



WHO IS SAFE ?

THE IMPACT OF INACTION ON IMMUNIZATION.

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ABOUT WACI HEALTH

WACI Health is an African regional advocacy organization which influences political priorities through an effective, evidence-driven Pan-African civil society voice and action. WACI champions the end of life threatening epidemics, and improved health outcomes for all in Africa, by influencing political priorities through evidence driven Pan-African civil society voice and action.

WACI Health's exists is to champion the end of life-threatening epidemics and health for all in Africa by influencing political priorities through an effective , evidence driven Pan-African civil society voice and action. Its strategic goals are ; Increased and effective resources for health, Adoption of regional and national policies and reforms that improve health and equity, Enhanced accountability in health governance and delivery, Health systems that are equitable and responsive to peoples needs.

Its work is guided by the core values of Tolerance, Accountability, Leadership, Authenticity, and Learning. WACI Health believes in strengthening Civil Society, promoting justice

and equity, fostering Innovation and Learning, nurturing Leadership, and maintaining a functioning organization.

WACI Health is a member of numerous national and international networks, working groups, and organizations to leverage synergy in development work. Platforms that we lead or co-lead in driving this kind of organizing include the Africa Free of New HIV infections, which is a network of HIV prevention advocates in Africa (AfNHi); Global Fund Advocates Network (GFAN) Africa; Civil Society Platform on Health in Africa (CiSPHA), Youth Leaders for Health (YL4H), UHC2030 Civil Society Engagement Mechanism and the Communities and Civil Society ACT-A platform supported communities and Civil society representatives in the Access to COVID Technologies Accelerator. We are also a partner of the ACTION Global Health Advocacy partnership. Read more here: <https://wacihealth.org/publications/>

ABOUT GAVI CSO CONSTITUENCY

The Gavi CSO Constituency is an initiative that was established in 2010 to engage Civil Society Organizations (CSOs) globally as key stakeholders, allowing them to advocate for community perspectives at the policy level.

The constituency includes over 450 member CSOs, ranging from large international NGOs to local and national CSOs, as well as national paediatric associations and NGO consortiums.

Affiliate CSOs play a critical role in supporting immunization services and participate in all aspects of the Gavi Alliance, including governance and policy committees. The constituency's mission is to ensure that every person has access to vaccination and basic health services, regardless of their origin, gender, or social status, upholding the principle of leaving no one behind.

ABOUT PATH

PATH is a global nonprofit organization committed to advancing health equity through innovation and partnerships. With a mission to address emerging health threats, PATH collaborates with governments, communities, and private-sector actors to co-create and implement global, national, and local interventions.

PATH focuses on developing and delivering innovative solutions, including vaccines, diagnostics, and medical devices, while strengthening health systems to ensure equitable, accessible, and high-quality care.

By addressing the determinants of health and prioritizing human rights, PATH challenges inequities in global health programming and emphasizes country and community leadership in defining health priorities and approaches.

PATH's strategy highlights the importance of respectful partnerships, inclusive innovation, and community-focused priorities to create fit-for-purpose health interventions.

PATH engages countries and communities in the design process, ensuring that solutions are tailored to local needs. PATH's work is supported by six key enablers: expertise and evidence, diversity and inclusion, continuous learning, trusted relationships, operational agility, and advocacy.

These enablers allow PATH to adapt to changing health landscapes and deliver impactful interventions across Africa, Asia, the Americas, and Europe, ultimately contributing to a more equitable and resilient global health system.

ABBREVIATIONS

ADI	Addis Declaration on Immunization
Africa CDC	The Africa Centers for Disease Control and Prevention
AU	The African Union
CSO	Civil Society Organization
DTP	Diphtheria, tetanus toxoid and pertussis-containing vaccine
EAC	East African Community
ECOWAS	Economic Community of West African States
EPI	Expanded Program of Immunization
GDP	Gross Domestic Product
GNI	Gross National Income
IA2030	Immunization Agenda 2030
MCV	Measles Containing Vaccine
REC	Regional Economic Communities
THE	Total Health Expenditure
WHA	World Health Assembly
WHO	World Health Organization

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EXECUTIVE SUMMARY

BACKGROUND

Immunization is a crucial component of primary health care, preventing 3.5–5 million deaths annually from diseases such as diphtheria, tetanus, pertussis, influenza, and measles. It is a fundamental human right and one of the most cost-effective health investments. Vaccines are essential for preventing and controlling infectious disease outbreaks, supporting global health security, and combatting antimicrobial resistance. The Covid-19 pandemic strained health systems globally, but recovery efforts are underway, with WHO initiatives aiming to improve vaccination coverage. The Immunization Agenda 2030 (IA2030) sets a global vision for vaccines and immunization from 2021 to 2030, aiming to ensure everyone benefits from vaccines for good health and well-being.

Consultancy Objectives

This consultancy follows a previous quantitative assessment by PATH/WACI Health on the progress of selected African Union member states in financing immunization services. It aims to provide qualitative insights into the contextual factors influencing immunization investments in these countries. The specific objectives are:

1. Mapping the financing and sustainability of immunization in 10 African Union member states (Comoros, DRC, Ethiopia, Kenya, Malawi, Mozambique, Nigeria, Senegal, South Sudan, and Uganda).
2. Documenting stakeholders' inputs on immunization sustainability in these countries.
3. Preparing a synthesis report for dissemination to regional and national policymakers, communities, and CSOs.

METHODS

This retrospective qualitative assessment of immunization financing across 10 African Union member states (Comoros, DRC, Ethiopia, Kenya, Malawi, Mozambique, Nigeria, Senegal, South Sudan, and Uganda) was conducted between August and November 2024. It targeted key immunization stakeholders, including representatives from Ministries of Health, WHO, UNICEF, GAVI, CSOs, children and implementation partners. Data was collected through key informant interviews with purposively selected respondents, guided by a semi-structured interview guide.

Thematic analysis was performed using a grounded theory framework, and findings were validated through triangulation, internal check-ins, and a stakeholder validation workshop. Ethical considerations included obtaining informed consent from all respondents. Limitations included conflicting priorities and language differences, which were mitigated by flexible scheduling and the use of translators.

FINDINGS

Cluster Context

The sampled countries have significant socio-economic challenges, with high poverty levels and low health system performance. Infants and children under five years old, who are the primary targets for childhood vaccines, form a substantial part of the population. However, the health systems in these countries are underfunded, with low tax revenues and high debt levels limiting the fiscal space for health and immunization services.

Impact of Inaction - Coverage and Equity

The inadequate investments in health and immunization have led to low immunization coverage rates, especially in conflict-affected regions like Nigeria, Ethiopia, DRC, and South Sudan. Consequently, there is a notable increase in Zero dose children and under-immunized children.

This results in higher incidences of vaccine-preventable diseases, including Measles, Mumps, Diphtheria, Polio and Cholera, affecting zero-dose children, under-immunized children and the general public.

Additionally, there are significant disparities in health outcomes based on income levels, with the poorest groups experiencing higher under-five mortality rates and lower DTP3 coverage.

The lack of investment also leads to high out-of-pocket payments and increased vaccine hesitancy due to insufficient awareness and sensitization efforts. Further, the limited government investments result in weak cold chain systems and engender significant vaccine wastage.

RECOMMENDATIONS

1. Increase Government Investments

Governments should increase budgetary allocations to health and immunization to ensure sustainability of immunization services.

2. Increase Partner Investments

Encourage increased investments for immunization from partners such as GAVI, especially for countries with low coverage rates, high zero-dose cases, high under-immunized children and tenuous circumstances such as conflict, and natural disasters.

3. Health Systems Strengthening for efficiency

Countries should prioritize investments in infrastructure, supply chains, cold chain systems, and requisite human resources for health to minimize immunization system wastages.

4. Community Engagement

Governments should conduct awareness campaigns and foster partnerships with local leadership and civil society to improve vaccine acceptance.

5. Accountability and Governance

Governments in concert with CSOs and partners should invest in strengthening accountability structures and fight corruption to ensure efficient immunization resource management.

6. Regional Cooperation

Governments should collaborate under the auspices of the Africa CDC or respective regional economic blocks on cross-border immunization services and domestic vaccine manufacturing to leverage shared capacities.

7. Domestic Vaccine Production

Build upon existing quality and regulatory systems to support regional vaccine manufacturing initiatives.

8. Targeted Immunization Campaigns

Governments, CSOs, partners should jointly focus on under-immunized and zero-dose children to boost vaccine acceptance and coverage.

9. Advocacy for preventive services

CSOs and partners should champion advocacy for prioritization of preventive and promotive services by governments in the region as these are more cost effective.

CONCLUSION

The findings of this assessment highlight significant challenges in the health and immunization systems of the 10 sampled countries, characterized by low public funding, high out-of-pocket payments, and substantial donor dependence.

