

## **Tanzania Childhood Pneumonia Project Phase 3 Proposal Options**

### **Objective**

This document outlines the proposal for the final grant of the Tanzania Childhood Pneumonia project, providing the following three budget envelopes for consideration along with their associated activities:

1. **Option #1:** \$1.9M
2. **Option #2:** \$1.0M
3. **Option #3:** \$0.5M

### **Introduction & Context Setting**

As Phase 2 comes to a close in the latter half of 2023, there have been ongoing discussions on Phase 3 of the program whose objective is to help ensure, as much as possible, that gains made in amox DT access within the public sector are maintained and that the program can be responsibly closed out, with many of the activities being routinized and transitioned to appropriate government stakeholders.

Phase 3 planning discussions were initiated in October 2021. At this time, considering the various landscape shifts that had taken place (details of which are provided in the next section), Results for Development (R4D) proposed two potential options for Phase 3 with GiveWell:

- **Option A:** Phase 3 to last a duration of three years with amox DT to transition to a sellable item in the 2023-2024 timeframe.
- **Option B:** Phase 3 to last a duration of five years with amox DT to transition to a sellable item in year 2026.

Following further conversations with members of the R4D team in November 2021, GiveWell stated that Option A was preferred. With this direction, R4D engaged in internal planning discussions to identify areas of activity that would help achieve the Phase 3 goals of sustainability and responsible close-out within a three-year timeframe. Phase 3 draft activities were also shared with key Government of Tanzania (GoT) partners for their feedback and additions to better understand the areas that would have the highest impact and alignment to government priorities. After these internal and external stakeholder discussions, a costing framework was developed and R4D shared further details on activities and budgets for Phase 3 with GiveWell in August and September 2022. These discussions led to further options being explored for Phase 3 that are described in subsequent sections of this document.

### **Historical Context of the Program**

Planning for the future of the program requires retrospective reflection on the past, with a focus on identifying the successes achieved and remaining gaps, and also being conscious of how program trajectories have changed between what was planned and what actually happened. This is particularly important when programs are longer in duration and operate within dynamic and fluctuating environments.

To set historical context, the Tanzania Childhood Pneumonia Program began in 2016 after R4D was awarded an incubation grant (i.e. Phase 1) of \$6.4M from Good Ventures with the objective to ensure that the imminent funding cliff and stockouts of amox DT were averted and to learn more about the diagnosis and treatment landscape of childhood pneumonia within Tanzania. In 2019, R4D received an

additional \$5.6M grant renewal (i.e. Phase 2), to work more closely with the Government of Tanzania (GoT) on improving the amox DT market and associated systems as a way to further increase the treatment coverage rate of amox DT. Phase 2 of the program is scheduled to end in mid-2023.

Throughout Phase 1 and Phase 2 of the program, significant progress has been made across the various market dimensions for amox DT. The activities highlighted below have had a correlated impact on achieving the goals of increased coverage and averting stockouts within public health facilities, with amox DT availability increasing from 48% in 2016 to 90% in 2022 and stockouts decreasing from 58% to 14% within the same time period (see Figure 1.0 and 2.0).

- **Financing:**
  - R4D advocacy efforts have led the GoT to mobilize ~\$0.4M for amox DT procurement (~2M courses of treatment)
  - Alignment across all GoT stakeholders on a sustainable financing mechanism for amox DT through domestically mobilized health facility budgets (to be implemented mid-2023)
- **Regulatory:**
  - With the introduction of amox DT as the first-line treatment for childhood pneumonia to replace the previously well-known amoxicillin oral suspension formulation (amox OS), R4D worked closely with GoT partners to ensure a well-aligned policy environment through the inclusion of amox DT in national guidelines and policies and subsequent removal and phase out of amox OS (i.e. essential medicine lists, standard treatment guidelines, etc.)
  - Increased market transparency to amox DT manufacturers with 8 suppliers now registered within the country, 3 of which have WHO-GMP certification
- **Quantification and Supply Planning**
  - Increased robustness of quantification methodology which led to 140% increase in projected demand with seasonality incorporated into supply planning
  - Streamlined procurement processes through the implementation of effective TA activities which resulted in the shift from ordering 4 consignments per year to 2 consignments per year, thereby reducing transaction costs and ensuring consistent availability at the national level
- **Procurement**
  - Transitioned procurement of amox DT from a third-party agency to the national agency – the Medical Stores Department (MSD)

