



## Expanded Programme on Immunization (EPI) & COVID-19 Vaccination

MALAWI BUDGET BRIEF

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## Preserving Immunization Services During the COVID-19 Pandemic

### KEY MESSAGES AND RECOMMENDATIONS

- **Government allocated a total of MK750 million for the procurement of vaccines in 2021/22, the same level as in 2020/21, and an additional MK138 million for operational costs under the expanded programme on immunization (EPI).**

**Recommendation:** The Government is encouraged to sustain its investments in vaccines and immunization, to preserve the remarkable gains realized to date in terms of coverage and reduction of the incidence of major illnesses.

- **Government spending on procurement of vaccines has consistently fallen short of the estimated financial needs, by 79% in 2021/22, as the Ministry of Health requested MK3.5 billion for routine immunization procurement but was only allocated MK750 million.**

**Recommendation:** The Ministry of Health (MoH) is encouraged to continuously engage the Treasury to ensure allocations are in line with quantified needs for routine immunizations and co-financing obligations for new vaccines, under the Gavi arrangement.

- **Low domestic financing for vaccines is partly linked to the extensive earmarking of the health ORT budget, which reduces the discretionary budget from which MoH can allocate to immunization supplies.**

**Recommendation:** The MoH is encouraged to continuously engage the Treasury to rationalize the extent and areas of earmarking of the MoH budget (Vote 310), with the view of expanding the discretionary budget available to the MoH, helping thus to create fiscal space for immunization supply procurements.

- **The EPI faces several budget execution challenges, including untimely release of Government funds for vaccine payments and heavy underutilization of donor funds.**

**Recommendation:** The Government should prioritize timely release of foreign exchange for vaccine payments to guarantee steady supply of vaccines and ensure every child gets the immunization they need on time. With respect to donor funds, there is need to foster better coordination between the MoH, Gavi and decentralized levels to help ensure effective grant implementation and enhanced financial absorption.

- **COVID-19 cases have been on the rise since mid-December 2021 as the whole world is experiencing increment of COVID-19 cases due to the Omicron variant. To curb the further increase of COVID-19 cases, Government has introduced new measures including restricting indoor and outdoor gatherings to 100 and 250 people, respectively and extending vaccination outreach efforts close to people through door to door and mobile outreaches.**

**Recommendation:** Government should continue to implement awareness campaign on COVID-19 prevention and vaccination to control the spread of the virus and increase the uptake of COVID-19 vaccines.

- **Government allocated MK5 billion to support the COVID-19 response in the health sector, with MK2.72 billion directed towards COVID-19 response for local government authorities (LGAs). However, LGAs received a flat allocation of MK100 million (except MK20 million for Likoma), without consideration of the differences in districts' COVID-19 burden and financial needs.**

**Recommendation:** Government should ensure evidence-based planning and budgeting, flexible budget management, strengthening the application of available public finance management (PFM) frameworks and guidelines such as the revised health resource allocation formula (HRAF) and continuously building the capacity of health planners, including at district level in strategic planning, budgeting and spending in the framework of the continued COVID-19 emergency.

- **Malawi has started a phased rollout of the malaria vaccine, GlaxoSmithKline (GSK)'s RTS, S/AS01e, to children under the age of two years under the EPI, in selected areas in eleven selected districts, following a 2021 recommendation by the World Health Organization (WHO) for broader use of the vaccine.**

**Recommendation:** The roll-out of the malaria vaccine is a significant development for Malawi with the potential to significantly boost malaria prevention, reduce the cases of malaria related deaths for under five children and save healthcare costs.



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# INTRODUCTION

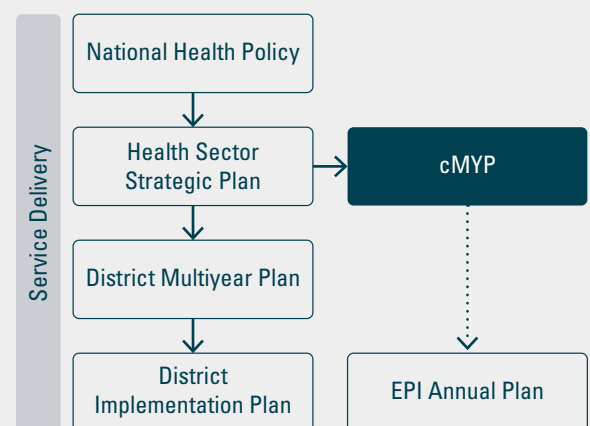
This budget brief assesses the extent to which the 2021/22 Government Budget contributed to the implementation of the Expanded Programme on Immunization (EPI)<sup>1</sup> and COVID-19 vaccination in Malawi. It provides an analysis of the size and composition of the EPI budget for 2021/22 and a summary of recommendations on critical financing issues related to adequacy, allocative efficiency and effectiveness of