These financial constraints, coupled with socio-economic pressures and poor health system performance, result in low immunization coverage and inequities in child health outcomes.

To address these issues, increased government and partner investments, health system strengthening, community engagement, and regional cooperation are essential. Without these measures, the health and well-being of vulnerable populations, particularly children, will continue to be at risk.

1. INTRODUCTION

BACKGROUND

Immunization currently prevents 3.5-5 million deaths every year from diseases like diphtheria, tetanus, pertussis, influenza and measles. Immunization is a key component of primary health care and an indisputable human right. It is also one of the best health investments money can buy. Vaccines are also critical to the prevention and control of infectious disease outbreaks. They underpin global health security and will be a vital tool in the battle against antimicrobial resistance.

The Covid-19 pandemic, associated disruptions, and Covid-19 vaccination efforts strained health systems in 2020 and 2021. However, from a global perspective, recovery is on the horizon. WHO is working with countries and partners to improve global vaccination coverage, including through initiatives adopted by the World Health Assembly in August 2020.

Immunization Agenda 2030, (IA2030) sets an ambitious, overarching global vision and strategy for vaccines and immunization for the decade 2021-2030. It was co-created with immense contributions from countries and organizations around the world. It draws on lessons from the past decade and acknowledges continuing and new challenges posed by infectious diseases. The strategy has been designed to respond to the interests of every country and intends to inspire and align the activities of community, national, regional and global stakeholders towards achieving a world where everyone, everywhere fully benefits from vaccines for good health and well-being. IA2030 is operationalized through regional and national strategies and mechanisms to ensure ownership and accountability and a monitoring and evaluation framework to guide country implementation.

Regional Initiatives and Frameworks

The African Union (AU): The African Union (AU) has been actively involved in promoting immunization and strengthening health systems across the continent, there are several initiatives and frameworks which exist within the AU's broader health agenda that contribute to immunization efforts.

Africa CDC Immunization Program: The Africa Center for Disease Control and Prevention (Africa CDC), a specialized technical institution of the AU, leads efforts to strengthen immunization programs across Africa. It provides technical support, capacity building, and coordination to AU member states to enhance their immunization efforts and response to vaccine-preventable diseases.

Africa Health Strategy (2016-2030): The AU's Africa Health Strategy provides a comprehensive framework for improving health outcomes across the continent. While not solely focused on immunization, it includes objectives related to strengthening health systems, increasing access to vaccines, and reducing vaccine-preventable diseases as part of its broader health goals.

Addis Declaration on Immunization (ADI):

The ADI is a political commitment adopted by AU member states in 2017 to advance immunization efforts and achieve universal access to immunization in Africa. It outlines key actions to be taken by governments, civil society, and development partners to strengthen immunization programs and increase vaccine coverage.

Regional Economic Communities (RECs):

The AU works closely with RECs, such as the Economic Community of West African States (ECOWAS) and the East African Community (EAC), to coordinate regional health initiatives, including immunization programs. RECs play a crucial role in harmonizing policies, sharing best practices, and coordinating efforts to improve health outcomes within their respective regions.

Partnerships and Collaboration: The AU collaborates with various international organizations, such as the World Health Organization (WHO), Gavi, the Vaccine Alliance, and UNICEF, to support immunization efforts in Africa. These partnerships facilitate resource mobilization, technical assistance, and knowledge sharing to strengthen immunization programs and improve vaccine coverage.

The VacciNations Campaign, hosted by WACI Health, PATH and the GAVI CSO constituency, aims to advocate for increased funding commitments towards immunization through the Gavi replenishment process, recognizing the vital role of sustained financial support in ensuring universal vaccine coverage.

Additionally, the campaign advocates for enhanced domestic resource mobilization to establish sustainable financing mechanisms for immunization.

The campaign seeks to hold regional stakeholders accountable for their immunization commitments and policies, promoting transparency and effective implementation to drive tangible improvements in vaccine delivery and uptake.

To support these advocacy efforts, the campaign provides tools, evidence, and resources to civil society organizations (CSOs) in implementing countries, empowering them to advocate for equitable immunization policies and programs effectively.

Furthermore, the campaign facilitates knowledge sharing and peer-to-peer learning among CSOs, strengthening their capacity to drive the immunization advocacy agenda at the regional level and foster collaboration towards shared objectives.

Consequently, the campaign hopes to achieve the following outcomes:

1. Increased and sustainable funding towards immunization contributing to improved vaccine coverage and access.
2. Enhanced accountability for commitments and policies translating into impact
3. Strengthened CSOs' capacity with knowledge, evidence, skills, and tools to effectively advocate for immunization policies and programs.
4. Facilitated knowledge sharing and peer-to-peer learning among CSOs to strengthen capacity in driving immunization advocacy agenda at the regional level

Consultancy Objectives

This assessment succeeds an earlier PATH/WACI Health-led quantitative assessment of the progress of selected African Union member states in the financing of immunization services in keeping with the ADI goal 2 on sustainable domestic financing of immunization. It therefore yields qualitative insights on the contextual realities influencing investments in immunization services in the respective countries. The specific objectives of this consultancy include:

1. Mapping to determine financing and level of sustainability of immunization financing in 10 African Union member states (Comoros, DRC, Ethiopia, Kenya, Malawi, Mozambique, Nigeria, Senegal, South Sudan and Uganda).
2. Document stakeholders' inputs on immunization sustainability in the 10 countries.
3. Prepare a synthesis report and disseminate it to regional, and national policymakers, communities, and CSOs.

2. METHODOLOGY

Study Design

This was a retrospective qualitative assessment of immunization financing across 10 African Union member states (Comoros, DRC, Ethiopia, Kenya, Malawi, Mozambique, Nigeria, Senegal, South Sudan and Uganda). The assessment was conducted between August and November 2024.

The assessment targeted key immunization stakeholders across the 10 countries and the African region including representatives from the Ministries of Health (including Divisions of Vaccines and Immunization), World Health Organization, UNICEF, GAVI the vaccine alliance, Civil Society Organizations, implementation partners including humanitarian NGOs *inter alia*.



Figure 1: Target Countries in the Assessment

Data collection was through key informant interviews with purposively selected respondents across the institutions listed above and guided by a semi-structured interview guide. A total of twenty-seven (27) respondents provided insights through the key informant interviews as listed in appendix 1. Interviews were audio recorded, transcribed and stored in secure cloud storage.

Thematic analysis of the qualitative data was done also anchored on grounded theory framework in which all the emergent themes were captured devoid of inductive or preset limitations. These were subsequently summarised as direct quotes and included in the findings.

Validation

Findings were validated through a) triangulation of insights across respondents and quantitative data; b) internal check-ins with client teams; and c) stakeholder validation workshop

Ethical Considerations

Informed consent was sought from all respondents prior to commencement of the Key Informant Interviews and recording of the same. For the minors, child immunization advocates, who were involved in the assessment, consent was sought from their known legal guardians, parents, prior to commencement of the interviews.

Limitations

Conflicting priorities for state and multi-lateral/ bilateral partners and government representatives thus limiting their availability for the key informant interviews. This was further compounded by institutional red-tape and procedures. *This was mitigated by*

- a) flexibility within our team to accommodate scheduling interviews at the respondents' convenience;
- b) targeting of multiple respondent categories per country to increase the chance of getting responsive stakeholders; and
- c) use of desk review to plug gaps in insights in contexts where targeted parties were unresponsive e.g. Comoros.

Language differences particularly among the Francophone and Portuguese respondents necessitated the use of translators (including online translation via DeepL[®]) to facilitate the interviews with the respective respondents.

3. FINDINGS

3.1. CLUSTER FINDINGS

3.1.1. Health System and Socio-Economic Context

Infants and children below five years age, who are the target of childhood vaccines, form a significant share of the populations in the sampled countries. Infants below 12 months accounted for below 10% of the populations while children below 5 years of age accounted for just below 20% of the populations in the selected 10 countries.

Socioeconomic pressures including poverty continue to plague the selected countries given that only two (2) countries (Kenya and Nigeria) within the cluster were in the GAVI Accelerated Transition phase while the majority were in the Initial Self-Financing Phase as shown in table 1.

GAVI Transition Phase	Countries
Initial Self Financing (US\$1085 GNI p.c.)	Mozambique, DRC, Malawi, Uganda & Ethiopia; S. Sudan*.
Preparatory Transition (>US\$1085 <US\$1730 GNI p.c.)	Comoros, Senegal
Accelerated Transition (US\$ 1730 GNI p.c.)	Kenya, Nigeria
Fully Self Financing	None

Source: GAVI, World Bank Group, Analysis by Consultant

Despite diversity in economic, socio-cultural, and political contexts, all the 10 countries had poor to moderate health system performance as depicted in the service coverage indices ranging from 34% in South Sudan to 53% in Kenya. The low service coverage indices imply underlying health system weaknesses that further limit access to essential health

Significance

Inadequate investments in immunization services in these sampled countries not only directly jeopardizes the future and wellbeing of children under five years who comprise at least 20% of the populations, but broadly threatens the health of entire populations due to under immunization and zero dose children services.

