

Country Profile: Mozambique

Demographic Context

The population in Mozambique progressively increased from 28M to 32M between 2017 to 2022 as shown in **figure 1**. Infants aged below 12 months and those below the age of 5 years accounted for less than 7% and 17% of the entire population respectively.

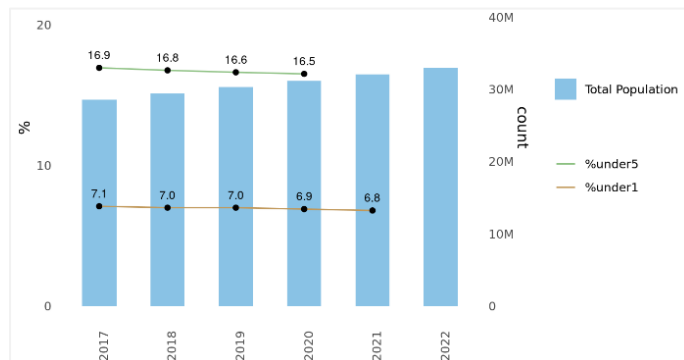


Figure 1: Population Trends in Mozambique

Source: UN and Analysis by Consultant

During the same period, the Human Development Index¹ remained just below 0.5, a below average performance on individual longevity, education and income capabilities (**Figure 2**). The Human Capital Index² was 0.4, which was below average in terms of the expected productivity of future generations owing to deprivations related to health and education. This implied that children born during the period would attain only 40% of their productivity potential. The life expectancy at birth remained between 59 and 61 years.

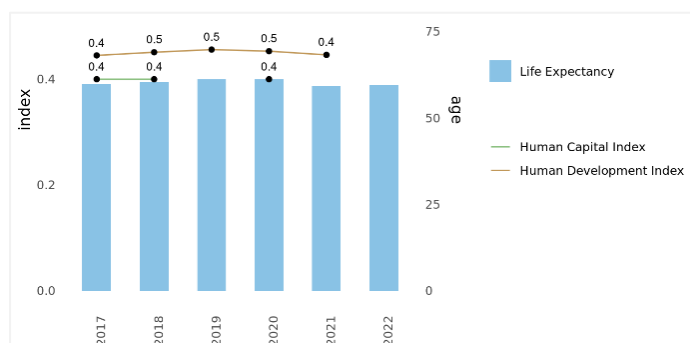


Figure 2: Development and Productivity Potential in Mozambique

Source: World Bank Group, UNDP, Analysis by Consultant

Economic Context

The Gross National Income Per Capita increased from USD 449 to USD 519 during the period of analysis (**Figure 3**). This matched the initial self-financing phase for GAVI eligibility (GAVI, 2022). The Tax to GDP ratio ranged between 21% and 27%, one of the highest within this cohort of countries. It thus met the regional 15% threshold for adequacy of financing public services.

¹ **The Human Capital Index (HCI)** is an annual measurement prepared by the World Bank. HCI measures which countries are best in mobilizing their human capital, the economic and professional potential of their citizens. The index measures how much capital each country loses through lack of education and health. The final index score ranges from zero to one and measures the productivity as a future worker of a child born today relative to the benchmark of full health and complete education (a maximum index score of 1).

² **The Human Development Index (HDI)** is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The Debt to GDP ratio was significantly high spanning between 100% and 120% within the period of interest hence above the Southern African Development Community (SADC) regional threshold of 60% for debt sustainability and adequacy of financing public services beyond debt repayment.

