Social Spending and Outcomes in Madagascar REPUBLIC OF MADAGASCAR

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ABSTRACT: The paper examines Madagascar's education, health, and social assistance spending and outcomes. Government spending on education is relatively low compared to peers, and the quality of education has deteriorated. The paper recommends allocating more resources to the sector, ensuring transparent and merit-based teacher recruitment mechanisms, and strengthening teacher training and incentives. Health spending is also low, and the health system faces challenges in malnutrition, immunization, and service delivery. Additional domestic resources and large-scale structural reforms are needed. Social safety net programs have limited coverage and low spending, and expanding them should be a top priority to reduce poverty and support vulnerable populations.

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SELECTED ISSUES PAPERS

Social Spending and Outcomes in Madagascar

Republic of Madagascar

Prepared by Samah Mazraani¹

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SOCIAL SPENDING AND OUTCOMES IN MADAGASCAR¹

Education, health, and social assistance spending in Madagascar is among the lowest worldwide and social outcomes such as education quality, malnutrition, basic immunization coverage, and poverty have deteriorated over the last decade. In a context of social fragility and vulnerability to exogenous shocks, Madagascar faces significant constraints to execute and deliver social spending and services. Looking ahead, sustained efforts are needed to implement the authorities' development agenda in the "Plan Emergence Madagascar" and support the needed investments in human capital. This includes creating fiscal space for higher social spending combined with institutional reforms to ensure a more efficient use of resources.

A. Introduction

- 1. Madagascar experienced some improvement in development outcomes over 2000–2010, but the overall situation remains challenging following two decades of income stagnation and recent pandemic and climate shocks. The authorities' Plan Emergence (PEM) aims to increase GDP per capita to US\$4,000 in 2040 (compared to US\$522 in 2019) and the human capital index to 0.60 (0.39 in 2020), while at the same time bringing the poverty rate down from 81 percent to 35 percent by 2040. While ambitious strategies have been developed in social sectors, a disconnect between announced ambitions and limited financial and human resources have led to slow reform implementation. Two years of pandemic, a series of climate shocks, and a more challenging external environment have compounded Madagascar's existing deep-rooted fragilities.
- 2. This paper takes stock of developments in education, health, and social assistance and offers policy options. It examines social spending² and outcomes in Madagascar. In particular, it addresses the following questions: (i) How large has social spending been over time and compared to peers? (ii) How does Madagascar perform on various socioeconomic outcomes? (iii) What are policy options and how can outcomes be improved?

B. Education

3. Government spending on education is relatively low compared with other Sub-Saharan African (SSA) countries and low-income peers. Education spending increased albeit at a slow pace in recent years (from 2.3 percent of GDP in 2011–15 to 2.6 percent of GDP in 2016–20 on average) but remains low compared with other low-income and SSA countries. While education spending as a

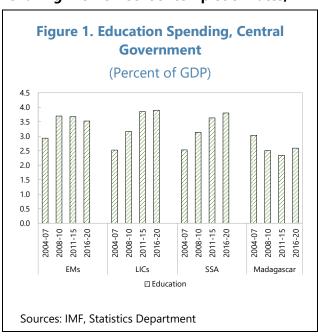
¹ Prepared by Samah Mazraani. The analysis benefitted from helpful comments from the World Food Program (WFP) and the European Union (EU).

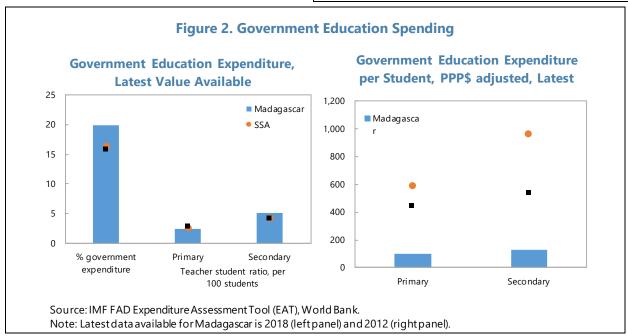
² Social spending throughout the paper is defined using the budget functional classification. The definition is consistent with the Classification of the Functions of Government (COFOG) and the IMF Statistics Department Government Finance Statistics Manual (GFSM 2014). It differs from the definition of the social spending target in the ECF program which includes domestically financed spending by four social ministries (education, health, water, and population/social protection) excluding wages.

percent of total government spending is higher than in peers (Figure 2, left), this reflects lower levels of government spending in Madagascar due to still limited tax revenue. Moreover, education spending *per student* significantly lags peers both at the primary and secondary levels (Figure 2, right). The teacher-student ratio is somewhat similar to peer groups with Madagascar having about 40 primary and 20 secondary school students per teacher in 2018.