Figure 1.0: Availability of Amox DT has significantly increased in public health facilities

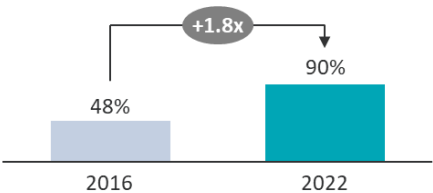
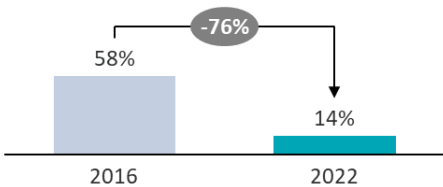


Figure 2.0: % of public health facilities with stockout of amox DT has significantly declined...



While significant progress has been made across the various market domains and have led to positive increases in amox DT availability, the COVID-19 pandemic, followed by a change in political landscape, has changed the timelines for critical milestones and required program resources to be spent differently than originally anticipated in Phase 2. These landscape shifts are important to further explore as they have direct implications for Phase 3 Planning.

### *Implications of Covid-19*

The impact of Covid-19 has led to prolonged in-country and global challenges particularly around the financial and supply chain environments.

**Financial Environment:** Covid-19 placed significant financial pressure on governments and with respect to the childhood pneumonia program in Tanzania, it abruptly halted the 5-year co-financing agreement that had already been put in place. The co-financing agreement intended to gradually transition amox DT from a fully funded donor commodity in 2017 to a commodity fully funded by domestically-mobilized resources by the beginning of 2022. The first three years of the co-financing agreement were successful with the GoT increasing their contributions from 0% in 2017 to 10% in 2018 to 30% in 2019. However, after the third year of the co-financing agreement, various events took place that altered the trajectory of the co-financing timeline:

- **March 2020:** Due to Covid-19 pressures, the GoT requested to halt the co-financing agreement, that stipulated that GoT would contribute 50% towards amox DT procurement and R4D the remaining 50%. The GoT further requested R4D to fully support amox DT needs through December 2020. After discussions with GiveWell, R4D agreed to support the GoT's request and redirected an additional ~\$375K (~1.8M courses of treatment) towards product procurement to ensure availability of amox DT within the country and at the health facility level.
- **June 2021:** There was a shift in the way the pandemic was being managed in the country. The GoT committed over \$470M for a vaccination strategy and economic recovery of the industries that had been hardest hit by the pandemic. These changes put further financial constraint on country budgets and the GoT made another explicit request to R4D to extend their support on product procurement as a result of prolonged financial pressures of Covid-19. Once again, after discussions with GiveWell, R4D agreed to the GoT's request leading to an additional \$260K (~900K courses of treatment) being used to purchase amox DT. This amount would support the remaining amox DT needs in 2021 and was anticipated to cover ~15% of needs in 2022.
- **October 2021:** In the latter half of 2021, while the GoT was able to mobilize a small amount of resources for amox DT via another donor, the ongoing pressures of Covid-19 and subsequent global and local financial crises meant that funding gaps would remain for amox DT in 2022. At this time, R4D aligned with GiveWell that funds could be redirected from TA activities to product procurement and support amox DT needs for 2022 and part of 2023 to fill the financing gap until the product could be fully transitioned to a sellable item.

