Status of the Education Sector - Key Findings

Madagascar’s education system exhibits severe weaknesses that leave a large number of children without the basic skills required to function in the labor market.

Structural weaknesses

- Education outcomes have fallen sharply over the past twenty years, as evidenced by the low results of learning assessments.
- The absence of a sustained and quality mechanism for teachers training and performance has had a severe impact on the declining quality of education.
- The increasing number of out-of-school children is putting substantial pressure on the system which still needs to expand and integrate strategies to attract out-of-school children.

Contextual weaknesses

- Since the start of the political and economic crisis in 2009, enrollments in primary education have stagnated, and even decreased in some years. Higher costs of education for households have been a key driver of school dropouts.
- Inputs to the sector have been dramatically reduced and the availability of learning materials has considerably worsened.
- The number of civil servant teachers has continuously decreased, resulting in a rapid increase in the number of community-hired teachers, which now constitute 80 percent of the total teaching force in primary schools.
- Community teachers, whose qualification and training are low, are unequally distributed, resulting in large variation in education quality across the country.
Madagascar has an urgent need to improve the quality of its education system and to meet the specific needs of out-of-school children.

### Invest in quality

**Stabilize the teaching force and improve the management of teachers**
- Create a sustainable supply of trained and qualified teachers, by carefully implementing a new and pragmatic strategy for Human Resources in the education sector,
- Ensure the equitable distribution of teachers across the country, with a special focus on the distribution of qualified teachers to areas where they are the most needed,
- Reestablish adequate administrative and pedagogical support at the local and school levels.

**Create the conditions for learning**
- Upgrade teachers’ skills and competencies, through the re-establishment of pre-service training and strong in-service training mechanisms,
- Improve the supply and quality of textbooks and other learning materials

### Address the needs of out-of-school children

- Consider expanding the school grant program in a selected and targeted manner,
- Scale up effective interventions targeting the most vulnerable, including conditional cash transfers and school feeding programs
- Pilot interventions providing second-chance education.
FINANCING AND GOVERNANCE OF THE EDUCATION SECTOR — KEY FINDINGS

Madagascar’s education system appears to be largely underfinanced; the budget processes in place do not support the strategic goals of the sector.

Level of public spending to education

- Public resources available to finance education have decreased since 2010. Madagascar now spends only 2.75 percent of GDP on education, the lowest share amongst comparable countries.
- However, education has consistently received a relatively high priority in the government budget, with 21% of government spending allocated to education on average between 2010 and 2013.
- Therefore, low levels of public funding to education are mainly due to low levels of overall public spending, rather than a lack of prioritization for the sector.
- The sharp drop in external funding after the crisis contributed to lower levels of funding to the sector. In 2013, more than 80 percent of public sector funding came from domestic resources, compared with 65 percent in 2010.

Execution of public spending

- Execution rates are relatively high but multiple budget reallocations reduce the credibility of the budget.
- Tight regulation rates appear to be an issue for the sector, especially in Q3 when the preparation of the school year starts.
- The sector remains highly centralized in terms of budget execution, despite a well-established school-based management framework.
- Serious limitations in the way budget execution is captured by SIGFP reduce MoE’s ability to perform budget analysis and to use the budget as a strategic tool.
FINANCING AND GOVERNANCE OF EDUCATION - POLICY IMPLICATIONS

In a context of rapid decrease in learning outcomes, additional public spending targeting interventions directly aiming at improving quality are needed.

- Madagascar invests too little a share of GDP in education. Given the severe deficiencies in the system, increasing the overall amounts of public spending supporting the education sector is a matter of urgency,
- Given the already high share of education in the total budget, such an increase can only come from either an overall larger envelope of public spending or increased contributions from external funding (public or private),
- Compared to other countries, there is room for increasing the amount of external aid supporting the education sector. The completion of a new Education Sector Strategy will contribute to attracting additional funds from all partners.

