ethnic and geographic groups are fundamental prerequisites for improving governance. Once the issues of governance are resolved, the government should consider implementing structural reforms to promote broad-based economic growth, reduce vulnerability, and minimize institutional and policy shortcomings in the area of social protection. The agenda of reforms to promote economic growth is large, encompassing reforms to modernize the state, enhance the business investment climate, improve the provision of basic infrastructure and services and create the conditions to develop tourism in an island considered to be one of the most geographically diverse destinations on the planet. As experienced by countries all over the world, the timely implementation of key economic reforms can be expected to lead to sustained economic growth over a long period, with a considerable impact in terms of poverty reduction.
20. In the short term, financial resources are limited while needs are enormous, so any social protection strategy must assign priorities to the various vulnerable groups according to their exposure to risks and their likelihood of falling into extreme poverty. The highest priority could be given to the rural extreme poor who are very vulnerable, particularly to those who live in the “deep south,” malnourished children in all areas, extremely poor head-of-household mothers in urban areas, and all those who have been affected by a catastrophic event such as a cyclone. The second highest priority could be given to combating extreme poverty among the peri-urban poor, the extremely poor elderly, and at-risk children who have left the formal education system. Finally, the next level of priority could be given to programs that target the remaining extreme poor who live in urban areas and the extreme poor who are unemployed.

21. Public spending on social protection should be rationalized in the short term and then increased in the medium term. Putting a strong social protection strategy into operation will eventually require an increase in government resources, but this increase should take place only within the context of the modernization of the entire state. Also, the decentralization of service delivery to the commune level as well as community participation in service delivery could increase the effectiveness of the delivery of social protection interventions. This would require the development of clearly defined mandates and budgets for local governments (regions, communes, and even provinces), the creation of decentralized offices of central government institutions, and a greater reliance on the Local Development Fund (Fonds Local de Development, or FDL) to channel funds to sub-national levels.

22. Monitoring will be necessary both of the vulnerability of the population and of the implementation of the social protection strategy, and adequate resources should be allocated to these tasks. The government may want to develop a risk monitoring system to track vulnerability and evaluate the impact of public interventions. The government could also closely monitor the implementation of its social protection strategy.
PENDING A FULL RESOLUTION TO THE POLITICAL CRISIS, IMMEDIATE MEASURES COULD BE ADOPTED TO STRENGTHEN SOCIAL PROTECTION

23. The vulnerability of the Malagasy population will not cease once a solution to the political crisis has been reached. It is likely to take some time for elections to be held, for a new government to take office, and for a social protection strategy to be developed and adopted. In the interim, the government and its technical and financial partners may want to immediately implement a few actions including:

(i) Scaling up the public works program.
(ii) Complementing the public works program with a cash transfer program for those who are labor-deprived
(iii) Piloting a conditional cash transfer in peri-urban areas.
MADAGASCAR

THREE YEARS INTO THE CRISIS: AN ASSESSMENT OF VULNERABILITY AND SOCIAL POLICIES AND PROSPECTS FOR THE FUTURE

INTRODUCTION

1. **Context.** Since February 2009, Madagascar has been in the midst of a political crisis caused by the change of power from Marc Ravalomanana (who was forced into exile) to Andry Rajoelina (at that time the mayor of the capital city, Antananarivo). This transfer of power was deemed unconstitutional by the international community. In March 2009, the World Bank decided to operate under the Operational Directives 7.30 “Dealings with De Facto Governments.” After an initial period of time when all disbursements to Madagascar were suspended, the World Bank gradually resumed disbursements under its existing portfolio starting in December 2009. However, the crisis halted the implementation of the World Bank Group’s four-year Country Assistance Strategy (CAS) that covered the period from June 2007 to June 2011. With the exception of an Additional Financing to the Third Environmental Program Support Project, no new project has been approved since early 2009, while the Bank’s economic works and technical support in the form of Analytic and Advisory Activities (AAA) have been adapted to reflect the new political context.

2. **Objectives.** The overarching objective of this report is to assess the impact of three years of crisis on social protection and provide inputs for the development of the social protection strategy that a duly elected government may want to develop in the aftermath of the political crisis. Specifically, the objectives of the report are to: (i) analyze risk and vulnerability in Madagascar; (ii) review the impact of the last three years of crisis on the provision of social protection by the Government of Madagascar, the international donor community, and NGOs; (iii) identify key constraints in the demand and supply of social protection; and (iv) outline the main principles of a social protection strategy including options for interventions not only in the short term but also in the aftermath of a resolution...
to the current political gridlock when donors are likely to be able to fully re-engage in Madagascar.

3. **Quantitative and Qualitative Data Sources.** This report draws on a number of recent studies and surveys. The starting point for the report is the August 2007 National Risk Management and Social Protection Strategy prepared jointly by the World Bank and the Government of Madagascar (GOM and World Bank, 2007). The main objective of this document was to orient public policies and expenditures to reduce vulnerability and to help the authorities to reduce extreme poverty. This report relies on the chapter on social protection included in the document “*Madagascar: Vers un Agenda de Relance économique*” written by the World Bank in collaboration with other donors at the beginning of 2010 (World Bank, 2010a). The objective of this chapter was to identify the main social risks one year into the political crisis, review Madagascar’s social protection strategy, and identify the main social protection challenges. This report also builds on a series of pieces analyzing labor market conditions in Madagascar starting in 2005 (World Bank, 2010b). It also uses data from the 2010 Household Survey (*Enquête Périodique auprès des Ménages* or EPM) conducted by Madagascar’s Institute of Statistics (INSTAT) on a representative sample of the population between June 15 and October 15, 2010.\(^2\) The household questionnaire included quantitative data on various aspects of living conditions including household structure, housing, infrastructure, health, nutrition, education, economic activities (labor), vulnerability, spending and consumption, the source and level of income, savings, credit, and transfers. Furthermore, the report is based on data from the 2008/09 Demographic and Health Survey (DHS), which includes indicators on demographics, population, and health, as well as data from a series of Multi-cluster Rapid Assessment Mechanism (McRAM) Surveys conducted by UNICEF in the peri-urban areas of Antananarivo and Tulear. The rapid surveys were initiated in July 2010 to make a quick assessment of the impact of the crisis in peri-urban areas. The report also incorporates the findings from surveys conducted by the Rural

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\(^2\) The final sample included 12,460 households located in 623 zones covering the 22 regions of the country. For more detail, see INSTAT (2011b).
Observatory Networks to assess the social and economic effects of the political crisis on rural areas as well as the Comprehensive Food and Nutrition Security and Vulnerability Analysis, carried out by the World Food Programme (WFP) and UNICEF in 2010, which is representative of rural Madagascar. Finally, the report draws on Rapid Harvest and Nutrition Assessments conducted by the Food and Agriculture Organization (FAO) and the WFP.

4. **Policy Impact of the Report.** A political process is in place under the auspices of the Southern African Development Community (SADC) to find a solution to the crisis in Madagascar. The social protection strategy outlined in this report could be an important input into the development of a government-owned social protection strategy after the resumption of peace and prosperity.

5. **Road Map for the Report.** The report is divided into two volumes. The first volume consists of the main report. It is organized as follows. Chapter 1 presents a conceptual framework to analyze risk and vulnerability and provides a definition of social protection. Chapter 2 assesses the main risks faced by the Malagasy population as well as its vulnerability profile. Chapter 3 reviews Madagascar’s social protection policies, the institutions responsible for social protection, and the financial resources allocated to social protection by the government, donors, and NGOs. Chapter 4 describes and analyzes the main social protection programs presently being implemented in Madagascar. Building on the previous chapters but also on the experience of other low-income countries, especially in Africa, Chapter 5 outlines the main principles of a social protection strategy and recommends priority actions for implementation, particularly in the immediate aftermath of the resolution of the current political crisis. In this way, this report is intended to contribute to the formulation and implementation of a social protection strategy by a future government.
6. The second volume includes a number of background papers that were commissioned during the preparation of this report. These papers are as follows: Strategic Directions for Social Protection in Madagascar by Anthony Hodges; Poverty, Vulnerability, and Sources of Risks by Tiaray Razafimanantena; Vulnerability Analysis by INSTAT; Review of Social Protection Programs by Julia Rachel Ravelosoa; Analysis of Public Spending on Social Protection in Madagascar by Maminirinarivo Ralaivelo; Description and Analysis of the Tsena Mora Program by Maminirinarivo Ralaivelo; Review and Analysis of Spending on Social Protection by NGOs by Francis Hary Soleman Kone; Case Study: Cash Transfers and Other Forms of Educational Support for Children of Poor Households by Brigitte Lalasoarandrianasolo; and Payment Mechanisms to Transfer Cash to the Poor in Madagascar by Josiane Robiarivony Rakotomanga.
I. CONCEPTUAL FRAMEWORK

7. Throughout their lives, individuals are subject to shocks that often negatively affect their welfare. Social protection consists of the set of policies and measures that reduces the impact of these shocks. This section briefly reviews the conceptual foundations of social protection and presents a simple typology of social protection programs.

A. Shocks, Risk, and Welfare

8. From conception until birth and during their lifetime, individuals face risks and are subject to shocks that can affect their welfare negatively. Each shock can be characterized by an origin, a probability of occurrence, and associated welfare costs. The origins of shocks are diverse. They can be political (a coup d’état), economic (an oil or food price crisis), environmental (a tsunami), or medical (illness) among others. The probability of occurrence varies widely from once per several centuries (earthquake) to several times per annum (illness). Furthermore, different shocks can have widely different consequences on the welfare of the population. Some shocks like earthquakes, tsunamis, or famine can result in considerable hardship (such as loss of life, depletion of financial assets, or destruction of physical assets), while others such as minor accidents or some illnesses have much lighter consequences. Also, the welfare impact of shocks can be temporary or permanent. For example, the impact of an illness may be temporary while the impact of a major car accident may lead to a permanent disability.

9. Individuals are typically adverse to risks. They prefer a sure stream of income to one that fluctuates. In particular, individuals are wary of being obliterated by a single bad contingency that can cause them to fall into a permanent state of hunger or destitution or to die.
B. Social Protection

10. Aversion to risk creates a considerable demand for mechanisms to reduce the impact of shocks. In traditional societies, this need for protection against adverse contingencies leads households to diversify their activities or the location of their activities as a form of self-insurance, hoping that good fortune in one activity will compensate for misfortune in another one. It also helps to explain the highly integrated network of inter-personal and inter-household obligations including, for example, task-sharing within households and marriage patterns. Having children is another way to build social protection, especially for old age. Traditional societies also develop behavioral norms and rules of reciprocity that constitute implicit insurance mechanisms. Within communities, there is typically an integrated system of mutual insurance against illness, production failure, and general bad luck. This system of reciprocity usually depends on an established structure of power and authority, the internalization of social norms, or repeated interactions.

11. However, traditional mechanisms do not provide an optimal level of protection. Trading in risks within communities is heavily constrained due to asymmetries of information and other sources of market failure. As a result, insurance markets are either very thin or inexistent. For instance, a major risk that affects all of the members of a community cannot be traded or diversified away among the members themselves. As a result, individuals remain exposed to risk well beyond a level that is socially optimal.

12. Social protection is generally understood to be the set of policies and formal measures that reduces the impact of shocks and provides a level of protection that goes beyond that provided by traditional mechanisms. Social protection policies may be translated into laws to protect some segments of the population like workers, children, women, or people with disabilities. The measures can be public or private, contributory or
non-contributory, conditional on actions to be taken by the beneficiaries or unconditional, and targeted to some specific vulnerable groups or untargeted.

13. Social protection measures can be divided in three broad categories: (i) prevention measures that aim to mitigate the impact of shocks in advance; (ii) protection measures that aim to help individuals to cope with the impact of shocks after they have occurred; and (iii) promotion measures that seek to lift individuals permanently out of extreme poverty and destitution (where they are very sensitive to any adverse shock). The World Bank has produced several important strategic documents that provide a conceptual framework for this prevention, protection, and promotion (3Ps) concept and that are relevant to Madagascar, including the Africa Social Protection Strategy 2011-21 (World Bank, 2011e) and the Social Protection and Labor Strategy 2012-22 (World Bank, 2012).
II. **Risk and Vulnerability**

14. The Malagasy population faces a wide variety of risks and experiences frequent shocks. Some shocks like cyclones or increases in the international price of oil and food affect the whole population or large segments of it at the same time. Other shocks have a specific impact on individuals. For example, each person faces the risks of being sick or of being unemployed. Eventually, a segment of the population faces the real risk of falling into extreme poverty or destitution with considerable lingering inter-generational welfare consequences. This chapter reviews these risks and their effects on the population. It also analyzes whether these risks have increased in the aftermath of the political crisis that erupted in Madagascar in early 2009. The risk and vulnerability profile outlined in this chapter provides a basis against which the relevance and effectiveness of social protection program will be assessed in the rest of the report.

A. **Prevalence of Shocks and Household Responses**

15. In Madagascar, a very high proportion of the population experiences frequent shocks, particularly shocks of an environmental nature. According to the 2010 EPM, 93 percent of households were affected by shocks in 2009/10 (Figure 1). Respondents reported that these shocks originated from catastrophic events (cyclones, floods, droughts, locust infestations, and plant diseases), a lack of security, and economic difficulties but also illnesses. Environmental shocks affected the rural population more than the urban population (83 percent versus 63 percent). Insecurity and economic shocks each affected about one-third of the population with no major difference between rural and urban areas. As the result of the shocks, 25 percent of households lost assets while 83 percent lost revenues. Unsurprisingly, poverty was higher among those affected by shocks (78 percent) than those who were not affected (59 percent).

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3 Respondents had to choose from a proposed list of shocks that did not include shocks of a political nature.
16. Households have limited means at their disposal to protect themselves against the effects of shocks. Inter-household transfers do provide some support during periods of adversity (47 percent of households made transfers and 36 percent received transfers in 2010). However, these transfers generally are not sufficient to protect the household when the whole household support network is itself affected by a shock. When asked about their shock response strategies, 48 percent of households responded that they worked more, 11 percent that they reduced their consumption, and 10 percent that they sold assets, including livestock, while fewer than 4 percent took out loans, which may be explained by the considerable constraints faced by households in trying to access credit (Figure 2). Most opportunities for working more are in the informal sector, which accounts for 65 percent of employment (up from 53 percent in 2001). Reducing consumption puts enormous stress on an already struggling population, including creating nutrition problems. The sale of productive assets further depletes the limited capacity of households to withstand future shocks.\(^4\) Migration is also a common strategy, either as a proactive measure or as a

\(^4\) Some farmers have been forced to sell land to cope with shocks, contributing to a more unequal distribution of land (Razafimanantena, 2011).
consequence of acute shocks like cyclones or droughts. Nevertheless, all of these mechanisms are largely insufficient to alleviate the impact of shocks with three out of every four households who had experienced a shock reporting that they had not been able to recover from it one year later according to the 2010 EPM (INSTAT, 2011b).

Figure 2: Household Responses to Shocks (%)


17. The available evidence suggests that the current political crisis has had a deep negative impact on households. Between May and November 2010, the overwhelming majority of households in Antananarivo relied on close family members (60 percent), friends (15 percent), neighbors (14 percent), and work colleagues (8 percent) to alleviate the impact of shocks. Very few households relied on NGOs (about 1 percent) or churches (about 0.6 percent) (United Nations System, 2011). The lack of additional external support in the form of remittances or resources from external donors or NGOs is clearly problematic in the current context as it forces households to rely on each other at a time when they are all simultaneously affected by the current political crisis. In this situation, it is not surprising that an increasing percentage of households reports not being able to get any support to withstand the negative shocks brought about by the political crisis (United Nations System,
This inability to alleviate shocks is likely to have considerable and lingering negative effects on the current population as well as on future generations.

B. Systematic Risks

18. Some shocks affect the whole population or large segments of it at the same time. The underlying risk is called a systematic risk, and it cannot be diversified away within the population itself because everyone is simultaneously affected. The main systematic risks faced by the Malagasy population are related to the occurrence of natural disasters and international economic shocks and the recurrence of self-inflicted governance crises, including the current political crisis.

19. **Natural Disasters.** Madagascar is highly exposed to natural disasters including repeated cyclones, floods, droughts, locust infestations, and animal and plant diseases. Over the past 35 years, Madagascar has experienced at least 50 such natural disasters. About one-quarter of the population lives in areas regularly affected by climatic shocks. The eastern coast, where more than one-third of the population lives, is exposed every year to cyclones forming in the southern Indian Ocean between December and April. Floods mainly affect the coastal areas of the southeast and the west. These repeated shocks cause extensive physical destruction to the country’s infrastructure, including roads and schools, and productive capacity and erode the livelihoods of the population. For example, three consecutive cyclones stuck Madagascar in early 2008 affecting 17 of 22 regions. A comprehensive damage, loss, and needs assessment conducted by the government estimated the total damages at US$174 million (Government of Madagascar, 2008). On the other hand, the south, where rainfall is lowest, is prone to recurrent droughts. Insufficient and irregular rainfall in three southern regions since 2008 had a devastating impact on the 2010 harvest, leaving many vulnerable households in need of assistance (WFP and UNICEF, 2011). The existence of only a very few mitigating measures (such as defenses against flooding, building standards, or anti-erosion measures) heightens the population’s exposure
to these risks. Animal and plant diseases and locust infestations are additional systematic risks.

20. Global warming is also increasing the population’s exposure to risks. Global warming is leading to climatic disturbances that have become more severe. Although there has not been any notable change in the annual number of cyclones striking Madagascar over the last 25 years, the intensity of cyclones has markedly increased since 1994 (WFP and UNICEF, 2011). Long-term projections point to a 2.5 degree average temperature increase over the next 50 to 100 years, with a reduction in average annual rainfall punctuated by sharp increases in rainfall during the rainy season.

21. **International Economic Shocks.** Madagascar is exposed to international economic shocks that can have a substantial impact on the welfare of Malagasy households. A large and sudden increase in international food prices, especially the price of rice, the main staple, affects both the urban population and the large number of households in rural areas that are net food consumers or that experience seasonal food shortfalls due to inadequate storage facilities. Although 68 percent of households produce rice, more than two-thirds among these households need to buy rice at some time in the year (INSTAT, 2011a). Prices are seasonally highest during the lean period before harvests when stocks are the lowest and transport in many areas is disrupted by heavy rains (December to March). Although there are geographical variations in farming calendars, farmers tend to sell when prices are low in June after the March to May rice harvest and then buy food at higher prices, which reach a peak in February (WFP and UNICEF, 2011).

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5 The long-term upward trend in the real prices of rice may not be a major threat to the welfare of the population as, over a long period of time, both producers and consumers may adjust their production and consumption patterns.
22. Madagascar does not produce oil, which also makes it vulnerable to any increase in the international price of oil. Higher energy prices result in higher prices for the petroleum products that are directly consumed by households (electricity, gasoline, kerosene, and diesel), which represent 2.6 percent of household expenditures (3.5 percent for households in the bottom quintile) (Andriamihaja and Vecchi, 2007). Energy consumption patterns vary widely according to wealth. For example, kerosene represents 92 percent of the total expenditures on energy of households in the poorest quintile whereas it represents only 41 percent for those households in the richest quintile, who spend 46 percent on electricity and 10 percent on gasoline. Higher oil prices also result in higher prices for goods and services that use energy products as intermediate goods in the production process. Andriamihaja and Vecchi (2007) estimated that approximately 60 percent of the increase in expenditures by the population (44 percent by the lowest quintile and 67 percent by the highest quintile) is due to these indirect effects, mostly via higher food and transport prices. However, the impact of international rice and oil shocks has historically been largely mitigated by the adoption of domestic policy measures (see Chapter 4).

23. Madagascar is also vulnerable to any loss of preferential access to foreign markets for manufactured exports, especially textiles. For example, more than 30,000 workers were laid off from textile and garment firms when Madagascar lost its African Growth and Opportunity Act (AGOA) preferential access in January 2010 (World Bank, 2011f). Large numbers of urban jobs have been lost due to disinvestment in the textile industry in recent years, particularly since the 2009 political crisis.

24. **Governance Crises.** The recurrence of governance crises is a major systematic risk faced by the Malagasy population. The socialist experiment of the Ratsiraka period (1975-1991) led to a major decline in real per capita GDP, which fell by about one-third during this period.

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6 This situation may change as the Tsimiroro heavy oil field, which has been reported to hold 3.9 billion barrels of oil, comes into production. There is considerable interest in the mining and oil exploration potential in Madagascar. This is one area in which, over the coming years, it may be possible to raise substantial additional revenues.
period (from about US$400 in 1975 to about US$250 in 1991). Since then, three major political crises have erupted in Madagascar (in 1991, 2002, and 2009), all of which have led to serious disruptions in economic activities. Gross domestic product (GDP) decreased by 6.3 percent in 1991, by 12.4 percent in 2002, and by 3.7 percent in 2009 (Figure 3). While the reduction in economic activities has been less dramatic during the current crisis, it has now lasted three years and per capita GDP has declined by about 10 percent since the beginning of 2009. Overall, per capita GDP over the last decade has remained broadly stable at a very low level of welfare as accumulated gains in any given year were offset by losses in another. With such lackluster growth, Madagascar has made no dent in poverty over the past 20 years. In fact, poverty has increased from 70 percent in 1993 to 77 percent in 2010, with the number of poor increasing from 9.9 million to 15.6 million and the number of extremely poor increasing from 8.4 million to 11.5 million. The poverty gap ratio, which is one measure of poverty intensity and measures how far below the poverty line the poor stand, has broadly remained stable at around 35 percent since 1993 (Box 1). In 2010, the poor consumed on average 35 percent less than the poverty line (INSTAT, 2011b). Currently, Madagascar shares the highest poverty headcount in the world with Haiti (based on national poverty lines and consumption expenditures) (World Bank, 2011d).

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7 Although per capita GDP is an aggregate number, it is a reasonably good proxy for an individual’s overall welfare.

8 The population of Madagascar was estimated at 14.1 million in 1993 and 20.0 million in 2009.
Figure 3: Per Capita GDP and Poverty (1960-2011)

Sources: INSTAT, World Development Indicators, and IMF.
Box 1: Poverty Measures and Measurement Issues

The extreme poverty line is defined as the cost of the normative food basket that individuals need to meet a minimal energy requirement. In Madagascar, it corresponds to the cost of a basic food basket providing a daily caloric intake of 2,133 kcal per person. In 2010, the cost of such a basket was estimated at Ar328,162 per annum, which was equivalent to US$157 (using data from the 2010 EPM). The poverty line is derived by adding estimates of a reasonable allowance for non-food consumption to the cost of the food basket. In 2010, the poverty line was Ar468,800 per annum, equivalent to US$224.

One natural measure of poverty is simply to count the number of people who are below the poverty line or below the extreme poverty line. This is the headcount. In 2010, 15.6 million Malagasy were estimated to be poor and 11.5 million extremely poor. If we are interested in the relative incidence of poverty, we might want to divide the number of poor by the population. In 2010, the poverty rate in Madagascar was 76.5 percent while the extreme poverty rate was 56.5 percent.

An obvious limitation of the poverty rate (or the extreme poverty rate) is that it fails to capture the extent to which individuals fall below the poverty line (or extreme poverty line). As such, if a government wants to reduce the poverty rate, it may choose to design policies to favor individuals who are very close to the poverty line since they are less expensive to lift out of poverty.

The poverty gap ratio corrects for this drawback and captures more directly the acuteness of poverty. The poverty gap ratio (PGR) is the shortfall in the average income (or consumption) of the poor (or extreme poor) as a percentage of the poverty line (or extreme poverty line). Formally, the poverty gap ratio is defined as:

\[
PGR = \frac{\sum_{i} (p - y_{i})}{\sum_{i} p} \cdot \frac{p}{p}
\]

where \(p\) is the poverty line, \(y_{i}\) is the income (or consumption) of individual \(i\), and the summation is over all the individuals who are below the poverty line. In 2010, the poverty gap ratio was 34.9 percent, which means that the average consumption of the poor was US$145.80 (34.9 percent less than the poverty line). The extreme poverty gap ratio was 20.8 percent so that the average consumption of the poor was US$124.30. It implies that each extremely poor individual needed an additional $32.70 to be able to afford the minimum food basket.

However, both the poverty rate and poverty gap ratio have their own limitations as poverty measures. They both fail to account for the important issue of relative deprivation among the poor. Indeed, a transfer of resources among the poor (so long as they remain below the poverty line) does not affect these measures. Economists have developed other poverty measures that address this issue, such that a transfer of income from any person below the poverty line to anyone poorer than themselves while maintaining the set of poor unchanged must decrease poverty. Foster et al (1984) propose a set of measures that address this distributional issue.

