

**MALAWI SDG ACCELERATION FUND
NARRATIVE FINAL REPORT**

Programme Title	Country, Locality(s), Priority Area(s) / SDGs focus
Malawi National COVID-19 Vaccine Programme Support	<i>Malawi / COVID-19 Vaccination/ SDG 3 -Good health & well-being)</i>
Participating Organization(s)	Priority area/ SDGs focus
World Health Organization World Food Programme	<i>COVID-19 Vaccine Roll-out</i>
Programme/Project Cost (US\$)	Implementing Partners
Total approved budget as per project document: 551,000 USD	Government of Malawi, Ministry of Health, College Medicine, University of Malawi.
SDG-AF Contribution ^[1] :	Programme Duration
<ul style="list-style-type: none"> • <i>by Agency</i> Agency Contribution	Overall Duration (<i>months</i>)
<ul style="list-style-type: none"> • <i>by Agency (if applicable)</i> 	<i>12</i>
Government Contribution	Start Date ^[2] (<i>15.04.2021</i>)
<i>(If applicable)</i>	Original End Date ^[3]
Other Contributions (donors)	<i>(14.04.2022)</i>
<i>(If applicable)</i>	Current End date ^[4] (<i>14.07.2022</i>)
TOTAL:551,000 USD	Report Submitted By
Programme Assessment/Review/Mid-	<ul style="list-style-type: none"> o Name: Boston Edward Zimba o Title: Dr o Participating Organization (Lead): WHO o Email address: bzimba@who.int
Assessment/Review - if applicable <i>ple</i>	
Yes, X Date: <i>dd.mm. yyyy</i>	
Mid-Term Evaluation Report – <i>if appli</i>	
Yes, X Date: <i>dd.mm. yyyy</i>	

Acronyms

ACT-A	Access to COVID-19 Tools Accelerator
MAITAG	Malawi Immunization Technical Advisory Group
RCCE	Risk Communication and Community Engagement
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

The global COVID-19 pandemic has had a profound impact on Malawi- the four waves of infection experienced so far have caused significant morbidity and mortality, disrupted continuity and demand for health services, disrupted schooling with additional harm to children, and caused damage to livelihoods and the country's economy. By 21st July 2022, the country had recorded 87,156 cases and 2,656 deaths cumulatively, representing a case fatality rate of 3%, which was above the global average CFR of 1.3%.

Malawi was a beneficiary of the Access to COVID-19 Tools Accelerator (ACT-A) programme and a recipient of vaccines for priority groups amounting to 3.8 million people or 20% of the population under the COVAX facility. The Malawi National COVID-19 Vaccine Programme Support provided technical and logistical assistance to support vaccine deployment and national COVID-19 response monitoring activities between April 2021 and July 2022.

The programme focused on 5 key output areas- increasing demand and uptake, supporting human resource capacity, strengthening supply chain, infrastructure, equipment, and consumables, and enhancing monitoring, evaluation, and learning. It also prioritised support for leadership and governance at the national, zonal, and district levels.

At the end of the project, over 3 million COVID-19 vaccine doses have been administered, and 1,716,923 Malawians had been fully vaccinated representing 9.1% vaccine coverage compared to 0% before the implementation of the activities under this grant. 52,418 (94.4%) health workers had received at least a dose of COVID-19 vaccine and 66% (33,300) were fully vaccinated. By 25th June 2022, 1,328,049 and 797,601 persons in the general population had received AstraZeneca dose 1 and dose 2 respectively. 684,024 people were vaccinated with dose 1 and 24,895 received dose 2 of the Johnson and Johnson vaccine by 25 June 2022.

1 <https://covid19.who.int/>, accessed on the 3rd of March 2022

A total of 134,066 and 42,136 people had received Pfizer dose 1 and dose 2 respectively. The sex distribution of the uptake in the priority groups was marginally higher in women with 52% of females being fully vaccinated as compared to 48% male. Three port health laboratories were also constructed in Chiponde, Mbirima and Songwe (Chitipa) border crossings and were installed with ultra-cold chain storage equipment for vaccine storage. 5 mobile vaccine storage units were also constructed.