4. The quality of education in Madagascar is falling with low school completion rates,

a high share of untrained teachers, and declining test scores. While Madagascar performs well in adult literacy rate (77 percent in 2021) and net enrollment rate for primary school (96 percent in 2018), the net enrollment rate in secondary school is still low at 29.8 percent in 2018 compared to 44 percent in low-income countries (Figure 3). Moreover, school completion rates have been on a declining trend over the last decade reaching levels below SSA and low-income countries (63 percent for primary school and 35 percent for lower secondary school). In addition, the strategy to use low-paid community-hired teachers supported by parents' associations, the "Maîtres FRAM" (now representing about

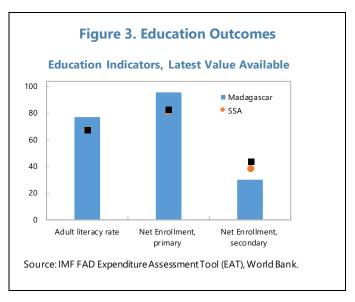




80 percent of teachers in primary schools) may have had a negative impact on education quality, as the majority lack formal credentials or teacher training (Figure 4). Harmonized test scores have also

fallen significantly since 2010³ (Figure 4). As a result, 97 percent of 10-year-old children are not able to read and understand a simple text in French (World Bank, 2022b)⁴.

5. Raising outcomes in education requires a concerted effort to allocate more resources to the sector, ensure transparent and merit-based teacher recruitment mechanisms, and strengthen teacher training and incentives. The government's policy initiated in October 2020 of canceling school enrollment fees is welcome and would facilitate universal access to school education. It is important to prioritize education spending by allocating more resources to the sector⁵ and undertaking public financial management (PFM) reforms to improve budget execution. The preparation of annual expenditure



commitment plans by social ministries in 2023, in line with sectoral strategies, together with the streamlined spending commitment process (both commitments under the ECF program) should help in this regard. Improving public investment prioritization of projects accompanied with appropriate costing of operational and maintenance costs (e.g., of school buildings) would contribute to greater resource efficiency in the sector. Additional recommendations include:

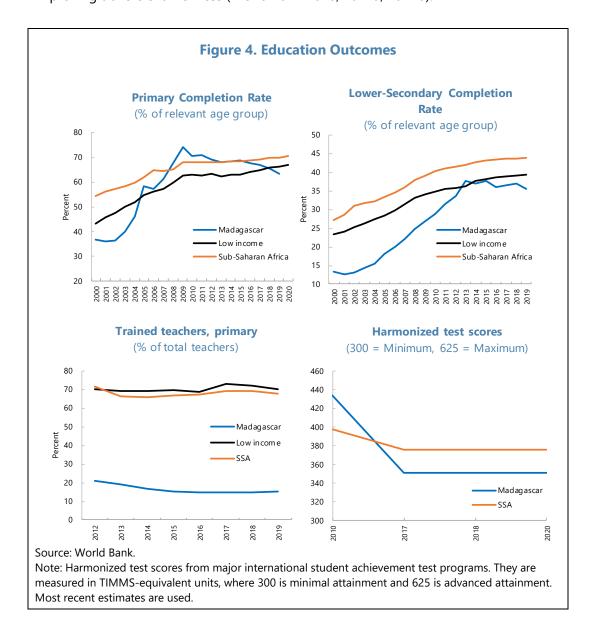
- Given limited fiscal space in Madagascar, integrating all FRAM teachers into the civil service is not feasible in the short term. An alternative approach is to gradually integrate them following a phased approach over several years (World Bank 2020, 2022a, 2022b).
- This should be done in a transparent and merit-based way following a competitive recruitment process to award contracts based on qualifications and competency tests—conducted for example by an independent agency for all civil service teachers (World Bank 2020, 2022a, 2022b).
- Undertake a biometric census of all civil servants including FRAM teachers and volunteer health personnel and utilize data results to verify the quality of the AUGURE database—an IT tool for civil service personnel management—including to eliminate any "ghost teachers". (Public Expenditure Tracking Survey, 2021).