C. Individual Risks

25. This section describes the main individual risks faced by the Malagasy population. It is worth noting from the outset that Madagascar has a very young population. Half of the population is under the age of 22, while only 5 percent of the population is over the age of 60. It is also worth mentioning that, despite the fact that Madagascar has the highest poverty rate in the world together with Haiti (77 percent), life expectancy (66 years) is higher in Madagascar than in most African countries and few people are dying of hunger, possibly because most of the population can grow and consume their own home-grown rice and have a shelter. Table 5 describes individual risks by age group, some selected indicators that assess the welfare impact of each risk, and the number of people affected.

26. Morbidity. Illnesses are major risks that can prevent early growth and healthy development. Morbidity is extremely high in Madagascar. According to the 2010 EPM household survey (INSTAT, 2011b), 12.4 percent of those interviewed reported to have been ill during the two weeks preceding the survey (Table 1). The illness incidence rate was as high as 22.0 percent among infants under 1 year old and 21.8 percent in the southern and poorest region of Androy. Fever, malaria, diarrheal diseases, and respiratory infections are the most common diseases, particularly in young children. This is a particularly concern as morbidity in early childhood poses the gravest threat to children, with life-long consequences for their cognitive development and their future well-being and productivity as adults.\(^9\) Moreover, morbidity increased sharply from 7.2 percent in 2005 to 12.4 in 2010, possibly due to the impact of the governance crisis that has been lingering for over three years. In the event of illness, only one-third of respondents reported that they had consulted a health provider in 2010, down from 40 percent in 2005. Among those who estimated that their condition was serious enough to use health services, about half did not consult a health provider because of financial constraints while another quarter reported

\(^9\) For more on this issue, see Walker et al (2011) who provide evidence of how early childhood development affects later stage development.
that they lived too far away from the nearest health services. However, supply-side problems also loom large, with over 40 percent of women expressing the fear that neither a health provider nor the necessary drugs would be available (according to data from the 2008/09 DHS). About two-thirds of those who did not consult a health care provider tried to self-medicate and spent on average Ar3,000 on medicine. About half among those who consulted a health care provider went to Basic Health Centers (Centres de Santé de Base or CSB) while about one-fifth went to private practices. There was a sharp difference between income quintiles, with two-thirds in the lowest quintile going to a CSB while only 10 percent visited a private doctor. In 2010, those who consulted a health care provider spent on average Ar17,800 on medication (up from Ar6,193 in 2005).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents indicating that they had been sick during the previous two weeks</td>
<td>7.2%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Illness incidence among infants under 1 year old</td>
<td>15.6%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Consultation rate</td>
<td>40.2%</td>
<td>32.7%</td>
</tr>
<tr>
<td>Among those with a serious condition, reasons for not consulting (% of total):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>50.8</td>
<td>53.0%</td>
</tr>
<tr>
<td>Remoteness from health care provider</td>
<td>20.0</td>
<td>24.4%</td>
</tr>
<tr>
<td>Other reason</td>
<td>29.2</td>
<td>22.6%</td>
</tr>
<tr>
<td>Self-medication rate</td>
<td>72.4%</td>
<td>64.1%</td>
</tr>
<tr>
<td>Average cost of medicine through auto medication</td>
<td>Ar1,436</td>
<td>Ar3,000</td>
</tr>
<tr>
<td>Location of consultation (% of total):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Health Centers</td>
<td>63.1</td>
<td>52.6%</td>
</tr>
<tr>
<td>Private doctor</td>
<td>15.7</td>
<td>19.2%</td>
</tr>
<tr>
<td>Other location</td>
<td>21.2</td>
<td>28.2%</td>
</tr>
<tr>
<td>Average cost of medicine (among those who consulted)</td>
<td>Ar6,193</td>
<td>Ar17,800</td>
</tr>
</tbody>
</table>


27. The Malagasy population faces numerous risks of morbidity including infectious and parasitic diseases among children. A common source of morbidity is related to iron deficiency among pregnant and lactating women. About 40 percent of women never take any extra iron during pregnancy while only 43 percent take vitamin A after giving birth.
(according to data from the 2008-09 DHS). Also, only half of the households have access to salt with an adequate level of iodine, a key for the normal metabolism of cells. Poor sanitation (more than half the population has no latrine) and limited access to potable water (more than half the population drinks water from rivers, lakes, or other unprotected sources) lead to diarrheal infections, a central cause of infant and child morbidity and mortality that systematically retards growth (data from the 2010 EPM in INSTAT, 2011b). Although vaccination coverage has increased over the past decade, only 62 percent of children aged between 12 and 23 months were fully immunized in 2008/09 while 13 percent (over 100,000 children) had not received any vaccinations (data from the 2008/09 DHS in INSTAT and ICF Macro, 2010). Child immunization has also decreased since the beginning of 2009. While the risk of disability and chronic illness is not known, the risk of contracting HIV/AIDS is a much less serious problem in Madagascar than in many other parts of Sub-Saharan Africa due to a still low HIV prevalence rate (less than 1 percent).

28. **Malnutrition.** The risk of nutritional deficiency is very high. Currently, more than half the population is undernourished (in other words, their caloric intake is less than the minimum caloric requirement).\(^{10}\) Good nutrition is also a key determinant of early growth. A child’s height-for-age and weight-for-height are good indicators of his or her state of health and nutritional status.\(^{11}\) Malagasy children face the highest risk of stunting among of all countries in Sub-Saharan Africa where data are available on this metric (World Bank, 2011d). The stunting rate among children under 3 years of age was 46 percent in 2009 according to the 2008/09 DHS (INSTAT and ICF Macro, 2010), which implies that over 1.2 million children under 3 suffer from chronic malnutrition. The wasting rate was 14.1 percent

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\(^{10}\) The extreme poverty rate derived from household surveys measures the percentage of individuals who cannot meet a minimum daily caloric intake of 2,133 kcal. Accordingly, extreme poverty was 59.2 percent in 1993 (Paternostro and al, 2001) and 56.5 percent in 2010 (INSTAT, 2011b).

\(^{11}\) Height-for-age is the summary statistics of a person’s past nutritional experience and morbidity. Weight-for-height, on the other hand, is the summary statistics of a person’s current nutritional status. Those with a deficit in weight-for-height are called wasted in the biomedical literature, and those with a deficit in height-for-age are called stunted.
in 2004, implying that over 350,000 children were emaciated (2003-04 DHS).\textsuperscript{12} Malnutrition rates have changed little over the past two decades, with 50.1 percent of children under 5 being stunted in 2008/09 compared to 56.4 percent in 1992 according to DHS data.

29. \textbf{Mortality}. The Malagasy population suffers from frequent episodes of illness, with infants and young children being particularly at risk. However, there have been significant declines in mortality. Despite the stubbornly high rates of malnutrition, infant and child mortality rates have been halved during the last two decades.\textsuperscript{13} Infant mortality declined from 117 deaths per 1,000 live births in the mid-1980s to 58 during the period 2000-2004 and to 48 during the period 2003-2008 according to the 2003/04 and 2008/09 DHS (INSTAT and ICF Macro, 2010) compared to 81 for Sub-Saharan Africa as a whole (World Bank, 2011d). Under-5 mortality decreased from 157 per 1,000 live births during the period 1992-97 to 94 in 2000-04 and 72 in 2003-08 compared to 130 for Sub-Saharan Africa as a whole (World Bank, 2011d). However, the current political crisis may have halted or reversed this progress.

30. \textbf{Maternal Mortality}. The risks associated with childbirth are also very high. With a maternal mortality rate estimated at 498 deaths per 100,000 live births during the period 2002-09, a woman runs a risk of 1 in 38 of dying from maternity-related causes during her reproductive lifetime (2008/09 DHS). This risk has remained broadly unchanged since 1998-2003 when it was 469 deaths per 100,000 live births. However, it compares favorably to an average of 646 per 100,000 live births for Sub-Saharan Africa as a whole (World Bank, 2011d).

\textsuperscript{12} The 2008/09 DHS does not include wasting rates.

\textsuperscript{13} The infant mortality rate is the number of deaths of children under 1 year of age per 1,000 live births. It is a good indicator of nutrition and hygiene at the earliest stage of life. It is also related to the health of the mother and to the duration of lactation. The child mortality rate is the number of deaths of children per 1,000 in the age group 1 to 4 years old. It is a good indicator of nutrition and hygiene after an infant is weaned (which is typically at 1 year of age, or a little over 1 year) and exposed to different nutritional intakes.
31. **Education-related Risks.** The main risks faced by children are low human capital development, child labor, and marginalization. The literacy rate is 71 percent while 37 percent of the population has never attended school (data from the 2010 EPM) (Table 2). The failure to accumulate education translates into reduced future earnings, as education is a significant determinant of employment in all sectors except agriculture. According to the 2010 EPM household survey, the net primary school attendance ratio was 73 percent. The household survey also indicates high dropout and repetition rates (respectively 6 percent and 15 percent at the primary level) as confirmed by administrative data. This failure to progress is greater in rural and lower-income households with no clear difference between the genders. As a consequence, the primary education completion rate was estimated to be 61 percent in 2010/11 (MENRS, 2011). Only a small minority of children transition to secondary education. The net attendance rate for middle school (collège) is 22.7 percent, with the attendance rate for high school (lycée) being even lower at 6.3 percent (data from the 2010 EPM).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy rate</td>
<td>62.9%</td>
<td>71.4%</td>
</tr>
<tr>
<td>Percentage of the population without instruction</td>
<td>33.8%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Primary school net attendance rate</td>
<td>83.3%</td>
<td>73.4%</td>
</tr>
<tr>
<td>Repetition rate (primary level)</td>
<td>19.7%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Dropout rate (primary level)</td>
<td>7.1%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Annual spending on education per child</td>
<td></td>
<td>Ar38,589</td>
</tr>
<tr>
<td>Middle school net attendance rate</td>
<td>19.1%</td>
<td>22.7%</td>
</tr>
<tr>
<td>High school net attendance rate</td>
<td>4.4%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

*Source: 2005 EPM (INSTAT, 2006) and 2010 EPM (INSTAT, 2011b).*

32. Since 2005, education attainment has declined, and this has been accentuated by the 2009 political crisis. According to the Ministry of National Education and Scientific Research (MENRS), the net primary school attendance ratio decreased from 83 percent in 2005 to 73 percent in 2010. The primary school completion rate declined from 66 percent in the 2008/09 school year to 61 percent in 2010/11 so that the absolute number of primary school-age children who are out of school increased from close to 260,000 in 2008/09 to
approximately 400,000 in 2009/10 (MENRS, 2011). The risk of school dropout has also increased during this period. The 2009 political and economic crisis has led to a reduction in government expenditure on education while parents are finding it increasingly difficult to cover school-related expenses. According to the 2010 EPM (INSTAT, 2011b), average annual education-related expenditure per child was Ar38,579 (equivalent to US$19), of which over half was for food and transport while other costs included school materials, textbooks, and FRAM levies.14 The absence of a resolution to the political situation is jeopardizing the education of the next generation.

33. Development indicators are worse for households in the lower quintiles, although in the case of many indicators they are poor even in the top quintiles (Table 3). The under-5 mortality rate (USMR) shows stark inequity across wealth deciles, with children in the poorest wealth quintile being twice as likely to die before reaching the age of 5 as children in the top quintile (106 compared with 48 deaths per 1,000 live births). Likewise, children in the bottom quintile with symptoms of acute respiratory infection (ARI) are half as likely as children in the top quintile to be taken to a health provider for treatment. There is an even larger difference in some maternal health indicators, as only a quarter as many women in the bottom quintile as in the top quintile give birth with the assistance of trained personnel. The one striking exception to this pattern is for stunting, which is very high across all quintiles with no clear correlation to household wealth, suggesting that culturally determined dietary practices (low levels of exclusive breastfeeding and a lack of dietary diversity) may be more important factors than differences in wealth. There is a similar structure of inequity with respect to school attendance as net attendance rates are strongly correlated with consumption expenditure. The primary school net attendance rate is by far the lowest for children from the first consumption expenditure quintile (59 percent) and then rises gradually to 87 percent for those in the richest quintile. The vast majority of children in the lower quintiles are effectively excluded from secondary education.

14 FRAM is the acronym for Fikambanan’ny Ray Amandrenin’ny Mpianatra, which are parent-teacher associations that hire contract teachers, called FRAM teachers.
### Table 3: Human Development Indicators by Quintiles

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1&lt;sup&gt;st&lt;/sup&gt;</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt;</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt;</th>
<th>4&lt;sup&gt;th&lt;/sup&gt;</th>
<th>5&lt;sup&gt;th&lt;/sup&gt;</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>2008/09 DHS Data</em> (Wealth Quintiles)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 5 mortality rate (per 1,000 live births)</td>
<td>106</td>
<td>93</td>
<td>84</td>
<td>64</td>
<td>48</td>
<td>72</td>
</tr>
<tr>
<td>Stunting (% of children under 5)</td>
<td>47.6</td>
<td>54.0</td>
<td>52.5</td>
<td>51.0</td>
<td>43.6</td>
<td>50.1</td>
</tr>
<tr>
<td>Births assisted by trained personnel (%)</td>
<td>21.9</td>
<td>28.3</td>
<td>42.9</td>
<td>60.1</td>
<td>90.0</td>
<td>43.9</td>
</tr>
<tr>
<td>Births in health facilities (%)</td>
<td>17.7</td>
<td>24.4</td>
<td>37.0</td>
<td>48.0</td>
<td>66.4</td>
<td>35.3</td>
</tr>
<tr>
<td>Children with ARI symptoms for whom treatment sought (%)</td>
<td>32.5</td>
<td>29.2</td>
<td>39.4</td>
<td>51.5</td>
<td>68.0</td>
<td>42.0</td>
</tr>
<tr>
<td>Children with fever for whom treatment sought (%)</td>
<td>33.2</td>
<td>32.2</td>
<td>35.2</td>
<td>48.2</td>
<td>64.8</td>
<td>41.4</td>
</tr>
<tr>
<td><strong>2010 CSFVA+N Data (for Rural Areas Only, Wealth Quintiles)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wasting (% of children under 5)</td>
<td>6.7</td>
<td>5.7</td>
<td>6.1</td>
<td>3.8</td>
<td>2.5</td>
<td>5.4</td>
</tr>
<tr>
<td>Children 6-23 months with acceptable dietary diversity (%)</td>
<td>10.4</td>
<td>9.8</td>
<td>9.5</td>
<td>10.7</td>
<td>39.4</td>
<td>14.4</td>
</tr>
<tr>
<td>Children 6-23 months with acceptable diet (%)</td>
<td>9.1</td>
<td>8.6</td>
<td>10.9</td>
<td>9.9</td>
<td>30.6</td>
<td>12.3</td>
</tr>
<tr>
<td>Incidence of illness in children under 5 (%, in 2 weeks prior to survey)</td>
<td>52.6</td>
<td>48.6</td>
<td>40.8</td>
<td>41.6</td>
<td>37.7</td>
<td>44.0</td>
</tr>
<tr>
<td>Treatment sought for children with illness (%)</td>
<td>17.1</td>
<td>23.4</td>
<td>25.2</td>
<td>31.9</td>
<td>32.4</td>
<td>26.0</td>
</tr>
<tr>
<td><strong>2010 EPM Data (Consumption Expenditure Quintiles)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school net attendance rate (%)</td>
<td>58.8</td>
<td>72.0</td>
<td>76.3</td>
<td>81.8</td>
<td>86.7</td>
<td>73.4</td>
</tr>
<tr>
<td>Middle school net attendance rate (%)</td>
<td>8.1</td>
<td>12.6</td>
<td>20.5</td>
<td>30.0</td>
<td>48.1</td>
<td>22.7</td>
</tr>
<tr>
<td>High school net attendance rate (%)</td>
<td>0.6</td>
<td>1.1</td>
<td>2.1</td>
<td>5.7</td>
<td>20.7</td>
<td>6.3</td>
</tr>
</tbody>
</table>

*Source: 2008/09 DHS (INSTAT and ICF Macro, 2010); 2010 CSFVA+N (WFP and UNICEF, 2011); 2010 EPM (INSTAT, 2011b).*

*Note: * For the five years preceding the 2008/09 DHS; data by quintiles are for the 10 years preceding the survey.

34. Poor households report that they face considerable constraints in attempting to access health services. The need to pay fees for almost all health services and medication constitutes a significant hurdle for all households. The constraints are particularly acute for those households in the lowest quintile. According to the 2008/09 DHS (INSTAT and ICF Macro, 2010), the main demand-side constraints are a lack of financial resources (cited by 65 percent of the women in the poorest quintile) and a lack of transport (42 percent) (Table 4). Supply-side constraints are also considerable with 55 percent of women in the lowest quintile citing the distance to a health post and almost 50 percent among them expressing a fear that either a health care provider or the necessary drugs would not be available. The problems are particularly acute for households in rural areas.
<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Rural</th>
<th>Urban</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need money</td>
<td>65.0</td>
<td>62.0</td>
<td>62.7</td>
<td>53.7</td>
<td>37.9</td>
<td>56.9</td>
<td>46.1</td>
<td>55.0</td>
</tr>
<tr>
<td>Distance to health service</td>
<td>55.1</td>
<td>51.6</td>
<td>51.4</td>
<td>36.8</td>
<td>21.9</td>
<td>46.0</td>
<td>21.9</td>
<td>41.8</td>
</tr>
<tr>
<td>Need transport</td>
<td>41.8</td>
<td>36.3</td>
<td>37.7</td>
<td>28.3</td>
<td>17.9</td>
<td>34.2</td>
<td>17.8</td>
<td>31.4</td>
</tr>
<tr>
<td>Not wanting to go alone</td>
<td>31.9</td>
<td>31.1</td>
<td>33.5</td>
<td>25.4</td>
<td>22.4</td>
<td>29.6</td>
<td>22.5</td>
<td>28.4</td>
</tr>
<tr>
<td>Fear that a health provider is unavailable</td>
<td>46.6</td>
<td>47.3</td>
<td>46.4</td>
<td>41.8</td>
<td>32.6</td>
<td>44.1</td>
<td>33.4</td>
<td>42.3</td>
</tr>
<tr>
<td>Fear that drugs are not available</td>
<td>48.4</td>
<td>46.7</td>
<td>47.1</td>
<td>42.7</td>
<td>34.2</td>
<td>44.9</td>
<td>35.1</td>
<td>43.2</td>
</tr>
<tr>
<td>Fear that health provider is not a woman</td>
<td>18.7</td>
<td>19.0</td>
<td>20.0</td>
<td>16.3</td>
<td>11.8</td>
<td>17.6</td>
<td>12.9</td>
<td>16.8</td>
</tr>
<tr>
<td>Need permission</td>
<td>18.7</td>
<td>18.1</td>
<td>17.8</td>
<td>12.5</td>
<td>10.0</td>
<td>15.7</td>
<td>11.6</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Source: 2008/09 DHS (INSTAT and ICF Macro, 2010).

35. **Child Labor.** A substantial number of children participate in income-generating activities in Madagascar. In 2010, about one-quarter of the children between the ages of 5 and 17 were economically active with no substantial difference between sexes (26 percent of boys and 23 percent of girls). About one-quarter were engaged in activities that present health hazards (ILO, 2007). The proportion of children who are economically active rises with age from less than 10 percent for those under the age of 10 to 26 percent of 10 to 14 year olds and 59 percent of 15 to 17 year olds (data from the 2010 EPM in INSTAT, 2011b). Child labor is much higher in rural areas than in urban areas (27 percent versus 17 percent), reflecting the involvement of children in their families’ agricultural activities. However, except for households in the top 20 percent of income (the richest quintile), child labor is not correlated with household expenditures according to the 2010 EPM (INSTAT, 2011b). Child labor decreased from 29 percent in 2007 to 24 percent in 2010. This decline may be explained by the fact that a decrease in work opportunities has more than compensated for an increase in the demand for labor (including that of children) to compensate for foregone income since the beginning of 2009.

36. **Child Marginalization.** A number of children under the age of 15 run the risk of being marginalized. Although the number of children currently in this situation is difficult to assess, it is estimated to be around 50,000. These children work in mines, engage in
prostitution, live in the street, or are seriously disabled. Existing sources estimate that there are about 3,000 child prostitutes, 1,000 children working in mines, 32,000 severely disabled children, 7,500 street children, and almost 400 children in prison. In addition, orphans, who account for about 7 percent of all children under the age of 15, run a greater than average risk of not attending school or of not completing the primary school cycle. Last but not least, about one-quarter of newborns are not registered at birth, which limits their access to some basic public services including education.\textsuperscript{15}

37. \textbf{Gender Discrimination}. Cultural discriminatory practices, some of which are regionally or ethnically specific, affect women. For example, in the south, women are traditionally denied inheritance and land ownership rights. In the region of Mahajanga, women are subject to the practice of \textit{moletry}, a form of rent-seeking through the repeated marriages of women to different partners to maximize revenue from dowries. More generally, girls are at risk of early marriage, early pregnancy, and related reproductive health dangers. In fact, gender discrimination starts at a very early age. Differential treatment in the feeding of young children results in fewer boys than girls being exclusively breastfed, which has the perverse result that stunting in children under 5 is much more prevalent among boys (53 percent) than girls (45 percent) (WFP and UNICEF, 2011). In the event of illness, parents are more likely to seek care for boys than for girls (28 percent versus 23 percent).

38. \textbf{Human Trafficking}. Madagascar is a source country for women and children who are subjected to forced labor and sex trafficking. Reports indicate that sex and labor trafficking have increased, particularly due to a lack of economic development and a decline in the rule of law during the present political crisis (U.S. Department of State, 2011).

\textsuperscript{15} Citizenship is derived from a person’s parents, although children born to a citizen mother and a foreign father must declare their desire for citizenship by age 18. The country has no uniformly enforced birth registration system, and unregistered children have historically not been eligible to attend school or obtain health care services. The United Nations Children’s Fund (UNICEF) has worked with the government to provide birth certificates for both newborn children and those who did not receive a certificate at birth. UNICEF estimates that 25 percent of children in the country under the age of 5 were not registered.
39. **Unemployment and Underemployment.** Although there is almost no unemployment (the 2010 EPM household survey revealed an unemployment rate of 3.5 percent), underemployment is high.\(^{16}\) In 2010, one-quarter of the population was underemployed (20 percent of men and 35 percent of women). Increased competition has depressed informal sector earnings, which fell by 4.1 percent in real terms between 2001 and 2010 (INSTAT, 2011[b]). The 2009 political crisis has led to substantial job losses as a result of firm closures and disinvestments, in particular in the textile industry. Since then, investors have reportedly returned to Madagascar so that employment in free trade zones at the beginning of 2012 is back to its pre-crisis level.

40. **Old Age.** The main risk for the elderly is the combined absence of family and community support together with little or no income. This combination reduces the chances of a decent and longer lifespan. In 2002, only 2.3 percent of the working age population was affiliated to a pension scheme.\(^{17}\) In fact, fewer than one-fourth of all formal sector workers are covered by a pension scheme although their affiliation is a legal requirement.

\(^{16}\) Unemployment is defined in the 2010 EPM as the proportion of the economically actively population (those between the ages of 15 and 64) who have been unemployed during the week preceding the survey, have been actively looking for a job, and would be willing to work immediately. Underemployment is defined as the proportion of the economically actively population who work less than 35 hours per week and report that they would like to work more.