A key success metric from the implementation of the programme was the safe administration of the COVID-19 vaccine to >80% of health workers and social and essential workers. This reduced the incidence of COVID-19 related morbidity and mortality in these high-risk groups. It also helped to minimize the disruption to essential services in the health and education sectors and reduced negative knock-on effects of the pandemic on livelihoods in Malawi which have historically disproportionately affected women and girls. The programme also strengthened the health system's capacity in new vaccine introduction and deployment through capacity building of health staff and establishment of vaccine deployment and storage systems which can be harnessed for the deployment of other vaccines in the future.

I. **Purpose**

The programme supported the national deployment of the COVID-19 vaccine in Malawi to directly lead to the vaccination of 3.8 million people from specific priority groups over the course of one year under the implementation of the COVID-19 National Preparedness and Response plan. The progress achieved so far was due to the support provided to the Government of Malawi and its partners to improve demand and uptake of the vaccine. The programme also strengthened human resources capacity required for the deployment of vaccines, and augmented the cold-chain, general supply chain capacity of the health system, implementation, monitoring, evaluation, and shared learning of the vaccination roll out process.

II. **Results**

This report covers all activities carried out during the period of implementation which was from April 2021 to July 2022. The operational aim was to ensure a successful deployment of COVID-19 vaccine across all levels of the health system.

The programme supported the Government of Malawi in COVID-19 vaccine planning and coordination, technical leadership, financing, supply chain and logistics, the service delivery and demand creation activities. The SDG-AF funds were used to directly support the activities of the Malawi Immunization Technical Advisory Group (MAITAG).

Some of these included MAITAG technical meetings where available data were synthesised, and recommendations made on modalities for COVID-19 Vaccine's deployment in Malawi. The programme also supported subsequent revisions of the decisions made by MAITAG, development of training materials, training of trainers for COVID-19 Vaccine roll out in all zones, training of health workers in 29 health districts in Malawi, conduct of supportive supervision of health workers in all districts, establishing and monitoring supply chain processes. The activities funded have had a direct impact on the effect of COVID-19 pandemic by improving service delivery and creating a well-trained health workforce.

Over 8,000 health workers of which 3,760 were female have been trained for COVID-19 vaccine roll out and in the conduct of effective monitoring and supervision. At the end of the programme over 3 million COVID-19 vaccine doses had been administered by trained health workers, with 1,722,793 Malawians fully vaccinated against COVID-19 by 25th June 2022. This represented a 9.1% vaccine coverage in the general population as compared to 0% before the implementation of the activities. Figure 1 shows the vaccine coverage by districts as of 25th June 2022. 52,418 (94.4%) health workers had received at least a dose of COVID-19 vaccine out of which over 24,000 were female. 66% of health workers (33,300) were fully vaccinated of which 16,983 are female as of 25th June 2022.