Existing budget tools must be better utilized, in particular the SIGFP. Key information should be inputted into the system, including external on-budget funds.
- There is room to further deconcentrate the execution of spending, and the channeling of additional funds to schools could be explored.
- Regulation rates could be adjusted to the specific needs of the education sector, to alleviate some of the pressures in preparing the new school year.
**ALLOCATIVE EFFICIENCY — KEY FINDINGS**

*Madagascar’s public education spending are mostly geared towards salaries which are rapidly increasing, leaving little room to finance the quality agenda.*

**Distribution of spending by level of education**

- The share of primary education in total education spending is in line with comparable countries,

- Public spending per capita in primary education appear to be on the lower side of comparable countries, while the rapid decrease in unit costs in secondary education is worrying given its importance both in terms of skills acquisition, as well as promotion of primary completion.

**Distribution of spending by economic category**

- Combining civil servants and community teachers, salary costs represent 90 percent of total public spending on education, up from 70 percent in 2006,

- Community teachers, who represent 78 percent of the total teaching force, absorb less than 15 percent of the wage bill,

- The progressive integration of community teachers in civil service can potentially crowd out all other categories of spending and become unsustainable,

- Capital spending has been dramatically reduced, due to a combination of factors, including the drop in external aid which funded most of the investment prior to the crisis,

- Overall, public expenditures on education are heavily focused on salaries, leaving little room for manoeuvre to finance inputs which have an impact on education quality. The ongoing regularization of community teachers into civil service is likely to aggravate this situation over the short term.
ALLOCATIVE EFFICIENCY - POLICY IMPLICATIONS

There is a need to progressively reorient spending towards inputs that have a direct impact on quality, while improving the ability of the Ministry to use the budget as a strategic tool to support the implementation of the Sector Strategy.

Supporting the quality agenda through better targeted public investment

- Unless total spending is substantially increased, containing the wage bill appears to be necessary to ensure that other category of expenses (including teachers’ training, curricula and learning materials) can be supported. This might require a slower implementation of the ongoing regularization of community teachers,
- Madagascar should also consider refining its framework for contractual teachers, to ensure that the necessary improvement in the status of community teachers remains sustainable,
- The ongoing regularization provides an opportunity to improve the distribution of qualified teachers across the country. This opportunity could be better reaped by ensuring that additional qualified teachers are allocated in priority to the neediest regions.
- The learning crisis in primary should not entirely detract attention from secondary education which remains key for future growth and development.

Better use of the budget as a strategic tool for the sector

- A renewed focus on program budgeting would help the Ministry in the preparation and analysis of the budget,
- Various adjustments could be made to facilitate budget analysis, including better categorizing of salary costs of non-regular teacher and systemizing the repartition of administrative and salary costs by level of education,
- The reclassification of subsidies to community teachers as “salary-type” of spending would provide the Government and its partners with a more accurate view on current priorities and challenges.
DISTRIBUTIONAL ANALYSIS OF PUBLIC EDUCATION EXPENDITURE — KEY FINDINGS

Although the distribution of public spending appears broadly equitable, the large increase in household spending on education over the past five years may have far-reaching consequences in terms of enrolments, and even more in terms of quality and learning outcomes.

Distribution of public spending

- Based on access, public spending on primary appears pro-poor, public spending on secondary appears broadly equal, and public spending on higher education has no direct benefit to the poor. There is however increasing inequity in secondary education,
- The distribution of public spending across regions show signs of regressivity, with some evening out recently due to the overall increase in poverty across regions.
- The distribution of wage expenditures reflects the highly inequitable distribution of civil servants across regions. Some regions amongst the most vulnerable seem clearly disadvantaged.

Household spending

- The last 7 years have witnessed a rapid increase in the share of education costs financed by households,
- The poorest spent on average 3.5 percent of their budget on education in 2012, against 2 percent in 2005. The share of household budget on education increased more for the richest, indicating a possible transfer of these children in private schools,
- The distribution of regular teachers has a direct impact on household spending: the lowest the share of civil servants, the highest is the share of households’ contribution in the total costs of education per child enrolled.
- Overall, the financing of the education sector seems increasingly reliant on household contribution.
Better equity in the distribution of spending will require that civil servant teachers are equally distributed across the country, which will reduce the pressure on household spending as well as promote equitable access to quality education.