3.1.2. Financing Context

Most of the sampled countries had characteristically low tax revenues (below 15% of GDP) and high debt levels (above 50% of GDP), all of which shrink the fiscal space for health and immunization services.

Consequently, all the countries had low public funding for health and immunization. All the countries allocated only 1-3% of their GDP to health, with a small fraction for routine immunization. None met the USD\$ 86 threshold for per capita spending on health, the Abuja threshold of 15% of government expenditure to health, and none spent more than 5% of GDP on health.

Additionally, as a corollary to the low government funding, the countries have high out of pocket payments for health and high donor dependence. Out of Pocket payments accounted for more than 40% of the Total Health Expenditures.

Government funding accounted for about 25% of all immunization financing in the sampled countries. Further, government spending on routine immunisation services accounted for less than 5% of all the spending within the health sector; and less than 10% of government spending on health. Nigeria and Kenya had the highest government financing to Routine Immunization accounting for 55% and 50% respectively, while Comoros had the least government financing at 14%.

Further, there is a mismatch between public investments in health and social services, and the growing population needs in the region. Our populations are growing faster than the resources governments have allocated for the essential welfare services.



Our countries do not make adequate investments in health systems to cater for our growing populations.' Representative Africa CDC

Significance

The low government prioritization and financing of health and immunization increases the risks for low coverage, high zero dose cases, rising under-immunized children, financial hardship and unsustainable immunization services.

The current levels of financing of immunization by governments threatens transition to self-financing and sustainability beyond donor financing.

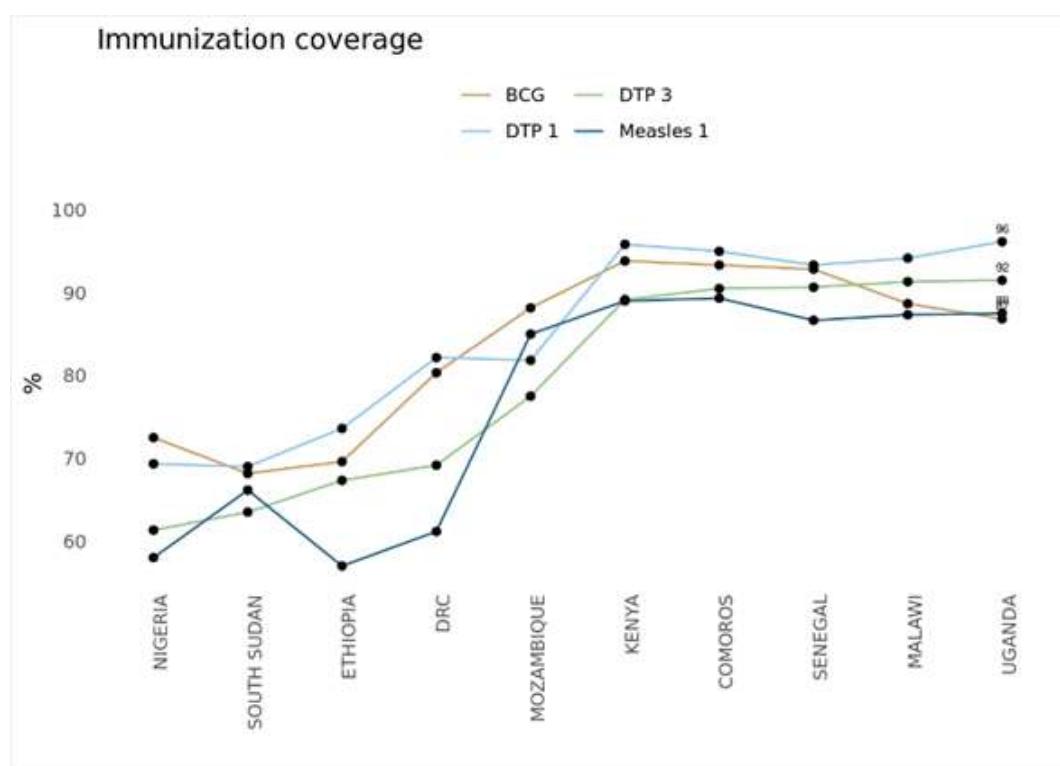
Weak public finance management systems including poor debt management and tax administration, constrain the resource envelope from which to finance health and immunization services.

3.1.2. Impact of Inaction

3.1.2.1. Coverage

The inadequate investments in health and immunization in the sampled countries have a direct effect of low coverage, particularly in countries with ongoing (or recovering from) conflict, and natural disasters like cyclones.

Generally, immunization coverage rates were lowest in conflict affected regions, including Nigeria, Ethiopia, DRC and South Sudan as in Figure 2.



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

Figure 2: Immunization Coverage trends

Significance

Mitigating against political, economic and natural factors that disrupt health systems should be an advocacy priority given the compounding effect these have on access to immunization services. This necessitates not only country effort but also regional and global solidarity.

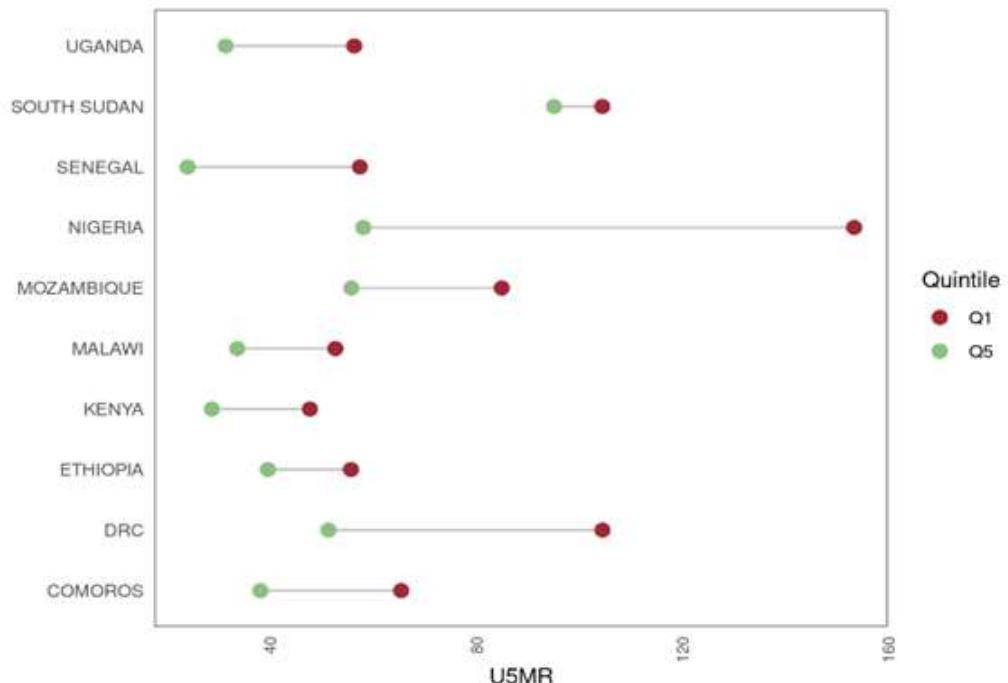


The low coverage rates further increase the incidences of vaccine preventable outbreaks that engender in morbidities and mortalities not just affecting the zero-dose or under immunized children but also the general public.

3.1.2.2. Equity

Inadequate investments in immunization not only hinder but also disproportionately worsen health outcomes for children of the poor and vulnerable in society. Consequently, there was a notably high number of Zero-dose cases and under-immunized children in this set of countries, and more in the countries with comparatively lower investments in immunization.

There were disparities in child health outcomes (under-five mortality rates and DTP3) based on income level. Differences in under-five mortality between the richest and poorest groups was highest in Nigeria and DRC, and lowest in South Sudan and Ethiopia. The lowest under five mortality rate (<40) was recorded among the richest group in Senegal and Kenya, while the highest was noted among the poorest group in Nigeria (>150). (Figure 3).



Source: WHO Equity Database

Disparities in DTP3 coverage between the richest and poorest groups was highest in DRC, Ethiopia and Comoros, and lowest in Uganda and South Sudan. DTP 3 coverage was highest in Senegal and Kenya in both income groups, and lowest in South Sudan, Uganda and Nigeria.

While paucity of data limits analysis of zero dose levels in all 10 countries, available data shows that the greatest differences between the richest and poorest groups in zero dose proportions were in Nigeria, DRC and Ethiopia.

Significance

Inadequate investments by government in immunization disproportionately disadvantages the poor and vulnerable who often end up not accessing these essential services hence bear the brunt of under-immunization and zero-dose compared to the wealthier income groups.