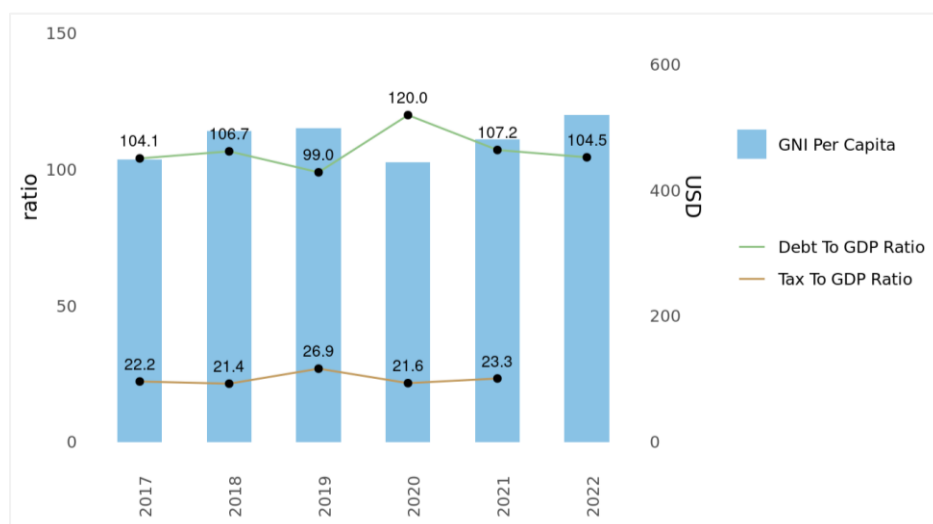


Figure 3: Economic performance in Mozambique

Source: WHO, IMF, Analysis by Consultant

Highlight

The significantly high debt levels in Mozambique beyond the regional threshold highlights potential risk of debt repayments crowding out expenditures on other essential public services including health and immunization.

The relatively high Tax to GDP ratio in Mozambique point to a fairly reliable tax administration system that ought to be strengthened to ensure fair, predictable and improved revenue mobilization to finance public services including health and immunization.

Health System Context

The top 3 causes of death in Mozambique were HIV/AIDS, neonatal conditions and Stroke. Malaria, HIV, Diarrhea and Pneumonia were the main causes of under 5 mortalities.

There was a steady decline in the Infant and Under Five Mortality Rates over the period of analysis. The Infant Mortality Rate (IMR) declined from 57 to 51 deaths per 1000 live births, while the Under Five Mortality Rate declined from 78 to 70 deaths per 1000 live births as shown in **figure 4**.

The UHC Service Coverage Index³ in 2021 was 44% implying that less than half (44%) of the population in Mozambique had access to quality essential services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

³ **Coverage index** for essential health services (based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access). It is presented on a scale of 0 to 100.