³ Student learning outcomes have multi-sectoral drivers which could include in addition to teacher quality, factors such as malnutrition, student illness, general learning environment, etc.

⁴ A more recent study by the Ministry of Education and the World Bank suggests an improvement in learning outcomes between 2016 and 2021 despite the effects of the COVID-19 pandemic. The final results of the study should be released soon.

⁵ While the government is committed to allocate at least 20 percent of the national budget to the education sector, actual budget allocations and realizations have been lower, ranging from 12–16 percent during 2021–23.

- Ensure the timely release of funds to public school teachers⁶ and to community teachers (World Bank 2020, 2022a, 2022b).
- Increase decentralized management in line with the decentralization policy⁷ by allocating additional resources to schools (through school grants or transfers to "Caisse Ecole") while improving transfers' timeliness (World Bank 2020, 2022a, 2022b).



⁶ According to World Bank (2022b), 40 percent of public teachers and 80 percent of FRAM teachers reported delays in receiving their salary more than once in the last two years, sometimes reaching several months.

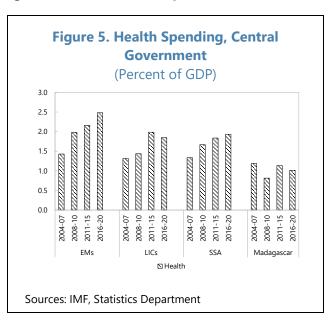
⁷ The government is shifting gradually towards management by school grants ("Caisse Ecole"). These school grants combined with school feeding transfers amounted to MGA 39 billion only in 2021 (0.07 percent of GDP).

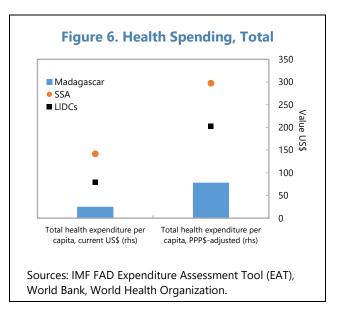
C. Health

6. Government spending and total spending on health are low compared with low-

income and SSA countries. Government health spending decreased in recent years (from 1.3 percent of GDP in 2016 to 1.0 percent of GDP in 2020) and remains low compared with LICs (1.8 percent of GDP over 2016-20), EMs (2.5 percent of GDP over 2016-20), and SSAs (1.9 percent of GDP over 2016–20) (Figure 5). Similarly to education spending, government health spending as a percent of total government spending is higher than in peers (18.6 in Madagascar compared to 10.2 in LICs), reflecting lower levels of government spending. However, total health spending per capita (both government and private) is about US\$ 78 per person per year (on a PPP basis), less than half the average in low-income countries of \$202 per person per year (Figure 6).

7. The public health system consists of four types of health facilities with limited autonomy (World Bank PER, 2014). These include basic health centers for primary care implemented within communes, referral hospitals within districts, referral and university hospitals within regions, and specialized centers at the regional and central levels. Private and community-based health insurance remains limited due to low incomes and a small formal employment base. Free services and vouchers are limited to specific programs and regions.



