Madagascar

2015 Review of Public Expenditure in Social Sectors

Executive Summary

Madagascar's economic growth has been slow at 1 percent annually in the last five years and far inferior to sub-Saharan region's average. Income per capita in 2014 fell to around USD 400 (2005 constant USD), losing about 20 percent from 1970 when per capita income reached the highest point since independence. The economic and social effects of the 2009 political crisis were intensified by the suspension of many donor activities which, in a country where international aid represented 40 percent of the government budget, led to significant cuts in investments and a sharp decline in the delivery of services. Macroeconomic stability was maintained during the crisis, as both fiscal and monetary authorities maintained prudent policies. A low public debt to GDP ratio (37.3 percent in 2014) and a low tax revenue (9.7 percent of GDP in 2014) contributed to hindering public investments necessary for development and adequate provision of public services.

Madagascar's failure to sustain robust income growth has translated into high poverty rates. Extreme poverty (per capita consumption under $1.25 2005 PPP per day) rose from an estimated 77.5 percent in 2001 to 80.7 percent in 2005 and over 79 percent in 2010, but then dropped slightly to 78.2 percent in 2012. Over the same timeframe, absolute poverty ($2.00 PPP per capital per day) rose from an estimated 88.9 in 2001 to 90.8 percent of the population in 2010, and then stayed flat at 90.6 in 2012. Inequality in Madagascar is similar to that of other low income countries, with the Gini coefficient ranging between 0.39 and 0.47 over the period 2001-2012 and most recently at 0.41 in 2012. About a third of the population in Madagascar is deprived on multiple dimensions, including consumption, access to education, usage of electricity, and possession of basic household assets.

In a context of high poverty rates, low overall public resources to finance public services delivery, and continuous fragility, economic and political instability, how can public spending promote better outcomes in education and health? How can the Government of Madagascar and its partners support better access to improved quality of services, in particular for the most vulnerable? The Review of Public Spending in Social Sectors in Madagascar systematically analyses how education, health and nutrition have been financed over the past five years. It examines the amounts, distribution and impact of public spending, and formulates recommendations on how best to allocate future public spending with a focus on incremental resources.

KEY INDICATORS

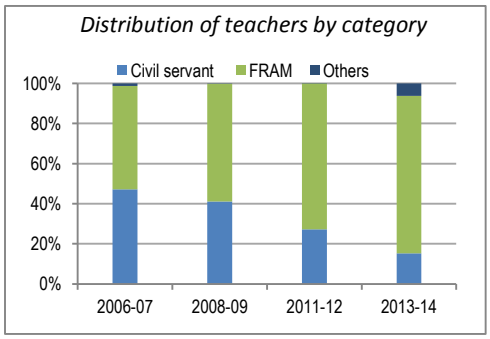
	Education	Health	Notes
Total Expenditure on Sector as percentage of GDP	5.3% (2012)	4.3% (2012)	Estimated figures combining public and households financing to the sector.
Total Public Expenditure on Sector as percentage of GDP	3.1% (2013)	2.8% (2013)	Includes domestic and external funding
Share of external funding in public expenditure	20% (2013)	80% (2013)	Estimates based on SIGFP and AMP data
Share of sector in total government spending	20.6% (2013)	9.8% (2013)	Includes expenditure executed by the respective Ministries. Does not include external aid implemented outside of line Ministries
Share of Out-of-Pocket in total spending	42% (2012)	30% (2012)	Estimates based on household survey data for primary levels of services
Share of salaries in total public spending to the sector	90% (2013)	85% (2013)	Estimates based on SIGFP data (includes subsidies to community teachers for education)

EDUCATION AND HEALTH SERVICES HAVE BEEN SEVERELY AFFECTED BY THE 2009 CRISIS

Key findings: *By 2008, Madagascar made considerable progress on the social MDGs. Enrolments in primary education steadily grew between 2000 and 2008, while the primary completion rate increased substantially. Similarly, under-five mortality had declined from 94 in 2002 to 71 in 2008, making it likely that the fourth MDG would be achieved by 2015. In addition, the country was starting to tackle some persistent challenges, such as improving maternal health and reducing stunting among children caused by chronic malnutrition. These positive trends were entirely reversed after the 2009 crisis. Today, Madagascar's education system exhibits severe weaknesses that leave a large number of children without the basic skills required to function on the labor market. Progress made on key health indicators has stagnated or is being reversed with Madagascar falling off track to achieve the MDGs. There is therefore an urgent need to improve the accessibility of health services, especially for the poorest, and to support improvement in education quality, while at the same time catering to the specific needs of children who are out of schools.*