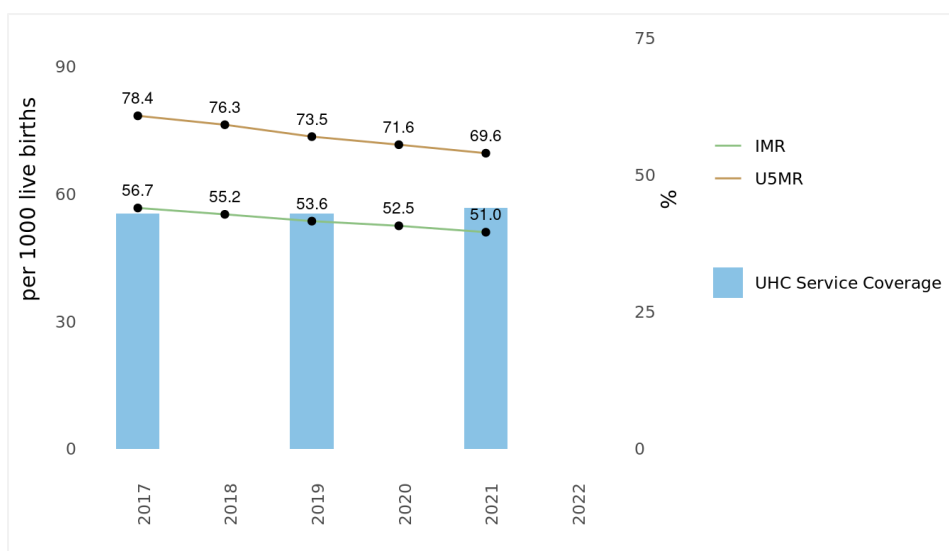


Figure 4: Health System Performance in Mozambique

Source: World Bank, WHO, Analysis by Consultant

Health Financing Context

Government spending on health was at 2% of the GDP which was markedly below the minimum of 5% recommended for progression towards UHC (McIntyre et al., 2017). The per capita spending on health was between USD 34 and USD 41 across the years, which was below the recommended per capita target of USD 86 (McIntyre et al., 2017). Further, the government expenditure on health relative to other sectors was between 6% and 7%, which was below the 15% Abuja target (**Figure 5**).

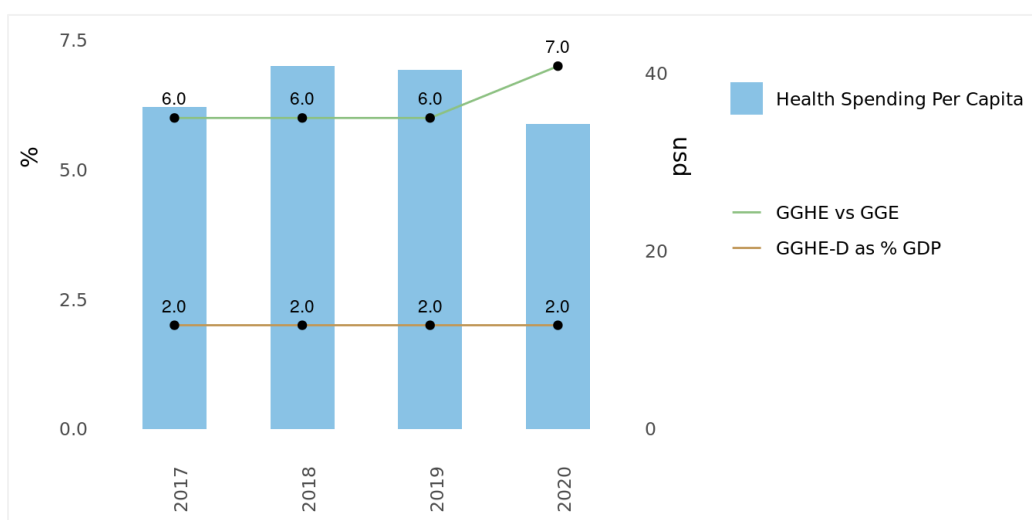


Figure 5: Health Financing Trends in Mozambique

Source: WHO Global Health Expenditure Database, Analysis by Consultant

Though declining, donor financing was the most significant source of funding for health in Mozambique. Donor funding accounted for between 52% and 62% of all health funding during the period of analysis, while government funding accounted for 22% to 32%, and Out of Pocket expenditures accounted for about 10%. (**Figure 6**)