**Supply Chain Environment:** The impact of Covid-19 on global supply chains was apparent in the form of delayed manufacturing and shipping timelines as well as increased market prices for commodities. Amox DT prices increased by >45% between 2021 and 2022 (i.e. from \$1.49/100 tablets in 2021 to \$2.22/100 tablets in 2022). This significant price increase on product costs as well as additional shipping/freight fees had further implications on the amount of funds redirected from R4D TA activities to amox DT procurement. R4D now anticipates to spend ~\$1.5M on amox DT procurement for 2022 and 2023.

Table A quantifies the impact of the financial and supply chain implications of Covid-19 by comparing the planned vs. actual state of financing for amox DT since the start of the co-financing agreement in 2017. As demonstrated, **R4D planned to spend ~\$495K on product procurement in Phase 2 (~10% of the total Phase 2 budget) but ended up redirecting an additional ~\$2M from TA activities to finance amox DT for a total spend on product procurement amounting to ~\$2.5M (~45% of the total Phase 2 budget).**

Table A: Planned vs. Actual Financing of Amox DT (2017-2023)					
Phase	Year	GoT-Mobilized		R4D	
		Planned	Actual	Planned	Actual
Phase 1	2017	0%	0%	100%	100%
	2018	10%	9%	90%	91%
	2019	30%	32%	70%	68%
Phase 2	2020	50%	0%	50% (~\$375K)	100% (~\$750K)
	2021	60%	20%	40% (~\$120K)	80% (~\$350K)
	2022	100%	23%	0%	77% (~\$650K)
	2023	100%	40%	0%	60% (~\$795K)*
<b>Planned R4D Spend on Product Procurement (Phase 2)</b>				<b>~\$0.495M</b>	
<b>Actual R4D Spend on Product Procurement (Phase 2)</b>				<b>~\$2.5M</b>	
*Anticipated					

### Implications of Change in Political Landscape

In March 2021, Tanzania experienced the sudden passing away of President Magufuli. The change in presidential leadership also led to further changes in government personnel within senior level positions. To adjust, R4D re-invested time to build relationships with those newly appointed individuals across relevant sections of the government (i.e. Minister of Health, MSD leadership, etc.) in efforts to then continue critical conversations on key program elements, namely sustainable financing. This, in turn, required more TA efforts to be directed to rally new GoT stakeholders and facilitate a decision-making process on a sustainable financing mechanism, ultimately adding to the delay in the decision to transition amox DT to a sellable item.

In addition to redirecting an additional ~2M to amox DT procurement, the implications of Covid-19 and the shift in political landscape led to an almost 2-year delay in a critical milestone of the program – having amox DT fully supported through domestically mobilized resources. Instead of this milestone being implemented midway through Phase 2 as per the co-financing agreement (i.e. beginning of 2022) and spending the remaining time on supporting the GoT through important post-transition activities that would help to limit any negative impact on amox DT availability, this milestone is now taking place at the tail end of Phase 2 (latter half of 2023). This delay leaves insufficient time in Phase 2 to support the GoT on critical activities post-transition and requires that these activities be shifted to Phase 3.

### Phase 3 Budget Options and Activities

As alluded to earlier, given the delay in critical program milestones that were driven by external landscape shifts, activities that would have originally taken place in Phase 2 are now shifted to Phase 3. As a result, some of these Phase 3 activities are 'new' and not typical of a close-out grant, but also considered critical to achieving the Phase 3 goals of sustainability and responsible close-out.

- **Financing:** With the shift of amox DT from a vertical item to a sellable item, the source of funding for the product shifts from donors or central government funds to domestically-mobilized funds (i.e. health facility budgets in the case of amox DT). Decisions for how much funds are allocated to procure amox DT now sit within health facilities. This landscape shift requires financial advocacy efforts to be included within Phase 3 activities to help ensure amox DT is considered a priority during annual health facility budget planning processes.
- **Quantification:** As amox DT shifts from a vertical to a sellable item, quantification of the product shifts from the national quantification process to the bottom-up quantification (BUQ) process. To date, with amox DT as a vertical item, many of the TA efforts to increase the robustness of quantification assumptions and incorporate seasonality into supply planning has been done at the national level, which is led by the Ministry of Health and implementing partners. Once amox DT transitions to a sellable item, the BUQ process, led by health facilities, will be responsible for the quantification of amox DT. Initial data analysis suggests that there is variation with the way commodities are quantified between BUQ and national quantification processes. With quantification as the entry point to having medicines available in the country, providing a similar level of TA support to the BUQ process, as was provided to the national quantification process will be important to ensure the right amount of amox DT will be brought into the country to meet demand and availability gains are sustained at the health facility level.