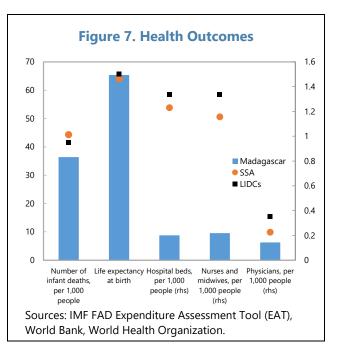


8. Madagascar has made progress on some key health indicators, but significant challenges remain in malnutrition, immunization, and service delivery. According to World Bank Development Indicators, Madagascar's performance improved over the last decade on life expectancy (67 years in 2020 compared to 62 in SSA), maternal mortality rates (335 deaths per 100,000 live births in 2017 compared to 534 in SSA), and infant mortality rates (36 deaths per 1,000 live births in 2020 compared to 50 in SSA). However, the prevalence of malnutrition has increased significantly (from 28 percent of the total population in 2010 to 49 percent in 2020). Likewise, the prevalence of stunting among children under five remains one of the highest in

the world (at 39.8 percent). Challenges remain on basic immunization coverage (Diphtheria, Tetanus, Pertussis) which remains low at 55 percent among 12–23 months aged children in 2021 according to World Bank indicators. Finally, the health system suffers from severe human resource shortages (physicians, nurses, and midwives) and other resource shortages (e.g., hospital beds) compared to other SSA and LIC countries (Figure 7).

9. Improving health outcomes will require the mobilization of additional domestic resources and large-scale reforms. With government health spending at only 1 percent of GDP, the health sector is clearly under-financed and under-staffed. Additional resources are needed—most

notably in primary healthcare services favoring the retention of qualified and motivated health workers while ensuring a better distribution in rural areas (most notably through strengthening decentralization and increasing allocations to basic health centers). PFM reforms are also needed to improve budget execution and ensure sound public investment management in the sector. The government's national social policy (adopted in 2015) and national social protection strategy (2019–23) outline the goal to attain universal health coverage (UHC) with a contributory system and free healthcare for the poorest households⁸. However, the implementation plan for the UHC strategy was never finalized. Therefore, a clear financing strategy is needed to achieve the objective of UHC accompanied



with clear identification criteria of the poorest and most vulnerable households who will be eligible for free healthcare—based on the social registry currently in development (World Bank, 2022a).

D. Social Assistance

10. Social assistance⁹ spending in Madagascar remains among the lowest in the world with limited coverage of the vulnerable population. Spending on social safety net programs (i.e., excluding social insurance such as pensions) averaged 0.2 percent of GDP over 2011–20 (according to ASPIRE database). This is significantly below spending levels in peers (0.9 percent of GDP median in SSA and 0.8 median in LIDCs, Figure 8). The government's strategy document (2019–23) aims to

⁸ A decree was passed in 2017 establishing the "Caisse Nationale de Solidarité en Santé (CNSS)" or national health solidarity fund, a public entity with administrative and financial autonomy charged with collecting and managing UHC contributions and paying benefits to health institutions. The CNSS has recently been abrogated.

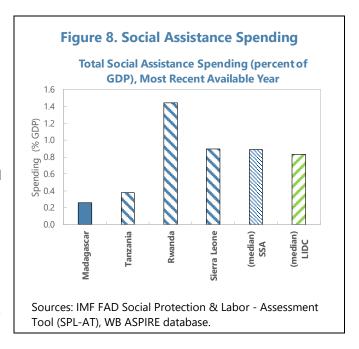
⁹ Following the WB Aspire program classification, social assistance programs are defined as non-contributory transfers in cash or in-kind. Social assistance spending therefore includes cash transfers (conditional and unconditional), school feeding programs, targeted food assistance, and near cash benefits such as fee waivers and food vouchers.

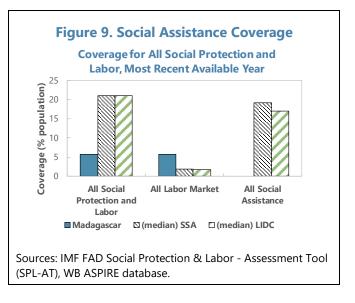
increase social safety net coverage of extremely poor households to 15 percent by 2023 and 50 percent by 2030. However, coverage of social safety nets remains very limited (5 percent of the population compared to 20 percent in peers, Figure 9).