the current and past spending on EPI. This will help the Government in for effective decision making in public financing immunization. The information used in this budget brief is based on data obtained from the Ministry of Health (MoH) and Ministry of Finance. Additional information on the specifics of the EPI in Malawi can be found in UNICEF’s Child Immunization Budget Brief of 2020/21, available on UNICEF’s website<sup>2</sup>.

# OVERVIEW OF IMMUNIZATION IN MALAWI

**Child immunization remains a key preventive health priority area for the Government of Malawi.** The implementation of immunisation services is guided by the National Health Policy and the second Health Sector Strategic Plan (HSSP II). Through the essential health package (EHP), the HSSP II defines priority health interventions for the entire health sector, including immunisation. At a more operational level, the EPI programme is guided by a five-year adjustable country multiyear plan (cMYP). The cMYP quantifies and costs vaccine requirements which form the basis of annual vaccine procurements, which is centralised and is the exclusive mandate of the EPI programme. The cMYP is operationalised by the annual plan of the EPI programme which feeds into the consolidated annual plan of the MoH headquarters.

**Figure 1**  
Overview of the Immunization Policy and Strategic Framework of Malawi



1 The programme was established in 1978 with the aim of reducing infant morbidity and mortality rates due to vaccine preventable diseases by providing quality immunization services. The current Malawian Expanded Programme on Immunization (EPI) defines basic vaccinations as one dose of BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (excluding polio vaccine given at birth), two doses of rotavirus vaccine, and three doses of pneumococcal vaccine provided at 6, 10 and 14 weeks of age and one dose of measles vaccine at 9 months of age.

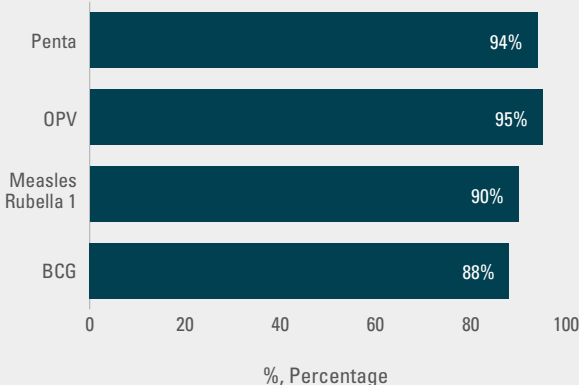
2 <https://www.unicef.org/esa/media/8996/file/UNICEF-Malawi-2020-2021-Immunization-Budget-Brief.pdf>

At sub-national level, district multiyear plans (MYPs) translate the HSSP and other national level strategies such as the cMYP. The MYPs focus on expanding EHP provision. Annually, district implementation plans (DIPs) are prepared, deriving from the multi-year plans and monitoring and evaluation reports. The DIP is the basis for the health budget of a District Council. DIPs focus on routine immunisation delivery and include activities such as local transportation of vaccines, cold chain maintenance, immunisation outreach clinics and requisite human resources for health training. However, there are significant gaps between the cMYP process and the multi-year planning process at the district level.

**Malawi administered over 90% of the planned vaccination targets in three out of four categories of traditional vaccines (Figure 2).** In 2021, Government successfully administered traditional vaccines with OPV being the highest as 95% of the planned OPV was administered. BCG had the lowest execution rate with 88% of the planned vaccination rolled out. All this was achieved in the face of the pandemic which constrained the health workforce especially in the first quarter of 2021.