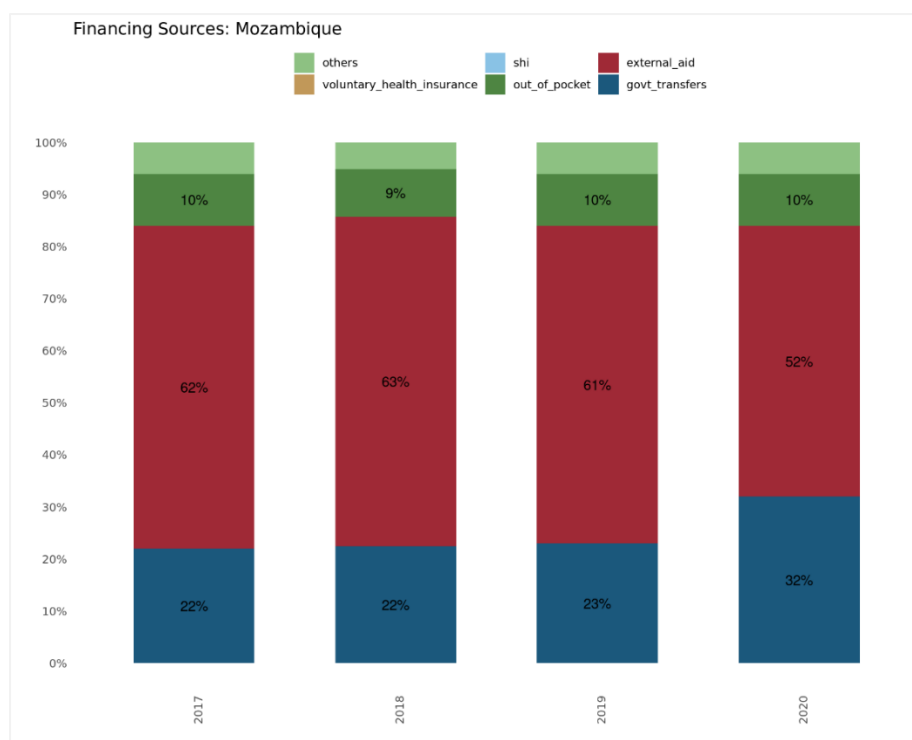


Figure 6: Health Financing Sources in Mozambique

Source: WHO Global Health Expenditure Database, Analysis by Consultant

Highlight

The low UHC service coverage index highlights the need for system wide improvements to facilitate access to quality essential healthcare in Mozambique.

Though improving, there was still a high dependence on donors in financing health in Mozambique. Increased government allocations are essential to guarantee sustainability of health services, including immunization services.

Immunization Coverage

Immunization coverage for all the selected vaccines declined between 2019 and 2022 as shown in **figure 7**. The least affected vaccine was Measles 1. This indicated challenges in access and utilization of immunization services possibly due to COVID-related restrictions, the aftermath of Cyclones, supply chain disruptions for the vaccine products.

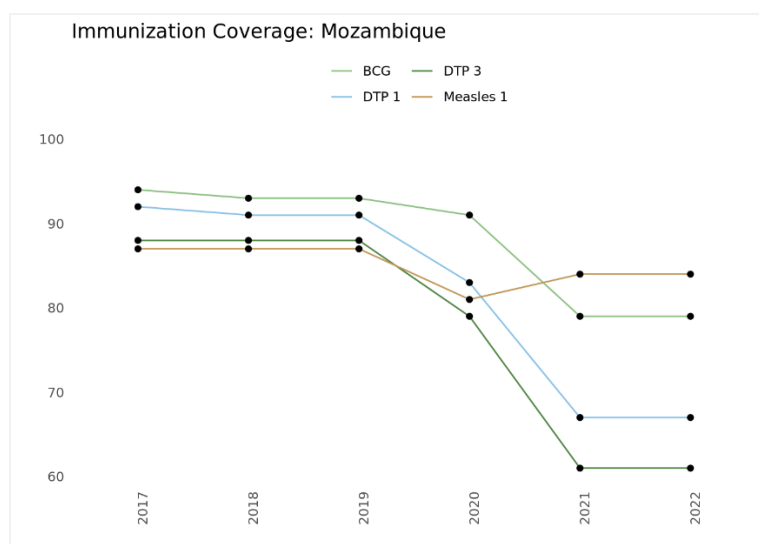


Figure 7: Immunization Coverage in Mozambique

Source: WHO/UNICEF, Joint reporting forms, Analysis by Consultant

Overall, lower income groups had higher under five mortality rates, and higher immunization coverage (**Figure 8**). There was a gap of more than 30 deaths per 1000 live births among the under-fives between the wealthiest and poorest income groups. The coverage gap for DTP3 and MCV2 was approximately 10 percentage points in favor of the poorest income groups. Paucity of data limited equity analysis of Zero Doses by income level.