\(^{17}\) For the private sector, the *Caisse Nationale de Prevoyance Sociale* (CNaPS) covers pensions while the *Organisation Sanitaires Inter-Entreprises* (OSIEs) covers health. Public sector employees contribute to the *Caisse de Retraite Civile et Militaire* (CRCM) and the *Caisse Autonome de Prevoyance et de Retraite* (CPR). Complementary protection is available from private insurance companies (ILO, 2004).
Table 5: Individual Risks by Age Group, Leading Indicators, and Number of People Affected

<table>
<thead>
<tr>
<th>Main Risks</th>
<th>Leading Indicator</th>
<th>Indicator Value (%)</th>
<th>Number of People Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morbidity</td>
<td>Child immunization (age 12-23 months)</td>
<td>52.9% (2003-04 DHS) 61.6% (2008-09 DHS)</td>
<td>320,000 children aged 12-23 months are not fully immunized</td>
</tr>
<tr>
<td></td>
<td>Iron supplement during pregnancy</td>
<td>34.3% (2003-04 DHS) 59.8% (2008-09 DHS)</td>
<td>350,000 pregnant women do not take iron supplements</td>
</tr>
<tr>
<td></td>
<td>Post-partum vitamin A supplement</td>
<td>19.1% (2003-04 DHS) 43.1% (2008-09 DHS)</td>
<td>500,000 women do not take vitamin A after giving birth</td>
</tr>
<tr>
<td></td>
<td>Household with adequate level of iodine salt</td>
<td>52.6% (2008-09 DHS)</td>
<td>10 million people without adequate iodine salt</td>
</tr>
<tr>
<td></td>
<td>Access to potable water</td>
<td>50.3% (2005 EPM) 45.8% (2010 EPM)</td>
<td>2.3 million children under 5 years old do not have access to drinking water</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>Stunting rate (height-for-age) (children under 3 years old)</td>
<td>44.8% (2003-04 DHS) 45.5% (2008-09 DHS)</td>
<td>1.2 million children under 3 years old are stunted</td>
</tr>
<tr>
<td></td>
<td>Wasting rate (weight-for-height) (children under 3 years old)</td>
<td>14.2% (2003-04 DHS)</td>
<td>350,000 children under 3 years old are wasted</td>
</tr>
<tr>
<td>Mortality</td>
<td>Maternal mortality rate</td>
<td>469 per 100,000 (2003-04 DHS) 498 per 100,000 (2008-09 DHS)</td>
<td>Deaths of 20,000 women per year</td>
</tr>
<tr>
<td></td>
<td>Infant mortality rate</td>
<td>57.8% (2003-04 DHS) 48% (2008-09 DHS)</td>
<td>40,000 deaths per year</td>
</tr>
<tr>
<td></td>
<td>Child mortality rate</td>
<td>93.4% (2003-04 DHS) 72% (2008-09 DHS)</td>
<td>60,000 deaths per year</td>
</tr>
<tr>
<td>Education-related Risks</td>
<td>Net attendance ratio in primary school</td>
<td>73.4% (2010 EPM)</td>
<td>About 1.2 million children aged 6-14 years do not attend primary school</td>
</tr>
<tr>
<td></td>
<td>Primary education completion rate</td>
<td>61.3% (2010/11 MoE)</td>
<td>1.8 million children aged 6-14 years do not complete primary education</td>
</tr>
<tr>
<td>Child Labor</td>
<td>Child labor rate (ages 5-17 years)</td>
<td>24.7% (2010 EPM)</td>
<td>1.5 million children aged 7-14 year work</td>
</tr>
<tr>
<td>Underemployment</td>
<td>Underemployment rate</td>
<td>25% (2010 EPM)</td>
<td>5 million people are underemployed</td>
</tr>
</tbody>
</table>

D. Risk of Falling into Extreme Poverty

41. Extreme poverty is a state of commodity deprivation where the individual cannot afford enough calories to be able to function. Traditional societies have historically developed layers of social protection against extreme poverty that were reflected in social norms of behavior and support systems. However, these norms and support systems tend to break down with the process of modernization, population growth, urbanization, and migration and with the opening of new markets. In Chapter 5, it will be argued that the state has a key role to play in providing social protection interventions that are an adequate substitute for the loss of these traditional support mechanisms in protecting individuals against extreme poverty.
42. This section analyzes the determinants of extreme poverty using data from the 2010 EPM household survey (INSTAT, 2011b). The analysis is useful, first, to verify the relative role of various factors in determining extreme poverty and second, to assess how social protection policies can induce changes in these factors when all other factors are held constant. As such, this section provides the basis of an effective social protection strategy to protect against extreme poverty, which will be developed in the following chapters.

43. It is important to note the limitations of this analysis at the outset. First and foremost, the analysis does not capture the dynamic impact of certain causes of destitution over time. Most notably, the impact of the economic decline since independence (Figure 3) – most certainly a key determinant of extreme poverty – cannot be assessed using the proposed static cross-sectional model. Second, the analysis is limited by the variables that are available at the household level from the 2010 EPM. Other factors – such as social conditions like crime and violence, social interactions like membership of community organizations, or physical conditions like variations in climate or access to markets – could not be included due to a lack of data. Finally, though the theory holds that many of the variables included in the analysis do indeed contribute to extreme poverty, the statistical relationships should be interpreted with caution since causality can run in both directions for some variables.

44. Extreme poverty is clearly associated with lower levels or constrained use of key assets including labor, education, physical assets, basic services, credit, and social capital. Geographical location and household size are also important correlates of extreme poverty. Table 6 shows the marginal effect of each significant variable on the probability of being extremely poor in both rural and urban areas in Madagascar. Table 7 complements the analysis by showing some key determinants of per capita expenditures.

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18 The marginal effects are the change in the probability of being extremely poor (dependent variable) due to a change in one of the independent variables.
45. Geographic location is a major factor in explaining extreme poverty in Madagascar. Extreme poverty (which affects 57 percent of the population) is much higher in rural areas than in urban areas (62 percent versus 35 percent). Of the estimated 11.4 million people who are considered extremely poor, about 90 percent (10 million people) live in rural areas. Living in rural areas in the southern provinces (Fianarantsoa and Toliara) increases the probability of being extremely poor after controlling for other factors. This finding corroborates the fact that 2 of the 22 regions have extreme poverty rates of above 50 percent according to the 2010 EPM (INSTAT, 2011b) – Androy (61 percent) in the south and Atsimo Atsinana (51 percent) in the southeast. Also, rural areas are generally more disadvantaged than urban areas, especially the most remote areas as they are further from markets and public services, a problem accentuated by the poor state of transport infrastructure in many parts of the country. Consequently, any social protection strategy would need to pay special attention to the rural areas in these regions.

46. Households with children and particularly young children tend to be more destitute. Due to the higher fertility rates among the extremely poor, a large number of children do not imbibe enough calories to sustain a healthy life. In fact, 66 percent of children under the age of 5 (about 2.6 million children) and 64 percent of all children under the age of 15 (about 6.3 million) live in extreme poverty. Overall, each additional child under 14 years of age increases a household’s probability of being extremely poor by about 5 percent, while any child under 1 year of age increases a household’s probability of being extremely poor by 7 percentage points. Family size and composition is clearly an important correlate of extreme poverty, suggesting a potentially crucial role for family planning interventions.

47. Female-headed households tend to be more destitute than male-headed households. Keeping all other factors constant, households in rural areas that are headed by a woman are 11 percent more likely to be extremely poor than rural households headed by a man (the difference is 8 percent in urban areas). This might be attributable to discriminatory practices and the absence of adequate family planning programs and
childcare centers. These findings indicate that female headship could be used as a useful proxy for targeting social policy interventions.

48. The presence of elderly (over 66) household members is not associated with extreme poverty. This finding may reflect the fact that survival to this age is higher among the better-off who do not face the loss of family support, illness, isolation, and disability and who may be receiving a pension.

49. Education is an important asset for mitigating the risk of being extremely poor. The higher the educational attainment of the household head, the less likely the household is to be extremely poor. Overall, if a household head has completed primary education, the household is about 10 percent less likely to be extremely poor than if the household head has no education. Secondary education reduces the probability of being extremely poor by about 13 percentage points, while higher education reduces the probability of being extremely poor by about 20 percent with no substantial difference between rural and urban areas. In fact, education is one of the most critical assets for mitigating the risk of becoming destitute.

50. Agricultural employment is correlated with extreme poverty. Overall, 81 percent of Malagasy households are engaged in agriculture, either as a principal or secondary activity, a figure which rises to 89 percent in rural areas (INSTAT, 2011b). The vast majority are subsistence farmers with low levels of technology and productivity. This is due to a lack of equipment, fertilizer, and other inputs, environmental degradation, diseconomies of scale, a lack of land titles, limited access to credit, inadequate storage facilities, and poor transport infrastructure that hinders access to markets and raises costs for these farmers. Also, many of them are highly exposed to droughts, cyclones, and floods. After correcting for other

---

19 The analysis uses the educational attainment of the heads of household. Since the educational attainment of household heads precedes their current economic status, it could validly be considered as having a causal influence on extreme poverty status (whereas the educational levels of young dependents in the household may be low because poverty prevents them from affording an education).
household characteristics, households headed by farmers have lower than average per capita consumption (Table 7). The finding that a household that owns agricultural land is also likely to be extremely poor may seem surprising (Table 6). Agricultural land ownership probably stands as a good proxy for households headed by farmers as 82 percent of farmers own their own land (WFP and UNICEF, 2011).20

51. Cultivating a larger area decreases the likelihood of falling into extreme poverty. The parceling of farmland, which has been accentuated by high population growth, is one of the major structural problems of Malagasy agriculture.21 The lack of land tenure security is another factor holding back the development of agriculture. Measures have been taken since 2005 to enable the poorest farmers to secure their land ownership rights, but take-up has been low because of the high cost of land certification fees for very poor rural households as well as fear on the part of some farmers that they will be subject to taxation. Since the beginning of 2009, the loss of donor funds has undermined the financing of the reform.

52. Growing rice decreases the probability of a household being extremely poor. This may be explained by the fact that rice production is a key agricultural activity in Madagascar (as has already been noted, about 70 percent of households produce rice). Maize production also decreases households’ probability of being extremely poor in both rural and urban areas. However, the other crops (cassava and potatoes) do not seem to have the same impact. Cattle ownership also reduces the risk of being extremely poor.

53. Employment in the informal sector is correlated with extreme poverty. Households deriving their income from the informal sector have lower per capita consumption

20 The renting of farmland is found mainly in the western regions and large farming plains, and sharecropping is concentrated in the central highlands.
21 In 2010, 52 percent of farming households cultivated less than 1 hectare while the average land size was 1.2 ha (WFP and UNICEF, 2010). It is estimated that 72 percent of farming households are smallholders with less than 1.5 ha of land (INSTAT, 2011b).
expenditures than those who work in the formal private and the public sector due to their lower earnings, poorer working conditions, and the absence of social protection coverage.

54. Extreme poverty is strongly correlated with the absence of basic services. The lack of access to water and electricity is strongly related to the probability of being extremely poor, though the direction of causality is not easy to discern from the regression. Access to potable water decreases the probability of being extremely poor by 10 percentage points in rural areas (7 percent in urban areas). Access to electricity considerably decreases the probability of being extremely poor. In urban areas, a household that has access to electricity is 39 percent less likely to be extremely poor than a household without access (27 percent in urban areas). Households with access to potable water are also less likely to be extremely poor. These results suggest that the availability of basic infrastructure could be a useful proxy for targeting social protection interventions. Interestingly, ownership of a radio substantially reduces the probability of being extremely poor (13 percent in urban areas and 21 percent in rural areas). Ownership of a cell phone has similar effects. The causality may go both directions: it may be that households purchase a radio or a cell phone as soon as they can afford them or that a radio and cell phone provide access to information that enables households to be less vulnerable.

55. Affiliation with a social security scheme reduces the probability of a household being extremely poor. Households who benefit from social security coverage\textsuperscript{22} are 11 percent less likely to be extremely poor. It is worth noting that social insurance covers only a limited number of formal sector employees along with their dependents and excludes the large majority of the population (see Chapter 4).

\textsuperscript{22} Social security coverage is provided by three institutions: \textit{Caisse Nationale de Prévoyance Sociale} (CNaPS) for private sector workers, \textit{Caisse de Retraite Civile et Militaire} (CRCM) for civil servants and armed services personnel, and \textit{Caisse de Prévoyance de Retraite} (CPR) for auxiliary public sector staff. Medical services are provided to a small number of formal sector employees through the \textit{Services Médicaux Inter Entreprises} (SMIE).
Table 6: Determinants of Extreme Poverty

<table>
<thead>
<tr>
<th>Variables</th>
<th>Urban</th>
<th>Rural</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme poverty rate</td>
<td>34.6</td>
<td>62.1</td>
<td>56.5</td>
</tr>
<tr>
<td>Household demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependancy ratio (active members/inactive members)</td>
<td>0.054 *</td>
<td>0.063 *</td>
<td>0.096 *</td>
</tr>
<tr>
<td>Age of head of household</td>
<td>-0.008 *</td>
<td>-0.009 *</td>
<td>-0.006 *</td>
</tr>
<tr>
<td>Age of head of household squared</td>
<td>0.006 *</td>
<td>0.009 *</td>
<td>0.000</td>
</tr>
<tr>
<td>Number of children under 1 year</td>
<td>0.012</td>
<td>0.067 *</td>
<td>0.011</td>
</tr>
<tr>
<td>Number of children 1 to 5 years</td>
<td>0.013</td>
<td>0.060 *</td>
<td>0.002</td>
</tr>
<tr>
<td>Number of children 6 to 9 years</td>
<td>0.015</td>
<td>0.013</td>
<td>-0.036 *</td>
</tr>
<tr>
<td>Number of children 10 to 14 years</td>
<td>0.019</td>
<td>0.007</td>
<td>-0.039 *</td>
</tr>
<tr>
<td>Number of children in the household</td>
<td>0.044 *</td>
<td>0.051 *</td>
<td>0.022</td>
</tr>
<tr>
<td>Old age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of people aged over 66</td>
<td>0.010</td>
<td>-0.017</td>
<td>-0.011</td>
</tr>
<tr>
<td>Number of people aged over 55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender/Marital Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female head of household</td>
<td>0.076 *</td>
<td>0.114 *</td>
<td>0.063 *</td>
</tr>
<tr>
<td>Household head customarily married monogamous</td>
<td>0.071 *</td>
<td>0.065 *</td>
<td>0.062 *</td>
</tr>
<tr>
<td>Household head customarily married polygamous</td>
<td>0.002</td>
<td>0.135 *</td>
<td>0.061</td>
</tr>
<tr>
<td>Common law monogamous</td>
<td>0.031</td>
<td>0.080 *</td>
<td>0.030</td>
</tr>
<tr>
<td>Divorced</td>
<td>0.050</td>
<td>-0.146</td>
<td>0.023</td>
</tr>
<tr>
<td>Separated</td>
<td>0.036</td>
<td>0.065</td>
<td>0.074 *</td>
</tr>
<tr>
<td>Widow (er)</td>
<td>0.053 *</td>
<td>0.003</td>
<td>0.117 *</td>
</tr>
<tr>
<td>Single</td>
<td>0.027</td>
<td>-0.018</td>
<td>0.014</td>
</tr>
<tr>
<td>Education Level (Head of Household)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
<td>-0.104 *</td>
<td>-0.083 *</td>
<td>-0.094 *</td>
</tr>
<tr>
<td>Secondary education</td>
<td>-0.139 *</td>
<td>-0.125 *</td>
<td>-0.120 *</td>
</tr>
<tr>
<td>University level</td>
<td>-0.198 *</td>
<td>-0.273 *</td>
<td>-0.213 *</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health problem in the previous 2 weeks</td>
<td>0.016</td>
<td>-0.009</td>
<td>0.072 *</td>
</tr>
<tr>
<td>Activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total area cultivated (rice, maize, cassava, potato)</td>
<td>0.000 *</td>
<td>-0.001 *</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Rice producer</td>
<td>-0.056</td>
<td>-0.077</td>
<td>-0.093 *</td>
</tr>
<tr>
<td>Maize producer</td>
<td>-0.053</td>
<td>-0.028</td>
<td>0.030 *</td>
</tr>
<tr>
<td>Cassava producer</td>
<td>0.010</td>
<td>0.035</td>
<td>0.004</td>
</tr>
<tr>
<td>Potato producer</td>
<td>-0.021</td>
<td>0.009</td>
<td>0.003</td>
</tr>
<tr>
<td>Livestock breeder</td>
<td>-0.039</td>
<td>-0.074 *</td>
<td>-0.015</td>
</tr>
<tr>
<td>Agricultural land ownership</td>
<td>0.116</td>
<td>0.101</td>
<td>0.130 *</td>
</tr>
<tr>
<td>Fishing</td>
<td>-0.005</td>
<td>0.082</td>
<td>-0.020</td>
</tr>
<tr>
<td>Non-farm business ownership</td>
<td>-0.060</td>
<td>-0.100</td>
<td>-0.079 *</td>
</tr>
<tr>
<td>Head of household unemployed or inactive</td>
<td>0.036</td>
<td>-0.089</td>
<td>0.087 *</td>
</tr>
<tr>
<td>Access to social security/services/assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household head benefits from social security</td>
<td></td>
<td></td>
<td>-0.113 *</td>
</tr>
<tr>
<td>Household head affiliated with a trade union</td>
<td></td>
<td></td>
<td>-0.132</td>
</tr>
<tr>
<td>Access to electricity</td>
<td>-0.268</td>
<td>-0.389</td>
<td>-0.306 *</td>
</tr>
<tr>
<td>Access to potable water</td>
<td>-0.073</td>
<td>-0.099</td>
<td>-0.082 *</td>
</tr>
<tr>
<td>Radio ownership</td>
<td>-0.127</td>
<td>-0.206</td>
<td>-0.108 *</td>
</tr>
<tr>
<td>Cell phone ownership</td>
<td></td>
<td></td>
<td>-0.236 *</td>
</tr>
<tr>
<td>Member of a credit union</td>
<td>-0.053</td>
<td>-0.015</td>
<td></td>
</tr>
<tr>
<td>Province</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fianarantsoa</td>
<td>0.040 *</td>
<td>0.078</td>
<td></td>
</tr>
<tr>
<td>Toamasina</td>
<td>0.092 *</td>
<td>0.054 *</td>
<td></td>
</tr>
<tr>
<td>Mahajanga</td>
<td>-0.085</td>
<td>-0.072</td>
<td></td>
</tr>
<tr>
<td>Tulear</td>
<td>0.019</td>
<td>0.058</td>
<td></td>
</tr>
<tr>
<td>Diégo</td>
<td>-0.052</td>
<td>-0.046</td>
<td></td>
</tr>
<tr>
<td>Antananarivo rural</td>
<td></td>
<td>0.067</td>
<td></td>
</tr>
<tr>
<td>Fianarantsoa urban</td>
<td>0.070</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fianarantsoa rural</td>
<td>0.148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toamasina urban</td>
<td>0.149</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toamasina rural</td>
<td>0.117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahajanga urban</td>
<td>-0.102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahajanga rural</td>
<td>-0.035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulear urban</td>
<td>0.044</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulear rural</td>
<td>0.100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diégo urban</td>
<td>-0.042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diégo rural</td>
<td>0.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>6,320</td>
<td>6,140</td>
<td>12,469</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.38</td>
<td>0.26</td>
<td>0.36</td>
</tr>
<tr>
<td>Chi-squared</td>
<td>2,975</td>
<td>2,260</td>
<td>6,240</td>
</tr>
</tbody>
</table>


Note: * Significance at 5 percent confidence level.
Table 7: Determinants of Per Capita Consumption

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household demographics</strong></td>
<td></td>
</tr>
<tr>
<td>Household size (people)</td>
<td>-0.1105</td>
</tr>
<tr>
<td>Number of children under 5 years (ind)</td>
<td>-0.0855</td>
</tr>
<tr>
<td><strong>Head of Household Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>0.0182</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.0167</td>
</tr>
<tr>
<td>Female single-headed household</td>
<td>-0.2054</td>
</tr>
<tr>
<td><strong>Human Capital</strong></td>
<td></td>
</tr>
<tr>
<td>Child not in school</td>
<td>-0.1391</td>
</tr>
<tr>
<td>Adults with disabilities</td>
<td>-0.0460</td>
</tr>
<tr>
<td>Primary education (head of household)</td>
<td>0.1415</td>
</tr>
<tr>
<td>Secondary education (head of household)</td>
<td>0.2562</td>
</tr>
<tr>
<td>University level (head of household)</td>
<td>0.6247</td>
</tr>
<tr>
<td><strong>Household Economic Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Farmer head of household</td>
<td>-0.2261</td>
</tr>
<tr>
<td>Number of workers in informal sector</td>
<td>0.0101</td>
</tr>
<tr>
<td>Number of workers in public sector</td>
<td>0.2186</td>
</tr>
<tr>
<td>Number of workers in formal sector</td>
<td>0.1321</td>
</tr>
<tr>
<td>Non-farm business ownership</td>
<td>0.1204</td>
</tr>
<tr>
<td>Transfers received per person (Log)</td>
<td>0.0243</td>
</tr>
<tr>
<td>Access to potable water</td>
<td>0.1482</td>
</tr>
<tr>
<td><strong>Agricultural Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Livestock (number)</td>
<td>0.0013</td>
</tr>
<tr>
<td>Total area (are equivalent to 10,000 square meters)</td>
<td>0.0006</td>
</tr>
<tr>
<td><strong>Geographic Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Rural area</td>
<td>-0.1493</td>
</tr>
<tr>
<td>Infrastructure (number)</td>
<td>0.0123</td>
</tr>
<tr>
<td>East Coast cyclonic area</td>
<td>-0.1469</td>
</tr>
<tr>
<td>Dry South area</td>
<td>-0.4554</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>12,460</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.9929</td>
</tr>
</tbody>
</table>

Note: Dependant variable = Log of per capita consumption – Feasible Generalized Least Square.
*** Significance at 1 percent confidence level.
** Significance at 5 percent confidence level.
* Significance at 10 percent confidence level.

56. While poverty is a source of vulnerability, it is also noteworthy that some non-poor households are vulnerable to poverty. This highlights the fact that, while a large proportion of households are in chronic (structural) poverty, others move in and out of poverty depending on the extent to which they are affected by temporary shocks. INSTAT (2011a)
has estimated that, while 77 percent of the population was below the poverty line in 2010, 87 percent of the population had a more than 50 percent probability of being poor in the following year. According to this analysis, in 2010, 71 percent of the population was in chronic poverty, 16 percent was vulnerable to transitory poverty, and only 13 percent was not vulnerable to poverty. As Figure 4 shows, the vast majority of the rural population (78 percent) lived in a state of chronic poverty, but this was less true in urban areas (51 percent in secondary urban centers and 19 percent in the major urban centers).

**Figure 4: Distribution of Population by Chronic Poverty, Vulnerability to Transitory Poverty, and Non-vulnerability to Poverty (%)**

![Figure 4 Diagram]

*Source: 2010 EPM (INSTAT, 2011b).*

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23 These estimates are based on the methodology developed by Harttgen and Günther (2006).
III. POLICIES, INSTITUTIONS, AND FINANCING FOR SOCIAL PROTECTION

57. Chapter 2 showed that the Malagasy population faces a large number of risks. It provided evidence that systematic and individual shocks have a considerable negative impact on the welfare of the population and that, although people have some means to mitigate the impacts of these shocks, the means are very limited – so that individuals still face a considerable level of residual risks. It also established that the high levels of vulnerability that prevailed before 2009 have been compounded by Madagascar’s deep and prolonged political crisis. It analyzed the very fundamental risk of falling into destitution and established links between disparities in assets and the probability of becoming destitute.

58. This chapter reviews Madagascar’s social protection policies, the institutions responsible for social protection, and the financial resources allocated to social protection programs by the government, donors, and NGOs.

A. Social Protection Policies

59. Before the inception of the current political crisis in early 2009, the overall development policy of the Government of Madagascar was outlined in a document called the Madagascar Action Plan (MAP). After a deep political crisis that lasted for six months in 2002, the new government of President Ravalomanana embarked on an ambitious development agenda outlined in a first Poverty Reduction Strategy (PRSP) in 2003, followed in 2006 by a second PRSP entitled the Madagascar Action Plan (MAP) 2007-12. MAP reaffirmed the commitment of the government to social protection. It outlined a strategy to reach the Millennium Development Goals (MDGs) and to support the poorest and most vulnerable segments of the population. Social protection was one of the eight commitments of MAP, in which it was included under the broad designation of “national solidarity.” This commitment included four “challenges,” of which the last was to “improve support to the very poor and vulnerable” by: (i) improving the management of social protection and
increasing the access of vulnerable groups to basic social services; (ii) improving the targeting and monitoring of social protection expenditures and their impact on the well-being of population groups; (iii) mitigating and responding to catastrophes; and (iv) guaranteeing an equitable legal framework for the vulnerable. The High Transitional Authority (Haute Autorité de la Transition, or HAT) established in early 2009 did not refute MAP, which remains nominally in application until it expires in 2012. However, in practice, MAP is associated with the Ravalomanana regime and has ceased to guide government actions.

60. At the present time, there is no national social protection strategy to guide the development of social programs and resource allocations. While MAP provided a sound overall framework for strengthening social protection, it was supposed to be complemented by a more detailed social protection strategy. In 2007, a Risk Management and Social Protection Strategy was drafted as an overall framework to orient social protection. Its objective was to “help households better manage the risks that lead to the loss of life or irreversible losses of assets, and to improve access to basic social services for the most vulnerable segments of the population” (Republic of Madagascar and World Bank, 2007, Vol. 1, pp.12-13). The development of the strategy was led by the Technical Committee on Social Protection (TCSP), which was created in April 2002 with technical support from the World Bank, and involved ministries, civil society organizations, and donors. However, the strategy was never officially adopted because of a lack of high-level political ownership. The 2009 political crisis has further pushed social protection down the governmental agenda.