**Figure 2**

Proportion of Administered Traditional Vaccines Out of Planned Vaccination in 2021



Source: MoH, 2021

## MALARIA VACCINATION



**Malawi has started a phased rollout of the malaria vaccine under the EPI<sup>3</sup>, following the World Health Organization (WHO) 2021 recommendation for the broader use of GlaxoSmithKline (GSK)'s RTS, S/AS01e to reduce childhood illness and deaths from malaria.**

Malawi, alongside Ghana and Kenya, is one of three African countries that is carrying out the Malaria Vaccine Implementation Programme (MVIP) with support from WHO and in collaboration with partners, including PATH, a nonprofit organization, and GSK, the vaccine manufacturer. The introduction of the malaria vaccine is expected to significantly boost malaria prevention and reduce the cases of malaria related deaths for under five children and save healthcare costs. For instance, large scale clinical testing results from seven African countries (including more than 1,600 children in Malawi) revealed that the vaccine prevented about 4 in 10 cases of malaria and about 3 in 10 cases of life-threatening, severe malaria over a four-year period (2009-2014) and resulted in significantly fewer hospitalizations.<sup>4</sup>

<sup>3</sup> The vaccine is currently being administered in a phased approach in selected areas in 11 selected districts of Karonga and Nkhata Bay (Northern Region); Mchinji, Ntchisi, and Lilongwe Rural (Central Region); and Mangochi, Machinga, Balaka, Phalombe, Chikwawa, and Nsanje (Southern Region).

<sup>4</sup> [https://www.who.int/docs/default-source/immunization/mvip/rt-s-malawi-04\\_19.pdf?sfvrsn=cbfdd591\\_2&download=true](https://www.who.int/docs/default-source/immunization/mvip/rt-s-malawi-04_19.pdf?sfvrsn=cbfdd591_2&download=true)

## COVID-19 VACCINATION



**Recognizing the serious threat COVID-19 poses, Government developed the National Coronavirus Disease (COVID-19) Preparedness and Response Plan.**

The plan was developed to establish operational procedures for preparedness and response to COVID-19 based on risks identified by the Ministry of Health (MoH) and the World Health Organization (WHO). To contain the pandemic, Government of Malawi has led in the development and implementation of three National Coronavirus Disease (COVID-19) Preparedness and Response Plans, the last of which lapsed at the end of December 2020. The current plan builds on successes made and lessons learnt from implementation of the two initial plans, and it provides a short to medium term strategic anchor against COVID-19 between June 2021 to June 2022. The plan estimates that MK 358 billion shall be required to contain the pandemic.

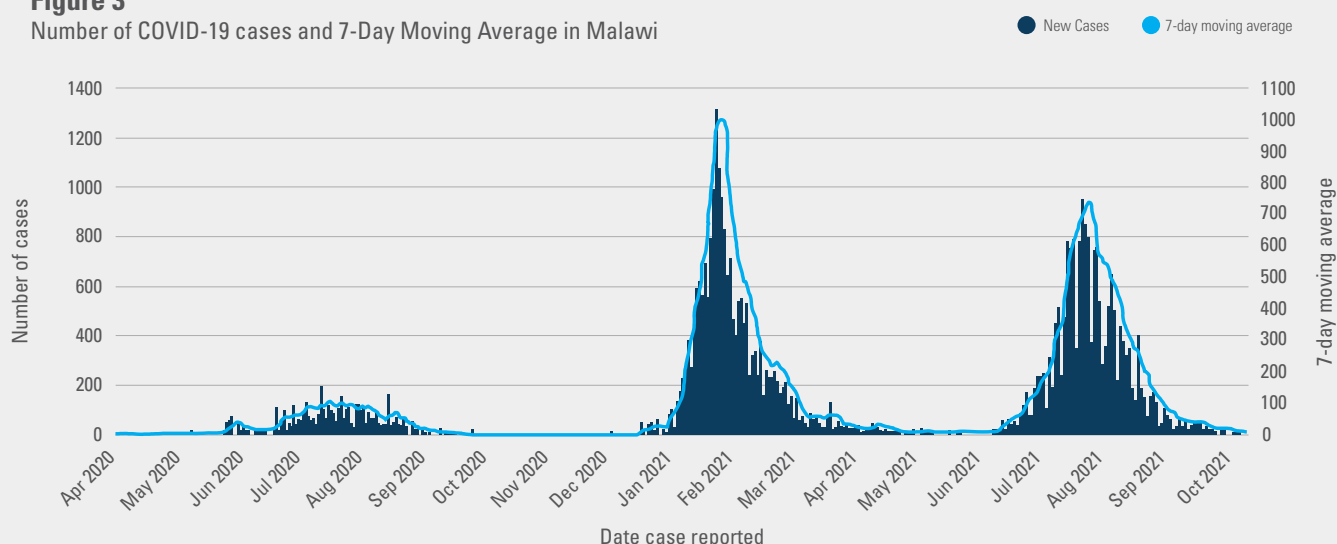
**Government launched the implementation of the Malawi COVID-19 Socio-Economic Recovery Plan (SERP) 2021-2023.** The SERP outlines some of the key interventions for Malawi to build back much faster from COVID-19. The SERP is aligned to the MW2063 First 10 Year Implementation Plan (MIP-1) and among others front-loads socio-economic infrastructure investments some of which are part of the MIP-1. It seeks to revive Malawi’s economy through investments costing over US\$700 million. The SERP will mainly focus on addressing current economic challenges largely caused by COVID-19. These include imported inflation and low levels of forex generation. The stimulants defined in the SERP will target sectors that are in state of readiness with regard to production and availability of markets.