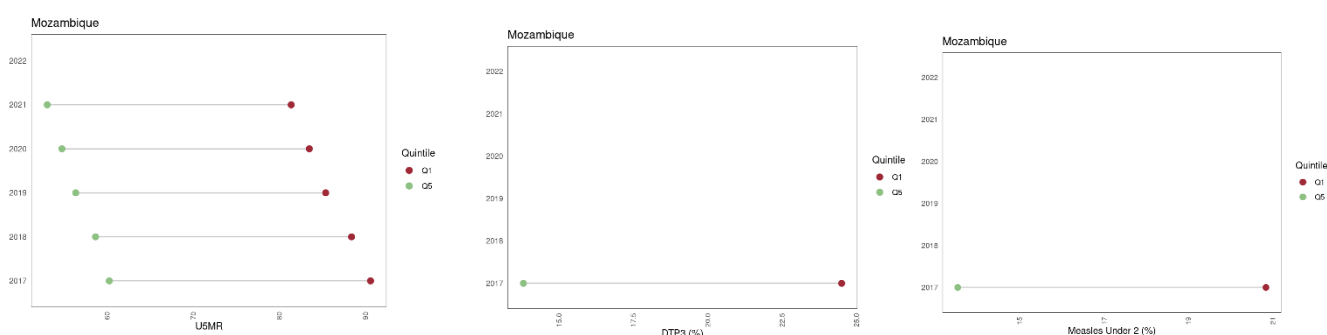


Figure 8: Equity Analysis of U5MR and Immunization coverage in Mozambique

Source: WHO Equity Database

Immunization Financing

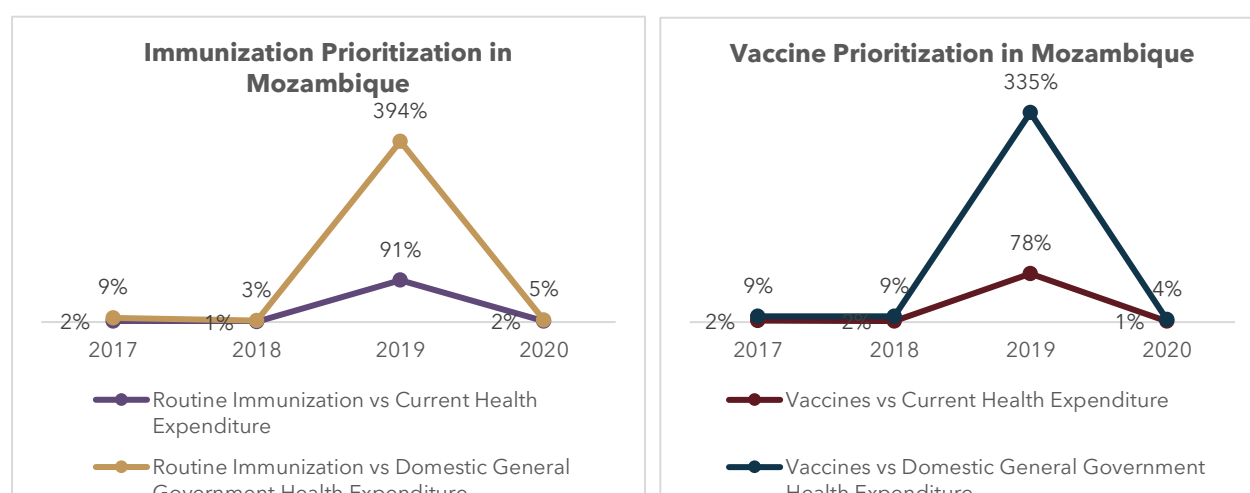


Figure 9: Prioritization of Immunization and Vaccines in Mozambique

Source: WHO/UNICEF, Joint reporting forms, Analysis by Consultant

Expenditures on Routine Immunization in Mozambique were unpredictable during the period of analysis. Routine immunization accounted for between 1% and 91% (2019) of the Current Health Expenditure; and between 3% and 400% of the Domestic General Government Health Expenditures between 2017 and 2020. Vaccine related expenditures also had a similar trend accounting for between 2% and 78% of the CHE, and between 9% to 335% of the Domestic General Government Expenditures (**Figure 9**).