61. That being said, a number of additional, more specific strategies and plans with components relevant to social protection do exist – although the current government’s commitment to them remains uncertain. These include:
i. **National Nutrition Policy** and **National Nutrition Action Plan 1 (2005-2009)**. The National Nutrition Policy includes a wide range of strategies, from measures to improve food security to the growth monitoring of children, the communication of good nutritional practices to mothers, preventive supplementary feeding, and therapeutic interventions to rehabilitate young children with severe acute malnutrition. The first National Nutrition Action Plan has 14 strategic components, of which two (Number 6 on strengthening the food and nutritional security of vulnerable households and Number 10 on post-disaster responses) form the basis for the public works program implemented by the National Nutrition Office (Office National de Nutrition or ONN). A second National Nutrition Action Plan is currently being prepared.

ii. **National Policy for the Management of Risks and Catastrophes**, established by law in 2003, which provides a comprehensive framework for disaster management and is complemented by operational guidelines, notably the national contingency plan for cyclones and floods (see below).

iii. **National Employment Policy**, established by law in 2005, and the **National Employment Support Program**, which aim in particular at increasing the employment opportunities and the income of disadvantaged and vulnerable groups.

iv. **Education for All (EFA) Plan**, adopted in 2005, which includes a range of demand-side measures to lessen the burden on parents of their children’s enrollment and attendance in schools, stem dropout rates, and achieve universal primary education by 2015.

v. **National Plan for Rural Development** adopted in 2005, which aims to increase agricultural productivity and rural incomes by improving rural infrastructure,

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24 Chapter 4 will describe the public works programs that are currently being implemented in Madagascar.
increasing access to microcredit, and improving the management of natural disasters.

vi. **National Microfinance Strategy** for 2008-2012, which aims to improve the legal and institutional framework for microfinance, develop microfinance, and extend its geographical coverage.

vii. Various policy, planning, and legal frameworks for the social inclusion and empowerment of specific vulnerable groups, including the **National Policy for the Promotion of Women** and the related **National Plan of Action on Gender and Development** and the **Law on the Protection of Persons with Disabilities** (Law 97-44).

62. Anti-Trafficking Law No. 2007-038 prohibits all forms of human trafficking. Yet, according to the U.S. Department of State (2011), the *de facto* Government of Madagascar does not fully comply with the minimum standards for the elimination of trafficking and is making no significant efforts to do so.

63. Madagascar has also ratified several major international conventions relevant to social protection. These include the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW). It has also signed but not yet ratified the Convention on the Rights of Persons with Disabilities. While a protective legal framework is largely in place, its effective implementation remains a major challenge. In addition, a draft law on the elderly, which was approved by the two parliamentary chambers in 2006-07, has not yet been promulgated, apparently out of concern for the financial implications of the concessions provided to the elderly for subsidized access to public transport, health care, and other services.
B. **Institutions Responsible for Social Protection**

64. Although MAP addressed social protection, the institutional responsibility for this sector never became fully effective. Even before the 2009 crisis, political ownership of the process to develop a national social protection strategy was weakened by the fact that the lead ministry, the Ministry of Population, Social Protection, and Leisure (created in 2004), was one of the weakest ministries in terms of capacity, influence, and resources. When this ministry was dissolved in January 2007, responsibility for social protection moved to a Directorate of Social Protection in the new Ministry of Health, Family, and Social Protection. Following the change in government in 2009, however, this ministry was reorganized to become the present Ministry of Population and Social Affairs with a mandate to “execute government policy on population and social affairs as well as humanitarian action in order to ensure the social protection and inclusion of the population, in particular vulnerable and marginalized groups, in the process of economic and social development” (Republic of Madagascar, 2010). Both before and after its reorganization, this ministry has focused primarily on small-scale, short-term interventions in support of certain vulnerable groups. In terms of leading the design and implementation of an overall social protection strategy, it remains largely ineffective. In particular, it is only present in about 80 percent of the 110 districts in Madagascar and has no presence below the district level.

65. The government has created some institutions to respond to natural disasters including cyclones. The Disaster Preparedness Unit (*Cellule de Prévention et Gestion des Urgences*, or CPGU) under the Prime Minister’s Office and the National Risk Management Bureau (*Bureau National de Gestion des Risques et des Catastrophes*, or BNGRC) created in 2006 (Decree No. 2006 – 904) under the Ministry of the Interior are the main agencies responsible for disaster risk management in Madagascar. The CPGU is responsible for policy and technical coordination on behalf of the Inter-Ministerial National Council for the Management of Risk and Disasters (established in 2005) and is chaired by the Prime Minister. The BNGRC is responsible for preparedness and emergency responses. In 2007, it
organized effective training sessions on early warning and community emergency preparedness at the district level. A National Contingency Plan was prepared in October 2007 by the Disaster Preparedness Committee (Comité de Réflexion des Intervenants en Cas de Catastrophes, CRIC), the local humanitarian aid platform managed by the BNGRC. Following the 2008 cyclone season, the government and donors recognized the need to shift the national strategy away from responding to natural disasters and towards a strategy that manages recurrent disasters more efficiently by adopting and implementing various mitigating measures such as cyclone-resistant building norms, awareness and information campaigns, and early warning systems and by implementing emergency operations to alleviate the most devastating immediate effects of catastrophic events. However, the capacity of the BNGRC and its units at the regional, district, and commune levels have weakened since the emergence of the political crisis. In late 2011, a crisis management center (Centre d'Etudes, de Réflexion, de Veille et d'Orientation or CERVO), financed by the French bilateral agency (Agence Française de Développement or AFD), was created within the BNGRC to strengthen its capacity.

66. Strong coordination is especially important in social protection because of its inherently cross-cutting, multi-sectoral nature, with various government bodies involved as well as many non-governmental actors financed by donors. In the absence of strong government leadership, social protection interventions in Madagascar have been developed on an ad hoc basis, often on the initiative of donors. As a result, they are scattered and uncoordinated across a number of ministries and agencies. To fill this vacuum, donors have come together to create ad hoc forums called “clusters” to discuss and coordinate selected social protection programs. There is a cluster for food security and livelihoods, coordinated by the World Food Programme (WFP), a social protection cluster led by UNICEF, and other clusters in the areas of water and sanitation, education, shelter, logistics, nutrition, and

25 On February 17, 2008, the eastern coast of Madagascar was hit by cyclone Ivan, a category 4 cyclone with winds exceeding 230 kilometers per hour. In early 2008 two other cyclones (Fame and Jokwe) affected the west coast of Madagascar.

26 For more detail, see Government of Madagascar (2008).
health. These clusters constitute forums for discussion and coordination among donors, NGOs, and other actors. For example, the food security and livelihoods cluster has helped to define geographical priorities and to divide areas of intervention among agencies, including cash-for-work and food-for-work programs. Even so, the decision-making power of these clusters is limited and cannot substitute for government action.

67. Coordination between partners and the government, including on social protection, has suffered from the halt in the government–donor dialogue at the political level since 2009. Theoretically, 14 sector and thematic working groups exist to discuss and coordinate strategies, programs, and projects. In practice, since the emergence of the political crisis, the absence of political-level dialogue between the government and donors, along with weak political leadership, has accentuated the difficulties of coordination. Some sectoral and thematic working groups, including the group on employment and social protection, which existed prior to the crisis, are inactive, and government participation in any of these groups, even at a technical level, is rare. The umbrella donor coordination group (Groupe de Concertation des Partenaires Techniques et Financiers) was recently revived and is trying to breathe new life into the sector groups, but it is not clear what this group can achieve beyond coordinating among partners in the absence of any direct policy discussions with an internationally recognized government. Importantly, the impetus to adopt cyclone-mitigating measures, implement awareness and information campaigns, and develop early warning systems waned when the donors – the driving forces behind the implementation and financing of this strategy – pulled out with the onset of the latest political crisis. At the beginning of 2012, the Fonds d’Intervention pour le Développement (Intervention Fund for Development or FID) was the only institution with the readily available institutional capacity and financial resources to respond to the destruction brought about by cyclones.27

27 US$8 million of the US$40 million of the Emergency Food Security and Reconstruction Project financed by IDA is allocated to post-cyclone reconstruction.
68. As a result of the political crisis, donors bypass the government, which is further eroding state systems. While government capacity was already weak in many fields, state systems have been further weakened by the crisis, which has led to a lack of policy direction, budget cuts, demoralization among civil service staff, and the development of aid-funded parallel systems. The lack of recognition from the international community of the transitional authority has led donors to finance activities at arm’s length, which has undone much of the progress previously made in implementing the Paris Declaration on Aid Effectiveness and has led to a severe erosion of state systems (World Bank, 2011a). Social protection, due to its heavy dependence on external aid, is acutely affected. Donors, in particular USAID, have halted their direct funding to the central government and have assigned NGOs to manage their programs that are delivering services to the population. While this is a partial short-term solution to the situation, it also has also fragmented service delivery, weakened public systems, and undermined the sustainability of project-financed services.

69. The political crisis has also halted the decentralization process with important consequences for social protection. Decentralization in Madagascar has been under way since the beginning of the 1990s, focusing mainly on the approximately 1,550 communes but also more recently on the 22 regions created in 2004. As part of the decentralization process, communes were expected to take on increasing responsibilities for providing core social programs including the delivery of basic services such as schools, health posts, water systems, and communal roads. However, the decentralization process (including the transfer of incremental financial resources to communes by the central government [check]) that was supposed to take place in early 2009 did not materialize as donors suspended their financial contributions to Madagascar.28 As a consequence, in practice,

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28 In early 2009, several donors including the European Commission, the World Bank, and the Swiss cooperation were in the final stage of preparing an important program aiming at strengthening communes and transferring block grants for investment to all communes in Madagascar. This program was going to be implemented by the Local Development Fund (Fonds de Développement Local or FDL). The preparation of this US$130 million Commune Development Support Program was suspended as a result of the political crisis.
Madagascar remains a highly centralized state where communes have very limited resources and the few public services provided at the local level are carried out by the devolved offices of the line ministries.

70. In practice, the political crisis has increased the role of local authorities. The *de facto* power and influence of the *fokontany*, of which there are about 17,500, has increased since 2009 due to the progressive weakening of the central government and the channeling of external resources to *fokontany* and communities through NGOs. *Fokontany* have increasingly been implementing the few social protection programs that still exist such as the issuing of solidarity cards for free drugs in Basic Health Posts (*Centres de Santé de Base*, or CSB), the approval of local public works projects, and the targeting of *Tsena Mora* beneficiaries (see Chapter 4). The role of communes has been weakened as the mayors’ terms of office expire on December 31, 2012 and a recent law prohibits them from making any new investments.

C. Expenditures on Social Protection

71. There are definitional challenges to measuring expenditures on social protection.29 There is no universal and consistent definition of social protection expenditures. The internationally adopted definition of social protection in the “classification of the functions of government” (COFOG) that is used for the purposes of national accounts and government financial statistics by the UN, the IMF, and the World Bank excludes expenditures related to education, health, or agriculture, even when these expenditures have social protection features.

72. There are also technical difficulties involved in measuring expenditures on social protection. First, there is no functional budgetary classification of expenditures in

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29 This section draws on Ralaivelo (2011a).
Madagascar, so the government itself does not produce data on social protection as a function. To get around this difficulty, Ralaivelo (2011a) reviewed the expenditures related to each program and administrative classification and estimated the expenditures that are related to social protection. However, this review was complicated by the fact that the nature or purpose of many of these expenditures is unclear. Also, the budget lines do not consistently include the same expenditures from one year to the next, which makes it difficult to compare expenditures across time. Second, the program budgets exclude general administration costs that cannot easily be attributed to specific programs. Third, some expenditures from international donors are not included in the government accounts. Fortunately, there is a comprehensive database on aid flows managed by the Aid Coordination Unit in the Prime Minister’s Office (Primature, 2010 and World Bank, 2011a). However, this database only includes the major donors and does not include the flows of funds from a myriad of small NGOs and faith-based organizations. In light of these challenges, the total expenditures on the social sectors reported in this section have been derived by adding together: (i) estimates of expenditures on the social sectors derived from the budget documents as reported in the background paper by Ralaivelo (2011a); (ii) estimates of disbursements by external donors from the aid flow database as reported in the background paper by Ravelosoa (2011); and (iii) estimates of expenditures by NGOs that are not included in the aid flow database as reported in the background paper by Kone (2011).

With the caveats just mentioned, we can say that government expenditures on social protection have fallen dramatically since the emergence of the current political crisis. Based on a review of budget documents, Ralaivelo (2011a) has estimated that public spending on social protection (on a commitment basis) has decreased considerably from US$145 million in 2008 to US$56 million in 2010 (Table 8). In part, this reflects the general

30 Due to a lack of available data, Table 8 does not include three crucial categories of social protection expenditures: (i) expenditure on salaries, which are not part of the program budgets from which the data are drawn; (ii) some off-budget donor-funded expenditure; and (iii) some government social protection
decline in public expenditure by the current government, which has been intent on preventing major budget disequilibria arising from the sharp decline in revenue and aid in the aftermath of the political crisis. The dramatic decline in the relative share of social protection in total government expenditure from 13.4 percent in 2007 to 2.9 percent in 2010 also suggests that social protection has been given a lower priority than other spending areas as budgets have been cut. Although the data, notably with respect to the financing of the *Tsena Mora* program, are incomplete, this is unlikely to have affected this conclusion (see Chapter 4).

74. Consequently, at 0.6 percent of GDP in 2010 (down from 1.5 percent in 2008), Madagascar’s spending on social protection is low by international standards (Table 8). Comparisons across countries need to be made with caution as it is notoriously difficult to quantify spending on social protection and compare expenditure data across countries. Nonetheless, spending on safety nets typically represents 1 to 2 percent or less of GDP in developing countries, while average spending levels tend to be higher in middle-income countries than in low-income countries. Spending levels also vary by region, with Sub-Saharan Africa and South Asian countries spending less than those in Latin America and the Caribbean while countries in Eastern and Central Europe and the Middle East spend relatively more (Grosh and al, 2008, p. 63). Using data from 87 countries between 1996 and 2006, Weigand and Grosh (2008) reported mean spending on safety nets of 1.9 percent of GDP and median spending of 1.4 percent of GDP.

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31 For more on intra-country comparisons, see Chapter 3 in Grosh and al (2008).
32 This compares with spending levels of 2 to 4 percent of GDP in industrial countries (Atkinson, 1995).
33 The reported average of 3.5 percent of GDP for Sub-Saharan Africa is not a robust number as it is based on only six observations and includes external financing (Grosh et al, 2008, p. 65).
Table 8: Government Expenditures on Social Protection, Commitment Basis (2007-10)

<table>
<thead>
<tr>
<th>Government Expenditures on Social Protection</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Ariary (million)</td>
<td>171,000</td>
<td>247,650</td>
<td>189,550</td>
<td>116,550</td>
</tr>
<tr>
<td>In US$ (million)</td>
<td>91.3</td>
<td>145.0</td>
<td>96.9</td>
<td>55.8</td>
</tr>
<tr>
<td>% of GDP</td>
<td>1.2</td>
<td>1.5</td>
<td>1.1</td>
<td>0.6</td>
</tr>
<tr>
<td>% of total expenditures</td>
<td>10.1</td>
<td>13.4</td>
<td>9.3</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Government Expenditures on Social Protection (% of total expenditures)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social security for public employees</td>
<td>55.7</td>
<td>44.3</td>
<td>65.4</td>
<td>86.0</td>
</tr>
<tr>
<td>Health and nutrition</td>
<td>10.2</td>
<td>5.6</td>
<td>11.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Education</td>
<td>21.4</td>
<td>31.8</td>
<td>11.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Public works</td>
<td>4.1</td>
<td>7.9</td>
<td>2.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Natural disasters</td>
<td>4.0</td>
<td>8.4</td>
<td>5.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Vulnerable groups</td>
<td>4.6</td>
<td>2.0</td>
<td>3.8</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Ralaivelo (2011a).

75. The composition of government expenditures on social protection in Madagascar has also dramatically changed since the beginning of the crisis. For the past three years, the government has been paying the social security of public employees while dramatically cutting all other social protection expenditures, thus raising important equity concerns.\(^\text{34}\) In fact, the share of social protection spending allocated to public employees’ social security increased from 44 percent in 2007 to 86 percent in 2010 (Table 8). Consequently, other than payments to cover the pensions of public employees, the government spent only US$7.8 million on social protection in 2010 (equivalent to US$0.4 per person).

76. Public spending on health-related social protection measures has been deeply cut.\(^\text{35}\) The government finances very few of the limited social protection measures that are in place to facilitate access to health services. Under FANOME procedures (\textit{Fonds d’Approvisionnement Non-stop en Médicaments Essentiels} or Fund for the Non-stop Supply of Essential Drugs), the equity funds in the CSB are financed entirely from a fixed 3 percent

\(^\text{34}\) Ralaivelo (2011a) includes a detailed description of the programs.
\(^\text{35}\) Chapter 4 provides a detailed description of these measures.
deduction from the 35 percent mark-up on the sale of drugs. Consequently, it is those who buy these drugs (in other words, exclusively those who are sick and use public health providers) who finance most social protection in the health sector. Therefore, neither the non-sick nor the government fund this mechanism, which helps to explain why its coverage remains so limited. The equity funds in the hospitals are somewhat different in so far as the government pays for about half of their financing, but the balance is provided by fixed deductions on the mark-up of drug sales and revenue from consultations, which again come out of the pockets of sick people using government hospitals. Regional hospital funds that provide free access to emergency obstetrical and pediatric care are funded entirely by aid (World Bank and UNFPA), but these disbursements were suspended in early 2009. Mutual health organizations (MHO), where they exist, are funded entirely on a contributory basis by their members, although donors sometimes provide funding for their administrative and start-up costs, as in the case of the AFAFI (“Let’s Protect Family Health Together”) initiative (see Chapter 4).

77. Public spending on education-related social protection programs has been severely reduced as well. The September 2010 budget revision law introduced large cuts in social protection spending by the MENRS. The ministry’s overall budget was slashed by 56 percent from the amount allocated in the original budget for 2010. Among the consequences were the cancellation of the distribution of free school kits at the start of the 2010/11 school year and a large reduction in the transfer of funds to schools (caissons écoles) that were intended to reduce the burden of school levies and charges on parents.

36 While the equity fund financing mechanism introduces the principle of solidarity between the non-poor who finance the system and the identified poor beneficiaries, it does not introduce the principle of solidarity between the sick and the non-sick (Poncin and Le Mentec, 2009). Also, those who use private health providers are excluded from the pool of contributors.

37 For example, financing from the government represented 44 percent and 51 percent of the expenditures of the Mahajanga and Fianarantsoa CHUs (Centres Hospitaliers Universitaires) in 2008 respectively (Poncin and Le Mentec, 2009).

38 Chapter 4 provides a detailed description of these measures.
78. Moreover, government spending on public works ceased due to the closure of the HIPC debt relief fund, which constituted its main funding source. Government expenditure on labor-intensive public works programs, mainly through the National Nutrition Office (Office National de Nutrition or ONN), decreased from Ar3.2 billion (equivalent to US$1.9 million) in 2008 to Ar10 million (less than US$5,000) in 2010.

79. Allocations to the Ministry of Population and Social Affairs have also declined sharply since 2009. Budget execution data for the Ministry of Population and Social Affairs, the “core” government agency that has been responsible for social protection since 2009, show that expenditure commitments (engagements) dramatically declined in 2010 (Table 9). On a commitment basis, expenditure by the Ministry of Population and Social Affairs as a proportion of total government expenditures declined from 1.4 percent in 2009 to only a quarter of 1 percent in 2010 (about US$4.8 million). However, not all expenditures were reduced – expenditure on salaries did increase in 2010.

| Table 9: Expenditures on the Ministry of Population and Social Affairs, Commitment Basis (Ariary million) |
|---------------------------------------------------------------|---------------------|---------------------|
| 2009 | 2010 |
| Salaries | 1,990 | 2,403 |
| Non-salary recurrent expenditure | 4,372 | 3,119 |
| Investment | 21,005 | 2,594 |
| Total | 29,375 | 10,127 |
| Memo | | |
| As % of total budget expenditure commitments | 1.44 | 0.25 |

Source: Budget documents, Ministry of Finance and Budget.

80. *Tsena Mora* is now the main government social protection program. Launched in October 2010 to provide subsidized basic food commodities to the urban poor, the program sought to alleviate the negative effects of the political crisis including job losses in peri-urban areas. Although no data on actual expenditure by *Tsena Mora* is available, the program has reportedly received an allocation of Ar25 billion (equivalent to about US$12

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39 Chapter 4 includes a detailed description of the *Tsena Mora* program.
million), which exceeds the total amount of government social protection expenditures in 2010 (Ralaivelo, 2011b). This program is exclusively implemented in large cities, which means that the overwhelming majority of the extremely poor, who live in rural areas, do not benefit. The implementation of *Tsena Mora* has reportedly been suspended since July 2011 with the exception of the *Vary Mora* (cheap rice) sub-program, which was implemented during the 2011 end-of-the-year season.

81. Overall expenditures on social protection by government, donors, and NGOs have considerably decreased since the emergence of the 2009 political crisis. As mentioned above, public spending on social protection has decreased considerably since the beginning of the political crisis (Table 10). This decline has been offset very partially by increased donor aid. According to the Aid Coordination Unit in the Prime Minister’s Office, aid disbursements for social protection increased from US$26 million in 2008 to US$37 million in 2010 (World Bank, 2011a). This includes social protection measures in the education sector that are now largely financed by donors, notably through the Catalytic Fund of the Education for All Fast Track Initiative, managed by UNICEF, and through the WFP’s support for school feeding. Also, increased aid for labor-intensive public works projects, notably from the World Bank through the FID, has more than offset the sharp fall in government financing (through the ONN), making it possible to expand the coverage of public works. On the other side, the additional resources provided directly by NGOs have declined to US$5.1 million in 2010 (Kone, 2011). In the end, total spending on social protection decreased from 1.9 percent of GDP in 2008 to 1.1 percent in 2010.\(^\text{40}\)

\(^{40}\) Some expenditure reported by donors may be recorded in budget documents, while some NGO resources may be also recorded in the donor aid database as most NGOs act primarily as contractors for official aid agencies. As such, the total expenditure reported in Table 10 is an upper bound.
<table>
<thead>
<tr>
<th>Expenditures on social protection by</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>91.3</td>
<td>145.0</td>
<td>96.9</td>
<td>55.8</td>
</tr>
<tr>
<td>Donors</td>
<td>n.a.</td>
<td>26.0</td>
<td>40.7</td>
<td>36.8</td>
</tr>
<tr>
<td>NGOs</td>
<td>6.8</td>
<td>8.0</td>
<td>7.2</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>n.a.</td>
<td><strong>179.0</strong></td>
<td><strong>144.8</strong></td>
<td><strong>97.7</strong></td>
</tr>
</tbody>
</table>

**Memo**

| Total as percentage of GDP        | 1.9%  | 1.7%  | 1.1%  |

*Sources: Ravelosoa (2011), Ralaivel (2011a), and Kone (2011).*
IV. Social Protection Programs

82. As discussed in Chapter 3, before 2009 Madagascar’s social protection policy was outlined in the 2007-12 Madagascar Action Plan while the mechanism to translate the policies into action, the Risk Management and Social Protection Strategy was drafted but never officially adopted. Since the beginning of the political crisis in early 2009, MAP – associated with the former regime – has ceased to guide the government’s actions, and the public resources necessary for its implementation are no longer available. Overall expenditures on social protection have considerably decreased, although the sharp decline in public spending has been offset very partially by an increase in donor aid, at least until 2010.

83. This chapter reviews Madagascar’s current social protection interventions. First, it describes and analyzes the primary policies aimed at reducing the impact of the main systematic shocks described in Chapter 2 including those originating from international commodity price crises. Second, it reviews the Tsena Mora program, a consumer subsidy program that was introduced in October 2010 by the High Transitional Authority (HAT) as a flagship program to alleviate the impact of the crisis on the urban poor. Third, it surveys the other main social protection programs currently being implemented in Madagascar including their costs, coverage, and effectiveness.