**COVID-19 cases have been on the rise since mid-December 2021 as the whole world is experiencing increment of COVID-19 cases due to Omicron variant.**

The omicron variant came at a time when Malawi was returning to normality due to a steady decline of COVID-19 cases between August and early December 2021. During this period, the number of COVID-19 cases, deaths, and admissions to Emergency Treatment Units (ETUs) declined (Figure 3). To curb the further increase of COVID-19 cases, Government has introduced new measures including restricting indoor gatherings to 100 and outdoor gatherings to 250 people. As of 1st February 2022, Malawi had cumulatively registered 84,572 confirmed cases out of 529,674 tests, with a total of 69,474 recoveries (82.15%) and 2,563 deaths, representing a Case Fatality Rate (CFR) of 3.03%, above the Global CFR (<https://covid19.health.gov.mw>).

**Figure 3**

Number of COVID-19 cases and 7-Day Moving Average in Malawi



Source: UNICEF, 2021

**Vaccination for COVID-19 overstretched the health work force thereby disrupting routine immunization.**

As of 1st February 2022, 776,356 people had been fully vaccinated against COVID-19, representing 7% of the population Malawi is targeting to vaccinate by December 2022. Currently, Malawi has about 700,000 and 400,000 doses of J&J and Pfizer vaccines which provide room for vaccinating the remaining people (about 700,000) with only first dose of AstraZeneca. However, the demand for vaccine has been decreasing persuading MoH to extend vaccination services close to the people through door to door and mobile outreaches to the elderly, people with disabilities and those in hard-to-reach areas. Further, Government rolled out vaccination of teenagers aged 12-17 starting on 1st January 2022, using the Pfizer vaccine. These efforts have the potential of increasing the population vaccinated against COVID-19.

**Table 1**

COVID-19 Indicators – 1st February 2022

Indicator	Status
Tested Samples	529,674
Cumulative Confirmed Cases	84,572
Recoveries	69,474
Deaths	2,563
Fully Vaccinated	776,356
First Dose AstraZeneca	1,098,898
Second Dose AstraZeneca	399,078
Full dose Johnson and Johnson	377,275
First dose Pfizer	7,512
Second dose Pfizer	7

Source : <https://covid19.health.gov.mw>

# SIZE AND COMPOSITION OF EPI SPENDING

**The health sector budget has been steadily maintained at the level of 9.4% of the National Budget in 2021/22,** but allocations have now been overtaken by transport and public works (10.5%) to become the fourth national spending priority after education (16.5%), agriculture (14.3%), and not counting debt servicing (15.1%). In 2021/22, Government allocated a total of MK187 billion to the health sector, representing a 12% increase in nominal terms from 2020/21.

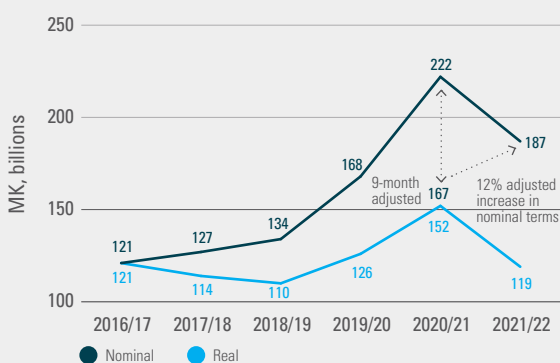
**The Government allocated a total of MK888 million for the EPI in 2021/22, translating to 0.5% of the total health sector budget.** This represents almost the same level when compared to the nominal allocation of 2020/21, despite the overall health budget increased by 12% in nominal terms

**The Government allocated a total of MK750 million for the purchase of vaccines in 2021/22, representing no change in nominal terms when compared to 2020/21.**

In addition to the vaccine budget, the MoH allocated MK138 million towards EPI related operational costs<sup>5</sup>, an increase of 8% in adjusted nominal terms. As a share of the total EPI budget, the allocation for operational costs increased from 15% in 2020/21 to 16% in 2021/22.