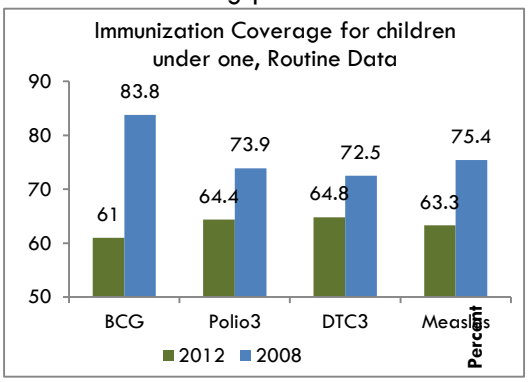
Primary School Enrollments have decreased since 2009 as a result of increased dropouts, mainly related to financial constraints. According to the Household Surveys, the attendance rate of children aged 6 to 14 years has receded strongly over the 2005-12 period, from 77 percent to 74 percent in 2010 and 69 percent in 2012. The drop in attendance rates has been unequal, especially affecting rural zones and the southern regions. The most recent estimates indicate that 1.4 million children aged 6-10 (25 percent of the age group) are likely out of school. Financial problems are the key drivers of dropout for more than one third of households.

Learning outcomes have considerably worsened over the past fifteen years. Prior to the 2009 crisis, Madagascar experienced an upward trend in primary completion rates. Since then, however, the primary completion rate has declined from 74 percent to 70 percent. Moreover, comparison of data across three rounds of learning assessments indicates a sharp downward trend in all three subject areas. Overall, between 1998 and 2012, the national average in French has dropped by 16 percentage points and the math score by 19 percentage points.



The rapid increase in community teachers whose skills are low has been a key contributor to reducing the quality of teaching, especially in vulnerable areas. The share of civil servant teachers has fallen considerably over recent years, and community teachers now make up 80 percent of the total. These teachers are unequally distributed across regions, with higher concentration in poor and vulnerable areas. Community teachers are generally underqualified, with more than 80 percent of them having no form of teaching qualification, which has important negative consequences on education outcomes. The 2012 learning assessment, for example, showed a strong and significant relationship between community teachers and low learning outcomes.

Coverage of essential health services especially key maternal and child health services is very low. Access to quality prenatal and antenatal care remains a persistent challenge with only 38 percent of births taking place in a health center and of those less than half (44%) are attended by skilled personnel. This is lower than the average in the developing world, where about 58% of all deliveries are reported as attended by skilled health providers and over 50% of births taken place in health centers. Population policies aimed at reducing fertility through encouraging family planning practices brought about a remarkable increase in the use of modern methods of contraception by more than 15 percentage points prior to 2009 but the contraceptive prevalence rate is still very low at 33 percent. According to the DHS 2008/2009, complete immunization coverage for children 12 to 23 months old in 2008 was 62 percent. Comparable data from the MDG survey in 2012 indicated a decrease in complete immunization coverage to 51.1 percent in just four years. Routine data collected from health facilities also confirms the drop.



Since 2009, the some declining trends in key indicators of health system performance have also been observed. For example, the prescription satisfaction rate, a key indicator for drug availability, has sharply declined from 69 percent to 59 percent at facility level and utilization rates at primary care health facilities has decreased by at least 20 percent.

Madagascar's epidemiological profile remains comparable to many low-income countries with a high communicable disease burden. Almost 30 percent of all deaths in Madagascar are still attributable to preventable and infectious and parasitic diseases, with the burden of disease falling disproportionately on the poor. Over the past decade, non-communicable diseases are increasing in the population, resulting in a dual burden of disease which will tax and already fragile health system.