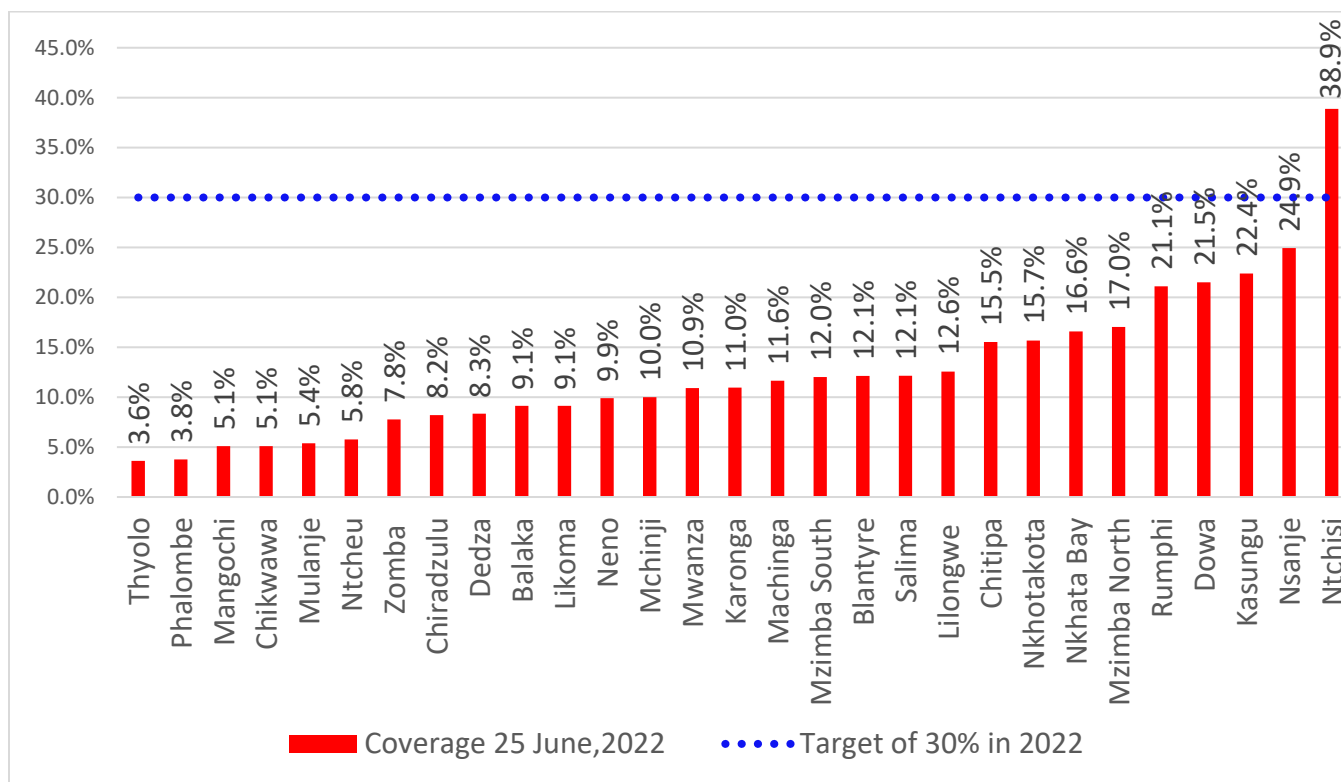


Figure 1 Proportion of total population fully vaccinated by district, 25 June 2022

In the periods August-September and November- December 2021, the country had more than 215,000 and 700,000 doses of AstraZeneca vaccines respectively with short shelf life of 6 weeks. There was risk of expiry of more than 400,000 doses due to poor vaccine uptake and utilization. However, these vaccines were fully utilized by 31st December 2021 with no expiry in part due to the financial and technical support provided from this programme to closely monitor vaccine utilization, implement an inter and intra district vaccine distribution programme and conduct the COVID- 19 Vaccine Express program.

During that period, the country registered an increase in the uptake of first dose of AstraZeneca vaccine of 61% compared to the previous 8 months (April 2021 to November 2021). An increase of 36 % uptake was also registered for the second dose of AstraZeneca vaccine while an increase of 21% was registered for those who received J&J.

A total of 156,000 were fully vaccinated representing 28% increase in the coverage prior to December 2021. The importance of the COVID 19 vaccination express program cannot be over emphasized as it proved to be an effective strategy evidenced by the achievements made between November to December 2021.

The use of mobile branded vehicles to support district deployment efforts increased the daily vaccine utilization in districts and consumption increased from a 3, 000 per day to 15,000 per a day (3 times more consumption and utilization).

III Evaluation and Learning:

Evaluating the performance of health facilities through supportive supervision helped in identifying approaches that work best in COVID-19 vaccine delivery, improving quality and safety. These supervisory visits served as platforms for onsite coaching and for the development of context- specific interventions to address local challenges.

Lessons learnt were documented and shared with other districts. For instance, the Mangochi District "Vaccinate my village" strategy which is a house-to-house strategy implemented by Health Surveillance Assistants in the catchment areas was successfully scaled up to other

districts by the MOH through the shared learning approach. There has been reduced COVID-19 cases and mortality among the vaccinated population.

IV OUTPUTS:

- Table 1: Summary output Indicator Table as of 25th June 2022.

Output Indicator	Planned Target (PT)	Achieved (A)	Percentage of Achievements (A/PT*100)
<i>Development of COVID-19 Vaccine training materials</i>	N/A	COVID-19 Vaccine training Materials available	100%
<i>Number of Health workers trained</i>	9,562	8,000	84%
<i>Number of Health workers vaccinated</i>	50,304	33,300	66%
<i>Harmonization of COVID-19 Vaccination data</i>	N/A	270,000 registries been updated into the online system	35%
Transportation of PPEs and ancillary vaccine supplies (on demand)	On demand	500m ³ transported to 10 Districts across the country	100%
Storage of PPEs and ancillary vaccine supplies (on demand)	On demand	700m ³ of storage space was availed to the Ministry of Health	100%

		for the storage of PPEs and related medical equipment.	
Construction of health infrastructure (including port health labs and tents)	3 Port Health Laboratory	3 Port Health laboratories was constructed in Chiponde, Mbirima and Songwe (Chitipa) border crossings with ultra-cold chain equipment available for storage of vaccines. Five 320m ² mobile storage units were also installed for vaccine campaigns.	100%