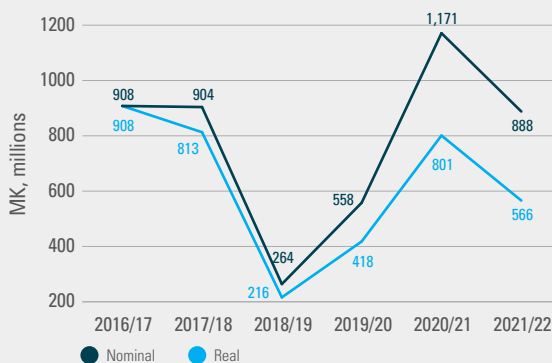
**Government spending on vaccines have consistently fallen short of the estimated financial needs (Figure 6).** In 2021/22, the MoH requested a total of MK3.5 billion for co-financing and routine immunization procurement, but was only allocated MK750 million, widening the funding gap from 77% in 2020/21 to 79% in 2021/22. In allocating resources to vaccine procurement, the MoF uses historical estimates and does not consider cost estimates provided by the MoH. As shown in Figure 6, Government has come short to meet the immunization financial needs and relied on support from the HSJF to meet its EPI budgetary needs. The HSJF committed US\$1.5 million to EPI in 2021/22.

**Figure 4**  
Trends in Health Sector Spending



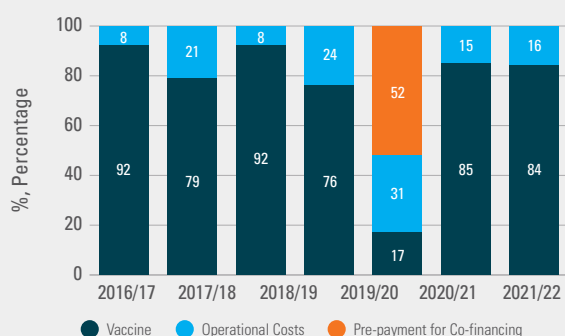
Source: Government Budget Documents (2017/18-2021/22)

**Figure 5**  
Trends in EPI Spending



Source: MoH (2021)

**Figure 6**  
Trends in the Composition of EPI Spending



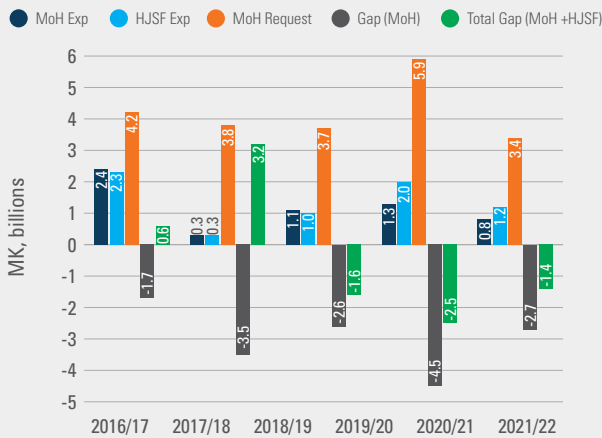
Source: Ministry of Health (2021)

**The MoH allocated MK138 million towards EPI related operational costs<sup>5</sup>, an increase of 8% in adjusted nominal terms**

<sup>5</sup> Fuel and lubricants, maintenance of medical equipment, subsistence allowances and other consumables

**Figure 7**

Co-Financing and Routine Immunization Procurement Financing Gaps



Source: MoH (2020)

Note: The abbreviation “Exp.” refers to “expenditure.” The amounts for 2020/21 are budget estimates.

**Low domestic financing for vaccines is partly linked to the extensive earmarking of the health ORT budget,** which reduces the discretionary budget from which MoH can allocate to immunization supplies procurement. Table 2 shows that the discretionary ORT budget under the MoH declined by 22% between 2019/20 and 2020/21. The actual decision on how much is allocated towards procurement of vaccines is undertaken within the DPPD based on the final ceiling provided by the Treasury after the budget hearing, and their assessments, including of available unearmarked funding. However, this decision-making role of the DPPD is severely constrained by the ear-marking decisions of Treasury that leave little room for discretion in resource allocation. Earmarking reduces the ability of

DPPD to influence budget allocations as the budget ceiling amount that is left at the discretion of MOH is so low and not adequate to cater for essential administrative services.