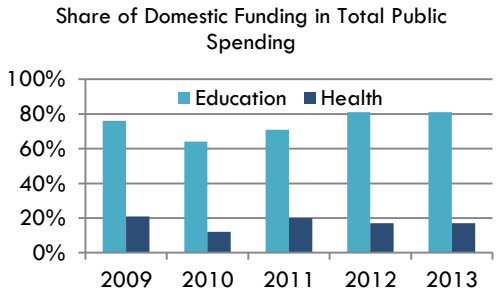
EDUCATION AND HEALTH SERVICES ARE UNDER SEVERE FINANCIAL CONSTRAINTS

Key findings: *Madagascar's education and health sectors appear to be largely underfinanced with differing degrees of priority in the overall Government budget. Reduced domestic public spending is complemented by large amounts of external aid in health, and substantial contributions from households in both education and health. Existing resources are not sufficient to support improvements in access and quality of education and health services, and deprives public systems from meeting the basic needs of the population. Various issues complicate the preparation and execution of the budget which prevent ministries from using budgeted funds, including tight and fluctuating execution rates imposed by the Ministry of Finance. This creates substantial difficulties for the health and education systems, including delays in disbursing subsidies to community teachers and full implementation of key public health programs. Moreover, frequent and substantial re-allocations within and across programs, and the incomplete recording of external funds into Government accounts (SIGFP/AMP) reduce the budget credibility and usefulness as a strategic tool to support the implementation of sectors strategies.*

Madagascar allocates a low share of its GDP to education, although the sector is well prioritized within overall public spending. Total public spending on education decreased substantially to 3.1 percent in 2013, a percentage much lower than the average for low-income country. This low investment in education reflects the overall contraction of public spending rather than a lack of prioritization by the Government. Indeed, education represented on average more than 20 percent of total government spending between 2010 and 2012, which is substantially higher than the average of Sub-Saharan countries and the low income group as a whole.

On the other hand, total spending on health decreased to 4.3 percent of GDP in 2012, while the average in Sub-Saharan Africa (SSA) countries was above 6 percent. On average, total spending in Madagascar on health was 4.3 percent of its GDP between 2009 and 2012, compared to 4.8 percent in the four years preceding the crisis (2005-2008). This was the reverse of the trend observed in other SSA countries where the share of GDP allocated to health increased on average from 6 to 6.4 percent. In real terms per capita expenditure on health has not changed since 1995, at around US$20, a level comparable to other Low Income Countries in SSA.

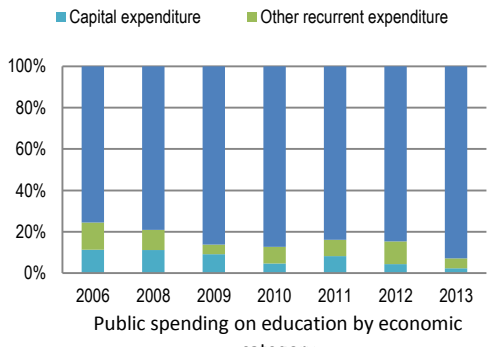
External aid makes up a very large share of total public spending on health while the share of external funds in total public spending on education is relatively low. Between 2009 and 2013, 80 percent of public funding to the health sector was financed through external funds, which is particularly high compared with other sectors in the country as well as with other countries. This poses serious concerns for sustainability, ownership and efficiency of existing resources. On the other hand, about 20 percent of total education spending was financed by external funds, down from 35 percent in 2010. In fact, the sharp in external funding to education accounts for a large share of the overall decrease in funding to the sector.



DOMESTIC FUNDING TO EDUCATION AND HEALTH IS MOSTLY GEARED TOWARDS SALARY COSTS

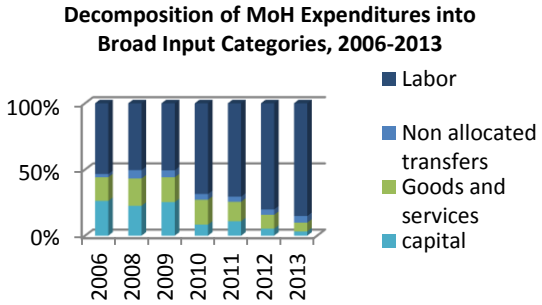
Key findings*: Madagascar's domestic education and health spending is mostly geared towards salaries, which are rapidly increasing, leaving little room to finance much else. In both sectors, spending are very centralized, which can results in delays in transferring resources and a lack of alignment with local needs. In this context, there is a need to progressively reorient education spending towards inputs that have a direct impact on quality, which could require a more progressive timeline for the planned integration of community teachers into civil service. In health, expenditures on labor have also been increasing both in real term and in share of total expenditures, while other operational expenditures and internally financed investments have decreased. This indicates that Madagascar has clearly moved to an unbalanced situation that is concerning in terms of both efficiency and sustainability in delivering a sufficient amount of quality health services to the population.*