V Challenges

1. During the period of implementation, Malawi experienced multiple health related emergencies. These included floods with subsequent displacement of close to one million people, wild polio outbreak and Cholera outbreaks. These emergencies required prompt actions to control the situation with a subsequent increase in workload for all health staff. These emergencies also disrupted routine service delivery including COVID-19 service delivery and led to postponement of many planned activities.

To manage the situation, surge staff were deployed to assist with in some districts. COVID-19 activities were also integrated with other activities such as routine immunisation, bed net distribution and fertilizer distribution to maximize time and efforts whilst reducing staff workload.

2. The second major challenge faced during the implementation was the erratic supply of vaccines. There were periods of prolonged shortage of vaccines especially AstraZeneca for the administration of 2nd doses. This led to despair amongst the then enthusiastic population who wanted these vaccines.

To address this gap, MAITAG reviewed available evidence and introduced heterogenous administration of vaccines to allow people to receive vaccines from different vaccine groups.

3. Communication between national and district authorities on site allocation, and suitability of sites selected for some of the border crossing health labs, proved very difficult. For example, Mchinji which was originally one of the project sites had to be changed to Mangochi due to a conflicting project with the customs authority. To address this gap, additional consultations with all relevant stakeholders and joint technical site visits were carried out to build consensus and further buy-in.

4. Due to the lower than anticipated vaccine uptake, some mobile storage units installed for health or vaccine campaigns were poorly managed. Supervisory teams were established to conduct regular spot checks and assessments at the Mobile Storage Units to supervise ongoing activities.

 5. **Qualitative assessment:** Key success metrics from the implementation of the programme was the safe administration of the COVID-19 vaccine to >80% of health workers and social and essential workers. This has reduced incidence of COVID-19 related morbidity and mortality in these high-risk groups. It also helped to minimize the disruption to essential services in the health and education sectors and reduced negative knock-on effects of the pandemic on livelihoods in Malawi which have disproportionately affected women and girls. It also strengthened the capacity of the health system through the development of guidelines, capacity building of health staff and establishment of vaccine deployment systems and construction of 3 vaccine storage facilities in cross border regions which can be harnessed for the deployment of other vaccines in the future.
- **Gender Specific Results:** The project support provided COVID-19 vaccination equitably to both genders amongst priority groups as well as in the general population. The vaccination data was tracked by gender to address any skewing urgently. The programme also focused on sustaining essential service provision in the health and educational sectors to prevent the disruption of services that can disadvantage women and girls. The funds were used to also support data synthesis by MAITAG to facilitate the inclusion of pregnant women in the Eligible population.

 - **Environmental considerations:** The programme implementation supported the development and dissemination of Waste management guidelines during the health worker training and hence built the capacity of the health workforce in managing waste

generated from the roll-out. Waste generated from vaccine deployment were disposed of in the Medical Grade Incinerators available in the various zones for instance the Kamuzu Central Hospital (KCH) in the central region and Queen Elizabeth Central Hospital in the south. In addition, all waste generated at service delivery points including used syringes and vials are disposed of by incineration at the district hospital level.

- **Monitoring and Evaluation:** The UN Joint organizations participated in COVID-19 Vaccine National Task Force meetings and held regular meetings with the Ministry of health to ensure that the terms of implementation were being implemented appropriately. A joint Ministry of Health (MoH) and partner mission comprising of WHO, UNICEF, JSI and Gavi was conducted between 19th and 29th October 2021. It was designed to identify the root causes for slow COVID-19 vaccine uptake in Malawi and to recommend strategies to increase vaccination uptake. The WHO-led joint mission also participated in COVID-19 vaccine review meetings which were being organised at the time of the mission. This was followed by subsequent cascade reviews at the district and health facility level to accelerate vaccine uptake.
- The mission team collected information through desk reviews, online and face to face interviews and direct observations from national and local government health coordination and service delivery structures. Additionally, the team interviewed clients and community members at health facilities and other public locations. Strengths, barriers, risks, and perspectives to promote vaccine uptake were probed and discussed in detail at all levels. A debriefing meeting of the government and senior partnership management was held on 29th October 2021. Priority activities were identified, weighted and those thought to be impactful were budgeted to facilitate resource mobilization.