11. The social safety net system consists of two regular cash transfer programs mostly funded by donors:

- A conditional cash transfer program (TMDH "Transfert Monétaire pour le Développement Humain"), providing regular cash transfers for families with children under the age of 12 and conditional on primary school attendance with a UNICEF-funded top up for children transitioning to secondary school (LUL "Let us Learn"). TMDH also includes beneficiaries from the program "Fiavota", an emergency cash transfer program designed to assist families severely affected by drought in the South of the country.
- A productive safety net program
 (ACTP Asa Avotra Mirindra "Argent
 contre Travail Productif") providing
 cash for work opportunities over a
 minimum of three years for workers
 assessed as poor in select districts
 with an unconditional transfer
 component in favor of vulnerable
 persons who are unable to work due
 to disabilities.

These programs are supported by the World Bank and implemented by the "Fonds



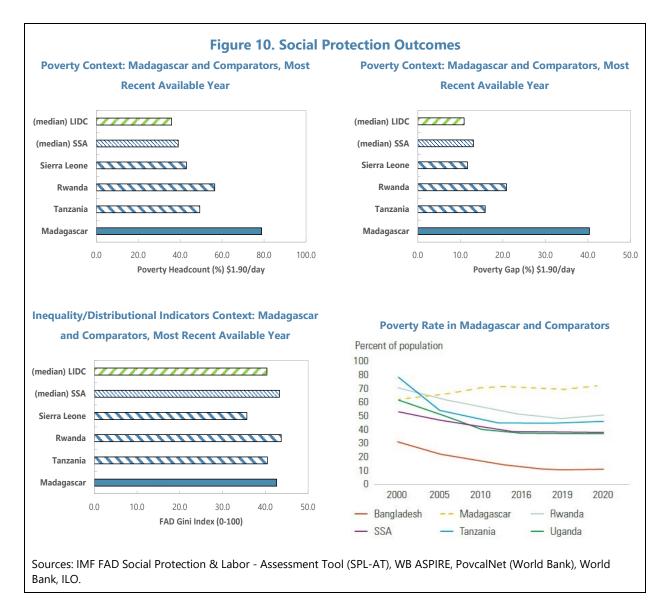


d'Intervention pour le Développment (FID)". Combined, they currently cover about 309.000 households in extreme poverty mostly in rural areas (89 percent financed by donors). However, according to UNICEF, geographical coverage of these programs is limited (only operating in 7 out of 22 regions), and coverage is rationed in the beneficiary regions through proxy means testing and community verification (reaching only 30 percent of households in these regions despite pervasive poverty).

12. In addition, there are three types of shock-responsive social protection programs, two of which were developed in response to the COVID-19 pandemic:

- An unconditional cash transfer program (TVA "Toseke Vonje Aigne") launched in 2018 following the drought caused by El Nino in the South. This program includes specific triggers to cover victims of areas affected by poor harvests, cyclones, and droughts in the South. Coverage varies from year to year, but the total number of beneficiaries reached about 108,000 households receiving MGA 80.000 per month (around 20 U.S. dollars) for 5 months.
- An unconditional cash transfer program (Tosika Fameno) implemented following the COVID-19 pandemic in coordination with donors to support vulnerable households in three urban regions mostly affected by the negative effects of the national lockdown. Coverage reached around 215,000 households receiving MGA 100.000 per month (around 25 U.S. dollars) for two months (May and July 2020). Enrollment was done through self-registration using an online survey at the community level and payments were done in cash (through payment agencies) or through mobile money accounts.
- A domestically financed presidential project providing in-kind donations (Vatsy Tsinjo) to the most vulnerable and to those whose activities were affected by COVID confinement in three regions. It is estimated that 305,000 food packs were distributed (out of an initial objective of 500.000 packs) with each household receiving two packs for two months (April and July 2020). While the strategy initially targeted the homeless, elderly, and those affected by confinement, it was extended to cover university students, artists, persons with disabilities, and public school teachers, among others.
- 13. Madagascar's poverty rate worsened following the COVID-19 pandemic and is projected to remain close to 80 percent over the next three years. The poverty rate based on the international definition (percent of the population living on less than US\$1.90/ day in 2011 PPP) was estimated at around 78 percent in 2012, compared to 36 percent in LIDCs and 39 percent in SSAs (Figure 10). World Bank (2022a) estimates that Madagascar has not been able to reduce poverty over the last decade with the poverty rate now estimated at a record high of 81 percent in 2020. Furthermore, the poverty gap (a measure of the intensity of poverty given by the difference between the poverty line and the mean income of the poor in percent of the poverty line) is around 40 percent, compared to 13 percent only in SSAs. As for inequality, the latest measures date back to 2012¹⁰ and show that inequality is close to the average of SSA countries, with a GINI coefficient of 42.6.