Labor costs have crowed out capital and non-wage recurrent expenditures. All labor costs included, the share of the labor in public education went up from 70 percent in 2006 to 90 percent in 2013, while capital expenditures went down from 11 to 2 percent and non-labor operational expenditures from 19 to 7 percent of total education spending. Although this is somehow comparable with other low-income countries, the on-going integration of a large number of community teachers into civil service will make this trend unsustainable and detrimental to other important investment geared towards improving the quality of education. A more progressive timeline to integrate community teachers into civil service may be needed to ensure that other priorities, such as improving the learning environment, can be sustained.



Primary education absorbs almost half of total non-investment education expenditure. Primary education receives a large share of public spending on education, between 45 and 48 percent over the period 2002-2013. This share is in line with that in other countries at a similar level of development, and reflects the priority given to primary education by successive governments. The non-wage recurrent budget, although a much smaller part of total expenses shows a surprisingly large and increasing share of education spending going to post-secondary education, most likely related to the large program of support to university students, including scholarships.

Regular salary expenditures in health have reached levels that are much higher than those generally observed in less-developed countries. While labor made up 54 percent of total spending in 2006, it now represents 85 percent of domestic financing. Expenditures on goods and services related to the provision of health care make up a very small share of the budget. The large bias towards salaries in domestic funding was somewhat compensated by external aid, in particular for goods and services. Although Madagascar was found to do well overall in term of outcomes relative to expenditures before 2008, the current imbalance in the use of inputs shows that it will likely not keep this advantage.



Administration and coordination takes the largest share of recurrent non-wage expenditures to health, more than primary health care, maternal and child health, and public health combined. Administrative expenses constitute about 40 percent of non-wage recurrent expenditure, with a marked decrease from 43 in 2010 to 36 percent in 2013. The share going to hospital services stayed relatively constant at around 25 percent. The share going specifically to primary health care services was significantly reduced from 19 to 11 percent, although maternal and child health expenditures compensated for the decrease.

Communicable diseases (CDs) and Maternal and Child Health (MCH) dominate expenditures identifiable by program. Excluding the investment budget, expenditure on CDs clearly dominate every year, followed by MCH. Looking at investment, CDs and MCH still make up the bulk of targeted expenditure. There has been some increase in non-communicable diseases program funding, indicating that are starting to gain importance in the investment budget.

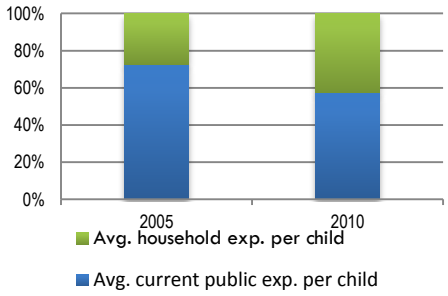
THE EDUCATION AND HEALTH SYSTEMS ARE HIGHLY INEQUITABLE AND INCREASINGLY FINANCED BY HOUSEHOLDS

***Key findings**: The distributional analysis shows that the poorest regions have the lowest amount of spending for both sectors. Moreover, considering that two-thirds of the population lives in rural areas, the low amount of education and health expenditure in these areas is indicative of large inequities in the distribution of public resources, largely driven by unequitable distribution of human resources across the country. Cuts in public spending to social sectors have resulted in large increases in household spending, in particular on education. This has had far-reaching consequences in terms of enrollments in primary schools, learning outcomes and utilization of health services. Better equity in the distribution of spending will require that trained and qualified teachers are equally distributed across the country, and additional health human resources target the neediest areas. Finally, severe data limitations due to the lack of a recent census and more recent household data at the district level prevent a finer analysis of the distribution of spending by poverty level.*

The distribution of government current expenditures by region indicates some regressivity, with some leveling out during the most recent period. Expenditure shares by type of residence have evolved in favor of the large urban centers (+14 percent), mostly at the expense of other urban areas and peri-urban rural areas. Rural areas (including the peri-urban areas) received less than a third of expenditures.