The high donor contributions and relatively low government spend on health in 2019 may be attributed to the impact of humanitarian emergencies such as Tropical Cyclone Idai and Cyclone Kenneth.

Highlight

There is significant donor dependence in financing of health and immunization services in Mozambique. This significantly peaked in 2019 due to the humanitarian emergencies occasioned by Cyclone Idai and Kenneth. This donor dependence is also compounded by the unpredictable nature of the financing available for immunization services.

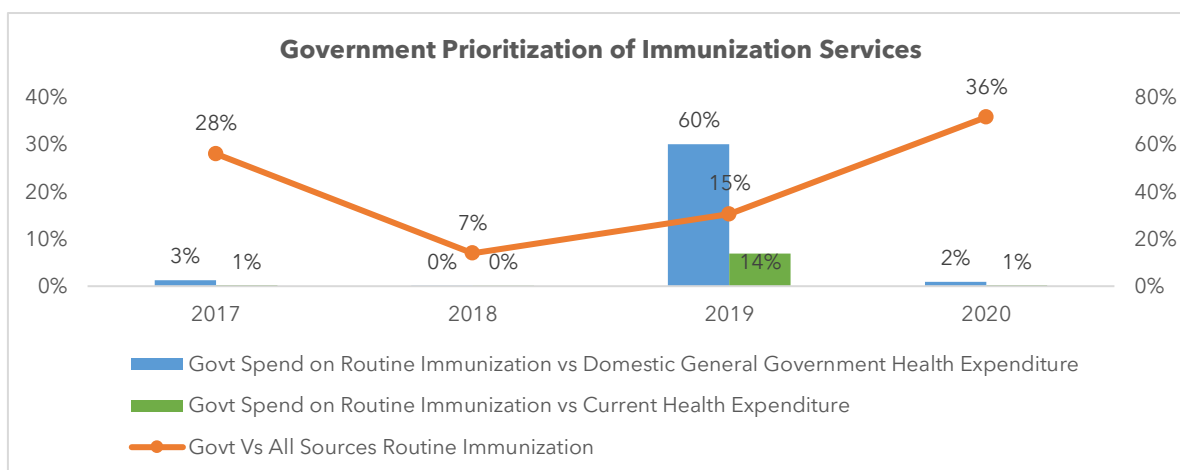


Figure 11: Government Prioritization of Immunization in Mozambique

Source: WHO/UNICEF, Joint reporting forms, Analysis by Consultant

Government funding as a source of immunization financing fluctuated between 7% to 36% between 2017 and 2020. This accounted for between less than 1% and 14% (2019) of Current Health Expenditures and below 1% and 60% (2019) of the Domestic General Government Health Expenditure. The highest allocations were at the peak of Cyclone Idai and Kenneth in 2019 (**Figure 11**).