The low investments in immunization by countries further limit financing of sensitization and awareness creation initiatives among the populations. This inaction engenders in growing vaccine hesitance stemming from misconceptions and misinformation which reduce the demand for and uptake of immunization services.

Low public financing of immunization services in the sampled countries limits investments in strengthening health systems, the cold chain management and transportation systems which ultimately end in vaccine wastage.

The insufficient investments in health and immunization in the region also predisposes the populations to high out of pocket payments as they seek for health care and thus placing them at high risk of financial hardship.

Significance

Growing vaccine hesitancy in the context of low vaccine coverage further accelerates vaccine wastage.

3.1.3. Recommendations

1. **Increased government investments in health and immunization:** Countries need to increase budgetary allocations to health and immunization to guarantee sustainability.
2. **Increased partner investments in health and immunization (including the ongoing Gavi replenishment),** particularly for countries with low coverage, high zero dose cases, low investments in immunization and confounding circumstances such as conflict and natural disasters.
3. **Health systems strengthening:** Countries should prioritize investments in infrastructure, supply chains, cold chain systems, and human resources for health and immunization to optimize value and minimize system wastages including vaccine wastages.
4. **Community engagement and awareness:** Awareness campaigns and partnerships with local leadership, civil society, partners, governments and communities are crucial for improving vaccine acceptance.
5. **Accountability and governance:** Concerted efforts by governments, civil society, development partners and communities towards strengthening accountability structures and fighting corruption can ensure efficient resource management including immunization investments.

'Our governments should focus on fighting corruption to ensure they get value for money for the investments in health.' Representative Africa CDC
6. **Regional cooperation and coordination:** Collaboration among governments on cross-border immunization services and domestic vaccine manufacturing can leverage shared capacities resulting in synergies towards greater immunization coverage and solidarity.
7. **Leveraging existing systems for domestic vaccine production:** Countries, regional economic blocks, partners and the Africa CDC can build upon existing quality and regulatory systems to support regional vaccine manufacturing initiatives.

'We must ensure that infrastructure, regulatory (structures), and markets are ready for domestic manufacturing.' Representative Africa CDC
8. **Targeted immunization campaigns** led by governments and facilitated by CSOs and partners, targeting the under-immunized and zero dose children, can help boost vaccine acceptance, uptake and coverage in low coverage regions.
9. **Advocacy by CSOs and partners** for prioritization of preventive and promotive services by governments in the region.

3.2. COUNTRY FINDINGS

3.2.1. Democratic Republic of Congo (DRC)

3.2.1.1. Health System and Socio-Economic Context

The Democratic Republic of Congo has a large population of about 100 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 8% and 20% of the entire population respectively.

Despite being richly endowed in valuable natural resources and extractives, the country does not mobilize sufficient tax revenues to support public services as tax revenues in DRC were less than 8% of the country's GDP as at 2020.

Consequently, there is a significant dependence on donors and out of pocket payments to finance health. The Government funded only 16% of the Total Health Expenditures (THE) as of 2020, while OOPs and donors funded 40% of the THE each.

DRC allocated 1% of its GDP to health and 22% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2022. Further, the Government funded upto 14% of its routine immunization expenditures as at 2022.

The health systems remain weak and often disrupted due to ongoing conflict. Notably, the UHC service coverage index in 2021 was low at 42% implying that only 42% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Socioeconomic pressures including poverty continue to plague the selected countries given that only two (2) countries (Kenya and Nigeria) within the cluster were in the GAVI Accelerated Transition phase while the majority were in the Initial Self-Financing Phase as shown in table 1.

Significance

Approximately 20 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in DRC given the low investments in immunization services by government and compounded by the disruption of health services by the ongoing conflict

3.2.1.2. Impact of Inaction

a. Coverage

As a corollary to the low immunization investments, immunization coverage in DRC was generally below 80% across most antigens, particularly DTP 3, BCG and Measles 1 between 2017 and 2022.

Consequently, there is a notable surge in vaccine preventable diseases such as measles, polio and meningitis.

'The DRC is currently facing several vaccine-preventable epidemics, including measles, polio, and meningitis.' CSO Representative

Limited public financing coupled to high poverty rates in DRC engender in reduced uptake of immunization services as the households prioritize income generation for sustenance and trade off healthcare which is unaffordable to most.

'Many households in the DRC struggle to afford the costs associated with seeking healthcare, including immunization services, leading to delayed or missed appointments.' CSO Representative

Disruption of health systems due to ongoing conflict further complicates the limited access to services, including immunization.

'The ongoing conflict and insecurity in certain regions of the DRC have disrupted health services, including immunization programs, and limited access to health facilities.' CSO Representative

b. Equity

Overall, lower income groups in DRC had higher under five mortality rates, lower immunization coverage and higher zero dose children which indicate income related inequities. There was a gap of more than 50 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 40 percentage points between the wealthiest and poorest income groups. Notably, the proportion of zero dose children for low-income households was more than ten times those of high-income households.

Significance

Ongoing conflict not only disrupt health systems but also disrupts livelihoods resulting in internally displaced persons and refugees who are more predisposed to limited access to immunization services, under-immunization and zero-dose cases. This poses a threat not only internally but regionally along the migrant pathways.

Low tax revenues limit the government's capacity to adequately invest in infrastructure, human resources for health, supply chain systems, and cold chain systems, particularly in the rural areas. This results in limited access to health and immunization services, and also accelerates vaccine wastage due to poor cold chain systems across the vast country.

'Inequalities in vaccination coverage exist across different regions of the DRC, primarily due to weak supply chains, inadequate infrastructure, and limited access to health services in rural areas.' CSO Representative

'The lack of adequate human resources, particularly in rural areas, is a major constraint to the effective delivery of immunization services.' CSO Representative

3.2.1.3. Recommendations

1. Sustained advocacy by CSOs and partners for peace building and conflict resolution towards political stability in DRC. Peace and stability remain as critical ingredients to functional health systems and immunization services.
2. Advocacy by CSOs for increased investments (by government and partners) in health systems strengthening and immunization services. This will ensure progressive capacity development and recruitment of health workers, improved health facilities, improved cold chain systems and resilience in spite of system shocks like the ongoing conflict.
3. Collaborative and sustained awareness creation among the public by government, partners, and CSOs is essential in building public trust in vaccines, and increased uptake of immunization services.
4. Government, partners and CSOs should invest in targeted immunization campaigns in rural, and conflict-ridden regions which have higher populations under-immunized as well as zero dose children.
5. Regional collaboration to improve immunization coverage of the Internally Displaced Persons and refugees from DRC. This can be coordinated through the Africa CDC, the East African Community, and supported by partners and CSOs.

3.2.2. Ethiopia

3.2.2.1. Health System and Socio-Economic Context

Ethiopia has a large population of about 123 million with Infants aged below 12 months and those below the age of 5 years accounting for just about 7% and 15% of the entire population respectively.

The country does not mobilize sufficient tax revenues to support public services as tax revenues in Ethiopia were less than 7% of the country's GDP as at 2020. Consequently, there is a significant dependence on donors and out of pocket payments to finance health. The government funded upto 28% of the Total Health Expenditures as of 2020, whilst donors and out of pocket payments each accounted for about 34% of the THE.

Ethiopia allocated 1% of its GDP to health and 10% of the Domestic General Government Health Expenditure to routine immunization between 2017 and 2022. Further, the government funded upto 30% of its routine immunization expenditures as of 2020

Significance

Approximately 19 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Ethiopia given the low investments in immunization services by government and compounded by the disruption of health services by the ongoing conflict.

The health systems remain weak and suffer disruption due to ongoing conflict in the vast Tigray and Amhara regions. The consequence of the conflict is a large population of Internally Displaced Persons and refugees. Notably, the UHC service coverage index in 2021 was low at 34% implying that only 34% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

'Ethiopia is a vast country with diverse cultural practices, and vulnerable populations including IDPs and refugees...approximately 3.5-4 million IDPs and 1 million refugees.' Federal Technical Advisor- Immunization

3.2.1.2. Impact of Inaction

a. Coverage

Given the low government investments in immunization, vaccination coverage in Ethiopia was generally below 80% across all tracer antigens (BCG, DTP1, DTP3, and MCV1). The low coverage and consequent low immunity have led to surges in vaccine preventable illnesses such as Measles and Cholera across the country between 2021 and 2024.

The low government prioritization and high donor dependence for immunization services results in a vicious cycle of dependence due to relegation of immunization services to donors. This threatens sustainability of immunization services beyond donor transitions.

'Since partners will fund immunization, there is no incentive to increase government funding to immunization. The funds can be channeled to other government priorities.' Federal Technical Advisor- Immunization

b. Equity

Low investments also engender in high Zero dose and Under-immunized children in Ethiopia. This is further compounded by the geographical vastness of the country, and the prevailing conflict in northern Ethiopia. The conflict further disrupts health systems, and livelihoods resulting in high number of internally displaced persons who have limited access to immunization services.