VI LESSONS LEARNT

1. Written agreements must be developed and signed between national and sub-national authorities before contractors are selected and works commence on site
2. Regular review of assets e.g., mobile units for vaccine campaigns to ensure proper maintenance schedule and prevent misuse.
3. Good stakeholder mapping and involvement is essential in improving ownership of programmes.

Table 2: Indicator Table as of 25th June 2022

	Achieved	Indicator	Reasons for Variance	Source
	Targets		with Planned Target	of
			(if any)	Verification
<p>Outcome 1[5]</p> <p>Indicator: % of high-risk group protected (20% of the population)</p> <p>Baseline:0%</p> <p>Planned Target: 20%</p>	9.1%		Low uptake of vaccines, erratic availability of COVID19 Vaccine	National Sitrep
<p>Output 1.1</p> <p>Indicator 1.1.1</p> <p>% Of fully immunized persons for each target group category disaggregated by sex and age</p> <p>Baseline:0%</p> <p>Planned Target:100%</p>	<p>16% of people aged > 60 years were fully vaccinated by 25 June 2022,</p> <p>6.2 % of comorbid were fully vaccinated by 25 June 2022.</p> <p>66% of Health workers were fully vaccinated by 25 June 2022.</p>		<p>Low uptake and vaccine hesitancy.</p> <p>Erratic supply of vaccines</p>	National weekly Vaccination data
<p>Indicator 1.1.2</p>	81% of social workers were fully vaccinated by 25 June 2022.			

<p>Baseline: Planned Target:</p> <p>Output 1.2 Indicator 1.2.1 Baseline: Planned Target:</p>	<p>84 % of vaccinators were trained to handle, administer and Document COVID-19 vaccination appropriately</p>		<p>MoH report</p>
<p>Baseline: Planned Target:</p> <p>Output 1.2 Indicator 1.2.1 Baseline: 0 Planned Target: 3</p>	<p>3 Port Health Laboratories constructed in Chiponde, Mbirima and Songwe (Chitipa) border crossings with ultra-cold chain equipment.</p>		<p>MoH report</p>

VII) Life Story

Demand creation for COVID 19 vaccines through community engagement Malawi's COVID-19 vaccination drive kicked off on 11 March 2021. The introduction of the COVID 19 vaccine marked a milestone in the fight against the COVID 19 pandemic.

However, the vaccination rollout faced a lot of barriers that mostly centered on people's perception about the COVID 19 disease and the vaccine itself. This resulted in the low uptake of the vaccine, with the country failing to reach 10% target in 2021.

In recognizing this challenge, WHO Malawi Country Office (WCO) supported the Ministry of Health in demand creation and community engagement activities. WCO provided technical and financial support in the five COVID- 19 high burdened yet vaccine hesitant districts of Blantyre, Zomba, Thyolo, Karonga and Mzimba to boost the uptake of the vaccine.

The Ministry of Health with support from WHO conducted community engagement activities that targeted village health committees, local and religious leaders. The aim of the meetings was to orient the key community influencers on COVID 19 vaccine messages that highlight public health of the vaccine. The orientation also aimed at addressing misinformation, myths and misconceptions surrounding the COVID 19 vaccines.

Subsequently, the influencers worked to promote confidence in COVID 19 vaccination in their communities. Additionally, health workers in the targeted districts were supported to make public service announcements on COVID 19 pandemic using mobile vans. This engagement created an opportunity for communities to express their fears and have them addressed.

Following the community engagement interventions, the five high burden districts registered an increase in the uptake of the vaccine. For example, Blantyre reached over 54,000 people with timely and accurate COVID-19 vaccine related information and over 800 people vaccinated immediately during the community engagement activities. WCO responded to the rise in demand for the COVID 19 vaccine by providing financial support to enable the districts to conduct mobile vaccination campaigns. The mobile vaccination campaigns

allowed vaccinators to reach people even in the most hard-to-reach areas. This strategy was critical in bridging access and equity gaps in these districts and has contributed significantly to improving acceptance in these hitherto vaccine hesitant communities.

A mobile communication team engaging members of the community in Blantyre.