A. Policies to Alleviate Systematic Shocks

A.1 Governance

84. As noted in Chapter 2, the single most critical shock affecting the Malagasy population is recurrent governance crises. These crises are deeply rooted in the political structure of society and in shifting alliances between the country’s elite families. In the end, these crises translate not only into an absence of economic development but also, and
worse, into a progressive and steady long-term economic decline. Per capita GDP declined by 40 percent between 1960 and 2010. This makes Madagascar the third worst performer among 29 Sub-Saharan countries for which data are available (after Liberia and the Democratic Republic of Congo – both affected by civil wars) and the worst performer among countries at peace. An analysis of all of the factors that are preventing growth would be beyond the scope of this report. However, the alleviation of these constraints would be the single most effective way to lift the population out of extreme poverty and generate the fiscal resources necessary to finance any effective social protection strategy. If the country can properly tackle its deeply rooted governance issues, it should be able to reverse its downward economic trend and grow its economy by at least as much as neighboring countries such as Sri Lanka, which had a per capita GDP comparable to that of Madagascar in 1960, or Cape Verde, an island state on the west coast of Africa (Figure 5).
A.2 International Commodity Prices

85. Price of Rice. Madagascar’s economy is characterized by a high level of dependence on the price of rice (see Chapter 2). Because rice is the most important staple, any increase in the international price has a substantial impact on the welfare of Malagasy households. Therefore, the government’s rice policy is a fundamental component of any social protection strategy. Since the 1970s Madagascar has been a structural rice importer. From 2000 until 2004, rice imports were subject to both an import tariff of 20 percent and an ad valorem tax of 21 percent, together yielding a tariff rate of 45 percent. In 2005, the import tariff was lowered to 10 percent. These tariffs on rice imports increased the domestic price of rice above world prices and were essentially a subsidy to rice net producers financed from a tax on net consumers of rice. In 2007, the government

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41 At 114 kilograms per inhabitant per annum, per capita rice consumption in Madagascar is one of the highest in the world (Carimentrand, 2011).
42 The other main crops grown in Madagascar (maize and cassava) are not traded internationally and not subject to taxes or subsidies.
eliminated the tariff on rice imports and set the ad valorem tax at 18 percent.\textsuperscript{43} The former most probably resulted in substantial efficiency gains, mainly for higher-income households, effectively making poor net sellers of rice the losers. In July 2008, the government eliminated the ad valorem tax on rice imports to mitigate the pressure on domestic prices brought about by a spike in international food prices. Since then, the policy that eliminated both the tariff and ad valorem tax on rice imports has been maintained and domestic prices have been broadly aligned with import parity prices (Figure 6).

\textsuperscript{43} The ad valorem rate was increased to 20 percent in January 2008.
86. **Oil Price.** Madagascar’s economy is also characterized by a high level of dependence on the international price of oil (see Chapter 2). Higher petroleum prices result not only in higher prices for the petroleum products themselves but also for the numerous other goods and services that use petroleum as an intermediate good like transport. The domestic prices of petroleum products fluctuate with the international prices, the exchange rate, and domestic taxes (Figure 7). The level of taxation (including excises and VAT) on petroleum products (1.1 percent for kerosene, 27 percent for diesel, and 38 percent for gasoline) is about average by international standards (IMF, 2007). The fact that the tax on kerosene is so low even though it represents over 90 percent of poor households’ expenditures on energy indicates that petroleum product taxation is largely redistributive.

Figure 6: Domestic Price and Import Parity Price of Rice (Jan 2008-Sept 2011)

Source: INSTAT.
B. Consumer Subsidies and the Tsena Mora Program

87. The *Tsena Mora* was introduced in October 2010 as the flagship program of the High Transitional Authority (HAT) to mitigate the impact of the political crisis on the urban poor, who were acutely affected.\textsuperscript{44} The program has the formal status of a cooperative and is overseen directly by the Presidency, and it provides subsidized basic food commodities to the urban poor. Special *Tsena Mora* sales points have been established in Antananarivo and the five other former provincial capitals.\textsuperscript{45} As Table 11 indicates, *Tsena Mora* seeks to provide rice, oil, and sugar at about half the market price. However, it has been reported that the *Tsena Mora* program, with the exception of the *Vary Mora* (cheap rice) sub-program, has been suspended since July 2011.

\textsuperscript{44} For more detail on the *Tsena Mora* program, see Ralaivelo (2011b).
\textsuperscript{45} In Antananarivo, all 192 *fokontany* (neighborhoods) are covered.
Table 11: Subsidized Sales of Essential Food Commodities by Tsena Mora

<table>
<thead>
<tr>
<th>Product</th>
<th>Subsidized Sales Price</th>
<th>Rate of Subsidy (% of Average Retail Price)</th>
<th>Amount Sold Per Beneficiary (Once Every 2 Weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Ar500 per kg</td>
<td>57%</td>
<td>64%</td>
</tr>
<tr>
<td>Oil</td>
<td>Ar2,500 per litre</td>
<td>43%</td>
<td>44%</td>
</tr>
<tr>
<td>Sugar</td>
<td>Ar1,000 per kg</td>
<td>56%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Source: Ralaivelo (2011b) and price data from INSTAT.

88. **Coverage.** *Tsena Mora* has wide coverage in the six provincial capitals where it is implemented. Beneficiaries are selected by the staff of the sales points based on pre-existing lists of vulnerable residents provided by *fokontany* officials. Partnerships have been established with NGOs working in poor neighborhoods to implement local surveys to complement this pre-existing information. Officially, the program targets households with three to five non-working-age dependents, households with unstable income from casual labor or the informal sector, and women who work in the informal sector.

89. **Cost.** The program reportedly received Ar25 billion in government funds (about US$13 million) in 2011, although this allocation was not included in the state budget (Ralaivelo, 2011b). Recent evidence indicates that the program was scaled back considerably due to financial constraints.

90. **Effectiveness.** By subsidizing key food commodities, *Tsena Mora* seeks to increase food security and reduce vulnerability in the capital cities of the six provinces where it operates. Households in secondary urban centers or in rural areas (where the bulk of poverty is concentrated) have no access to the program, which raises equity concerns. Also, the available evidence suggests that *Tsena Mora* benefits a large number of the non-poor. Ralaivelo (2011b) estimates that 250,000 households benefitted from *Tsena Mora* (equivalent to about 6 percent of total households, or two-thirds of all households in the six covered cities). As the urban poverty rate is 54 percent and the urban extreme poverty rate

46 In 2004, each *fokontany* established a list of indigent people to benefit from free basic health services (see below).
is 35 percent (see Chapter 2), this suggests that there is significant leakage to the non-poor. Little information is available on the program’s beneficiaries, implementation, and targeting efficiency. Based on interviews with a limited number of beneficiaries, Ralaiveloa (2011b) noted that *Tsena Mora* may have subsidized about one-third of beneficiaries’ total expenditures on rice. In mid-2011, beneficiaries expressed a high level of satisfaction with the program, although there were complaints related to a lack of transparency, the alleged diversion of some commodity stocks to the informal market, and inadequate supplies of the subsidized products, particularly oil.

**C. Social Protection Programs**

91. This section describes the main social protection programs currently being implemented in Madagascar and, for each program, reviews its coverage, cost, and efficiency. These programs include the formal social security schemes as well as the social protection programs related to education, health, and nutrition, labor-intensive public works, post-catastrophe reconstruction programs, and programs targeted to specific vulnerable groups including the disabled, at-risk youth, children, and the elderly. The end of the section touches upon Madagascar’s decentralization process as this might be a promising mechanism for the effective delivery of social protection to the population once the political situation normalizes.

**C.1 Social Security**

92. In Madagascar, social security coverage is provided by three institutions: *Caisse Nationale de Prévoyance Sociale* (CNaPS) for private sector workers, *Caisse de Retraite Civile et Militaire* (CRCM) for civil servants and armed services personnel, and *Caisse de Prévoyance de Retraite* (CPR) for auxiliary public sector staff. However, these systems protect against only a limited number of risks. CNaPS covers only a subset of the nine types of risks envisaged under the 1952 International Labor Organization’s “minimal standards”
social security convention, namely employment injury, retirement, disability and survivors pensions, and family allowances. Medical insurance and unemployment insurance are not covered, although some medical services are provided to a small number of formal sector employees through the Services Médicaux Inter Entreprises (SMIEs), which are geographically based associations located in the six provincial capitals. Civil servants and armed forces personnel also receive some medical benefits.

93. **Coverage.** Social insurance covers only a limited number of formal sector employees along with their dependents and thus excludes the large majority of the population. With about 500,000 affiliated members, CNaPs can be estimated to cover 2.4 million individuals, which equivalent to 12 percent of the population (Table 12). CNaPS also provides small family allowances to about 220,000 children. According to the 2010 EPM household survey (INSTAT, 2011b), only 3.1 percent of Malagasy workers contribute to a social security scheme, of whom 35 percent belong to the formal private sector and 65 percent to the public sector. Consequently, while CNaPS and the schemes for state employees do provide pensions and some other benefits to enrollees, they exclude the vast majority of the population. SMIEs cover only a tiny proportion of their respective provincial populations. For example, the scheme in Analamanga Province reaches 7 percent of the population, which is far higher than in any other province (CGA, 2009).

<table>
<thead>
<tr>
<th>Table 12: Number of Employers and Employees Affiliated to CNaPS (2006-08)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employers affiliated</td>
</tr>
<tr>
<td>Number of employees affiliated</td>
</tr>
</tbody>
</table>


47 Despite the lack of unemployment insurance, CNaPS has taken some measures to alleviate the hardship suffered by recent job losses in the formal sector brought about by the political crisis, notably by extending coverage for six months after a loss of employment and by sponsoring a retraining scheme in partnership with the Canadian mining company Sheritt. CNaPS has also established a partnership with microfinance institutions to deliver pension payments and facilitate pensioners’ access to microcredit (Donati et al, 2011 and CNaPS, 2011).

48 This assumes an average household size of 4.8 members.
C.2 Social Protection Programs Related to Education

94. In 2003, the newly established government of President Ravalomanana sought to reduce the financial barriers to education. It abolished formal school fees and started the distribution of free school kits. In 2005, the government adopted its first Education for All plan and subsequently obtained substantial financial support under the Fast Track Initiative’s Catalytic Fund. This helped to finance a range of measures on both the supply and demand sides of education with the objectives of raising enrollment and reducing dropouts.

95. The main social protection programs in the area of education are as follows:

i. **Reduction of parents’ payments for the salaries of community teachers.** A characteristic feature of the Malagasy public education system is that a high and rising proportion of teachers are not formally employed by the government but instead are hired and paid by local parents’ associations (FRAM). These “community teachers” represented two-thirds of the teaching staff at the primary level in 2010/11, up from 56 percent in 2007/08 (Table 13). The government, with support from the Catalytic Fund, has subsidized the salaries of a large number of FRAM teachers to reduce the amount that has to be borne by parents. For example, during the 2009/10 school year, 70 percent of FRAM teachers’ salaries was subsidized at a cost of Ar46.3 billion (equivalent to US$22.9 million), of which Ar23.2 billion was financed by the government and Ar18.6 billion by the Catalytic Fund. The salaries of teachers in private schools were also supposed to be subsidized with the same objective of reducing the burden on parents, but this program was not implemented in 2010 because of
budget cuts. Disbursements from the Catalytic Fund were slow due in part to delays in the government paying its share of teachers’ salaries.49

### Table 13: Subsidization of FRAM Teachers (2008/09-2010/11)

<table>
<thead>
<tr>
<th></th>
<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of teachers in government primary schools, of which:</td>
<td>69,613</td>
<td>82,954</td>
<td>78,632</td>
</tr>
<tr>
<td>Government-employed teachers</td>
<td>28,611</td>
<td>27,498</td>
<td>26,385</td>
</tr>
<tr>
<td>FRAM teachers</td>
<td>41,002</td>
<td>55,456</td>
<td>52,247</td>
</tr>
<tr>
<td>FRAM teachers (as percentage of total)</td>
<td>58.9</td>
<td>66.9</td>
<td>66.4</td>
</tr>
<tr>
<td>FRAM teachers subsidized</td>
<td>35,886</td>
<td>38,583</td>
<td>39,885*</td>
</tr>
<tr>
<td>FRAM teachers subsidized (as percentage of total FRAM teachers)</td>
<td>87.5</td>
<td>69.6</td>
<td>76.3*</td>
</tr>
</tbody>
</table>

Note: * Planned.

ii. **Distribution of free school kits.** School kits are distributed to pupils free of charge at the beginning of each school year but are quite limited in their composition and coverage. In 2009/10, they consisted of schoolbags for pupils starting grade 1 and exercise books for pupils in grades 1, 2, and 5. However, no kits were distributed at the start of the 2010/11 school year because of a drastic reduction in the budget allocated to the MENRS in the revised budget adopted in September 2010 (MENRS, 2011).

iii. **School funds.** School funds are budget allocations to schools done on a per-pupil basis to cover the basic operating costs of schools. They were originally intended to compensate schools for the abolition of school fees and deter informal school levies. However, these funds have been sharply reduced as the result of the post-crisis budget cuts: the revised budget adopted in September 2010 has resulted in a drastic reduction in per-pupil allocation from Ar3,000 during the 2009/10 academic year to Ar800 in 2010/11 (MENRS, 2011). Supplemental funds to cover

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49 Under the agreement, the government pays eight months of the salaries while the Fast Track Initiative pays the remaining four months.
the purchase of school materials for highly vulnerable pupils, in addition to
teaching materials, other consumables, and school maintenance and repairs,
were provided by the Catalytic Fund for schools in regions with the poorest
education indicators (MEN, 2011). These disbursements were slower than
anticipated.

iv. **School feeding.** School feeding programs provide food-insecure households with
another incentive to send their children to school. The World Food Programme
(WFP) provides school meals in most parts of southern Madagascar. The WFP
currently reaches about 200,000 pupils in 1,150 schools with meals provided
throughout the academic year. The government implements a smaller scheme to
provide food rations for slightly over 60,000 pupils on the outskirts of
Antananarivo (MEN, 2011). There are other school feeding programs as well
although these are limited in scale.

v. **Cash transfers and scholarships.** There have been some limited experiments
with conditional cash transfers. Some local initiatives attempt to condition cash
outlays on school attendance by the children. Other programs have provided
scholarships to girls who make the transition from primary to secondary
education, particularly in areas without colleges, which requires them to board
away from home. Box 2 describes one such experiment.
Box 2: NGO-led Experiment with Conditional Cash Transfers: the Case of the Education Action Support Program

The Jeunesse du Troisième Age Association (or JTA) was one of the first NGOs in Madagascar to experiment with an innovative cash transfer program conditioned on students’ academic performance. Thanks to the financial and technical support of senior members of the JTA, the Education Action Support Program (Programme d’Appui à l’Action Scolaire, or PAAS) was launched in 2005. After a careful examination of education institutions in some of Madagascar’s poorest districts, the program selected two elementary schools: a publicly run school located in the outskirts of Antananarivo and a privately owned school located in a rural area. The program is limited in scale and scope. However, it demonstrates how grassroots initiatives can foster human development in local communities.

Every school year, the program offers different forms of financial and material incentives to students with superior academic performance. As such, this program is not typical as programs usually aim at reducing dropouts and not at enhancing performance. Although the bundle of benefits available in each of the targeted schools varies, it generally includes a subsidy to cover school fees for elementary school, together with agrant in the form of cash to cover additional educational expenses. Students who maintain a satisfactory academic record may be assisted during both the first and second cycles of secondary school. Once PAAS beneficiaries finish elementary school, the JTA monitors their subsequent performance and progress during the secondary cycle.

The number of beneficiaries has been limited. Since its creation, PAAS has provided benefits to 902 students. However, the program has still managed to create a previously non-existent atmosphere of competition that rewards academic success. The different modalities of the cash transfer are conditioned on the pupil’s performance, completion of the primary cycle, and subsequent enrollment and performance in high school. The following table shows the average cash transfer per student.

<table>
<thead>
<tr>
<th></th>
<th>Elementary School</th>
<th>Secondary School First Cycle</th>
<th>Secondary School Second Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition/Enrollment fee</td>
<td>18,000</td>
<td>107,000</td>
<td>96,000</td>
</tr>
<tr>
<td>Grants</td>
<td>56,000</td>
<td>9,000</td>
<td></td>
</tr>
</tbody>
</table>

The implementation of the program has involved some challenges. Data inconsistencies between the JTA and the partner schools, limitations and, in some cases, abuses in the delivery of benefits, and biased reporting of student results have not been uncommon. However, the joint mechanism by which responsibilities are shared and information is collected has improved over the years. However, despite the efforts and goodwill of the JTA, the performance level of students in the secondary level reflects a declining trend. For example, 17 percent of students (4 out of 23 students) who won a scholarship to advance to the secondary level abandoned school. Many beneficiaries perform less than satisfactorily when advancing from one course to the next. This suggests that demand-side measures to alleviate the cost of education on their own are insufficient to increase education attainment.

Source: Randrianasolo (2011).
96. **Efficiency.** Although the measures outlined above have not been properly assessed, the initial benefits have probably been offset by the fall-out from the current crisis. The abolition of formal school fees in 2003, along with the introduction of some of the measures listed above, is likely to have contributed to the rapid increase in the net primary school enrollment ratio from 72 percent in 2002/03 to 86 percent in 2004/05 (Schüring, 2005). However, other measures such as classroom construction also helped to address bottlenecks in the supply side of education, while the reduction in poverty during this period may have eased the burden on parents and increased the expected return on education. Likewise, the partial reversal of the gains in school attendance since 2009 may reflect the widening and deepening of poverty, along with a sharp decline in public expenditures. Most demand-side measures (such as the abolition of school fees and the distribution of school kits) are universal and benefit all pupils including those from non-poor households. The subsidization of FRAM teachers is not targeted either, although the number of teachers covered is adjusted according to a quota system that aims to equalize the pupil–teacher ratio across the country at a ratio of 50:1. The WFP targets its school feeding program to districts with poor education and food security indicators, using education and food security vulnerability maps, but in practice, all pupils who attend the assisted schools benefit. It is uncertain whether the transfers to schools from the Catalytic Fund were used to assist highly vulnerable pupils and how these pupils were identified.

**C.3 Social Protection Programs Related to Health and Nutrition**

97. In 1998, the Government of Madagascar abolished free primary health care and introduced a system of cost recovery for drugs.\(^\text{50}\) In 2002, the government of President Ravalomanana abolished user fees for primary health. As a result, the demand for health services surged and quickly outstripped the supply of drugs and other essential inputs. User fees were reinstated in 2004 under a new drug management system known as the *Fonds*

\(^{50}\) Since the 1970s, UNICEF and several bilateral donors have supported experiments in community-managed pharmacy schemes to cope with drug shortages in government health centers.
d’Approvisionnement Non-stop en Médicaments Essentiels (Fund for the Non-stop Supply of Essential Drugs) also referred to as FANOME.

98. At the present time, users pay out of their own pockets for the overwhelming majority of health services including medical consultations (above the primary level), drugs, and laboratory tests. The main exceptions are medical consultations in primary health centers and some preventive services (notably child vaccination during vaccination campaigns), therapeutic treatment of severe acute malnutrition in young children, some family planning services, and treatment of certain chronic diseases (such as tuberculosis, HIV/AIDS, leprosy, and bilharzias), which are provided free of charge. Also, insecticide-treated bed nets are distributed in health centers free of charge to pregnant women and households with children under the age of 5, whereas they are usually sold at a subsidized price. That being said, most of these programs are heavily dependent on funding by donors and their coverage is limited.51

99. A few other social protection programs have been introduced to facilitate access to health services including:

i. **Drug fee waivers through CSB equity funds for the ultra-poor.** Equity funds were created in 2005 in health centers (Centres de Santé de Base or CSB) to provide free drugs for the registered indigent, entirely financed from a 3 percent deduction on the sale of drugs by the CSB pharmacies (see Chapter 3). Since medical consultations are free at the primary level, the equity funds intended to ensure that the ultra poor had free access to all primary health care by providing them with access to free medications. However, the system is financed by a 3

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51 For example, while the therapeutic treatment of children with severe acute malnutrition is theoretically free in the Centres de Récupération Nutritionnelle Ambulatoire (CRENA) and the Centres de Récupération Nutritionnelle Intensive (CRENI) of the Ministry of Health, effective services are often only available in districts supported by external agencies such as UNICEF and the World Bank.
percent share of the gross revenue from drugs sales, which considerably limits its coverage (see below).

ii. **Hospital equity funds to cover the fees of the ultra-poor.** In 2007, the Ministry of Health and Family Planning launched a pilot scheme to set up hospital equity funds in university hospitals (*Centres Hospitaliers Universitaires* or CHU) and regional hospitals (*Centre Hospitalier Régional de Référence* or CHRR) in 10 of the 22 regions. The funds aim to increase the use of hospital services by the ultra-poor by covering all of the costs of their hospitalization, including drugs, medical procedures, accommodation, and meals. As outlined in the previous chapter, each fund is financed from the sale of drugs provided free to the hospital by the central drug agency (SALAMA), 6 percent of the profits from other drug sales, and 5 percent of the revenue from consultation charges.

iii. **The Fonds de Prise en Charge Universelle (FPCU).** Between 2007 and 2009, the World Bank, through the Sustainable Health System Development Project, financed a third party payment system that was managed by a contracted faith-based organization to provide free access to emergency obstetrical, neonatal, and pediatric health services in hospitals in three regions (Diana, Boeny, and Atsimo Andrefana). The FPCU covered all hospital-related costs. Financing was discontinued when the project closed in December 2009. A similar scheme was supported by the United Nations Population Fund (UNFPA) in Toliara but that has now also been closed.

iv. **Mutual Health Organizations (MHOs).** Locally based initiatives to set up MHOs began in the 1970s, particularly in Fianarantsoa, in response to the stock-out of drugs in public health facilities. These MHOs acquired and sold alternative drug supplies at a time when drugs were theoretically free but in practice were often unavailable in government-run health centers. After the introduction of the
principle of cost recovery in the government health system in 1998, the MHOs went into decline. According to the Ministry of Health, efforts are under way to relaunch MHOs, but no further information was available on this initiative. However, the French NGO Inter Aide is developing urban-based MHOs linked to microcredit with financing from the European Union and the French bilateral agency Agence Française de Développement (AFD).

v. There are several other health-related social protection programs, but they tend to be small or temporary. For example, the UNICEF/WHO/UNFPA joint emergency fund provided certain kinds of drugs free for six months to children under the age of 5 and pregnant women in eight districts in the south of Madagascar.

100. These social protection initiatives in the health sector select beneficiaries differently:

i. With the **CSB equity funds**, the Ministry of Health and Family Planning aims officially to reach only 1 percent of the population, a very modest target. The selection criteria, as set out by the ministry, are general and flexible, which allows communes to define them more precisely. Each **fokontany** is responsible

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52 Inter Aide started this initiative in poor neighborhoods of Antananarivo in 2009 by establishing AFAFI (“Let’s Protect Family Health Together”). AFAFI is linked to the microfinance institution Crédit Epargne et Formation (CEFor). Borrowers are automatically enrolled in the MHO, which is seen by CEFor as a way of reducing the credit risk related to sickness. Premiums average Ar. 18,300 (about US$9) per family per year but vary according to the size of the loan and are automatically deducted from the loan amounts. AFAFI reimburses borrowers for 100 percent of their hospital costs, including transport and meals, up to Ar300,000 per person per year (about US$150), under a third party payer mechanism as well as any consultation costs charged by accredited health centers and private doctors. Drugs are not covered, but Inter Aide has negotiated price reductions with local pharmacies. About 30 health providers have been accredited in Antananarivo. Inter Aide uses a participatory approach to MHO development and management and also provides training for administrators of the scheme and holds information sessions on preventive health practices. Inter Aide is planning similar initiatives in Antsirabe and Mahajanga (Inter Aide and AFAFI, 2011).