'We have almost 4 million Zero dose children who in the absence of an accelerated immunization campaign will suffer significant mortalities and morbidities.' Federal Technical Advisor- Immunization

'The ongoing conflict in the Tigray and Amhara region is a great disaster.' Federal Technical Advisor- Immunization

Significance

Ongoing conflict not only disrupts health systems but also disrupts livelihoods resulting in internally displaced persons and refugees who are more predisposed to limited access to immunization services, under- immunization and zero-dose cases. This poses a threat not only internally but regionally along the migrant pathways.

Increased partner investments e.g. from GAVI, are thus critical in complementing existing resources in conflict ridden and fragile contexts such as this with a view to ensuring continuity of immunization services.

3.2.2.3. Recommendations

1. Accelerated immunization campaigns by government, partners and CSOs targeting the under-immunized and zero dose children, and the rural, internally displaced and refugees in Ethiopia.
2. Progressive increments in budgetary investments in immunization services by government and partners to guarantee coverage and sustainability.



The plan is to increase the budget year after year because the funding is declining at the global level. The government has signed a compact agreement between the Ministry of Health, Ministry of Finance and major partners towards increasing immunization budgets.' Federal Technical Advisor- Immunization

3. Regional collaboration to improve immunization coverage of the Internally Displaced Persons and refugees from Ethiopia and neighboring Eritrea. This can be coordinated through the Africa CDC, the East African Community, and supported by partners and CSOs.
4. Collaborative and sustained awareness creation among the public by government, partners, and CSOs is essential in building public trust in vaccines, and increased uptake of immunization services.
5. Sustained advocacy by CSOs and partners for peace building and conflict resolution towards political stability in Ethiopia. Peace and stability remain as critical ingredients to functional health systems and immunization services.
6. Leverage existing systems, including quality and regulatory systems, to support regional manufacturing of vaccines based on contextual capacities.



Not every African country must develop vaccines locally...what would be more feasible is for production at regional level, for example under Africa CDC. Later on, countries can start production based on R&D and building capacities, but for now working together as one and not 54 states is better.' Federal Technical Advisor- Immunization

3.2.3. Nigeria

3.2.3.1. Health System and Socio-Economic Context

Nigeria has a large population of about 218 million as at 2022, the highest population within this cohort of countries. Infants aged below 12 months and children below the age of 5 years accounted for about 7% and 17% of the entire population respectively.

Despite being the largest economy in this cohort and an abundance of extractives, mainly oil and gas, the country does not mobilize sufficient tax revenues to support public services. The tax revenues in Nigeria were less than 6% of the country's GDP as at 2020. Consequently, there is a significant dependence on out-of-pocket payments to finance health. The government funded upto 15% of the Total Health Expenditures as of 2020, whilst out of pocket payments accounted for about 75% of the THE.

Nigeria allocated 1% of its GDP to health and about 27% of the Domestic General Government Expenditure to routine immunization between 2017 and 2022. Further, the government funded upto 55% of its routine immunization expenditures as at 2022 and was one of the two countries in this cohort in the Gavi accelerated transition phase.

Significance

Approximately 37 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Nigeria given the low investments in immunization services by government and compounded by the disruption of health services by the ongoing conflict and insecurity in the northern region of the country.

The health systems remain weak and suffer disruption due to ongoing conflict in the vast northern region. The consequence of the conflict is a large population of Internally Displaced Persons. Notably, the UHC service coverage index in 2021 was low at 38% implying that only 38% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

The country further contends with ongoing pressures including economic recession post pandemic, competing priorities across other sectors such as security and infrastructural development which then deprioritize health and immunization.

'The financing is not adequate because of competing needs across sectors, generally struggling economies and economic instability, political instability and a preference for infrastructure investments rather than services by the political leaders.' EPI Officer

3.2.3.2. Impact of Inaction

a. Coverage

Immunization coverage was generally below 80% across most antigens but was progressively increasing over time between 2017 and 2022. Nonetheless, the low coverage and consequent low immunity has engendered in re-emergence of vaccine preventable outbreaks such as Diphtheria in 2022 and 2023, with a peak case fatality rate of 13%, alongside other related morbidities.

'We are now witnessing diseases we only used to read about, like Diphtheria...' Head of Immunization Services, MOH

Further, the limited investments in immunization systems result in weak last mile delivery of vaccines across the country partly due to poor cold chain systems, inadequate staffing, dilapidated road network and infrastructure inter alia.

'Last mile delivery is limited across the country due to insecurity in some regions, harsh geographical terrains, limited funding, and inadequate staffing' Head of Immunization Services, MOH

Inadequate financing hinders the strengthening of vaccine tracking and related data management systems and hence results in limited visibility of vaccine commodities at facility level. This limited visibility impedes accountability, forecasting and planning for vaccines.

b. Equity

The low investment in immunization has in part also contributed to the high Zero dose and Under-Immunized children in Nigeria, with a disproportionate impact on the hard to reach and conflict areas.

'The current funding is not sufficient to facilitate outreaches targeting the affected regions, most of which are affected by conflict, and have limited awareness on value of immunization...' Head of Immunization Services, MOH

3.2.3.3. Recommendations

1. Advocacy by CSOs for increased investments (by government and partners) in health systems strengthening and immunization services. This will ensure progressive capacity development and recruitment of health workers, improved health facilities, improved cold chain systems, targeted outreaches and resilience in spite of system shocks.
2. The government (federal and state) should refine public budgeting processes and resources to increase visibility and priority of immunization in budget and planning tools.



'We have established a budget line for immunization in our current budgets and have been very pragmatic in our estimates in the 2025-28 GAVI country portfolio plan'
EPI Officer

3. Government, with the help of partners and CSOs should invest in and prioritize strengthening of forecasting and quantification capacities for immunization commodities among the immunization teams.



'We are also enforcing forecasting at both national and state level to ensure representative procurement and stocking of immunization commodities.' EPI Officer

4. Accelerated immunization campaigns by government, partners and CSOs targeting the under-immunized and zero dose children, and the rural, internally displaced and hard to reach refugees in Nigeria.
5. Sustained advocacy by CSOs and partners for peace building and conflict resolution towards political stability in Northern Nigeria. Peace and stability remain as critical ingredients to functional health systems and immunization services.

3.2.4. South Sudan

3.2.4.1. Health System and Socio-Economic Context

South Sudan, the youngest republic in this cluster, has a population of about 11 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 7% and 18% of the entire population respectively. It is characterized by a predominantly rural and pastoralist population.

Despite being richly endowed in valuable natural resources and extractives, the country does not mobilize sufficient tax revenues to support public services as demonstrated by the high donor dependence in the financing of health.

The Government funded only 8% of the Total Health Expenditures (THE) as of 2020, while donors funded 65% and OOPs funded 23% of the THE.

South Sudan allocated 1% of its GDP to health and 39% of the Domestic General Government Health Expenditures to routine immunization as of 2018. Further, the Government funded up to 14% of its routine immunization expenditures.

Significance

Approximately 2 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in South Sudan given the low investments in immunization services by government and compounded by the disruption of health services by the sporadic conflict and flooding in the country.

The health systems remain weak and often disrupted due to conflict and natural disasters such as droughts and flooding. Notably, the UHC service coverage index in 2021 was low at 34% implying

Significance

Weak health system performance, particularly weak Primary Healthcare systems threaten the delivery and sustainability of immunization services which are often a core component of PHC.

That only 34% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

3.2.4.2. Impact of Inaction

a. Coverage

Immunization coverage in South Sudan was generally below 80% across all the antigens of interest.

Given the low investments in immunization, there is a notable increase in vaccine preventable outbreaks like the current measles and cholera outbreaks and increase in vaccine preventable mortalities.

'The children in rural areas/low-income areas end up getting vaccine preventable diseases which spreads to those who have been vaccinated leading to outbreaks affecting both the rich and the poor.' EPI Coordinator

Lack of funds for immunization and limited control over partner funding also engender delayed response to vaccine preventable outbreaks in South Sudan.

'There is a delay in response to outbreaks beyond the WHO stipulated timelines. This is due to the long process of getting funds from partners which makes the vaccine related morbidities and mortalities to be high.' EPI Coordinator

Additionally, weak investments in immunization by government results in significant vaccine wastage due to weak cold chain systems

'...we face a challenge where vaccines stay at the airport for long since we depend on partners to transport them to the states. By the time vaccines are transported to the states, they are in a discardable state...hence a lot of vaccine wastage.' EPI Coordinator

Limited advocacy and sensitization of the populations on immunization has resulted in rising vaccine hesitancy which lowers vaccine uptake in an already low coverage context.