¹⁰ According to World Bank (2020), there is a significant risk that the COVID-19 crisis heightened existing inequalities, given the projected increase in the extreme poverty rate in 2020.



- 14. Strengthening the social protection system and expanding existing social safety nets should be a key policy priority in order to help reduce poverty and protect the most vulnerable. Key areas for policy action include¹¹:
- **Update the social protection strategy.** The government adopted its National Social Protection Policy (PNPS) in 2015 with a vision to ensure coverage of half of the vulnerable population by 2030. The National Social Protection Strategy (SNPS) for 2019–23 in turn states the objective to cover 15 percent of the population in extreme poverty by 2023. In order to reach the PNPS objective, it will be important to update the medium-term strategy including to link stated objectives with a clear funding strategy.

¹¹ These areas are in line with the *Cour des Comptes* audit report on social measures taken in 2020 to combat the effects of the COVID-19 pandemic.

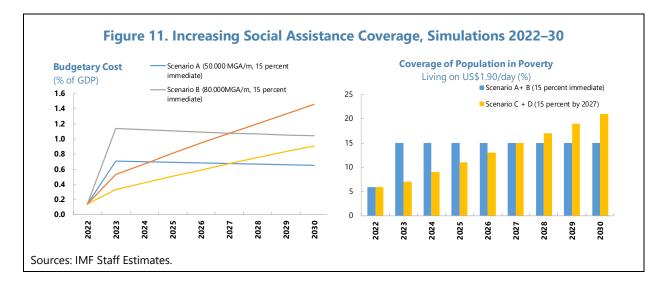
- **Develop a national social registry.** While the PNPS envisaged the creation of an inventory of all social programs and a unique register of beneficiaries with a view to improve planning and coordination of interventions, they are still under development and not yet operational. Scaling up the existing register of beneficiaries to a national social registry ¹² (starting for example with a pilot phase with limited geographical coverage) will be key to facilitate expansion of transfers and to respond rapidly to future crises. The social registry should be managed and regularly updated over time by the Ministry of Population and serve as a basis to identify potential beneficiaries of social programs, ensure a coordinated and harmonized response to social needs, and avoid fragmentation of efforts by various donors.
- Ensure predictable and sufficient budget allocations and scale up social protection programs sustainably. Social assistance spending (i.e., cash and in-kind transfers) is extremely low and remains mostly financed by external donors. Given the poverty level and immense needs, it is important to find fiscal space (through spending reallocation and/or revenue mobilization) with a view to gradually expand coverage of existing social programs and increase households' resilience to future shocks. The successful experience gained from the program "Tosika Fameno", which was designed and implemented in just a few weeks, could be used to scale up existing social programs.

E. Simulations

- **15.** Four illustrative scenarios are considered to estimate the total budgetary cost of raising the coverage of existing social assistance programs (Figure 11). In all four scenarios, it is assumed that the transfer increases every year with average inflation and that administrative costs are about five percent of the transfer size. Specifically:
- Scenario A assumes an average transfer of 50.000 MGA per household per month, with coverage of the poor population immediately reaching 15 percent in 2023 (in line with the authorities' social protection strategy targets).
- Scenario B assumes an average transfer of 80.000 MGA per household per month, with coverage of the poor population immediately reaching 15 percent in 2023.
- Scenario C assumes an average transfer of 50.000 MGA per household per month, with coverage of the poor population only gradually reaching 15 percent by 2027 and continuing to increase to 20 percent by 2030.