**More equitable repartition of resources**

- In the current context where the allocation of human resources drives the distribution of spending, it is key to ensure that ongoing and future recruitments serve areas currently suffering from severe shortages of teachers,
- Beyond the evening of inequality in the distribution of spending, the focus needs to be on the equal distribution of quality, which will heavily rely on qualified and trained teachers in the short term.
- This again points to the importance of using the ongoing regularization of community teachers as a strategic tool to contribute to a more equitable distribution of resources and that of education quality.

**Further reducing the financial burden on the poorest**

- Government’s support to schools and families in terms of learning materials and school furniture may be scaled up if better targeted,
- Support to children and families with high opportunity costs of schooling could be achieved through various interventions such as conditional cash transfers or vouchers,
- Strategic use of external funds to finance such measures could contribute to overcome the limited fiscal space for such interventions, while supporting the emergence of a knowledge base on interventions that are efficient and can be scaled up.
HEALTH
STATUS OF THE HEALTH SECTOR - KEY FINDINGS

Since the start of the political and economic crisis in 2009, progress made on key health indicators has stagnated or is being reversed with Madagascar falling off track to achieve the MDGs. The prevalence of chronic malnutrition among children under five is one of the highest in the world. Maternal mortality ratios also have remained relatively high and stagnant over the last ten years and the country.

Contextual weaknesses

- Madagascar’s epidemiological profile remains comparable to many low-income countries with a high communicable disease burden. Almost 30% of all deaths in Madagascar are still attributable to preventable and infectious and parasitic diseases. 50% of children under five are stunted due to chronic malnutrition, one of the highest rates globally, an outcome that is inextricably linked to other development outcomes.

- Maternal mortality ratios also have remained relatively high and stagnant over the last ten years: from 469 per 100,000 live births in 2003 to 480 per 100,000 live births in 2012. This is a significant issue in 2010, pregnant women and children under five bore almost 40 percent of the total disease burden in the country.

- The system is plagued by inequitable health service delivery. The two critical dimensions are:
  - Affordability: i) the poor are more vulnerable and have a greater risk of falling and staying in poverty by paying for health services and ii) less of the population is seeking health services due to an inability to pay.
  - Accessibility: Numerous communities are seasonally isolated for months at a time, leaving entire populations – not only the poor – with little access to health centers.
  - There are major inequities in HRH distribution with the greatest negative impact on the poor who access first level primary care facilities. An added issue is that nearly 50% of public health sector staff is over 50 years old and will retire in less than ten years. Current health sector human resource policies do not address this future constraint to service delivery.

Structural weaknesses

- The quality of health service delivery is low, especially in rural parts of the country. Critical challenges include: (a) weak provider compliance with diagnostic procedures; (b) weak supervision and monitoring functions; and (c) lack of availability of key supply-side inputs.
- High-out-of-pocket costs and scarcity of risk pooling mechanisms make it difficult for the poor to access care.
STATUS OF THE HEALTH SECTOR - POLICY IMPLICATIONS

There are several short and medium recommendations that Madagascar should consider implementing as a matter of priority.

Promote equitable access to health services

- Focus on delivering an essential package of high, impact maternal and child health and nutrition interventions in rural areas.
- Address financial barriers to access
  - Remove out-of-pocket costs for services at facility level
  - Strengthen risk-pooling and safety-net mechanisms such as the Health Equity Fund, fee exemption schemes for services/medicines, CCTs and community health insurance.
- Address geographic barriers to access
  - Finance existing outreach activities and approaches especially in rural areas by expanding initiatives like Strategie Avancee and community health workers, which bring services to communities.
- Prioritize and invest in functionality of first level rural health facilities.