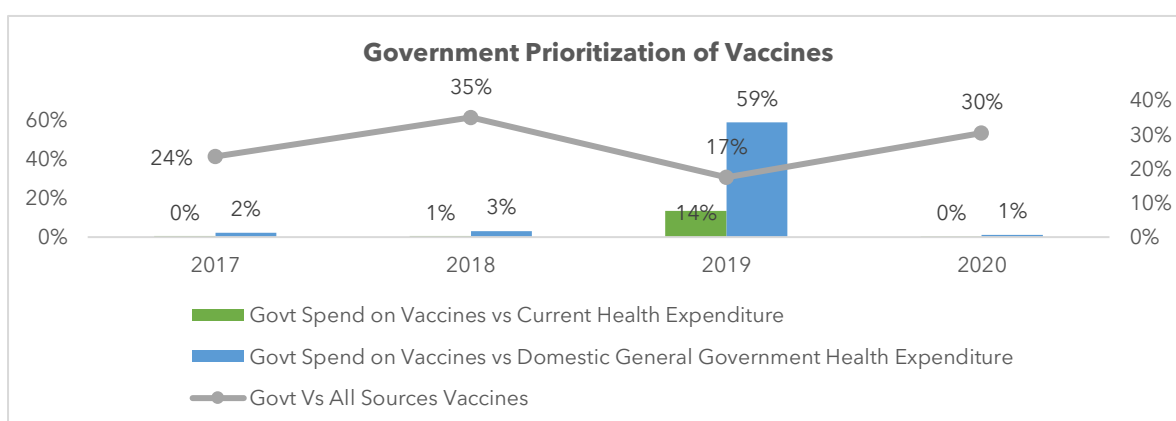


Figure 10: Government prioritization of Vaccines in Mozambique

Source: WHO/UNICEF, Joint reporting forms, Analysis by Consultant

During the period of analysis, Government financing as a source of vaccination financing varied between 17% (2019) to 35% (2018). This accounted for less than 1% of Current Health Expenditures except for 2019 (14%) and less than 3% of the Domestic General Government Health Expenditure except for 2019 (59%). **See figure 10.**

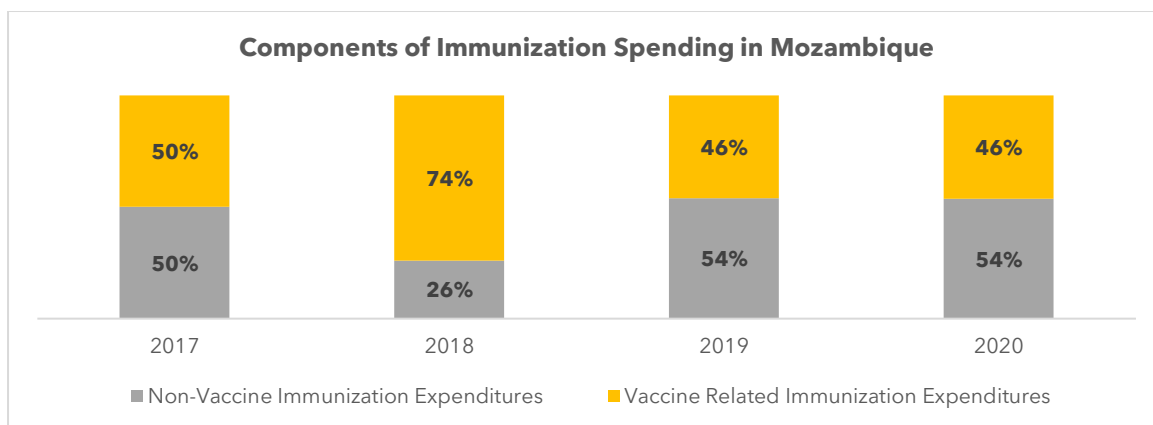


Figure 12: Components of Immunization Spending in Mozambique

Source: WHO/UNICEF, Joint reporting forms, Analysis by Consultant

Except for 2018 when the vaccines accounted for just 26% of all immunization spending, vaccine related expenditures accounted for between 50% and 54% of immunization spending during the period of analysis (Figure 12).

Highlight

There is still significant donor dependence for immunization financing in Mozambique. This threatens sustainability of immunization services. Progressive increments in government financing of health and immunization will help mitigate against donor dependence and financial hardship among households as they seek for immunization services.