53 The national guidelines suggest, on an indicative basis, that beneficiaries should meet four out of the six following criteria: being homeless, unemployed, without means of support, disabled or suffering from a chronic disease, in a household with more than seven members, or in a household headed by someone over 60 years of age.
for putting together a list of potential beneficiaries and for sending it to the commune authorities, who review the list and then issue “solidarity cards” to the approved beneficiaries. However, in many communes, this selection process has never been used or only partially due to a combination of factors including a lack of training for commune staff, uncertainty regarding the eligibility criteria, and a lack of time. Furthermore, the stigma associated with the status of indigent is so strong in Malagasy culture that even the poorest segments of the population are reluctant to accept and use the solidarity cards, particularly in the rural areas in the north of the country. As a result, even the modest target of 1 percent coverage has not been met (Poncin and Le Mentec, 2009).

ii. In the case of the hospital equity funds, there are no clear rules to select beneficiaries so the selection process varies across hospitals. Hospitals generally exempt patients with the CSB solidarity cards, but they also tend to exempt on an ad hoc basis patients who can afford to pay for their entire hospital costs. In addition, the funds are used to cover the costs of emergency patients who have been treated but who have left the hospital without paying their bills. As in the case of the CSB solidarity cards, cultural concerns about the stigma of being perceived as poor limit the take-up rate (Poncin and Le Mentec, 2009).

iii. In line with the FPCU’s objective of reducing maternal and neonatal mortality, all women who required emergency obstetrical care and children under 6 months old who required emergency neonatal and pediatric services were eligible under the scheme. No socioeconomic selection criteria were used. Poncin and Le Mentec (2009) argued that this is a major advantage of the FPCU, as it avoided the difficulties encountered by the CSB and hospital equity funds while responding to a major public health priority.
iv. Finally, in the case of *mutual health insurance*, AFAFI is based in the poor neighborhoods of Antananarivo and targets those unable to obtain medical insurance through formal sector mechanisms (SMIEs). It is unlikely, however, that this MHO is reaching the poorest and most vulnerable, since its sole focus is on those able to take on debt through microcredit.

101. The social protection initiatives in the health sector are largely unable to provide access to health care to a large segment of the population:

i. Regarding **services that are provided free or are heavily subsidized**, Ravelosoa (2011) has argued that the poorest are the least likely to use them because of the travel costs and loss of work time involved, as well as the constraints of distance and a lack of information. These conclusions are corroborated by both the most recent demographic and health survey (2008/09 DHS) and household survey (2010 EPM) (see also Chapter 2).

ii. The **CSB equity funds** are heavily underused and benefit only a very small proportion of the poor. One study of a sample of communes found “a general massive underutilization of the equity funds” (Poncin and Le Mentec, 2009, p. 14), due to the targeting problems mentioned above, to a stigma-related reluctance to use the solidarity cards, a lack of publicity of the funds (to avoid high demand), and various restrictive rules imposed by the communes on the use of funds. The use of health services by card-holders in rural areas is especially low, possibly because for other reasons such as the use of traditional medicine, a lack of information, and distance as well as stigma. The Ministry of
Health and Family Planning recognizes that nationally the funds benefit far less than the 1 percent of the population that they target.\textsuperscript{54}

iii. Regarding the \textit{hospital equity funds}, Poncin and Le Mentec (2009) found that only between 2.0 percent and 3.4 percent of hospital admissions were covered by the funds and that there were substantial unused balances. They attributed this to: (i) patients’ concerns about stigma; (ii) hospital managers’ uncertainty about being reimbursed by the funds as their replenishment depends on uncertain government subsidies to SALAMA; (iii) a lack of personal incentives for hospital staff to use the funds; and (iv) non-inclusion of transport costs, which is an important access constraint for those who live in remote areas.\textsuperscript{55}

iv. Since the \textit{FPCU} covers all emergency obstetrical and neonatal/pediatric services without reference to a patient’s socioeconomic status, this fund avoids the stigma problem and covers a much higher proportion of patients. However, as in the case of the hospital equity funds, transport costs are not reimbursed, which limits in practice its coverage to those patients who live within a relatively close radius of the hospitals. The fact that these mechanisms are in place in only four regions (out of 22) also limits their access. Poncin and Le Mentec (2009) also argued that the fixed rate reimbursement system does not adequately cover all costs, including the hospital mark-up, and that the system is undermined by drug stock-outs, which force patients to purchase drugs privately.

v. Given that \textit{mutual health insurance} appears to be limited to one relatively new initiative in Antananarivo, the number of beneficiaries is extremely small. By the end of 2010, AFAFI had 9,219 members in 2,838 families (Inter Aide and AFAFI, \textsuperscript{55} Eighty-five percent of beneficiaries come from within a 30 kilometer radius of the hospitals.\textsuperscript{55} The consultation rate of beneficiaries with a solidarity card was 48 percent in 2008, compared to 30 percent for the general population, which provides further evidence of demand-side constraints to access to health services (Ravelosoa, 2011).}
2011). It is unclear whether AFAFI will succeed in retaining its members once they cease to be microcredit borrowers.\textsuperscript{56} Also, the small size of the average yearly premium is likely to limit coverage, particularly when expensive drugs and laboratory procedures are required.

\textbf{C.4 Labor-intensive Public Works}

102. Several labor-intensive public works (\textit{travaux publics à haute intensité de main d’oeuvre} or HIMO) programs are currently being implemented in Madagascar. All of these programs provide participants with a wage (in cash or in kind) in return for their labor on public works. While the specific modalities vary across programs, all of the programs share the common objectives of increasing income and food security among participants while providing basic labor-intensive public goods. In Madagascar, typical micro-projects have included the building, repair, and maintenance of simple infrastructure (such as rural feeder roads, small bridges, granaries, water systems, irrigation systems, dykes, and wind barriers), reforestation, garbage collection, cleaning of canals, and building of latrines, all of which are labor-intensive and technologically simple. HIMO programs are also well suited to respond to immediate post-disaster recovery needs. Although the labor content varies across programs and micro-project types, payments of wages to beneficiaries represent between 65 percent and 80 percent of total project costs (Andrianjaka and Milazzo, 2008).

103. The main labor-intensive public works programs currently being implemented in Madagascar are as follows (Table 14):

\begin{itemize}
  \item \textit{Cash-for-work component of the Emergency Food Security and Reconstruction Project financed by IDA}. This US$40 million three-year project includes a US$12.3 million cash-for-work component. It is being implemented by the \textit{Fonds} \footnote{To date, about 20 percent of former borrowers have remained in the scheme, according to Inter Aide.}
\end{itemize}
d’Intervention pour le Développement (FID), which was created in 1993 as an independent agency. The project is expected to close in June 2013. This component seeks to increase access to short-term employment in targeted food-insecure areas. By providing short-term employment, mainly during the lean period before harvests, the aim is to increase disposable income and, thus, the food consumption of vulnerable groups, including women. Public works projects are selected by local authorities in consultation with communities and focus on the prevention of soil erosion and the maintenance and repair of small irrigation systems, feeder roads, and small bridges. This component aims to provide 7.8 million person-days of cash-for-work manual labor to poor beneficiaries in food-insecure areas, with women making up over half of the beneficiaries, and to complete 1,600 public works projects (World Bank, 2008). Recently, the program has substituted some of the requisite days of work with the requirement to attend awareness programs delivered by specialized NGOs on subjects like family planning, HIV/AIDS awareness, hygiene, water usage, and environment protection. Furthermore, the Ministry of Health is working with the FID to provide immunizations and nutrition support to children in communities during the implementation of the cash-for-work micro-projects.

ii. **WFP Protracted Relief and Recovery Operations food-for-work program.** The WFP is implementing a food-for-work program as part of its emergency response to natural disasters (drought, floods, and cyclones) through its Protracted Relief and Recovery Operations (PRRO) for 2010-12.

iii. **WFP Country Program food-for-work program.** This program, known as “Improve Food Security and Protect the Environment” is a component of the WFP’s Country Program for Madagascar the period 2005-13. It focuses on the

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57 The FID started to implement public works in 2002 as part of an addition to the Community Development Fund project, which aimed to reconstruct and rehabilitate basic infrastructure in the aftermath of two major cyclones.
areas in the south of Madagascar, which are chronically affected by droughts. The aim is to provide temporary employment during the lean season (October to April) and build sustainable livelihoods through food-for-work projects in the areas of reforestation, water systems, wind barriers, and other infrastructure. The program also aims to strengthen the resilience of the population and is regarded as a preventive approach to disaster risk management.

iv. **Food-for-work component of the SALOHI program financed by USAID.** SALOHI is the acronym for “Strengthening and Accessing Livelihood Opportunities for Household Impact.” It is a US$85 million five-year integrated development program that started in 2009 with the aim of reducing food insecurity and improving the livelihoods, health, and nutrition of 98,500 vulnerable households in 21 eastern and southern districts regularly affected by cyclones, floods, and droughts. The program includes a small food-for-work component that seeks to strengthen households’ resilience to shocks. The program is implemented by a consortium of international NGOs (Catholic Relief Services, Adventist Development and Relief Agency, CARE, and Land O’Lakes).

v. **Cash/food/seeds-for-work program of the Office National de Nutrition (ONN).** The Prevention and Nutritional Security Unit of the ONN manages a labor-intensive public works program with the triple objective of: (i) improving the lives of the most vulnerable households by providing temporary employment on public works in return for cash, food, and seeds; (ii) increasing the productive capacity and improving the health of communities by building or rehabilitating hydro-agricultural infrastructure, community granaries, water systems, latrines, and other community infrastructure; and (iii) mitigating the negative effects of disasters on household nutrition through emergency interventions, including

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58 The program includes a health and nutrition component and a component aimed at developing livelihoods (through field-based participatory farmers’ groups).
community works. The micro-projects are proposed by communities themselves and should in principle be included in their communal development plan. This program was extensive until 2009 when it was drastically reduced as a result of the expiration of funding from HIPC debt relief, which had been its main source of financing.

vi. **Community HIMO program of the International Labor Organization (ILO).** This program, implemented in 2006-09, focused heavily on the southern region of Anosy because of its high level of food insecurity, while also investing in developing the capacity of local actors to apply the labor-intensive public works approach.

vii. Other agencies are also involved in highly labor-intensive public works, including the Unit for the Coordination of Projects for Economic Recovery and Social Activities (*Cellule de Coordination des Projets pour la Relance Economique et des Activités Sociales*, or CCPREAS), which is under the administrative oversight of both the Ministry of Finance and Budget and the Ministry of Agriculture. The implementation of the individual public works micro-projects is invariably subcontracted by the managing agencies to NGOs.
Table 14: Employment Created by Labor-intensive Public Works Programs (2007-10)

<table>
<thead>
<tr>
<th>Number of Beneficiaries</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA: Cash-for-work program (implemented by the FID)</td>
<td>14,850</td>
<td>12,450</td>
<td>2,930</td>
<td>222,995</td>
</tr>
<tr>
<td>WFP Food-for-work (PRRO)</td>
<td>66,939</td>
<td>45,276</td>
<td>92,665</td>
<td>68,301</td>
</tr>
<tr>
<td>WFP: Food-for-work (country program)</td>
<td>9,646</td>
<td>6630</td>
<td>14,685</td>
<td>12,005</td>
</tr>
<tr>
<td>USAID: Food-for-work (SALOHI)</td>
<td>0</td>
<td>0</td>
<td>16,400</td>
<td>16,400</td>
</tr>
<tr>
<td>ONN: Cash/food/seeds-for-work</td>
<td>54,060</td>
<td>47,468</td>
<td>45,777</td>
<td>2,354</td>
</tr>
<tr>
<td>ILO: Communal HIMO</td>
<td>1,134</td>
<td>1,134</td>
<td>1,134</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146,629</strong></td>
<td><strong>112,958</strong></td>
<td><strong>127,814</strong></td>
<td><strong>319,701</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Person-days of Employment Created</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA: Cash-for-work program (implemented by the FID)</td>
<td>411,119</td>
<td>178,523</td>
<td>24,576</td>
<td>4,102,350</td>
</tr>
<tr>
<td>WFP Food-for-work (PRRO)</td>
<td>2,556,519</td>
<td>1,802,147</td>
<td>2,662,174</td>
<td>3,585,800</td>
</tr>
<tr>
<td>WFP: Food-for-work (country program)</td>
<td>214,609</td>
<td>119,826</td>
<td>262,815</td>
<td>161,926</td>
</tr>
<tr>
<td>USAID: Food-for-work (SALOHI)</td>
<td>0</td>
<td>0</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>ONN: Cash/food/seeds-for-work</td>
<td>1,036,126</td>
<td>884,787</td>
<td>852,974</td>
<td>31,174</td>
</tr>
<tr>
<td>ILO: Communal HIMO</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,218,373</strong></td>
<td><strong>2,985,283</strong></td>
<td><strong>3,802,539</strong></td>
<td><strong>7,881,250</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average Number of Days of Employment per Beneficiary</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA: Cash-for-work program implemented by the FID</td>
<td>27.7</td>
<td>14.3</td>
<td>8.4</td>
<td>18.4</td>
</tr>
<tr>
<td>WFP: Food-for-work (PRRO)</td>
<td>38.2</td>
<td>39.8</td>
<td>28.7</td>
<td>52.5</td>
</tr>
<tr>
<td>WFP: Food-for-work (country program)</td>
<td>22.2</td>
<td>18.1</td>
<td>17.9</td>
<td>13.5</td>
</tr>
<tr>
<td>USAID: Food-for-work (SALOHI)</td>
<td>...</td>
<td>...</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>ONN: Cash/food/seeds-for-work</td>
<td>19.2</td>
<td>18.6</td>
<td>18.6</td>
<td>13.2</td>
</tr>
<tr>
<td>ILO: Communal HIMO</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>Average (all programs)</strong></td>
<td><strong>28.8</strong></td>
<td><strong>26.4</strong></td>
<td><strong>29.8</strong></td>
<td><strong>24.7</strong></td>
</tr>
</tbody>
</table>

**Sources:** Ravelosoa (2011) and the FID.

104. **Coverage.** Although labor-intensive public works are one of the largest components of social protection, their coverage is limited. The main programs supported by IDA, the WFP, USAID, the ONN, and the ILO have created about 4 million person-days of employment per year between 2007 and 2009 and close to 8 million in 2010. The much higher figure for 2010 is due to the implementation of the IDA-financed Emergency Food Security and Reconstruction Project starting in mid-2010, which includes a substantial cash-for-work component (Table 14). These programs have benefitted about 130,000 direct
beneficiaries per annum between 2007 and 2009 and 320,000 in 2010. Assuming 150,000 beneficiaries per annum, an average beneficiary household size of seven people, and optimal intra-household allocation of resources, the cash-for-work programs can be estimated to have benefitted 1 million people, which is equivalent to 6.4 percent of the poor or 8.7 percent of the extremely poor. However, the amount transferred to beneficiaries (about 25 days of labor employment) is largely insufficient to lift them out of poverty.

105. Selection of Micro-projects. All of the public works programs use participatory methods for selecting labor-intensive public works micro-projects. The programs typically require that: (i) communities set their own priorities, usually through a general assembly; (ii) projects are included in community development plans; and (iii) the micro-projects are approved in advance by the local authorities. Except in urban areas, public works projects are invariably scheduled during the lean period (October to April in the south) or in the aftermath of natural disasters including cyclones. Public works projects also help to increase the long-term resilience of communities by focusing on environmental protection and infrastructure that increases agricultural production.

106. Targeting. The public works programs are targeted using a multi-stage mechanism that typically involves: (i) the selection of the most vulnerable geographic areas; (ii) within each geographic area, the selection of the most vulnerable districts, communes, and communities (typically at the fokontany level); (iii) self-targeting of participants by the selection and advertisement of a wage rate and a number of working days that in principle will only attract the poorest among the population; and (iv) when demand for work exceeds supply, the selection of beneficiary households by community leaders (including teachers

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59 The large number of beneficiaries under the IDA project is because the FID initially allowed a rotation among workers in order to spread the benefits. This practice was stopped in July 2010 so from that date until the project’s completion in mid-2013, the number of beneficiaries is expected to be around 120,000 per annum.

60 The numbers of poor and extremely poor were estimated at 15.6 million and 11.5 million respectively in 2010 (see Chapter 2).
and NGO representatives). The first step — geographical targeting — is done on the basis of an analysis of vulnerability using poverty, food security and nutritional indicators from all available surveys. While some agencies, notably the FID and the ONN, operate in all 22 regions, others like the WFP, SALOHI, and the ILO concentrate their actions in specific regions with endemic nutritional deficiencies, mainly in the south and southeast. Food-for-work programs implemented in the aftermath of natural disasters, for example under the WFP’s PRRO or by the FID, are targeted according to the location of natural disasters, mainly droughts in the south, cyclones along the eastern coast, and floods in the southeast. The implementing agencies liaise among themselves informally and within the UN’s humanitarian cluster on “food security and means of subsistence” to maximize synergies and avoid overlapping interventions. In addition, the FID and the WFP both emphasize the participation of women. For instance, the cash-for-work program implemented by the FID requires that 50 percent of beneficiaries be women and, to this end, provides on-site childcare.

107. **Wage Rate.** In 2009, the government adopted a decree setting the minimum daily wage to be paid by all cash-for-work programs at Ar2,000 (about US$1) for five hours of work. Although this wage rate is above the Ar1,500 daily rate paid to unskilled workers in rural areas, it does not distort the local job market. First, the transparent selection of beneficiaries by community representatives ensures that the poorest, most of whom are unemployed, are selected. Second, the benefits of the public works programs are limited (the average length of employment per beneficiary was on average 25 days in 2010) so that there is little incentive to leave a job in order to benefit from the program. Indeed, access to cash-for-work programs is so limited that it is unlikely to modify any individual’s job behavior.

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61 The daily wage rate of unskilled workers in rural areas was approximately Ar1,500 before the 2009 political crisis. However, in addition to this rate, workers were also provided with lunch of a value estimated to be Ar200 per worker. In the aftermath of the political crisis, some employers have stopped providing lunch, which has resulted in a decrease in the workers’ net gains.
Efficiency. The available evidence suggests that these programs are effective instruments for providing access to short-term employment and for increasing disposable income for vulnerable groups in targeted food-insecure areas. Quick beneficiary surveys conducted by the FID showed that the targeting mechanism is effective in reaching the intended target population. The fact that beneficiaries use almost all of the incremental income that they receive from these programs on food consumption provides further evidence that the targeting is effective. However, by their very design, public works projects are not the best instruments to reach the most vulnerable as they exclude some of the most deprived segments of society including the disabled, the elderly, pregnant women, orphans, and female-headed households (although the FID does provide some limited on-site child care during the implementation of public works). Furthermore, the FID’s and the ONN’s requirement to operate in all regions may not be socially optimal as some regions, notably in the south, are in dire need while others are better-off. Third, the targeting methods used in these cash-for-work programs themselves vary widely across programs and are applied with varying degrees of community participation. The ONN, for example, gives priority to households with children under the age of 5, large households, households containing disabled or old people, very poor households, and low-paid casual workers. The WFP favors female-headed households, large households, and households cultivating less than 1 hectare among other criteria. As statistically valid and sufficiently up-to-date data are not available for most indicators, the ability of the programs to fine-tune their targeting at the level of communes or fokontany is hampered. In the absence of robust impact evaluations, it is currently not possible to tell how well agencies’ selection criteria have been applied in practice and whether they are successfully identifying the most vulnerable. Several HIMO use a rotation system to spread the benefits of HIMO projects to as many people as possible and thereby meet the high level of demand. Also, there has been criticism of the quality and durability of the infrastructure created or rehabilitated by some programs due to the poor technical competence of the small local NGOs hired as executing agents by the managing agencies (Andrianjaka and Milazzo, 2008).
C.5  Post-catastrophe Reconstruction Programs

109. As noted in Chapter 3, most post-catastrophe reconstruction programs are conceived and put in place only after the occurrence of catastrophic events. One notable exception is the post-catastrophe rehabilitation and reconstruction component of the Emergency Food Security and Reconstruction Project financed by IDA, which was developed in anticipation of the occurrence of crises. In addition to the cash-for-work program described above, this project includes a US$12.8 million component to restore access to social and economic services (school, health centers, small roads, and water systems) in the aftermath of catastrophic events. The targeting mechanism involves: (i) the National Bureau for Risk and Catastrophe Management (Bureau National de Gestion des Risques et des Catastrophes, or BNGRC) putting together a list of areas that have been affected by a catastrophic event; (ii) the BNGRC identifies all infrastructure in need of rehabilitation or reconstruction; (iii) the BNGRC prioritizes these infrastructure items in transparent consultations with authorities at the region, district, and commune levels, including those responsible for catastrophe management; and (iv) the project rehabilitates and reconstructs the high-priority infrastructure items on the list. The component includes a limit on the number of infrastructure items that can be rehabilitated in each commune to ensure that the benefits are spread as widely as possible.

C.6  Social Programs for Vulnerable Groups

110. A number of small-scale social protection interventions target specific highly vulnerable groups:

i. **Nutrition-related transfers in kind.** Several agencies, including the WFP, USAID (through the SALOHI program – see above), and the Research and Technology Exchange Group NGO (Groupe de Recherche et d’Echanges technologiques or GRET), supported by the AFD and the EU, provide supplementary foods to pregnant and
lactating women and very young children as a preventive nutrition measure complemented by nutritional screening and communication activities. The WFP and the National Nutrition Office (ONN) also support the distribution of food rations composed of rice, pulses, oil, and enriched flour to tuberculosis patients for two months after they leave the hospital in order to increase their adherence to TB treatment and thus raise recovery rates.

ii. **Conditional cash transfers.** UNICEF piloted the first conditional cash transfers (CCT) in Madagascar on a very small scale using short-term project funds. Two pilots have been implemented. The first, which ran for one year starting in February 2009, provided transfers of Ar40,000 per family per month (about US$20) to approximately 500 families in two districts of Antananarivo on the condition that they made sure that their children attended school (UNICEF, n.d.). The second small project, also in Antananarivo, began in 2010 and is providing transfers over a two-year period to 150 families who earn a living from recycling waste. Its conditions are the enrollment of the family’s children in school (enrollments in Antananarivo increased from 22 percent in 2010 to 58 percent in 2011), the civil registration of the family’s children, and greater use of medical facilities (UNICEF/ATD Quart Monde, n.d.).

iii. **Free access to water for the urban poor.** Another innovative pilot experience, initiated by UNICEF in 2010, is a scheme to provide free access to community water taps for very poor families in the peripheral neighborhoods of Antananarivo. The beneficiaries are selected according to targeting criteria developed by the WFP and are then issued with water cards.

iv. **Services for vulnerable children and women.** A large number of fragmented projects, supported by faith-based organizations and donors and executed by NGOs, provide assistance to highly vulnerable children and women. Some of these projects
are implemented by NGOs in partnership with the Ministry of Population and Social Affairs, which has the official mandate to coordinate these types of assistance programs. There are too many such projects to cite all of them in this report, but the following are some examples of the kind of social welfare services provided:

- The WFP provides food and other assistance in the form of health care, reintegration into primary education, and professional training for out-of-school orphans and vulnerable children in urban areas through NGOs working in about 150 centers accredited by the Ministry of Population and Social Affairs.

- Catholic Relief Services (CRS), supported by USAID through the SALOHI program (see above), provides support for vulnerable single mothers in 15 centers in Antananarivo, Tamatave, and Fianarantsoa. This program combines food assistance with counseling, medical assistance, the preparation of individual “life plans,” training, the establishment of small savings and loans groups, the registration of land titles, referrals to other services (schools and health centers), and the development of revenue-generating activities.

- UNFPA has helped the Ministry of Population and Social Affairs to set up centers to provide counseling and legal advice to girls and women who are victims of violence and other rights abuses.

- UNICEF supports “child protection networks” in about 700 communes in partnership with the Ministry of Population and Social Affairs. These activities seek to protect children from the risks of violence and exploitation by involving the commune and fokontany authorities, the police, local NGOs, schools, health centers, and other local services. However, the system has never been fully institutionalized, and, according to UNICEF, the networks have been undermined
by a general loss of motivation among officials at the local level since the onset of the political crisis in 2009.

v. **Services for the elderly and people with disabilities.** Despite the increasing number of elderly people living in isolation without family support, especially in the south, and the risks of social exclusion and marginalization faced by those with disabilities, these initiatives are very limited and mostly led by churches. A law has been drafted to protect the rights of the elderly, including the issuing of a “green card” that would provide them with access to medical services, drugs, public transportation, and some other basic necessities at reduced prices, but the law has not yet been adopted. The government has set up recreational centers for the elderly and also provides limited financial support for the socioeconomic integration of people with disabilities.

111. **Coverage.** The social programs for vulnerable groups are small and depend largely on donor assistance. The nutrition-related activities are the largest, but they still cover only a small minority of those in need of assistance. The WFP’s support for orphans and vulnerable children in social assistance centers reaches 22,000 children but is limited to the main urban centers. The WFP’s supplementary feeding activities benefit about 52,000 mothers and young children, mainly in the south, while its food rations to complement tuberculosis treatment benefit about 8,000 patients, mainly in the south and urban areas. The UNICEF water card scheme currently benefits 9,000 residents in the poor neighborhoods of Antananarivo. Most of the other projects, such as the UNICEF conditional cash transfers and the CRS integrated support for single mothers, are extremely small, often with only a few hundred beneficiaries. It is estimated that programs for the disabled reach only 3 percent of those incapacitated for work (Ravelosoa, 2011).