Improve the Quality of Health Services

- Ensure availability of essential commodities and drugs at the primary level, as well as investment in upkeep and maintenance of health facilities, especially in rural areas.
- Invest in supervision and monitoring at lower levels. This includes training and capacity building for better management.
- Strengthen relevant plans to inform priority actions for improving quality
  - Update and implement the National Human Resources Development Plan (short, medium and longer term actions)
  - Develop and implement standardized “Norms and Standards” for all types of health facilities at all levels.
FINANCING AND GOVERNANCE OF THE HEALTH SECTOR - KEY FINDINGS

Madagascar’s health sector is not adequately funded and has a very constrained budget envelope. The public health sector is also largely externally financed with domestic financing very low and unstable.

Level of public spending to health
- Madagascar spends now less on health than three quarters of the SSA countries. Since 1995, the percentage of Total Health Expenditure (THE) in GDP has been around 4-5 percent with a downward trend in recent years.
- In real terms THE per capita expenditure has not changed since 1995. Looking at the period between 1995 and 1999 THE per capita was US$21. In the period between 2010 and 2014, it was US$20.
- Between 2009 and 2013, 80 percent of public funding to the health sector was financed through external funds.
- The share of domestic funding to the sector (20%) is very low compared with other sectors in the country. This poses serious concerns for sustainability, ownership and efficiency of existing resources.
- The share of MoH spending in total government spending has stagnated at about 6%-8% since 2006 across budget categories except for the share of civil servant wages, which increased from 8.5 to 10 percent of the civil servant wage bill between 2006 and 2010.

Budget Execution
- There is lack of clarity between budget appropriations and expenditures due to the different ways in which externally financed investment expenditures are recorded in the government budget under the SIGFP and the Management Aid Platform.
- Rules related to the execution of the budget may prevent full execution, especially for non-wage expenditure; this is notably the case for regulation rates imposed by MoF. The final yearly cuts in regulation rates have negatively impacted the execution rates of some programs more than others, namely primary health services and specific disease programs.
- Despite some inconsistent improvement over the last four years, the budget execution rates of the MoH remain low for non-wage expenditures.

Lack of deconcentration of resources
- Budget execution is highly centralized. Between 2006-2013, the central level managed between 50 and 70 percent of current non-wage expenditures with no clear trend toward de-concentration despite a tiered management and service delivery system down to primary care level.
- Since 2011, there has been a reduction in the share of non-wage current expenditures managed at the district level. In addition, the share of expenses that could potentially be de-concentrated has gone down sharply, from over 20 percent to 13 percent in 2013.
FINANCING AND GOVERNANCE OF THE HEALTH SECTOR - POLICY IMPLICATIONS

In a context of stagnation and reversal of progress across several key health outcome indicators, additional public spending on expanding access and utilization of quality health interventions is needed.

- The Government needs to better prioritize the health sector in its overall Government budget by increasing public financing to the overall sector. These additional resources can come from a combination of increased resources in the total budget (given the current low share of health) and increased external financing from public and/or private sources.

- Existing budgeting tools need to be strengthened particularly the SIGFP especially with regards to including more comprehensive data on external aid, better tracking of investments and precise analysis of trends in execution rates across different programs.

- De-concentration of resources to lower levels of management and service delivery should be considered with more autonomy on execution of at least some of the non-wage budget at district and primary care levels

- Execution of regulation rates should be revisited with a specific focus on having a more equal impact across programs consistent with a prioritized budget execution strategy by the MOH.

- The impending validation of the New Health Sector Strategy should be seen as a critical opportunity by Government to better harmonize financing to the sector under one national plan.

- More harmonized and dynamic budgeting mechanisms should be put in place including with partners and donors and alignment of budget planning processes with calendar of the Ministry of Finance and Budget.
ALLOCATIVE EFFICIENCY — KEY FINDINGS

Expenditures on labor have 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.