**Table 2**

Changes in Health Sector ORT Budgets (by Extent of Discretionality) between 2017/18 and 2020/21, amounts in MK billions

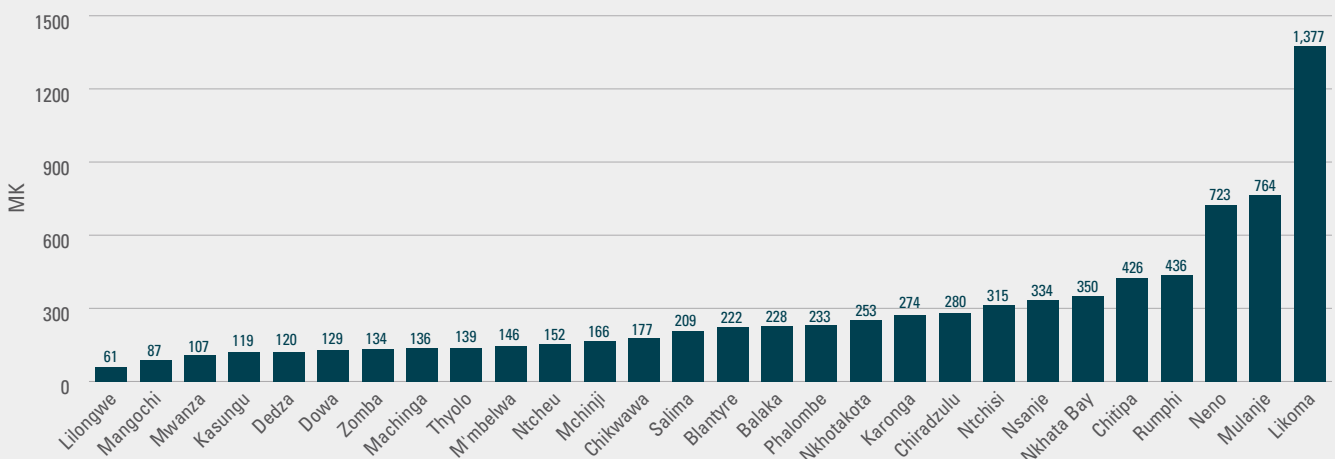
Category	2017/18	2018/19	2019/20	2020/21	Level of discretionality
Central Hospital Drugs	8	8.5	10.6	10.7	Earmarked
Generic ORT & Utilities (MoH)	6.45	5.03	3.65	3.23	Discretionary
Central Hospital Operations	3	4.9	5.1	3.56	Discretionary
Ambulances	0	4	5.86	2.26	Earmarked

Source: MoH (2021)

**Government allocated MK5 billion to support the COVID-19 response in the health sector, with MK2.72 billion directed towards COVID-19 response for local government authorities (LGAs).** However, LGAs received a flat allocation of MK100 million (except MK20 million for Likoma), without consideration of the differences in districts’ COVID-19 burden and financial needs, among others. The distribution of the district COVID-19 ORT budget does not consider differences in the COVID-19 burden and financial needs by districts. This results in significant per capita ORT variations by district as shown in Figure 8. The allocation is mainly for the purposes of testing, screening, supplies, surveillance, enforcement and coordination and monitoring.

**Figure 8**

Per Capita Health ORT COVID-19 Budget by District



Source: National Local Government Finance Committee (NLGFC) 2021/22

## BUDGET CREDIBILITY AND EXECUTION

### The EPI faces several budget execution challenges.

According to a recent report on Immunization and Nutrition Budget Process Mapping launched by UNICEF (2021), these are linked to weak alignment between shipment schedules and funds release; slow processing of vaccines payments at the Reserve Bank of Malawi (RBM) due to low forex prioritization; weak vaccines budget accounting capacity of MoH; weak communication among key immunization budget process actors (EPI Programme, DPPD and MoH Accounts Department) within Government and high wastage rates (in some cases as high as 80%) for vaccines at facility level that create avoidable financing gaps.