Climate change: The frequent flooding affects accessibility of immunization centers by people as most roads and infrastructure are poor due to limited investments in strengthening the transport network.

'Climate change is emerging as critical threat to the health system in South Sudan. The frequent flooding affects access to services, particularly given that the communities are nomadic and predominantly found in the remote rural areas of the country.' Humanitarian NGO representative

Significance

Climate change and its impacts bears a significant threat to immunization by the disruption of immunization systems and services e.g. through flooding and drought.

3.2.5. Mozambique

3.2.5.1. Health System and Socio-Economic Context

Mozambique has a population of about 32 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 7% and 17% of the entire population respectively.

The country is richly endowed in valuable natural resources and extractives but has also suffered significant insecurity and conflict in the Northern region and repeated cyclones (Idai, Kenneth and Fredy) between 2018 and 2020.

The country does mobilize relatively high tax revenues within this cluster to support public services as tax revenues stood at 23% of the country's GDP as at 2021. On the contrary, the country had the highest debt levels at 105% of the GDP in 2022.

Significance

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 points 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.

Consequently, there is a significant dependence on donors and out of pocket payments to finance health. The Government funded only 32% of the Total Health Expenditures (THE) as of 2020, while donors and OOPs funded 53% and 10% of the THE respectively.

The government allocated 2% of its GDP to health and 5% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2022. Further, the Government funded upto 36% of its routine immunization expenditures as at 2020.

The health systems remain weak and often disrupted due to ongoing conflict and natural disasters. Notably, the UHC service coverage index in 2021 was low at 44% implying that only 44% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Significance

Approximately 5.5 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Mozambique given the low investments in immunization services by government and compounded by the disruption of health services by the ongoing conflict and cyclones.

b. Equity

The low investment in immunization has in part also contributed to the high Zero dose and Under-Immunized children in rural South Sudan, and among the pastoralist communities.

The wealthier population and urban groups have higher immunization coverage rates than the poor and rural populations since the former have greater access to facilities and often can afford to pay OOP for health services, including immunization.

Given the high poverty levels in South Sudan, most care givers and mothers end up prioritizing fending for subsistence rather than seeking immunization services in facilities which are often distant from them.

Significance

The nomadic lifestyle in a predominantly rural population structure necessitates mobility, portability and flexibility of the immunization services to ensure all can access this critical service.

3.2.4.3. Recommendations

1. Advocacy by CSOs for increased investments (by government and partners) in health systems strengthening and immunization services. This will ensure progressive capacity development and recruitment of health workers, improved health facilities, improved cold chain systems and resilience in spite of system shocks like the ongoing conflict.
2. Advocacy by CSOs and partners for strengthened accountability structures in government to ensure efficient management of immunization resources.
3. Accelerated immunization campaigns and outreaches by government, partners and CSOs targeting the under-immunized and zero dose children, the rural populations, and hard to reach nomadic communities.
4. Collaborative and sustained awareness creation among the public by government, partners, and CSOs with a view to building public trust in vaccines, and increased uptake of immunization services.
5. Increased investment by government, partners, and CSOs in climate change mitigation measures and health system resilience to ensure continuity of health services, including immunization, and to reduce the impact of climate change such as droughts and floods.

3.2.5.2. Impact of Inaction

a. Coverage

Immunization coverage in Mozambique was generally below 80% across most antigens. Given the low investments in immunization, there is a notable increase in vaccine preventable outbreaks like Polio.

The country witnessed the first polio outbreak (wild polio virus type 1) in the North-Eastern region in 2022. Seventy-six (76) of the 161 districts in Mozambique had Cholera outbreaks between 2022 and 2023.

Inadequate infrastructure investments by government result in poor infrastructure and supply chain systems, particularly in the northern region hence limiting distribution of vaccines and access to immunization services.

b. Equity

It is estimated that the tally of Zero Dose children rose from 97,000 in 2019 to 750,000 in 2023. This indicated challenges in access and utilization of immunization services possibly due to inadequate funding, COVID-related restrictions, the aftermath of Cyclones, and supply chain disruptions for the vaccine products.

'The low coverage during and just after pandemic would partly be accounted for by the disrupted utilization in the conflict-ridden northern Mozambique which hosts about 7 to 8% of coverage in Mozambique.' Immunization CSO Executive

The wealthier population and urban groups have higher immunization coverage rates than the poor and rural populations since the former have greater access to facilities and often can afford to pay OOP for health services, including immunization.

Inadequate investments to support immunization awareness campaigns have engendered growing vaccine hesitancy, particularly among the less literate in Mozambique.

'The disparities based on income are partly driven by poor transport network with limited last mile coverage in the vast country, low maternal literacy levels, gender-based violence, and limited-service integration in the rural areas.' Immunization CSO Executive

3.2.5.3. Recommendations

1. Increased awareness creation across the country on vaccine preventable diseases by Government, partners and CSOs

'A low hanging opportunity for partners and government lies in training local trusted community representatives to support awareness creation for immunization within communities' Mozambique CSO M&E Lead

2. Advocacy for increased investments in immunization services by government and partners

'The government has recently passed laws that earmark sin taxes to healthcare. While this is commendable, its operationalization and implementation remain a major cause of concern.' Public Policy Researcher, Mozambique

3. Advocacy for increased investments by government, and partners in health systems strengthening and resilience

'Perhaps it is high time funding partners were flexible to support health system interventions beyond vertical disease areas if we are to see stronger health systems that can outlast the tenure of donor financing.' Multi-lateral Partner Representative

4. Advocacy for economic stability and strong Public Finance Systems to boost public funding capacity and efficiency.

5. To remedy the challenge of health worker shortages, the government, partners and CSO should invest in training and education programs and offer incentives for healthcare workers to work in underserved regions.

6. Sustained synergistic engagement of Civil Society in the joint immunization planning platforms alongside government and partners.

'CSOs can achieve more through synergy if only they were proactive and coalesced advocacy initiatives targeted at immunization financing.' Mozambique CSO M&E Lead

3.2.6. Uganda

3.2.6.1. Health System and Socio-Economic Context

Uganda has a population of about 47 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 8% and 18% of the entire population respectively.

The country does not mobilize sufficient tax revenues to support public services as tax revenues in Uganda were less than 13% of the country's GDP as at 2021.

Consequently, there is a significant dependence on donors and out of pocket payments to finance health. The Government funded only 17% of the Total Health Expenditures (THE) as of 2020, while OOPs and donors funded 40% of the THE each.

The government allocated 1% of its GDP to health and 7% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2022. Further, the Government funded upto 30% of its routine immunization expenditures as at 2022.

The health systems remain weak and often disrupted due to ongoing conflict. Notably, the UHC service coverage index in 2021 was moderate at 49% implying that only 49% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Significance

Approximately 8.5 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in DRC given the low investments in immunization services by government.

There is significant donor dependence for immunization financing in Uganda. This threatens sustainability of immunization services.

3.2.6.2. Impact of Inaction

a. Coverage

Immunization coverage in Uganda was generally high above 80% across most antigens. However, the slight decline in coverage just after the pandemic engendered low immunity at population level hence a surge in vaccine preventable outbreaks including Measles and Polio.

'We have recently witnessed Measles outbreaks in more than thirty (30) districts in Uganda and some outbreaks of Polio' EPI Coordinator

Further, the limited investments in immunization systems result in weak last mile delivery of vaccines across the country partly due to poor cold chain systems, inadequate staffing, dilapidated road network and infrastructure inter alia

'Last mile delivery to facilities suffers due to limited refrigerated fleets and limited staffing to support this.' EPI Coordinator

Inadequate financing hinders the strengthening of vaccine tracking and related data management systems which results in limited visibility of vaccine commodities beyond the district vaccine stores. This limited visibility impedes accountability, forecasting and planning for vaccines.

b. Equity

Overall, lower income groups had significantly higher under five mortality rates, and relatively higher immunization coverage. 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 zero dose children and under-immunized children were predominantly found in rural regions and in districts with high numbers of refugees, particularly the North-Western region bordering DRC and South Sudan.

Significance

Proximity to fragile regions and being a host of regional refugees necessitates heightened disease surveillance systems with a view to preventing outbreaks.

3.1.3. Recommendations

1. Sustained advocacy by CSOs and partners for increased investments in health and immunization services by government and funding partners towards sustainability
2. Intentional involvement of local governments and communities by partners, CSOs and national government for accountability in immunization services.
3. Advocacy for progressive integration of immunization services with other primary health services for efficiency.
4. Regional cooperation and coordination of cross border immunization services in view of cross border spread of vaccine preventable diseases.

3.2.7. Malawi

3.2.7.1. Health System and Socio-Economic Context

Malawi has a population of about 20 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 7% and 20% of the entire population respectively.

The country does not mobilize sufficient tax revenues to support public services as tax revenues were less than 12% of the country's GDP as at 2021.