Economic analysis of public spending

- Regular salary expenditures made up 84% of domestic financing in 2013, a level much higher than generally observed in low-income countries. Expenditures on goods and services related to the provision of health care make up a very small share of the budget, with the cost of most medical consumables borne by the patient through cost recovery.

- Total salaries at service delivery levels have remained low and constant since 2006, while central and regional administrative salaries increased exponentially in the same period. Similarly, administration and coordination takes the largest share of recurrent non-wage expenditures, more than PHC, MCH, and public health combined.

- The large bias towards salaries in domestic funding is somewhat compensated by substantial inflows of external aid targeting other aspects of the system, in particular goods and services. However, investment financed by external aid has dropped considerably, making it very difficult to sustain improvement in the quality and quantity of health services delivered.

Functional Allocation of Total Health Expenditures

Madagascar does not exhibit the common SSA pattern of over-spending on in-patient care and under-spending on preventive and public care:

- The share of hospital care decreased while the share of spending on prevention and public health programs increased over the period 2003 -2010.

- The share of expenditures going to inpatient care is less than 7 percent, which is less than a third of LIC averages.

- Pharmaceutical costs have also remained stable, at less than 20 percent of total expenditures, and these costs even decreased in 2013.

These indicators could be a signal of system failure, in the sense that the majority of the population may just not be seeking care. The 2010 Household Survey indicates that close to 70 percent of people in Madagascar did not seek care when ill.
ALLOCATIVE EFFICIENCY – KEY FINDINGS (cont.)

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Functional allocation of public health expenditures

- The 2010 NHA results indicate a distribution of public expenditures that strongly prioritizes preventative activities (nearly two thirds of all activities) as would be expected of the public system.
- Primary health care facilities absorb only 27 percent of wages, while 50 percent of the population seeking care go to these facilities.
- In Madagascar, similar to other low-income countries, a great deal of primary health care is provided outside of primary health care facilities, especially in tertiary hospitals.

Preliminary Analysis of External Aid

- There is substantial evidence pointing to large and continuous support from external partners in providing health inputs, such as vaccines and other health materials, over recent years. However, this support is generally channeled outside of the MoH.
- In 2010 there was a total health expenditure on vaccinations of about US$11.5 million (0.11% of GDP). The Government was responsible for only 17%, about $2.2 million. Between 2010 and 2013, the Government share of financing dropped from 17% to 7%, representing a drop of 10 percentage points in 4 years.
- Given the high share of external aid in the total financing of the health sector, the absence of an updated national strategy and of as well as fully functioning coordination and alignment mechanisms could be impeding the realization of important synergies across sources of financing.

Low Government Spending on Vaccination

<table>
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<th>Year</th>
<th>Government</th>
<th>GAVI</th>
<th>Other Technical and Financial Partners</th>
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<td>2010</td>
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<td>16%</td>
<td>28%</td>
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<tr>
<td>2011</td>
<td>52%</td>
<td>72%</td>
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<tr>
<td>2012</td>
<td>17%</td>
<td>12%</td>
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<tr>
<td>2013</td>
<td>76%</td>
<td>7%</td>
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ALLOCATIVE EFFICIENCY – POLICY IMPLICATIONS

Over time, there is a need to redirect spending on activities and interventions that improve the delivery of quality health services

Better use of resources to improve service delivery of quality HNP interventions

In the current budget envelope, there is an urgent need for the Government to address the wage vs. non-wage expenditures to improve the efficiency and strengthen the sustainability health service delivery over time. Any incremental increases on available budgets should be directed to operational budget and investments.

One of the key areas that should be addressed is the exponential expansion of central and regional administrative salaries in the last decade when salaries at levels of service delivery have not changed in the same time period.

The Government aim to improve capacity and service delivery at the primary which will require a redistribution of the wage bill to ensure that it is in line with the level at which services are being utilized.

The distribution of non-wage expenditures should be re-balanced to support the delivery of critical public health programs. Consider the use of output-based approaches compared to the current largely input-based funding methodologies.