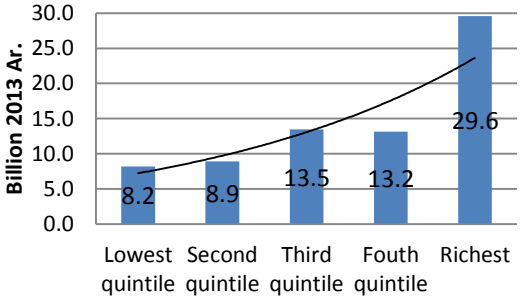
Households are financing an increasing share of the total costs of education. Since the crisis, a greater number of households with a child in Grade 2 has had to pay enrollment fees, PTA contributions and monthly school fees. In addition to be more frequent, the amount paid in school fees have generally increased by 26 percent on average. This has had direct repercussions in terms of enrollment. Indeed, financial problems are the first reason given by household to explain dropout. Over 2006-2008, current public expenditure contributed, on average, to 73 percent of expenses of one child enrolled at school, whereas household expenditure represented, on average, 27 percent. However, from 2009 to 2013, the share of current public expenditure was, on average, 59 percent of total spending per child enrolled. This reflects a substantial increase in the share of the costs per child enrolled financed by households. The increase was higher in Atsimo Andrefana, Menabe and Vatovavy Fitovinany, three regions that are particularly vulnerable.

Financing of primary education, share of household and public financing



Overall, MOH expenditures are strongly negatively correlated to poverty rates and strongly positively correlated with per capita income. Even when restricting expenditures to primary health care, regional distribution is strongly regressive. Benefit Incidence Analysis (BIA) on non-wage expenditures executed by the Ministry of Health reveals that benefits are found to be regressive with the average benefits going to individuals in the richest quintile two to four times higher than those going to individuals in the poorest two quintiles. BIA performed on wage expenditures on personnel in health facilities show that the richest quintile benefits 3.6 times more than the poorest quintile, and at least twice as much as households in any other quintile. Analysis of expenditure shares by type of residence show that less than 5 percent goes to rural communes. On average 36 percent going to large urban centers, 46 percent to smaller urban areas and 13 percent to the semi-rural or peri-urban areas.

Estimated Distribution of Benefits from MoH Non-Wage Expenditures



Household cost in terms of out-of-pocket costs are high with the cost of most medical consumables borne by the patient through cost recovery. 2013 NHA-lite data indicates that Out of Pocket (OOP) expenditure represents 80 percent share of private financing and 30 percent of total health expenditure. Yet, when looking at households, percentages of catastrophic expenditures in the poorest quintiles are very low, which is usually indicative of "system failure"; i.e., the poor just do not seek care. It should be noted that catastrophic expenditures may cause 4.5 percent of people in the richest quintile and 3 percent of people in the fourth quintile to fall below the poverty line.