Consequently, there is a significant dependence on donors and out of pocket payments to finance health. The Government funded only 36% of the Total Health Expenditures (THE) as of 2020, while donors funded 36% and OOPs 20% of the THE.

Malawi allocated 2% of its GDP to health and 9% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2022. Further, the Government funded upto 18% of its routine immunization expenditures as at 2020.

The health system performance remains moderate. Notably, the UHC service coverage index in 2021 was moderate at 48% implying that only 48% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Significance

Approximately 4 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Malawi given the low investments in immunization services by government and compounded by the disruption of health services by the occasional cyclones.

There still exists a high dependence on donors and Out of Pocket expenditures in financing health in Malawi. Increased government allocations are essential to guarantee financial protection and sustainability of health services, including immunization services.

3.2.3.2. Impact of Inaction

a. Coverage

Immunization coverage was generally high above 80% across most antigens in Malawi. Notwithstanding this, the level of funding restricts effective sensitization hence there is a notable growing vaccine hesitancy among the public due to incorrect information on vaccines.

'There are a lot of misconceptions around vaccines, particularly post-covid, among communities and the community influencers including religious leaders.' Director Health Financing Ministry of Health

Given the decline in coverage post pandemic and inadequate domestic resources to remedy this, the country has recently seen a surge in vaccine preventable diseases such as Polio, Measles and Cholera.

The high donor dependence triggers a vicious cycle of low budgetary prioritization of immunization; a cycle that is driven by the assumption that health has many partners supporting interventions. This results in unsustainable financing of immunization services.

b Equity

Overall, lower income groups in Malawi had higher under five mortality rates, and lower immunization coverage which indicate income related inequities. There was a gap of more than 20 deaths per 1000 live births among the under-fives between the wealthiest and poorest income groups. The coverage gaps for DTP3 and MCV2 between the wealthiest and poorest income groups were 15 and 10 percentage points respectively.

3.2.7.3. Recommendations

1. The government should improve tax financing of health and immunization through earmarked taxes, including sin taxes.
2. The government should enforce mandatory health insurance for the formal sector members, particularly among civil servants, to be invested in public health systems strengthening.
3. The government, partners and CSOs should prioritize increased awareness at community level on immunization services to enhance vaccine uptake and acceptance.
4. CSOs and partners should prioritize sustained engagement of political leadership on the value of increased investments towards immunization and health
5. Advocacy by CSOs for partner and donor alignment with country immunization and health priorities in keeping with the Lusaka Agenda.
6. Government, partners e.g. GAVI and regional teams (Africa CDC, EAC etc) should consider regional capacity and quality mapping to assess competitive advantages related to domestic manufacturing.



'As a region, we need to do a realistic assessment of our countries for our comparative advantages on manufacturing'
Director Health Financing Ministry of Health

3.2.8. Kenya

3.2.8.1. Health System and Socio-Economic Context

Kenya has a population of about 55 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 7% and 14% of the entire population respectively.

Kenya does not mobilize sufficient tax revenues to support public services as tax revenues were less than 14% of the country's GDP as at 2021.

Consequently, there is a dependence on donors and out of pocket payments to finance health. The Government funded 40% of the Total Health Expenditures (THE) as of 2020, while OOPs and donors funded 21% and 16% of the THE respectively.

Kenya allocated 2% of its GDP to health and 3% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2020. Further, the Government funded upto 50% of its routine immunization expenditures as at 2022, up from 21% in 2017.

The health system performance was moderate with one of the higher UHC service coverage index in 2021 within this cluster. The UHC service coverage index was 53% implying that only 53% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Significance

Approximately 8 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Kenya given the relatively suboptimal investments in immunization services by government and compounded by high number of refugees.

The low UHC service coverage index highlights the need for system-wide improvements to facilitate access to quality essential health-care in Kenya.

The high OOP payments pose a significant risk of financial hardship among the population as they seek for care. Strengthening pooling mechanisms in Kenya would help reduce OOPs.

Though declining, the dependence on donor funding limits the transition to domestic financing of health and immunization, and further threatens sustainability of immunization services.

3.2.8.2. Impact of Inaction

a. Coverage and Financing

Immunization coverage in Kenya was generally high above 80% across all antigens of interest except for the newly introduced MCV 2.

Inadequate financing of immunization will likely result in morbidities and mortalities related to vaccine preventable illnesses.

'Vaccines are good because they help keep people safe; vaccines protect them from getting ill and from dying.' Child Vaccine Advocate 1

'When children don't get vaccines, they stay sick and can get more flu.' Child Vaccine Advocate 2

Inadequate investments in immunization by the government will result in delayed transition of the country from donor financing, given that the country is currently in the accelerated transition phase.

Insufficient investments in immunization sensitization at community level is progressively resulting in vaccine hesitancy among the public.

The high donor dependence triggers a vicious cycle of low budgetary prioritization of immunization; a cycle that is driven by the assumption that health has many partners supporting interventions. This results in unsustainable financing of immunization services.

'We do not include immunization expenses in our county budgets. They are covered by the national government, GAVI and other partners.' County level health leadership

Delayed disbursement of allocated immunization resources by government delays delivery of immunization services across the country.

b. Equity

Overall, lower income groups in Kenya had higher under five mortality rates and lower immunization coverage (DTP 3 and MCV) which indicated income related inequities. The gap between the under-five mortality rates for low-income households and wealthy households was more than 20 deaths per 1000 live births across the years (2017-2021).

Kenya has recently experienced vaccine preventable outbreaks including Measles and Cholera with a concentration in the border regions of Marsabit and in refugee camps in Kakuma and Dadaab. The latter are overcrowded hence accentuating the risk of transmission of these illnesses.

Inadequate investment in immunization by government is likely to increase zero-dose and under-immunized children, particularly in the remote, rural, and northern frontier regions of Kenya.

3.2.8.3. Recommendations

1. Increased awareness creation across the country on vaccine preventable diseases by Government, partners and CSOs
2. Advocacy for strong Public Finance Systems to boost public funding capacity and efficiency and predictability of resources. These include tax administration, debt management, accountability and resource disbursement systems
3. Sustained advocacy by CSOs and partners for increased investments in health and immunization services by government and funding partners towards sustainability
4. Advocacy for progressive integration of immunization services with other primary health services in the primary care networks for efficiency.
5. Regional cooperation and coordination of cross border immunization services in view of cross border spread of vaccine preventable diseases.
6. Accelerated immunization campaigns and outreaches by government, partners and CSOs targeting the under-immunized and zero dose children, the rural populations, hard-to-reach communities, and the refugees.

3.2.9. Comoros

3.2.9.1. Health System and Socio-Economic Context

The Comoros had the smallest population in this cluster estimated at 1 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 6% and 15% of the entire population respectively.

Comoros does mobilize moderately sufficient tax revenues to support public services as tax revenues were 17% of the country's GDP as at 2020. However, there is a significant dependence on donors and out of pocket payments to finance health. The Government funded only 14% of the Total Health Expenditures (THE) as of 2020, while OOPs and donors funded 68% and 13% of the THE respectively.

Comoros allocated 1% of its GDP to health and 14% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2020. Further, the Government funded upto 14% of its routine immunization expenditures as at 2022.

The health system performance was moderate as the UHC service coverage index in 2021 was low at 48% implying that only 48% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Significance

Approximately 1.5 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Comoros given the low investments in immunization services by government.

The high dependence on donor financing and out of pocket payments for health threatens sustainability of financing and increases the risk for financial hardship as households seek for health services, including immunization. Increased government funding for health is thus urgent and necessary to ensure sustainability and access to health services.

3.2.3.2. Impact of Inaction

a. Coverage and Financing

While immunization coverage across the tracer antigens was generally above 80%, there was a notable decline in coverage post 2020 and after the COVID 19 pandemic. The decline in coverage was in part as a result of the low government investments in immunization.

The low government financing of immunization (just about 14% of all routine immunization needs) threatens the sustainability of routine immunization given the high donor dependence in financing these services in the country.

The low investments and consequent declining immunization coverage has resulted in a surge in vaccine preventable outbreaks in the country. These include Measles in 2019, and Mumps in 2020.

The limited funding from government limits capacity for disaster and pandemic preparedness and response in Comoros given that the collection of islands is highly vulnerable to shocks, including climate change.

b. Equity

The low investments in immunization by government has resulted in a rise in the zero-dose and under-immunized children in Comoros.

'In 2021, there were an estimated 3,492 under-immunised children and 1,164 zero-dose children. The Zero dose children increased to 2330 in 2022.' WHO

The low prioritization of immunization services by government limits targeted coverage campaigns among the vulnerable and poor. This results in disparities in coverage along income strata with higher immunization coverage among the high-income groups. Consequently, there was more than 25% difference in immunization coverage for DTP 3 between the high- and low-income strata.