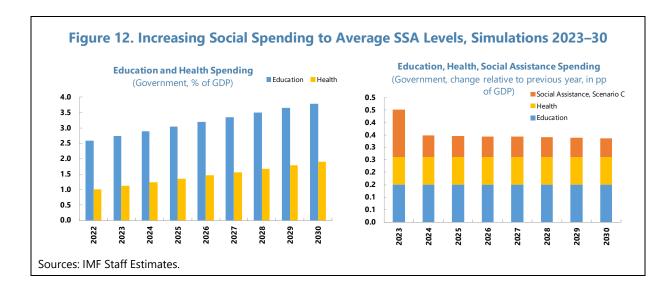
¹² While a register of beneficiaries is a static database/list of *existing* beneficiaries of specific social programs, a social registry is not just a database, but a full information system including *potential* beneficiaries (eligible or not). In particular, it is a dynamic system that evolves over time and supports registration of applicants, determines potential eligibility, stores, verifies, updates, and validates data. Scaling up from a register of beneficiaries to a social registry would require pre-conditions such as establishing a unique identifier (e.g., biometric ID) and comprehensive surveys to collect socioeconomic indicators allowing the calculation of a vulnerability index.

 Scenario D assumes an average transfer of 80.000 MGA per household per month, with coverage of the poor population only gradually reaching 15 percent by 2027 and continuing to increase to 20 percent by 2030.



- **16. Significant budget allocations are needed to reach the authorities' objective under all four scenarios.** The budgetary cost of social assistance spending would need to increase from the current 0.1–0.2 percent of GDP to 0.7–1.5 percent of GDP by 2030¹³. Under Scenario C, a gradual increase in coverage accompanied by a moderate transfer amount (50.000 MGA per household per month) would result in feasible budget increases of 0.1 percent of GDP per year, to reach the SSA spending average of 0.9 percent of GDP by 2030.
- 17. Increasing education, health, and social assistance spending gradually to SSA levels by 2030 would require annual budget increases of 0.3 percent of GDP every year (Figure 12). Specifically, government education spending is assumed to increase by 0.2 percent of GDP every year (from 2.6 to reach SSA average of 3.8 by 2030). Similarly, government health spending is assumed to increase by 0.1 percent of GDP every year (from 1.0 to reach SSA average of 1.9 by 2030). Social assistance spending is assumed to increase by 0.1 percent of GDP every year consistent with Scenario C above. In total, social spending needs to increase by 0.5 percent of GDP in 2023 then by 0.3 percent of GDP every year during 2024–30 to reach SSA spending levels and cover 15 percent of the vulnerable population by 2027.

¹³ In all four scenarios, there is a steep increase in 2023 relative to 2022 due to the increase in the average transfer amount per household in 2023. The average transfer amount for all current social transfer programs is not known for 2022 but is assumed to be 22.500 MGA per household for the purpose of these simulations (which is implicitly derived by taking current household coverage and the estimated total budget cost).



F. Conclusions

18. Finding fiscal space to allocate more public resources to the education, health, and social protection sectors should be a key government priority. The resources currently budgeted for these sectors remain much lower than in other SSA countries and insufficient to improve development outcomes. Madagascar made some progress in improving access to primary education and basic health services, but the quality of the education system has deteriorated, significant human resource gaps remain in the health sector, and the poverty rate has increased. Continued efforts are needed to scale up social services, identify additional sources of financing, and allocate resources efficiently given the immense development needs of the country.

19. Large scale institutional and structural reforms are needed to raise social outcomes and alleviate poverty:

- In all three sectors, undertake PFM reforms to address significant budget under-execution (including implementation of expenditure commitment plans by social ministries in line with sectoral strategies) and to strengthen public investment prioritization, budgeting, and management.
- In the education sector, ensure quality teachers by gradually integrating community teachers into the civil service through a transparent and merit-based recruitment system and increase decentralized management of education resources.
- In the health sector, mobilize additional resources to address equipment and medical staff shortages, improve merit-based recruitment processes to ensure the integration of qualified health workers, and clearly identify criteria for free basic healthcare coverage of the most vulnerable households. For households not eligible for free healthcare, encourage formalization or facilitate voluntary participation in contributory health insurance schemes.

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• In the area of social protection, identify clear and predictable funding sources with a view to gradually scale up existing social programs, while developing a national social registry to harmonize the social response among different interventions and actors and set a strong basis to gradually increase social assistance coverage of the vulnerable population.

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