More informed budgeting

The Government could consider institutionalizing National Health Accounts (NHA) exercises every two years. The tool should be adapted to Madagascar’s specific system and needs.

More robust analysis of external aid financing is urgently needed to have a more exact analysis of the budget. In order to facilitate this, external aid data needs to be consistent across various data platforms and at different levels of the system.
DISTRIBUTIONAL ANALYSIS OF PUBLIC HEALTH EXPENDITURE — KEY FINDINGS

Overall, the distribution of public spending is highly inequitable with per capita total health expenditures strongly negatively correlated with poverty rates. This has significant implications for the overall health of the population especially in the current context of Madagascar where over 80% of the population is living in absolute poverty.

Distribution of public spending

- Expenditures of the MoH are characterized by a strongly regressive regional distribution. Regions with lower poverty rates receive more per capita, while regions with higher poverty rates receive less.
- Benefits from MoH wage expenditures on personnel in health facilities (excluding all personnel in administrative units) are also clearly regressively distributed. The richest quintile benefits 3.6 times more than the poorest quintile, and at least twice as much as households in any other quintile.
- Inequality are apparent at the district hospital level (CHD) and increases moving into upper levels of care toward regional level hospitals (CHU), which are utilized by the richest. The poorest households in the lowest two quintiles rarely use secondary and tertiary hospitals.
- With regards to non-wage expenditures, average benefits going to individuals in the richest quintile are two to four times higher than those going to individuals in the poorest two quintiles with the two poorest quintiles were found to benefit the least in most cases.
- Non-wage recurrent expenditure shares by type of residence show that 13 percent to semi-rural or peri-urban areas, and less than 5 percent to the rural communes. Considering that approximately two-thirds of the population live in rural areas, this represents a highly unequal distribution of expenditure shares.

Household spending and utilization by quintile

- The scarcity of prepayment mechanisms in Madagascar, combined with a cost recovery system, makes public health care expensive for the poor.
- Few households are subject to catastrophic expenditure in Madagascar, but prevalence increased in all quintiles between 2005 and 2010, and in the middle class in 2012. Very low percentages of households with expenditures in the poorest quintiles are usually indicative of “system failure”; i.e., the poor just do not seek care. Low utilization (rather than high cost) is therefore a plausible explanation for the low incidence of catastrophic expenditure.
DISTRIBUTIONAL ANALYSIS— POLICY IMPLICATIONS

Given the strong inverse relationship between poverty and good health, the need for publicly provided health care is greater among the poorer populations. Better equity in the distribution of spending in the health sector will need to take into consideration better resource allocation and targeting of the population, improvement in access to health care especially in rural areas and reducing the financial burden on households.

More equitable distribution of resources

- In the current context, Madagascar needs to urgently agree on and implement pro-poor strategies to ensure better equity of health expenditure and health services amongst the population. This includes:
  - Redistribution of health expenditure according to geographic distribution of the population to also benefit the poor
  - Better allocation of existing public human resources to be more equitable to the poor. Consider a diagnostic of the current human resource system.
  - Additional spending on first line health facilities (CSB1s), which are utilized more by the poor and maintaining spending on second line health facilities (CSB2s), which benefits all quintiles approximately equally. In addition, consider reallocation of CSB2 so they are more accessible to households.
  - Reallocation of regional hospital staff time to CSB1s and CSB2s.
- An updated census, poverty map and a Demographic Health Survey are needed to help inform decisions on resource distribution.

Tailor interventions for the poorest quintiles

- The analysis reiterates the need to implement interventions to improve health seeking behavior tailored specifically to the poor with mechanisms such as vouchers, conditional/non-conditional cash transfers, exemption schemes, non-monetary incentives (e.g. safe delivery kits) and support to the expanding the reach of health practitioners and health workers into the community.
- Redesigning existing mechanisms to be more effective such as the Equity Fund and social health insurance schemes.