Recommendations towards improving immunization services in Mozambique

- **Access to healthcare services:** Establish more healthcare facilities and mobile vaccination clinics in underserved areas.
- **Geographic barriers:** Invest in strengthening transportation infrastructure and consider innovative vaccine delivery methods such as drones.
- **Vaccine supply chain challenges:** Upgrade the cold chain infrastructure and implement robust supply chain management systems.
- **Vaccine hesitancy and cultural factors:** Launch public awareness campaigns and engage community leaders and trusted figures. Target outreach efforts to address specific challenges, promote female education, and facilitate dialogue with community and religious leaders.
- **Socioeconomic barriers:** Implement subsidies or free transportation and strengthen social safety nets.
- **Health worker shortages:** Invest in training and education programs and offer incentives for healthcare workers to work in underserved regions.
- **Infectious disease outbreaks and diversions:** Develop and implement contingency plans and allocate resources for both routine immunization and outbreak response.
- **Vaccine funding and health system weaknesses:** Advocate for consistent and increased government funding and explore sustainable funding models in partnerships with international organizations and donors.
- **Cultural and linguistic diversity:** Tailor immunization communication and engage community leaders and cultural influencers.

- **Civil unrest and conflict:** Collaborate with security and humanitarian agencies and implement strategies to maintain healthcare services during conflicts.
- **Data management and monitoring:** Improve data collection and reporting systems and implement real-time monitoring.
- **Climate-related challenges:** Develop disaster response plans and invest in climate-resilient healthcare facilities.

Recommendations towards improving immunization financing in Mozambique

1. **Government Funding:**

- Advocate for increased budget allocation for health and immunization with the executive and legislative teams.
- Advocate for enhanced collaboration and cross talk between the Ministry of Finance and Ministry of Health in planning and budgeting for health and immunization
- Emphasize immunization's cost-effectiveness in disease prevention.
- Advocacy for economic stability and strong Public Finance Systems to boost public funding capacity and efficiency.

2. **External Donor Dependency:**

- Advocacy for donor transition planning by the government to ensure sustainability of previously donor funded interventions, including immunization.
- Build domestic resource mobilization capacity through strengthened Public Finance Management (PFM) systems
- Advocacy for flexibility among donors to invest in health systems strengthening rather than vertical disease programmes.
- Advocacy for on-budget channeling of donor financing to improve visibility and accountability for donor funding; and strengthen country PFM systems.

3. **Vaccine Costs and Supply Chain:**

- Negotiate favorable vaccine prices.
- Increase investments in cold chain infrastructure.
- Implement cost-effective vaccine transportation.

4. **Human Resource and Health System Costs:**

- Streamline healthcare worker training and capacity-building.
- Strengthen healthcare infrastructure.
- Improve financial management and transparency within the health sector to optimize efficiency gains.

5. **Access and Disparities:**

- Target underserved regions with immunization campaigns.
- Enhance healthcare infrastructure in economically disadvantaged areas.

6. **Advocacy and Awareness:**

- Capacity building among Civil Society on Immunization financing for effective and targeted immunization advocacy.
- Conduct public awareness campaigns on the importance of immunization.
- Civil Society to continually engage political leaders for immunization funding prioritization.

7. **Data, Monitoring, and Accountability:**

- Allocate resources for data collection and monitoring.
- Strengthen inter-agency coordination and accountability mechanisms amongst stakeholders in immunization services.

8. **Vaccine Demand and Coordination:**

- Enhance forecasting and resource allocation strategies through continuous capacity development.
- Educate healthcare workers and communities on vaccine importance.
- Improve efficiency in resource utilization through collaboration.

9. **Health Insurance Coverage:**

- Expand health insurance for immunization.

- Provide subsidies or free vaccines for the uninsured.

10. **External Factors and Shocks:**

- Develop contingency plans to protect immunization programs during crises.
- Coordinate with disaster management agencies for effective resource use.

References

GAVI. (2022). *Gavi Alliance Eligibility and Transition Policy Version 4*. <https://www.gavi.org/types-support/sustainability/eligibility>

McIntyre, D., Meheus, F., & Rottingen, J. A. (2017). What level of domestic government health expenditure should we aspire to for universal health coverage? *Health Economics, Policy and Law*, 12(2), 125–137. <https://doi.org/10.1017/S1744133116000414>