	Timeline for implementation	Expected benefits vs political cost of reform		
		Short-term (1-2 years)	Medium-term (3-5 years)	Long-term (5- 10 years)
1. CROSS-CUTTING RECOMMENDATIONS				
1.1. Improved efficiency of spending in Education and Health				
▪ Revisit execution of regulation rates, bringing flexibility to align with sectors needs and ensuring a more equal impact across programs	Short term	Neutral	Low Positive	High Positive
▪ Strengthen and harmonize the use of existing budget tools, in particular the SIGFP to ensure that necessary information is recorded, including external financing	Medium term	Neutral	Low Positive	High Positive
▪ Link financing to results to maximize outputs from available resources particularly at service delivery levels through a scaling up of existing Results-Based Financing approaches, including Conditional Cash Transfers	Medium term	Low Negative	Neutral	High Positive
▪ Deconcentrate more resources to lower levels of management of service delivery with more autonomy on execution of some of the non-wage budget at district, primary care and school levels	Medium term	Low Negative	Neutral	High Positive
▪ Validate the final draft of the National Health Sector Strategy and coordinate donor financing around one national plan. Reinstitute the Joint Sector Reviews.	Medium term	High Positive	High Positive	High Positive
▪ Decentralize salary payments to improve allocation of staff and increase efficiency of (Health) Human Resources management at lower levels	Long term	High Negative	Neutral	High Positive
1.2 Evidence-based decision making				
▪ Collect additional data at regular periods of time (demographic and health data, poverty mapping, national census, National Health Accounts) to enable finer analysis, including distributional analysis.	Medium term	High Positive	High Positive	High Positive
▪ Conduct a robust review of external aid financing to social sectors to complement the results from this PER	Medium term	High Positive	High Positive	High Positive
2. EDUCATION				
2.1 More equitable spending on education				
▪ Maintain programs aiming at alleviating financial barriers to enrolments , especially for the most vulnerable, through the provision of basic education inputs (eg school kits, school grants)	Short term	High Positive	High Positive	High Positive
▪ Ensure that the ongoing recruitment of civil servant teachers has a pro-poor focus prioritizing rural populations and vulnerable areas	Short term	High Negative	Low Negative	High Positive
▪ Explore the possibility of scaling up support to children whose opportunity cost is high through conditional cash transfer, provision of vouchers, etc…	Medium term	Neutral	Low Positive	High Positive
2.2 Improved quality of education Services				

▪ Target incremental resources to interventions aimed at supporting improvements in the learning environment (including teachers' training, learning material, etc…)	Short term	High Negative	Low Negative	High Positive
▪ Adopt a more progressive timeline for the integration of community teachers into civil service to preserve investment in improving the learning environment	Short term	High Negative	Low Negative	High Positive
▪ Develop and implement a renewed strategy for the training, recruitment, deployment and evaluation of teachers, potentially including a revision and adoption of a framework for contractual teachers	Medium term	High Negative	Low Negative	High Positive
▪ Secure additional resources, including from external partners, to support substantial improvements in the learning environment	Medium term	High Positive	High Positive	High Positive
▪ Ensure that any additional resources support a more equitable distribution of education quality. This will require for example that qualified and trained teachers are equitably distributed across the country	Medium term	High Negative	Neutral	High Positive
▪ Invest in supervision and monitoring at lower levels of education, including CISCOs and ZAPs	Medium term	Low Negative	Neutral	High Positive
3. HEALTH				
3.1 Improved access to health services				
▪ Alleviate financial barriers to access by lowering out-of-pockets costs for health services (e.g. safe delivery kits, targeted fee exemption schemes for services and medicines, CCTs, etc)	Short term	High Positive	High Positive	High Positive
▪ Ensure that any incremental increase in the wage bill has a pro-poor focus prioritizing rural populations and first line health facilities	Short term	High Negative	Neutral	High Positive
▪ Increase domestic financing to the sector by raising the share of overall government budget allocated to the health sector and encouraging more alignment between external funding and national strategies for health	Medium term	Low Negative	High Positive	High Positive
▪ Address geographic barriers to access by investing in existing approaches and activities that bring services closer to communities (e.g. *Strategie Avancees* and community health workers)	Medium term	High Positive	High Positive	High Positive
▪ Prioritize and invest in functionality of CSB1s	Medium term	Low Negative	High Positive	High Positive
▪ Assess and strengthen and expand risk-pooling and safety-net mechanisms such as the Health Equity Fund and community health insurance	Long term	Low Negative	High Positive	High Positive
3.2 Quality of Health Services				
▪ Target incremental resources to operational budget and investments	Short term	High Negative	Neutral	High Positive
▪ To complement the National Health Strategy, develop and implement the Human Resource National Plan and the National Quality Plan for Health to inform priority actions in these areas.	Medium term	High Positive	High Positive	High Positive
▪ Re-balance the distribution of spending towards the delivery of critical services and programs on a dynamic basis to respond to health needs of the population (e.g. increased domestic resources immunization as indicators are getting worse)	Short term	High Negative	High Positive	High Positive
▪ Invest in supervision and monitoring at lower levels	Medium term	Low Negative	Low Positive	High Positive