In addition to the 'new' activities described above, there are other activities that are more typical of a close-out grant, focused on providing TA support to streamline and routinize processes to ensure gains are sustained. Examples of these types of activities include, but are not limited to, ensuring a focal point within the GoT continues to consistently monitor amox DT availability and use data to inform decision making or ensuring that procurement processes used by MSD for vertical items are as streamlined and routinized for sellable items.

The activities described above were shared with GiveWell in August 2022 along with two budget options that aligned with the agreed upon Option A (described above in the document) from GiveWell-R4D discussions in October and November 2021. The first budget option was for a duration of 3 years for ~\$3.8M and was positioned as the most comprehensive option to achieve Phase 3 goals. A second budget option for a duration of two years for ~\$2.25M was also shared that was positioned as an option that could still be effective to achieve Phase 3 goals but with more intensive activities over a shorter duration. After sharing both budget options, GiveWell requested R4D to provide a breakdown of the budget by activity for the ~\$2.25M budget option. To this end, R4D responded to the request and shared a breakdown of the selected budget envelope by activity during a meeting in September 2022. At this time, R4D also shared a further scaled down budget that could still meet the Phase 3 goals of sustainability and responsible close-out but with further scoped activities. This additional option was two years in duration for ~\$1.9M. After the discussions in September 2022 and at the request of GiveWell, three budget options are provided below for consideration, each describing the level of activities to be included, the duration, as well as the associated implications:

- Option #1: A recap of the \$1.9M budget shared during the September 2022 meeting
- Option #2: \$1.0M budget envelope
- Option #3: \$0.5M budget envelope

**Note:** For the purposes of planning, it is assumed that Phase 3 begins in September 2023.

[Option #1: \\$1.9M Budget Envelope](#)

The first option with a budget envelope of ~\$1.9M runs for a duration of two years and includes activities across the domains of financing, quantification, procurement, regulatory, commodity monitoring and codifying learnings (details of which can be found in Table B).

This budget option (which has already been downsized both in terms of duration and scope of activities) encompasses the level of activity that R4D believes are absolutely critical to achieve the goals of Phase 3 and sustain the gains made in availability of amox DT since program inception. The two-year duration provides a sufficient timeframe to collect and evaluate how amox DT availability and stockout data are impacted post transition and post implementation of some of the Phase 3 activities (i.e. financial advocacy and quantification efforts). The two-year timeframe also allows for participation in more than one cycle of financial planning and BUQ processes, creating opportunity to generate evidence on whether these Phase 3 interventions are effective.

This budget option also includes focused activities on codifying learnings which builds upon the earlier-shared progression model. Leveraging expertise of the evaluation and adaptive learning team, this activity (only included within this budget option), provides an opportunity to document learnings that can then be used to inform market shaping strategies for other commodities within the country or other countries with a similar landscape.

<b>Table B: Budget Option #1 Details and Activities Description</b>	
<b>Total Budget:</b>	\$1,924,997
<b>Duration:</b>	2 Years
<b>Activities Included:</b>	
<b>Finance</b>	Support financial advocacy at the PORALG level for HFs to prioritize financing for Amox DT
<b>Quantification</b>	Strengthen BUQ methodology and identify priority challenges within the BUQ process using adaptive learning tools and team expertise (i.e. systems mapping)
<b>Procurement</b>	Strengthen and streamline processes for Amox DT procurement as a sellable item
<b>Regulatory</b>	Routinize processes within GoT systems and focal point to continuously monitor supply base and policy environment
<b>Commodity Monitoring</b>	Track availability and stockout of Amox DT using eLMIS reports
<b>Codifying Learnings</b>	Leveraging earlier-shared progression model, document learnings from overall Pneumonia program

### Option #2: \$1.0M Budget Envelope

This second budget option includes an envelope of ~\$1.0M with a duration of 18 months. Table C provides further detail on the activities included within this budget envelope which are targeted to the domains of financing, quantification (lighter touch), procurement, regulatory and commodity monitoring.