112. **Targeting.** Nutrition-related transfers in kind tend to be focused in geographical areas with high levels of food insecurity. For example, the WFP’s supplementary feeding for
mothers and young children targets high-risk areas of the south. The WFP’s distribution of food rations to TB patients is also concentrated in the south and southeast. In both cases, there is no socioeconomic targeting of individual beneficiaries as nutritional criteria are paramount. Some programs target vulnerable groups in the major urban areas for reasons that seem to be based mainly on ease of program delivery. The WFP’s support for orphans and vulnerable children is delivered through social centers in urban areas, mainly in Antananarivo, Tamatave, Toliara, and Fianarantsoa. CRS’s program to build the self-reliance of single mothers and UNICEF’s water card project and CCTs are limited to the capital city. The selection of beneficiaries for many of these programs is based on the pre-existing lists of highly vulnerable households maintained by fokontany authorities and churches, supplemented by additional targeting criteria.

Efficiency. Although there have been no formal evaluations of these programs, their overall efficiency is likely to be very high as they deliver life-saving assistance to beneficiaries. It is not clear whether the criteria to select beneficiaries are the most appropriate or how these criteria are applied in practice. However, there is no doubt that those who receive the services are in dire need. The nutrition-related programs provide supplementary food as a preventive nutritional measure for young children and expectant and lactating mothers, especially during the lean season, and contribute to reducing malnutrition. Conditional cash transfer programs increase access to primary education and reduce dropouts. Although the provision of water cards is geographically limited to the capital, it also responds to a very real need.

62 However, the WFP plans to introduce a household food ration for TB patients based on an assessment of households’ food security starting in January 2012 to complement the present individual rations.
63 In CRS’s case, the criteria are as follows: households headed by women, large household size, large number of children, low income, poor quality housing, and dependence on daily labor. The UNICEF education-related CCT used different selection criteria in the two districts that it covered, including household income below Ar2,000 per day (in both districts), single parent households, households with orphans, households with more than eight members, and households not receiving other sources of assistance.
64 According to the Antananarivo McCRAM II survey conducted in November 2010, 13.6 percent of Antananarivo residents are unable to procure adequate water (UNICEF, 2011).
D. Delivery of Social Protection through Decentralization

114. While a decentralization process began in Madagascar in the 1990s, little concrete progress has been made despite the potential of this process to improve service delivery at the local level. In November 2004, the government adopted an ambitious Policy Letter on Decentralization and Deconcentration (LP2D) (Government of Madagascar, 2005), which was followed by an implementation program covering the years 2007-2008 (Government of Madagascar, 2006). The program outlined a decentralization strategy based on three core principles. First, local governments, which comprise approximately 1,550 communes and 22 regions, would be placed at the center of the development process and would be responsible for providing basic social and economic services at the local level. Second, deconcentrated services (Services Techniques Déconcentrés or STDs), which are local offices of central ministries, would be strengthened to provide support to local governments. Third, partnerships between local governments and the private sector would be fostered to enhance the provision of services at the local level.

115. Before the outset of the crisis in early 2009, action was taken to implement the LP2D including: (i) the creation in January 2005 of a ministry responsible for decentralization (Ministère de la Décentralisation et de l’Aménagement du Territoire or MDAT);65 (ii) the simplification of the institutional landscape so that communes and regions are the only levels of sub-national governments;66 (iii) the development of a fiscal decentralization strategy including the creation of estate tax bureaus (guichets fonciers) in communes; (iv) the adoption of measures to deconcentrate the state apparatus and create links between the deconcentrated technical services of central ministries (Services Techniques Deconcentrés or STDs) and the local governments (Collectivités Territoriales or CTs), including through the creation of Commune Support Centers (Centres d’Appui aux

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65 In September 2011, the Ministère de la Décentralisation et de l’Aménagement du Territoire was divided into the Ministère de la Décentralisation and the Ministère de l’Aménagement du Territoire.
66 This is currently changing as the six provinces are being reinstated.
Communes or CACs) on a pilot basis to provide technical assistance to communes; (iv) the creation of decentralization and deconcentration units (cellules 2D) in key ministries to accompany the deconcentration process; and (v) the creation in 2007 of a public agency, the Local Development Fund (Fonds de Développement Local or FDL), designed to strengthen the capacity of communes and transfer block grants to communes to invest in basic economic and social services under their mandate including schools, health centers, and water systems (Table 15).

<table>
<thead>
<tr>
<th>Table 15: Responsibilities of Local Governments</th>
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<tbody>
<tr>
<td><strong>Regions</strong></td>
</tr>
<tr>
<td>• Economic development</td>
</tr>
<tr>
<td>• Junior and senior high schools (collèges and lycées)</td>
</tr>
<tr>
<td>• Regional roads</td>
</tr>
<tr>
<td>• District Hospital Centers (Centres Hospitaliers de District or CHD)</td>
</tr>
<tr>
<td><strong>Communes</strong></td>
</tr>
<tr>
<td>• Basic social and economic services including:</td>
</tr>
<tr>
<td>○ Construction and maintenance of primary schools (Ecoles Publiques Primaires or EPP)</td>
</tr>
<tr>
<td>○ Construction and maintenance of basic health care centers (Centres de Santé de Base or CSB)</td>
</tr>
<tr>
<td>○ Construction and maintenance of communal roads</td>
</tr>
<tr>
<td>○ Construction and maintenance of water and sanitation systems</td>
</tr>
<tr>
<td>○ Construction and maintenance of other communal public works (such as small bridges, markets, and public squares)</td>
</tr>
<tr>
<td>• Delivery of building permits and building site development permits</td>
</tr>
</tbody>
</table>

The Local Development Fund (FDL) has two main functions: (i) to build the capacity of communes, particularly in public finance management, and (ii) to provide block grants to communes to build the basic social infrastructure that falls under their mandate (Table 15). The Government of Madagascar also created the FDL to harmonize donor support for decentralization, which had been provided through such instruments as ACORDS financed by the European Community, SAHA financed by the Swiss Agency for Development and Cooperation (SDC), and the FID financed by IDA. In 2010, the government decided to channel domestic resources to the FDL to implement labor-intensive public works. The FDL is currently operational and, to the extent that its limited funding allows, does build the capacity of communes. However, the large amount of financing that donors were planning
to provide in early 2009 (on the order of US$140 million) never materialized due to the onset of the political crisis. In consequence, the FDL does not currently channel block grants for investments to communes.
V. Principles, Priorities, and Actions to Enhance Social Protection

117. Chapter 2 shows that the Malagasy population faces a large number of risks while Chapters 3 and 4 provide evidence that the social protection policies and programs financed by the government, donors and NGOs remain largely insufficient to mitigate the devastating impacts of these risks on an already impoverished population – so that individuals face an enormous level of residual risks which has heightened since the onset of the current political crisis. This chapter builds on the previous chapters but also on the experience of other low income countries, especially in Africa. It outlines the main principles of a social protection strategy and recommends priority actions for implementation including in the immediate aftermath of the current political crisis. As such, this chapter is intended to contribute to future governments’ own formulation and implementation of a social protection strategy.

A. Main Principles of an Effective Social Protection Strategy

118. In Madagascar, successive governments have so far largely failed to provide social protection to the whole population. In 2002, the newly instated government of President Ravalomanana initiated an ambitious development agenda and outlined it in 2003 in the first Poverty Reduction Strategy Paper (PRSP). This was followed in 2006 by a second PRSP: Madagascar Action Plan (MAP) 2007-12, which confirmed the government’s commitment to social protection. In 2007, a social protection strategy for translating policies into actions was drafted but never officially adopted. Meanwhile, in January 2007 the Ministry of Health, Family, and Social Protection (which was then responsible for social policy) was abolished, and responsibility for social protection was relegated to a Directorate of Social Protection within the newly created Ministry of Health, Family, and Social Protection. Following the change in government in 2009, this ministry was reorganized to become the Ministry of Population and Social Affairs. Since the onset of the political crisis in early 2009, the MAP has ceased to guide the government’s actions while fiscal resources have
considerably decreased, with the result that there is currently no social protection strategy to guide the government’s actions.

119. Chapters 3 and 4 showed that the interventions in social protection are *ad hoc*, scattered among a number of ministries and agencies, and uncoordinated. Currently, the Presidency is responsible for the government’s main social protection program, the Tsena Mora program, which was created in 2010 to provide subsidized basic food commodities to the poor in the six provincial capitals. The Ministry of Health is responsible for the equity funds and other measures to increase the access of the ultra-poor to health services. The National Nutrition Office (*Office National de la Nutrition* or ONN), which is administratively linked to the Prime Minister’s Office (*Primature*), is responsible for coordinating the National Nutrition Action Plan and directly manages some programs, including labor-intensive public works. The Ministry of National Education and Scientific Research (MENRS) is responsible for the demand-side measures on school access as part of the Education for All (EFA) plan. The Ministry of the Interior oversees the National Office for the Management of Risks and Catastrophes (BNGRC), while the Prime Minister presides over the National Council for the Management of Risks and Catastrophes (CNGRC). The Ministry of Finance and Budget plays an important role in budget allocations, which can widely vary from one year to the next, while the Ministry of Decentralization and Territorial Planning (now divided into two ministries – see previous chapter) is responsible for strengthening local authorities (provinces, regions, and communes) and transferring funds for local development. There is also little coordination between the government and the National Statistical Agency (INSTAT), which is responsible for the analysis of vulnerability, or, within the government, between the Presidency and the line ministries. For example, the 2010 EPM was not designed by the Government to assess the existing social protection programs, and the technical analysis of vulnerability conducted by INSTAT does not feed into the policy formulation process.
Despite these problems, the existing programs are extremely valuable given the enormous social protection needs in Madagascar. Yet at the same time, the population continues to confront residual risks of a magnitude that is far beyond the combined capacity of the existing programs to address. Donors and NGOs have been trying to fill this gap, but the result has been a large number of scattered and generally small initiatives driven primarily by the donors’ own agendas. The expenditures of the many programs vary widely from one year to the next, new programs are routinely being created while others are being phased out, and the lack of coordination between the programs remains a challenge while their efficiency is largely unknown. Since 2009, the absence of any communication between donors and the government has further weakened the provision of social protection.

As a result, the post-crisis government may want to develop a comprehensive social protection strategy founded on sound principles that sets out clear objectives and priorities for translating this strategy into action.

The social protection strategy proposed in this report is designed to increase the overall social protection available to the population while decreasing its vulnerability, while taking into consideration the work of existing programs and the differences between population groups in their exposure to risks. The principles underlying such a strategy should include:

- The resolution of the current political crisis in the short term and of the deep-rooted governance issues in the longer term.

- Macroeconomic stability with low internal (fiscal) and external (balance of payments) deficits and low inflation to create the foundation for strong and sustainable economic growth.
• The adoption of measures to increase domestic revenues to generate the fiscal resources necessary to finance an effective social protection strategy.

• The implementation of economic reforms aimed at fostering sustained broad-based economic growth that will make it possible to enhance social protection and reduce vulnerability.

• The definition of a social protection strategy including the adoption of mitigating measures, prioritization among poverty groups, the evaluation and rationalization of the existing social protection programs, and the reallocation of any resulting savings to the priority groups.

• The decentralization of decision-making authority and financial resources for the delivery of social services.

• The establishment of links between the public and private sectors.

• The development and use of targeting mechanisms to reach priority groups.

• The monitoring of vulnerability and of the implementation of the strategy itself.

123. The strategy should also include a plan for interventions in key areas, not only in social protection but also in the areas of education, health, nutrition, and basic infrastructure.
B. Priorities for Translating these Principles into Actions

124. Priorities areas of action are the resolution of governance issues in the social protection sector and the implementing of policy reforms to enhance social protection. The definition of a social protection strategy would be a decisive step in this crucial agenda.

B.1 Resolving Issues of Governance

125. As shown in previous chapters, the recurrence of political crises may be the single most disruptive systematic risk affecting the Malagasy population. These crises are deeply rooted in the political structure of society and are influenced by shifting alliances among a few elite families.\footnote{Madagascar is divided into 18 or 20 ethnic groups, each with its own distinct territory. Malagasy society is also divided between the so-called côtiers, or peoples living in coastal areas, and those who live in the central highlands. The division between the central highlands people and the côtiers has increased in importance in terms of explaining social and political divisions whereas the salience of ethnic group identity has declined.} The resolution of the current political crisis and the establishment of a more viable social contract among ethnic and geographic groups are fundamental pre-conditions for improving the population’s welfare and for preventing any backsliding from reforms initiated by one government but not pursued by the next one.

B.2 Implementing Economic Reforms to Enhance Social protection and Reduce Vulnerability

126. Once the issues of governance are resolved, the implementation of structural reforms is key to promoting broad-based economic growth, reducing the vulnerabilities outlined in Chapter 2, and reducing the institutional and policy shortcomings that adversely impact the social protection of the population as discussed in Chapters 3 and 4. The list of the reforms needed to promote economic growth is long and encompasses initiatives to modernize the state including public finance management, to enhance the business investment climate, to improve the provision of basic infrastructure and services, and to create the conditions to develop tourism to an island considered to be one of the most
As has been experienced in countries all over the world, the timely implementation of key economic reforms can be expected to lead to sustained economic growth over a long period of time and to have a considerable impact in terms of reducing poverty. Some key structural reforms for reducing vulnerability are as follows:

- **Modernizing the state.** Devising a strategy to modernize the state is an absolute prerequisite to enhance the state’s capacity to deliver social protection to its citizens. The strategy should seek to transform the role of the government and its relationship with civil society, including the vulnerable, by redefining and transforming public institutions into effective policy developers. In 2004, the government began to implement, although imperfectly, some initiatives to increase the efficiency and transparency of government and selected public services in line with the Madagascar Action Plan (MAP), but this process has been discontinued as the result of the political crisis.

- **Increasing social protection.** Scaling up investment in social protection would involve a concerted effort to mobilize domestic revenues, increase donor assistance, and create an economic environment conducive to foreign direct investment. Increasing tax revenues is particularly important in Madagascar where domestic revenues amount to only about 10 percent of GDP, one of the lowest ratios in the world. Madagascar’s low tax revenues are deeply rooted in the complexity of the tax system and the weakness of the tax administration.

- **Enforcing mitigation measures.** The occurrence of catastrophic events including hurricanes and droughts has had a major impact on the population, especially on Madagascar.

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68 Madagascar contains an immense diversity of endemic flora and fauna including seven of the world’s nine species of the iconic Baobab tree and lemurs, which are all native to Madagascar.
the most vulnerable. The government should consider launching preparedness and information campaigns, define hurricane-resistant standards for infrastructure, enforce compliance with the building codes from both the public and private sectors, and stand ready to implement emergency operations to alleviate the most devastating immediate effects of catastrophic events.

B.3 Defining a Social Protection Strategy

127. Defining and Strengthening the Institutions Responsible for Social Protection. The incoming post-crisis government should develop a social protection strategy using a participatory approach. This would be a strong signal to the population of the new government’s political commitment to social protection. Responsibility for designing the strategy should lie with the Prime Minister’s Office or even the President as they are in the best position to coordinate the multiple institutions involved in social protection. The Ministry of Population and Social Affairs could then be responsible for the regulation of social protection and the implementation of specific social protection programs.

128. During the development of the strategy, the designers should encourage input from the donor-led social protection clusters and working groups described in Chapter 3. In the absence of any dialogue between the government and donors at the political level for the past three years, these forums have served as a useful coordination mechanism to oversee the social protection programs. In particular, the social protection working group that was revived in May 2011 has the potential to provide useful inputs to the design of the social protection strategy. Also, the food security and livelihoods cluster is likely to have helpful information to offer on the subject of public works given its accrued knowledge about how best to define the wage rate and to target those most in need.
129. The strategy could also serve as a framework to guide donors in aligning their future assistance in the area of social protection with the government’s priorities. Therefore, donors should be closely involved in the preparation of the strategy along with civil society organizations (NGOs and churches).

130. **Prioritizing among Vulnerable Groups.** Resources are limited in Madagascar but the extent of need is enormous, so this means that, in designing the social protection strategy, policymakers will have to prioritize among vulnerable groups. Back-of-the-envelope calculations can show the magnitude of the problem. With Madagascar having a poverty rate of 76.5 percent (as of 2010), a poverty gap ratio of 34.9 percent, and a poverty line at Ar468,800 per annum (US$224), it would cost US$1.2 billion (equivalent to 14.1 percent of GDP) per annum to lift all of the Malagasy poor out of poverty.\(^69\) This is an extremely unrealistic amount to expect to be forthcoming in the form of foreign aid.\(^70\) With an extreme poverty rate of 56.5 percent, an extreme poverty gap ratio of 20.8 percent, and an extreme poverty line at Ar328,200 per annum (US$157), it would cost approximately US$380 million (equivalent to 4.3 percent of GDP) per annum to lift all of the extreme poor in Malagasy out of extreme poverty (in other words, to provide them with a minimal basket of food to fulfill their minimum caloric needs). In fact, resources are extremely limited in Madagascar (far below 4.3 percent of GDP), which implies that any credible social protection strategy would not be able to alleviate extreme poverty in the short term. This is why policymakers will need to target a few of the most vulnerable groups among the extreme poor.

131. The government might choose to prioritize among extremely poor households according to the depth of their extreme poverty and their exposure to risk (Table 16). Based on the vulnerability analysis conducted in Chapter 2, first priority could be given to: (i) the

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\(^69\) This also assumes the availability of a mechanism to perfectly identify the poor and to transfer lump-sum amounts.

\(^70\) This number is derived as follows: population (20.5 million) multiplied by the poverty ratio (76.5 percent) multiplied by the poverty line (US$224) multiplied by the poverty gap ratio (34.9 percent) = US$1,226 million.
extreme poor in rural areas, particularly those who live in the “deep south;” (ii) malnourished children in all areas; (iii) extremely poor head-of-household mothers in urban areas; and (iv) all those who have been affected by a catastrophic event such as a cyclone. Second priority could be assigned to combating extreme poverty among: (i) the peri-urban poor; (ii) the elderly who are extremely poor; and (iii) at-risk children who have left the formal education system. Third priority could be given to the remaining extreme poor who live in urban areas and the extreme poor who are unemployed.
<table>
<thead>
<tr>
<th>Geographic Groups</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Extreme poor in rural areas, particularly those in the “deep south.” A large share of the rural population is extremely poor and vulnerable, and the rural population in the “deep south” is particularly vulnerable. The Early Warning System (Systeme d’Alerte Précoce or SAP) could identify the districts and communities most likely to be affected.</td>
<td>***</td>
</tr>
<tr>
<td>• The extreme poor who have been affected by a catastrophic event such as a cyclone.</td>
<td>***</td>
</tr>
<tr>
<td>• The extreme poor in peri-urban areas. The peri-urban poor constitute an important group. Overall, however, vulnerability in urban areas tends to be less extreme and severe than rural poverty.</td>
<td>**</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographic and Economic Groups</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Malnourished children. About half of all children under the age of 5 years old are chronically malnourished. The development status of children makes them extremely vulnerable to the risks of living in an impoverished environment that perpetuates the poverty cycle. Childhood is the point in the lifecycle when physical, cognitive, and psycho-social development occurs at its most accelerated pace and is most susceptible to being impeded by poverty.</td>
<td>***</td>
</tr>
<tr>
<td>• Single, female-headed extremely poor households, particularly in urban areas.</td>
<td>***</td>
</tr>
<tr>
<td>• Children who are not in the education system. Vulnerability is strongly correlated with a lack of education. However, re-integrating children back into the education system after they have left is an expensive strategy.</td>
<td>**</td>
</tr>
<tr>
<td>• The extremely poor elderly. Although a smaller share of the elderly are extremely poor, this is due mainly to their shorter life expectancy. There is currently no program in place to help poor elderly citizens who fall outside the social assistance system and have to rely on donations from their neighbors and family.</td>
<td>**</td>
</tr>
<tr>
<td>• The extreme poor in urban areas and unemployed extreme poor. The vulnerability analysis in this report identifies these groups as priorities for intervention. Indeed, vulnerability is strongly correlated with extreme poverty and unemployment, particularly among urban women and youths. Although these groups may well be included in the aforementioned priority group classifications, they may have specific needs as well.</td>
<td>*</td>
</tr>
</tbody>
</table>

*Note:*** = Top priority.

** = Medium priority.

* = Priority.

132. *Evaluating, rationalizing, and scaling up expenditures on social protection.* There is potential to rationalize public spending on social protection in the short term. However, in the medium term, a strong social protection strategy would eventually require an increase in overall government resources but only within the context of the modernization of the state. The lack of information systems, inadequate mechanisms for monitoring government expenditures, excessively centralized resource allocation and administration, and outmoded procurement practices together with a lack of mechanisms to target the vulnerable all make it unlikely that simply increasing funds would be enough to decrease vulnerability among priority groups. Therefore, it would only be advisable to increase the size of the state’s
provision of social protection if strong efforts are simultaneously made to increase its implementation capacity.

133. In this context, a thorough evaluation of the existing social programs along the lines suggested in Chapter 4 would be necessary to inform the rationalization of social protection expenditures and the reallocation of resources towards the priority groups. This thorough review of public spending on social protection might also generate some fiscal savings, even though these may be limited. For example, it would make sense to review the Tsena Mora program given that the most vulnerable groups live in rural areas and, therefore, do not benefit from it. The government could reallocate these savings to programs that benefit the high priority groups. It might also consider increasing cost recovery for services such as tertiary education and certain health services used mainly by those in the top quintile and increasing the efficiency of service delivery. Developing accurate targeting mechanisms (see below) would also help to ensure that more resources are channeled to the most vulnerable. The analysis of the 2010 EMP household survey on which this report is partially based already provides some recommendations for how to channel the limited resources devoted to social protection to the targeted population.

134. In the education sector, public spending should seek to reduce the financial burden of FRAM teachers and other education costs on extremely poor households. Chapter 2 presented evidence that education-related risks are key causes of vulnerability for children, while Chapter 3 indicated that public spending on education-related social protection programs has dramatically declined since the beginning of the 2009 crisis. Keeping children in school may be the principal mechanism for reducing vulnerability in the current context where the education financing burden is increasingly falling on households and where the most vulnerable children are dropping out of school. In this context, the following actions could help to reduce vulnerability:
• **Reduce the burden on the most vulnerable households of the costs of hiring community-hired FRAM teachers.** The provision of subsidies for FRAM teachers from the government budget and from the Education for All - Fast Track Initiative Catalytic Fund (which has now officially become the Global Partnership for Education) plays an important social protection function. To achieve free primary education in practice would require phasing out the community teacher system by integrating qualified FRAM teachers into the regular teaching corps so that the burden of paying for them would no longer fall on parents.

• **Provide adequate capitation grants to schools (caisses écoles) to reduce the amount that households have to pay for school materials, textbooks and other education-related costs.**

• **Distribute free school kits and textbooks to further reduce the costs of education born by households.**

• **Implement school feeding programs in areas with high levels of food insecurity to provide an incentive for households to send their children to school while simultaneously improving the children’s nutrition.**

• **Pilot a cash transfer program conditional on school attendance** as an additional incentive for the most vulnerable households to keep their children in school (see below).

135. **Distance learning may also offer a viable alternative to classroom teaching (Box 3).**
Box 3: Distance learning can be a viable alternative to classroom teaching

At the primary level, distance education rarely provides a suitable alternative on its own because it usually depends on learners being able to manage their own learning. Where distance education has been effective with young children, as in the Australian outback in the 1950s, parents provided the supervisory structure for its success. However, there are many substitutes for educated parents. For example, even in remote areas of Madagascar, radios are usually available. Primary education programs that combine radio delivery of a high-quality curriculum with local monitoring of children’s progress have been rigorously evaluated and found to increase learning.

The most widely evaluated program is interactive radio instruction, which has broadcast professionally developed curricula to children in remote regions of Belize, Bolivia, Cape Verde, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Lesotho, Papua New Guinea, South Africa, Thailand, and Venezuela. Each curriculum is designed in accordance with proven instructional design principles. Each 30-minute lesson focuses on the core instructional material and incorporates sound pedagogical principles, including the active participation of students. Randomized control evaluations have found that the programs have increased learning by as much as 2.1 standard deviations for rural children compared with an increase of 2.8 standard deviations from a year of traditional schooling but with 70 percent greater cost-effectiveness. Despite its proven effectiveness and cost-effectiveness, the fact that interactive radio instruction was largely donor-driven means that its continuation was curtailed when donor support ended.