3.2.9.3. Recommendations

- a. Advocacy by CSOs and partners for increased government funding of immunization services for sustainability
- b. Advocacy by CSOs for increased partner investments to complement existing government investments in immunization and health systems strengthening.
- C. Collaborative investment in and expansion of Social and behaviour change initiatives and community engagement by government, partners and with a view to increasing awareness and ownership of immunization.
- d. Community leadership in advocacy for immunization e.g. use of Mother Leaders to reach out to the pregnant mothers and households with children under the age of five years and eligible for vaccination.



This innovative approach was piloted in 9 health districts, involving 78 women who conducted community dialogues and interpersonal communications with 13,554 parents and community leaders, making it possible to identify and vaccinate 2,189 zero-dose or under immunized children, 50 pregnant women against tetanus and 606 adolescents and young people against COVID-19. UNICEF

3.2.10. Senegal

3.2.10.1. Health System and Socio-Economic Context

Senegal has a population of about 17 million, with infants aged below 12 months and those below the age of 5 years accounting for just about 7% and 16% of the entire population respectively.

The country does mobilize moderately sufficient tax revenues to support public services as tax revenues 18% of the country's GDP as at 2021.

There is a significant dependence on donors and out of pocket payments to finance health. The Government funded only 28% of the Total Health Expenditures (THE) as of 2020, while OOPs and donors funded 40% and 16% of the THE respectively.

Senegal allocated 2% of its GDP to health and 18% of the Domestic General Government Health Expenditures to routine immunization between 2017 and 2020. Further, the Government funded 25% of its routine immunization expenditures as at 2022, down from 76% in 2017.

The health system performance was moderate as the UHC service coverage index in 2021 was low at 50% implying that only 48% of the population had access to essential health services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Significance

Approximately 3 million children under the age of 5 years are directly at-risk of vaccine preventable illnesses in Senegal given the low investments in immunization services by government.

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

The high dependence on OOP payments poses a significant risk of financial hardship among the population as they seek for care. Strengthening pooling mechanisms in Senegal would help reduce OOPs.

The high dependence on donor funding limits the transition to domestic financing of health and immunization, and further threatens sustainability of immunization services.

Impact of inaction

a. Coverage

There is a noted decline in immunization coverage in Senegal over the years in part as a result of the limited investments by government in immunization services.

The low investments by government in immunization and the consequent low immunization coverage have engendered the re-emergence of vaccine preventable diseases such as Measles.

'We have had a recurrence of Measles outbreaks in Senegal, even within the capital city of Dakar, affecting at least 3 districts recently...' Partner & Health Systems Technical Advisor, Ministry of Health

b. Equity and Financing

Limited government financing and prioritization of immunization has in part accelerated the increase in zero-dose children in Senegal due to limited coverage and limited outreach to priority populations.

Limited prioritization of immunization by government has resulted in the declining government investments in immunization over the years.

'It may appear that the government did not adequately finance immunization services over the last 5 to 6 years because of the assumption that the partners, including GAVI, would step in because of the strong relations with part of government leadership that previously worked within the global institutions.' Partner & Health Systems Technical Advisor, Ministry of Health

The low government investments in immunization have resulted in a continued dependence on unsustainable sources of funding for immunization services in Senegal.

Recommendations

a. Evidence informed advocacy by CSOs for increased government financing of immunization among Ministry of Health, Ministry of Finance and the legislative assembly.

'Civil Society are in a better position for advocacy and bringing all these critical actors together on this matter of increasing domestic budgets to immunization. They can do this effectively using evidence.' Partner & Health Systems Technical Advisor, Ministry of Health

b. Government led immunization campaigns targeting the vulnerable and zero dose children in collaboration with funding and implementing partners and CSOs.

c. Increased government investments in domestic vaccine manufacturing given existing progress.

'Senegal is well placed to step up domestic manufacturing of vaccines and other medical commodities since there is already existing experience and capacity in-country.' Partner & Health Systems Technical Advisor, Ministry of Health

CONCLUSION

The findings of this assessment highlight significant challenges in the health and immunization systems of the 10 sampled countries, characterized by low public funding, high out-of-pocket payments, and substantial donor dependence.

These financial constraints, coupled with socio-economic pressures and poor health system performance, result in low immunization coverage and inequities in child health outcomes.

To address these issues, increased government and partner investments, health system strengthening, community engagement, and regional cooperation are essential. Without these measures, the health and well-being of vulnerable populations, particularly children, will continue to be at risk.

APPENDIX 1: LIST OF RESPONDENTS

No.	Respondent	Country/ Institution
1	Head of Immunization, National Primary Healthcare Development Agency (NPHCDA)	Nigeria
2	EPI Officer, National Primary Healthcare Development Agency (NPHCDA)	Nigeria
3	EPI Officer, National Primary Healthcare Development Agency (NPHCDA)	Nigeria
4	Director National Primary Healthcare Development Agency (NPHCDA)	Nigeria
5	Senior Technical Advisor to the Federal Government	Ethiopia
6	Global Health Advisory	Ethiopia
7	EPI Coordinator, Ministry of Health	Uganda
8	GAVI Coordinator	Uganda/ GAVI
9	Health Financing Officer	Mozambique/WHO
10	RMNCAH CSO Coordinator	Mozambique
11	M&E Child Welfare CSO	Mozambique
12	Program Manager Health CSO	Mozambique
13	Coordinator of Public Financing Health CSO	Mozambique
14	Founder & CEO Health CSO	Mozambique
15	Executive Director Immunization Advocacy CSO	Mozambique
16	Director Health Financing, Ministry of Health	Malawi
17	EPI Officer, Ministry of Health	South Sudan
18	Immunization Coordinator, Humanitarian NGO	South Sudan
19	Executive Director, Health Advocacy CSO	DRC
20	Program Officer, Health Advocacy CSO	DRC
21	Deputy Director, Africa CDC	Africa CDC
22	County Immunization & Partnership Coordinator	Kenya
23	Child Immunization Advocate	Kenya
24	Child Immunization Advocate	Kenya
25	Head, Division of Vaccines & Immunization, Ministry of Health	Kenya
26	Officer, Division of Vaccines & Immunization, Ministry of Health	Kenya
27	Partner & Health Systems Technical Advisor, Ministry of Health	Senegal

APPENDIX 2: INTERVIEW GUIDE

Immunization Financing Probing Questions

1. Immunization coverage across the key antigens (BCG, DTP1, DTP3, MCV 1) has been declining from 2019 in the country.
 - a. What could be the driver of the declining immunization coverage in the country?
 - b. What are the consequences or effects of the declining immunization in the country?
 - c. What measures have been put in place to remedy this decline in coverage? (Govt/ Donors/ CSOs/ Regional partners)
2. We note there is a significant difference in immunization coverage across income groups, with higher coverage among the wealthiest groups.
 - a. What are some of the reasons for this?
 - b. What are the consequences or effects of the inequality in coverage in the country?
 - c. How can the inequality gap be reduced in the country?
 - d. What measures have been put in place currently to address this challenge? (Govt/ Donors/ CSOs/ Regional partners)
 - e. In what ways can the civil society help address this challenge?
3. There is high donor dependence in financing health and immunization in (Country) and in many African countries.
 - a. What are some of the reasons for this (in country)?
 - b. What measures has Government put in place to reduce this dependence?
 - c. What measures have partners/ donors put in place to reduce this dependence?
 - d. What suggestions would you make to improve domestic financing of immunization services
 - e. In what ways can the civil society help address this challenge?
4. The country co-finances immunization services alongside GAVI.
 - a. What have been the sources of co-financing for immunization in the country?
 - b. What have been the challenges with co-financing?
 - c. What solutions have been proposed/adopted to resolve the challenges of co-financing?
 - d. Were these successful? Why?
5. What are the practical steps needed to ensure that vaccines costs (for Non-GAVI supported vaccines and GAVI co-financing requirements) are paid in time or fully catered for by the country?
6. What procurement arrangements for vaccines does your country have? (Explore sources of vaccines, pooled procurement, payment arrangements etc)
7. What challenges does your country face in:
 - a. the procurement of vaccines?
 - b. the supply chain management of vaccines?
 - c. What measures have been put in place to remedy these challenges? (Govt/ Donors/ CSOs/ Regional partners)
8. Domestic Manufacturing is gaining momentum as a regional priority to bridge the vaccine equity gap.
 - a. What is the progress on Domestic Manufacturing in your country? (Probe on processes, structures, gains, challenges)
 - b. What challenges standout on this in the country?
 - c. What recommendations would you make towards strengthening contextual domestic manufacturing?
9. What suggestions would you make to improve efficiency in immunization services?
10. What are your views and concerns about sustainability of immunization financing in your country?
11. What should be done to improve sustainability of immunization financing in your country given the ongoing donor transitions?

WHO IS SAFE ?

THE IMPACT OF INACTION ON IMMUNIZATION.