The 18-month duration included within this budget option provides a shorter timeframe in which to evaluate the impact of transition to a sellable item and post-transition activities on amox DT availability and stockouts. More specifically, the ability to evaluate the impact of any interventions/activities aimed at improving the BUQ process is fully eliminated as the GoT initiates the BUQ progress in August, and an 18-month timeframe (with the assumption that Phase 3 starts in September 2023) would not allow for participation in more than one cycle of BUQ.

The scope of activities is also reduced for this budget option. Firstly, all activities focused on documenting the learnings of this program to inform similar programs in the future has been removed to accommodate the reduced budget envelope. Furthermore, while TA activities will still focus on identifying key challenges/breakdowns in the BUQ process, evaluation and adapting learning tools as well as M&E team expertise will not be included which limits skills and resources that would otherwise be beneficial to this type of activity.

<b>Table C: Budget Option #2 Details and Activities Description</b>	
<b>Total Budget:</b>	\$1,006,445
<b>Duration:</b>	18 months
<b>Activities Included:</b>	
<b>Finance</b>	Support financial advocacy at the PORALG level for HFs to prioritize financing for Amox DT
<b>Quantification</b>	Strengthen BUQ methodology and identify priority challenges within the BUQ process; <u>no longer</u> includes adaptive learning strategies and team expertise (i.e. systems mapping)
<b>Procurement</b>	Strengthen and streamline processes for Amox DT procurement as a sellable item
<b>Regulatory</b>	Routinize processes within GoT systems and focal point to continuously monitor supply base and policy environment
<b>Commodity Monitoring</b>	Track availability and stockout of Amox DT using eLMIS reports

### Option #3: \$0.5M Budget Envelope

This third budget option includes an envelope of ~\$0.5M with a duration of 1 year. Details of the activities focused on financing, quantification (lighter touch) and commodity monitoring can be found in Table D.

Once again, a further reduced duration of 12 months limits the ability to evaluate impact of the transition and post-transition activities on amox DT availability and stockouts. A further constrained budget also limits the scope of activities by removing key activities focused on streamlining and routinizing processes in the market domains of procurement and regulatory.

<b>Table D: Budget Option #3 Details and Activities Description</b>	
<b>Total Budget:</b>	\$501,445
<b>Duration:</b>	12 months
<b>Activities Included:</b>	
<b>Finance</b>	Support financial advocacy at the PORALG level for HFs to prioritize financing for Amox DT
<b>Quantification</b>	Strengthen BUQ methodology and identify priority challenges within the BUQ process; <u>no longer</u> includes adaptive learning strategies and team expertise (i.e. systems mapping)
<b>Commodity Monitoring</b>	Track availability and stockout of Amox DT using eLMIS reports

### Conclusion

Overall, as framed above, the implications of Covid-19 and the shift in political landscape over the past two years has changed the trajectory of the program, delaying some key milestones, particularly in the areas of sustainable financing. This delay, along with redirecting an additional ~\$2M from TA to further support product procurement at the request of the GoT, has required some activities, originally planned in Phase 2 to be pushed to Phase 3. For this reason, Phase 3 now includes both 'new' activities as well as activities typical of a close-out grant (i.e., activities focused on streamlining and routinizing processes to sustain the gains). Inclusion of net new activities in a close-out grant is unusual, and for this reason, it is hard to classify Phase 3 as a typical 'close-out' grant and challenging to apply typical 'close-out' grant parameters to its implementation.