## FINANCING THE EPI AND COVID-19 VACCINATION

**The EPI is funded by the Government (MoH), Gavi and the Health Services Joint Fund (HSJF) and GlaxoSmithKline (GSK).** The Gavi, Vaccine Alliance supports the procurement of new vaccines and injection materials. The GAVI funds, which come as off-budget, are channeled directly to UNICEF Supply Division whenever vaccine procurement is to be initiated. The Government, supported by the HSJF, is responsible for funding traditional vaccines and co-financing new vaccines, in line with Gavi New Vaccine Support requirement for the Government to contribute US\$0.20 per dose. The Government's allocation is however not disaggregated to reflect the distribution of the funds for procurement of traditional vaccines and for co-financing new vaccines. In addition to vaccine procurement, the MoH also contributes to the operational costs related to ensuring continuous immunization service delivery.<sup>6</sup> The HSJF is also responsible for paying towards related clearing costs as well as other in-country logistical costs for the vaccines. The GSK is responsible for funding the procurement and rollout of malaria vaccines.

**GAVI is the biggest financier of the EPI (Figure 9 and Table 3).** GAVI has been contributing an average of 75% to the total financing of the EPI in Malawi between 2017/18 and 2020/21, followed by the HSJF (16%) and Government

(9%) (Figure 9). The HSJF has been supporting the procurement of vaccines since 2017/18. However, with an average 91% of funding coming from donors, the current funding arrangement for the EPI is highly unsustainable and places those in need of vaccinations in a vulnerable position should donor funding be reduced. This should be addressed in subsequent years through progressively increasing Government allocation towards vaccines procurement.

**Table 3**

Trends in Vaccine Financing by Source, Absolute Amounts

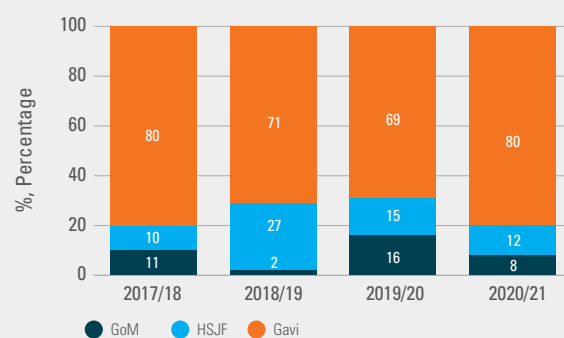
Financier	2017/18	2018/19	2019/20	2020/21
GoM	2,429,478	299,320	1,089,320	1,333,333
HSJF	2,275,160	3,395,704	1,002,305	2,000,000
GAVI	18,339,078	9,011,251	4,763,854	13,719,500
<b>Total Contribution</b>	<b>23,043,716</b>	<b>12,706,275</b>	<b>6,855,479</b>	<b>17,052,833</b>

Source: MoH (2021), HSJF Expenditure and Budget Documents and GAVI<sup>7</sup>

**The funding for the procurement of COVID-19 vaccines is mostly coming from the World Bank.** In June 2021, the World Bank approved US\$30 million in additional financing to support Malawi in the acquisition and deployment of safe, affordable and effective COVID-19 vaccines. This came as an additional financing for the existing Malawi's COVID-19 Emergency Response and Health Systems Preparedness<sup>8</sup> project bringing the World Bank contributions to the country's health sector COVID-19 response and vaccination efforts to a total of US\$37 million. In addition, the U.S has provided US\$21.5 million in support of the Malawi's fight against COVID-19. The US also contributed US\$2 billion to COVAX facility where Malawi expects to receive 1.5 million COVID-19 vaccines.<sup>9</sup>

**Figure 9**

Trends in Vaccine Financing by Source (%)



Source: MoH (2021)

<sup>6</sup> These are supply chain related expenses, which include vaccine waste management costs, vaccines and injection materials, quantification exercises; data management including efforts for improving data quality; and operational costs which include printing of temperature monitoring charts and stock books, electricity, and maintenance of generators for vaccine cold rooms among others.

<sup>7</sup> For more details, see the Immunization and Nutrition Budget Process Mapping Report produced by UNICEF (2021)

<sup>8</sup> <https://projects.worldbank.org/en/projects-operations/project-detail/P173806>

<sup>9</sup> <https://mw.usembassy.gov/usg-commits-2-billion-to-covax-vaccine-fund-from-which-malawi-is-obtaining-its-covid19-vaccines/>



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**For more information, contact:**

**Tedla Damte**  
Chief of Health  
UNICEF Malawi,  
Lilongwe  
tdamte@unicef.org

**Beatrice Targa**  
Chief of Social Policy  
UNICEF Malawi,  
Lilongwe  
btarga@unicef.org

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Airtel Complex Area 40/31  
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