136. Introducing more equitable health financing mechanisms would reduce vulnerability. Chapter 2 showed that the Malagasy population faces numerous risks of morbidity, malnutrition, and mortality and that these risks have increased since 2009. Chapter 3 presented evidence that Madagascar has had a highly regressive health financing system since the reintroduction of generalized cost recovery in the health system in 2004 and that public spending on health-related social protection measures has been dramatically reduced in the aftermath of the political crisis. Today, very few health services are provided free, and the fee exemptions introduced for the indigent through the equity funds in health centers and hospitals reach only a tiny proportion (less than 1 percent) of the extreme poor. This is partly because of the limited financing that is available but also because few eligible people choose to avail themselves of the exemptions because of the stigma attached to them (Chapters 3 and 4). Ultimately, the high costs of health care are the main reason for the low usage of health services, particularly of the secondary and tertiary levels of care (district and teaching hospitals) since health costs at these levels are much
higher (Ravelosoa, 2011). In order to reduce health-related risks, the government could consider taking the following actions:

- **Abolish health fees for prioritized vulnerable groups.** A few African countries – Sierra Leone, Uganda, and Zambia (and recently Côte d’Ivoire) – have abolished all health service fees in order to facilitate access, while Mauritius has maintained universal free health services since independence without ever introducing cost recovery. Other countries have abolished fees for specific services such as the treatment of malaria, child births, or caesareans for high-risk groups (children under the age of 5 or pregnant women). However, abolishing health fees for prioritized vulnerable groups in Madagascar would need to be carefully planned to ensure that services are capable of coping with the expected increase in usage rates and to avoid a repetition of the negative consequences of fee abolition experienced in 2002-04.

- **Scale up emergency obstetrical and neonatal/pediatric services.** The government may want to consider a nationwide scale-up of the free emergency obstetrical and neonatal/pediatric services that have been piloted in four regions through the FPCU financed by the World Bank and UNFPA (as discussed in Chapter 4). Because it is targeted according to medical rather than socioeconomic criteria, this scheme has responded to urgent medical needs while avoiding the targeting problems that have beset the equity funds.

- **Extend fee exemptions for maternal and child health care services.** Policymakers might consider a selective extension of fee exemptions aimed at reducing under-5 and maternal mortality provided that enough financial resources are available. Here also the abolition of maternal and child health fees would have to be carefully planned to avoid the risk of overwhelming health facilities.
Neither community-based risk pooling through mutual health insurance nor a larger national health insurance scheme is likely to be a viable strategy to reduce health-cost risks at least in the short and medium term (Box 4).

**B.4 Decentralizing and Increasing Community Participation**

Decentralization of, and community participation in, service delivery could increase the effectiveness of social protection interventions. Previous chapters have shown that a lack of capacity and budget at the local level impedes the effective delivery of services. The social protection strategy should emphasize the decentralization of social protection services to the commune level in order to improve their delivery. The strategy should also emphasize the importance of community participation as a way to boost local ownership and client satisfaction, mobilize additional resources, increase the accountability of the providers of social protection services, and build social capital. Some key actions might include:

- **Clarifying the mandates and financing of local governments** (regions but also communes and possibly provinces) and deconcentrated bodies of central government institutions, such as the Ministry of Population and Social Affairs, in order to obtain the most efficient division of responsibility, financing arrangements, and program implementation at the local level.

- **Building capacity at the local level** to improve service delivery for social protection in all sectors.

- **Putting greater reliance on the Local Development Fund** (*Fonds Local de Development*, or FDL) to strengthen commune capacity and channel block investment grants to communes for social and infrastructure projects included in their Communal Development Plan (*Plan Communal de Développement*). Using the
FDL to respond to the demand from communes for investment projects could help to increase the supply of important social services (such as schools, health centers, and water systems) to the population, thereby decreasing their vulnerability.

**Box 4: Mutual Health Insurance and National Health Insurance**

**Mutual health insurance.** Mutual health insurances are community-based or profession-based micro-insurance schemes in which people pay health insurance premiums [check] and are reimbursed for a share of their health care costs. The scale of mutual health insurance schemes in African countries tends to be limited. Population coverage rarely exceeds 4 percent (Mali), and is below 1 percent in most countries (Ouattara and Soors, 2007). Many community-based schemes suffer from management problems and require substantial technical assistance from aid-funded “promoters.”

**National health insurance.** An alternative approach is to set up national health insurance schemes, subsidized by the state. Two Sub-Saharan African countries have made substantial progress in setting up national insurance schemes: Rwanda, where coverage was 76 percent of the population in 2007 (OPM, 2011) and Ghana with 62 percent coverage in 2010 (National Health Insurance Authority, 2011). There are three major arguments in favor of this approach. First, compared with fee abolition, the national insurance model aims to increase efficiency by creating a split in functions between (public and private) health service providers and payers (the insurance authority) (see Witter and Garshong, 2009 regarding the Ghanaian case). Second, these schemes are compulsory and therefore avoid adverse selection problems, although in practice enforcement is impossible in the informal sector. Third, state subsidies make it possible to reduce premiums to more affordable levels, introduce exemptions for vulnerable groups, or widen the range of services covered. In Ghana’s National Health Insurance Scheme, for example, the scheme is financed mainly by a special tax, the National Health Insurance Levy, which represents 2.5 percent of the value of goods and services, which covers about 95 percent of health services (including the full costs of hospitalization), and provides extensive premium exemptions for children under 18, pregnant women, the elderly (those aged over 70), and the ultra-poor. However, even in this scheme, there is evidence of lower coverage of those in the bottom quintiles (NDPC, 2009) as well as concerns about the long-term financial viability of the system.

Other countries that have attempted to set up similar schemes, such as Côte d’Ivoire, Gabon, and Nigeria, have been largely unsuccessful. It is indeed extremely difficult administratively to achieve high population coverage in countries with large informal sectors where households or individuals have to be enrolled one by one and the deduction of premiums at the source is impossible. These administrative challenges would be particularly formidable in a country like Madagascar with a very large informal sector and weak capacity.

B.5  Developing and Using Targeting Mechanisms to Reach Priority Groups

139. A range of appropriate and accurate targeting mechanisms is needed necessary to ensure that scarce program resources are received by those most in need. A good targeting method increases both the cost-effectiveness and the impact of any social protection initiative. Most programs currently being implemented in Madagascar use some mix of categorical targeting, geographical targeting, self-targeting, and community-based targeting (Box 5).
### Madagascar

Madagascar is a country where there is very little difference in economic well-being between population deciles except at the top of the distribution because poverty is widespread, meaning that near-poor are only slightly better-off than the poor. In these conditions, any targeting method is likely to produce large exclusion errors (the non-selection of those who in theory should be eligible) and inclusion errors (the inclusion of those who in theory should not be eligible). This box briefly reviews the main targeting methods and their relative advantages/disadvantages in the Malagasy context.

#### Means testing.

Regarded as the “gold standard” for targeting around the world (Coady et al, 2004), this method, which requires the direct verification of income through pay slips and other documentation, is impossible to apply in countries like Madagascar where the vast majority of the poor work on family farms and other parts of the informal sector and have no documentary evidence of their income.

#### Proxy means testing.

In the absence of documents to verify income, methods have been devised (and adopted in some developing countries though not yet in Madagascar) to assess eligibility through proxies of vulnerability, poverty, or extreme poverty. These proxies are visible characteristics of households (such as their assets, composition, and building materials of their homes) that make it possible to identify households living below a certain eligibility threshold. The thresholds are generally derived from regression analysis of data from national household surveys and are then weighted in a formula that can be used to select beneficiaries. Because the proxy variables used in the formula are visible, they are in principle verifiable by social workers, and the information can be recorded on a standard form used to support eligibility applications. In practice, it is difficult to construct a formula of weighted proxy variables that accurately identifies households in the target group, especially in countries like Madagascar where the economic differences between deciles are very small, which tends to result in high errors of both inclusion and exclusion. However, this method is generally more accurate than using a small number of un-weighted purely categorical criteria. The main drawback of this method is that it requires considerable administrative capacity to collect and process the necessary information.

#### Categorical (demographic) targeting.

This method selects households or individuals on the basis of simple demographic characteristics, such as large household size, the presence of disabled or chronically sick household members, a lack of labor capacity, having a female head of the household, or containing children under a certain age or elderly members. These selection criteria are frequently used in Madagascar, sometimes along with geographical and community-based methods, although the criteria tend to vary from program to program. The risk of large inclusion and exclusion errors is high with this method.

#### Geographical targeting.

Geographical targeting is also frequently used method in Madagascar, with many programs focusing largely on specific regions in the south where poverty and food insecurity tend to be most serious. Geographical targeting also tends to be highly exclusionary because vulnerability is often only marginally higher in the targeted areas than in other areas. For example, a program focusing mainly on the south, such as school feeding, automatically excludes all highly vulnerable schoolchildren who live in other areas.

#### Community-based targeting.

Community participation in selecting beneficiaries has been used in Madagascar, particularly to supplement wage-based self-selection in labor-intensive public works. Community members have specific knowledge of the characteristics of their neighbors and can play an important role in confirming selection decisions made using other targeting methods. However, this can have some disadvantages. The selection process can sometimes be captured by local elites or in some cases communities may choose to spread the program benefits as widely as possible to avoid social tensions (for example, rotating places on public works projects). Therefore, community-based targeting can most usefully be used in combination with other methods, such as self-selection or proxy means testing.

#### Self-selection.

This method is used in labor-intensive public works programs, in principle by setting wages at a level that is lower than the local market rate so that only the neediest have an incentive to apply to the program. However, the wage rate rarely acts as a perfect selector, making it necessary in practice to supplement self-selection with other methods, usually involving a degree of community participation.

Targeting would also be enhanced by the creation of a common registry of the indigent. This registry could be used to determine eligibility for different social protection programs, such as enrollment in public works, fee exemptions for health centers (solidarity cards), access to school kits, and access to free water (water cards). Such a registry would essentially be an expansion of the list of indigents maintained by each fokontany. However, this is likely to be challenging in Madagascar due to the fact that extreme poverty is widespread and that the differences in living standards between the extreme poor and the near-extreme poor are minute.

**B.6 Monitoring Vulnerability and the Implementation of the Social Protection Strategy**

It is necessary to monitor both the ongoing vulnerability of the population and the implementation and impact of the social protection strategy, and adequate resources should be made available for these tasks. As such, the social protection strategy should include two main components:

- **Monitoring vulnerability.** It would be desirable for the government to develop a risk monitoring system to track vulnerability and gather the data needed to evaluate the impact of public interventions. The system could be a module of the household survey that could be repeated every two years. This module would collect information on the status of key risk groups and on the targeting outcomes and efficiency of the main social programs. It would also gather data on the incidence and coverage of all social protection programs, including food subsidy programs, public works programs, and health fee waivers as well as any new programs. The survey could also be used to monitor particularly vulnerable groups.

- **Monitoring and evaluating the social protection strategy.** Once it has adopted a social protection strategy, the government should adopt a number of measures to
monitor its implementation, including an action plan with specific actions and a timeline and monitoring indicators that could be tracked by each implementing agency. As outlined above, a specific institution could be responsible for the implementation of the social protection strategy, but INSTAT could be responsible for monitoring the vulnerability situation while each ministry or agency could be responsible for monitoring the implementation of its own social protection programs. Resources could also be made available for evaluating the impact of specific interventions, including their cost and efficiency, and to learn lessons that could be used to improve the program’s design.

C. Road Map of Key Immediate Actions for Social Protection

142. Immediate measures to strengthen social protection are urgently needed. It may take some time to normalize the political situation, and even after a political settlement is reached, it could take time for elections to be held, a new government to take office, and a social protection strategy to be developed and adopted. Yet in the meantime, the population is becoming steadily poorer and more vulnerable. Therefore, pending a resolution to the political crisis, the government and its technical and financial partners should consider the following actions in the short term: (i) scaling up existing public works program; (ii) complementing the public works program with a cash transfer program for those who are labor deprived; and (iii) piloting a conditional cash transfer in peri-urban areas. The remainder of the chapter reviews these proposed actions while the background papers provide additional details on how to implement them.

C.1 Scale Up Public Works

143. Scaling up the existing labor-intensive public works programs could be the most appropriate way to reduce the vulnerability of those in previously identified as high priority target groups. The main arguments to support this approach are as follows:
i. The scope for expanding this type of labor is enormous. The level of underemployment among the rural poor is extremely high and the number of those seeking employment on existing labor-intensive micro-projects vastly outstrips the number of jobs on offer. However, at the moment, the coverage of the existing labor-intensive public works programs is very limited. Chapter 2 showed that, under reasonable assumptions, existing public works programs reach fewer than 10 percent of the extreme poor.

ii. As a social protection instrument, labor-intensive public works programs can target two of the top priority vulnerable groups identified (Table 16) – the extreme poor in rural areas, particularly the “deep south” region of Madagascar, or regions that have been affected by a catastrophic event like a cyclone.

iii. Labor-intensive public works programs could also be used to target the extreme poor who live in peri-urban areas and constitute a medium priority group (Table 16).

iv. Labor-intensive public works programs can be scheduled to take place during the lean season before harvests when food insecurity and the risk of malnutrition is highest.

v. Labor-intensive public works have the potential to decrease vulnerability by reducing households’ exposure to environmental risks (through, for example, reforestation, wind barriers, and the maintenance of dykes) while increasing productivity and access to markets and services in addition to providing households with short-term revenue.

vi. Labor-intensive public works would contribute to fundamental developmental needs in rural Madagascar by constructing and maintaining feeder roads, irrigation systems, and other rural infrastructure as well as meeting the need for periodic post-
cyclone reconstruction in eastern coastal areas. Also, the types of environmental protection micro-projects cited above would improve water management for agriculture and thus increase productivity.

vii. Labor-intensive public works are culturally accepted in the Madagascar as they do not carry the stigma that has prevented potential beneficiaries from applying for the CSB equity funds, for example.

viii. There is widespread political support for labor-intensive public works, partly because they require beneficiaries to work in return for their benefits and because the micro-projects result in needed public infrastructure improvements.

ix. There is considerable experience with labor-intensive public works in Madagascar, including on the part of the government. Several government agencies have experience in this field, notably ONN and the Coordination Unit for Economic Recovery and Social Action Projects (Cellule de Coordination des Projets de Relance Economique et d’Action Sociale, or CCPREAS). Also, the labor-intensive public works approach has been endorsed in both the MAP and the National Employment Support Program.

x. Labor-intensive public works could be scaled up relatively quickly, since the program management structures are already in place.

xi. It is possible to combine participation in labor-intensive public works with days of training on HIV/AIDS, family planning, nutrition, and environment protection, thus developing synergies between different activities and programs at the community level.
144. The government may also want to harmonize the existing public works programs. It would be useful to develop a common manual of procedures to avoid any duplication of projects. The manual would harmonize beneficiary targeting methods, outline how to select micro-projects and micro-project contractors, and unify wage rates, quality standards, and other aspects of management. Ultimately, a national agency could be established to implement public works activities backed up possibly by a common fund to mobilize donor resources to supplement government financing.

145. **Targeting mechanism.** The targeting mechanism for the cash-for-work program could continue to follow a multi-stage procedure: (i) the identification by the food security cluster of the areas of intervention based on all available instruments;\(^{71}\) (ii) validation by the National Bureau for Risk and Catastrophe Management (Bureau National de Gestion des Risques et des Catastrophes or BNGRC)\(^{72}\) of the list of areas affected by a catastrophic event; (iii) within each area, the identification of the most affected communities through a transparent process of consultation with authorities at the region, district, and commune levels, including those responsible for catastrophe management; and (iv) targeting the most affected households in each community by consulting community leaders (including teachers and NGO representatives) while ensuring that women are fairly represented among beneficiaries.

146. **Selection of sub-projects.** The program could continue to finance highly manual labor-intensive (haute intensité de main d’œuvre) sub-projects selected by communities. The sub-projects would benefit the targeted population and would receive the prior approval of local authorities (communes and fokontany).

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\(^{71}\) These instruments include the Early Warning System (Systeme d’Alerte Précoce or SAP) in the south, the Multi-cluster Rapid Assessment Mechanism (McRAM) Surveys conducted by UNICEF in the peri-urban areas of Antananarivo and Tulear, the surveys conducted in rural areas by the Rural Observatory Networks, the Comprehensive Food Security and Vulnerability Analysis carried out by the World Food Programme (WFP) and UNICEF, and the Rapid Harvest and Nutrition Assessments conducted by the Food and Agriculture Organization (FAO) and the WFP.

\(^{72}\) The BNGRC is the national office responsible for officially defining the catastrophe-affected areas.
Wage rate and duration. There is no easy recipe for defining the appropriate wage rate or the duration of a cash-for-work program. However, as beneficiaries of cash-for-work programs are selected from among the extreme poor, policymakers may wish to ensure that beneficiaries receive a total payment just sufficient to lift them out of extreme poverty. Data from the 2010 household survey indicated that US$33 is necessary to lift the average extremely poor individual above the extreme poverty line. If the daily wage rate were set at Ar2,000 (about US$1) for five hours of work per day, 30 days of work per annum would be approximately enough to lift the average beneficiary out of extreme poverty. These are the approximate parameters (30 days of work paid at US$1 per day) used by the FID for the implementation of its cash-for-work program. As explained in Chapter 4, the cash-for-work programs are so limited in scope that they do not distort the local job market.

Implementation arrangements. The implementing agency could be responsible for the overall coordination, management, and financing of this activity. It would contract executing agencies (NGOs or faith-based organizations) to implement sub-projects on the ground including paying the beneficiaries.

C.2 Complement Public Works with a Cash Transfer Program Targeted to Labor-deprived Households

The labor-intensive public works programs could be complemented by a cash transfer program for households with no labor capacity or a very high dependency ratio. Households with no labor capacity (those in which the only adults are elderly, chronically sick, or disabled) and female-headed households with children cannot participate in labor-intensive public works. Some social transfers have been conceived specifically to assist those types of households. In Ethiopia, for example, 20 percent of the wage budget of the Productive Safety Net Program is reserved for social transfers to households in which no one is able to work (Samson et al, 2006). The Social Cash Transfer Programs in Malawi and Zambia specifically target ultra-poor households with no labor capacity or a very high
dependency ratio on the grounds that other households should be assisted through productive social protection methods such as labor-intensive public works (Schubert, 2008). The Food Subsidy Program (Programa de Subsidios de Alimentos or PSA) is the main basic social protection program of the Government of Mozambique and focuses on households with elderly, disabled, and chronically sick adults with no other means of support (Hodges and Pellerano, 2010). The Government of Madagascar may want to consider similar cash transfer programs that could reach two of the medium priority vulnerable groups – female-headed households, and the elderly (see Table 16).

C.3 Pilot a Conditional Cash Transfer Program

150. Eventually, the Government of Madagascar may want to introduce a conditional cash transfer (CCT) program on a pilot basis that would provide financial assistance to extremely poor households in return for certain commitments (such as ensuring their children attend school or receive all necessary vaccinations). This type of program would increase the likelihood that many children who are currently out of school, and have been identified as a priority group for intervention (see Table 16) would return to school.

151. The following arguments support the creation of a conditional cash transfer program on a pilot basis:

i. Conditional cash transfers could potentially boost investment in human capital and help to reduce long-term vulnerability. Cash transfers to the extreme poor, whether or not they are linked to behavioral conditions, would enable beneficiary households to increase their investment in the nutrition, schooling, and health care of their children. It may be particularly appropriate in the current context where school dropouts have increased as the result of the political crisis (see Chapter 2). By increasing the human capital of these children during the rest of their lifecycle, they
could help to break the inter-generational transmission of poverty (Samson et al, 2006 and Barrientos and De Jong, 2004).

ii. There is substantial and increasing evidence worldwide, including in Africa, that CCTs have had a positive impact on a range of human development indicators. Drawing on experiences in Latin America, Rawlings and Rubio (2005) found that CCT programs have had positive effects on school enrollment, nutrition, and vaccination rates. Evaluations of unconditional cash transfers in Africa, for example in Malawi (see Miller et al, 2008), have also shown these programs to have a positive human development impact.

iii. CCT programs have already been tested in Madagascar albeit on a very small scale. UNICEF has piloted two small pilot cash transfer schemes (see Chapter 4). Some NGOs like JAT Association have also experimented with providing cash transfers to students conditional on their academic performance (see Box 2);

iv. In Madagascar, some preparatory work has already been undertaken. Before the 2009 political crisis, the GTZ, UNICEF and the World Bank, among other donors, started to develop a pilot cash transfer program aimed at promoting access to basic social services and investment in human capital by highly vulnerable households. This initiative originated in the positive international experiences with CCT, particularly in Latin America. In 2005, a feasibility study was conducted in Madagascar, focusing in particular on the likely impact of CCTs in raising enrollment rates and stemming dropout rates in primary education (Schüring, 2005). In 2008, UNICEF commissioned a study to develop a proposal for a cash transfer pilot scheme (Ayala Consulting, 2009).

73 However, it is unclear whether it is the transfer or the conditionality (or both) that are responsible for the observed changes (Barrientos and De Jong, 2004).
v. As described in the background paper for this report by Rakotomanga (2011), a number of payment methods could be used to reach beneficiaries, including the post office network, micro-finance institutions, mobile phone transfers, smart cards, and mobile payment points. Each has its advantages and disadvantages with respect to accessibility, flexibility, and administrative charges. This suggests that several payment mechanisms should be tested during the pilot phase of the program to find the method best suited to the characteristics and circumstances of the beneficiaries.

152. The Government of Madagascar may also want to consider the following factors when deciding whether to scale up a CCT:

i. Conditional cash transfers have the potential to be highly effective in the short term by reversing the negative effects of the current political crisis on school attendance and the use of health services. However, in the medium term, CCTs will need to be supplemented by other reforms designed to increase supply. For example, households can send their children to school only to the extent that there are enough schools to absorb additional children. In Madagascar, the supply response may be automatic as the cash transfers may be used by households to pay the salaries of the FRAM teachers.

ii. Ensuring effective targeting may present a challenge in Madagascar given the widespread existence of extreme poverty. As noted in Chapter 2, Madagascar has the highest poverty headcount of all Sub-Saharan countries. In addition, human development indicators tend to be poor for those in all four of the lowest quintiles rather than being heavily concentrated in the bottom quintiles as is the case in Latin America countries. Targeting in such a context may pose problems both of equity (the beneficiaries are likely to become much better-off than the non-beneficiaries) and affordability. Also, targeting peri-urban areas may be questionable as the extreme poor are mostly located in rural areas. In the end, CCTs may be an
appropriate way to reach a particular subset of the extreme poor (like UNICEF’s CTT, which targets families who live from recycling waste – see Chapter 4).

iii. There is a risk that any conditional cash transfer targeted only to the indigent would carry a stigma. As is clear from the low take-up rate among the extreme poor of the solidarity cards for fee exemptions in health centers, there is a cultural antipathy to being labeled as indigent or ultra-poor in Malagasy society. This could deter the neediest households from enrolling in a cash transfer program as well.

iv. The country has only limited administrative capacity to implement a CCT program. Conditional cash transfers require substantial administrative capacity, especially for targeting, the enrollment of beneficiaries, management information systems, payments, and monitoring and evaluation. The application of behavioral conditions requires substantial additional capacity to monitor compliance, not only in the implementing agency but also in schools and health centers, and it may not be possible to free up much staff time for this purpose. Capacity is generally weak in Madagascar, particularly in terms of social workers at the local level. It might be possible to assemble the necessary capacity for a pilot project, but it would be a major challenge to scale it up nationally without making major long-term investments in staffing in all agencies involved in the program’s implementation.
VI. References


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Abstract

Madagascar is one of the poorest countries in the world and a very high proportion of the population experiences frequent shocks, whether from natural disasters, economic shocks or internal crises of governance. As a consequence, about half the country’s population is undernourished. Children between the ages of 6 and 14 face the risks of low human capital development, child labor and marginalization. On the other hand, the Government of Madagascar’s commitment to social protection as a national policy was never fully effective. Interventions in social protection have been developed on an ad-hoc basis, often on the initiative of donors. In order to inform the government’s policy development, the report proposes a social protection strategy that increases the protection of the population while decreasing its vulnerability, taking into account the existing programs and the differences in exposure to risks between population groups.

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For more information, please contact the Social Protection Advisory Service, The World Bank, 1818 H Street, N.W., Room MSN 6B-803, Washington, D.C. 20433 USA. Telephone: (202) 458-5267, Fax: (202) 614-0471, E-mail: socialprotection@worldbank.org or visit the Social Protection website at www.worldbank.org/sp.