HITAP
Health Intervention and Technology Assessment Program
FOUNDATION

ADVANCING SCHISTOSOMIASIS ELIMINATION AND STRENGTHENING HTA CAPACITIES IN TANZANIA
5 - 8 MAY 2025

PREPARED BY: HEALTH INTERVENTION AND TECHNOLOGY ASSESSMENT PROGRAM FOUNDATION (HITAP)

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List of acronyms

AAR	After-action review
ADP	Access and Delivery Partnership
AMR	Anti-microbial resistance
arPZQ	arpraziquantel
CASA	Community Anti-Schistosoma Advocates
HITAP	Health Intervention and Technology Assessment Program Foundation
HTA	Health technology assessment
MDA	Mass drug administration
NHIF	National Health Insurance Fund
NIMR	National Institute for Medical Research
NLEM	National List of Essential Medicines
NSRF	National Science, Research and Innovation Fund
PATH	Program for Appropriate Technology in Health
PSAC	Pre-school age children
SAC	School age children
T&T	Test-and-Treat
TMDA	Tanzania Medicines & Medical Devices Authority
TSRI	Thailand Science Research and Innovation
UCBP	Universal Coverage Benefit Package
UNDP	United Nations Development Programme
WHO	World Health Organization

Acknowledgements

The report summarises a visit to Tanzania and has been prepared by Mr. Panupong Chaowanasawat and Dr. Brandon Chua from the Health Intervention and Technology Assessment Program Foundation (HITAP), Thailand. The study visit was supported by the Access and Delivery Partnership (ADP), led by the United Nations Development Programme (UNDP) and the National Science, Research and Innovation Fund (NSRF), Thailand Science Research and Innovation (TSRI).

We would like to express our gratitude to the following individuals for their invaluable contributions to the study visit: Dr. Paul Kazyoba, Dr. Justin Omolo, Gerald Phares and Fedrick Mahawi from the National Institute for Medical Research (NIMR). We also thank Mr. William Reuben (President's Office, Regional Administration and Local Government), Dr. Inthira Suya and Deogratius Mkembela from ADP for their support and presentations during the visit, which were instrumental in supporting the success of this visit. We extend our gratitude to all resource persons, participants, and stakeholders who contributed their time and insights to this mission.

The findings, interpretations and conclusions expressed in this report do not necessarily reflect the views of the funding or participating agencies.

Document version: 02

Executive summary

Health Intervention and Technology Assessment Program Foundation (HITAP), in collaboration with Access and Delivery Partnership (ADP), conducted a mission to Tanzania from 5 to 8 May 2025 with a dual objective: 1) support the implementation of arpraziquantel (arPZQ) for pre-school age children as part of the STEPPS project, and 2) strengthen capacities in Health Technology Assessment (HTA) in Tanzania. The mission included a three-day HTA training, a stakeholder consultation meeting on the economic evaluation of arPZQ, and engagements with key institutions to explore future collaborations. The mission activities involved over 20 stakeholders from national health authorities, research institutions, hospitals, and international organizations. The mission facilitated sharing of international experiences on HTA institutionalization, priority setting, and economic evaluations, and helped identify pathways for advancing Tanzania's HTA agenda. The consultation helped refine the design of the economic evaluation of arPZQ, aligning it with the local context. Participants expressed a strong interest in continuing the development of HTA capacity and institutionalization.

Introduction

Background

Schistosomiasis remains a key public health concern in Tanzania, particularly among children under six who are not currently targeted by national treatment programs. Recently in 2024, arpraziquantel (arPZQ), an oro-dispersible formulation for treating children under six, was included in the list of prequalified medicinal products by the World Health Organization (WHO). Tanzania, with support from the Access and Delivery Partnership (ADP), led by the United Nations Development Programme (UNDP), is preparing to introduce this arPZQ through a real-world implementation study known as the STEPPS project. Treatment with arPZQ will be delivered through two strategies: mass drug administration (MDA) and test-and-treat (T&T). The STEPPS project will evaluate the feasibility and effectiveness of these strategies while generating evidence to inform national scale-up and global policy dialogue.

The Health Intervention and Technology Assessment Program Foundation (HITAP) is a research unit in Thailand and has been collaborating with ADP to strengthen the use of evidence to inform decision-making for health. In this initiative, HITAP has been involved in reviewing the STEPPS project protocol. HITAP is also involved in conducting an economic evaluation to inform decisions on the scale-up of the arPZQ program, guide international advocacy, and to build capacities for Health Technology Assessment (HTA). This study is expected to serve as a demonstration of using HTA in Tanzania.

To contribute to this process, HITAP was invited to visit Tanzania to conduct a training on HTA and provide support for stakeholder engagement for the economic evaluation of arPZQ. This mission also aimed to support Tanzania in institutionalizing HTA, leveraging experiences from Thailand and other countries. This study visit was supported by ADP and the National Science, Research and Innovation Fund (NSRF), Thailand Science Research and Innovation (TSRI).

Objectives

The objectives of the visit to Tanzania were as follows:

- Build capacity on HTA among Tanzanian stakeholders through structured training sessions.
- Engage stakeholders on the economic evaluation of arPZQ for schistosomiasis.
- Explore avenues for HTA institutionalization and foster collaborations on future HTA projects.

This report provides a summary of the study visit. Supporting documents are provided in the following Annexes: **Annex 1** details the study visit agenda; **Annex 2** details the list of participants; **Annex 3** summarises the stakeholder consultation; **Annex 4** details the after-action review (AAR) by HITAP; and **Annex 5** shows the event photographs.

Summary of visit

This section summarizes the proceedings of each session during the study visit held between 5 to 7 May 2025, by day, followed by a summary of the stakeholder consultation held on 8 May 2025. The agenda is provided in **Annex 1**, the list of participants in **Annex 2**.

HTA training

The HTA training was designed to provide an overview of HTA. Sessions were designed to be informative and interactive to encourage active participation from all parties.

The first day of training, commenced with introductions and an overview of Tanzania's current HTA landscape by Mr. William Reuben (President's Office, Regional Administration and Local Government). The session proceeded with an introduction to the fundamentals of Health Technology Assessment (HTA), including various types of economic evaluations and their roles in priority setting. Participants learned from Thailand's experience with the Universal Coverage Benefit Package (UCBP) and the National List of Essential Medicines (NLEM), gaining insights into how HTA supports systematic decision-making. The day ended with a hands-on session that guided participants through the development of search strategies for a systematic review, using PubMed as a resource.

The second day delved into the cost and outcome considerations for economic evaluations, with built-in exercise to complement the theoretical aspect of the session. The next session provides insights into the practical application of model-based economic evaluations. Real-world case studies from the Philippines, Vietnam, and Myanmar illustrated how economic models can inform policy decisions. Participants practiced formulating policy questions using the PICO framework and discussed challenges in selecting and contextualizing input parameters. Interactive exercises encouraged critical thinking on translating policy issues into structured analytical models.

The final day of the training addressed the institutionalization of HTA, highlighting essential elements such as governance, political commitment, and human resource development. Comparative experiences from Indonesia, Kenya, India, and Thailand were shared to illustrate different pathways toward sustainable HTA systems. Open discussions addressed challenges such as the role of politics in HTA, societal perspective used in HTA, and whether late adoption of a technology could be strategic. A final dialogue identified concrete next steps to advance Tanzania's HTA framework, including approval of pending HTA guidelines and establishing a national committee. The training closed with remarks from United Nations Development Programme (UNDP) and National Health Insurance Fund (NHIF), highlighting the success of the training in strengthening local capacity and supporting the institutionalization of HTA.

Stakeholder consultation

A stakeholder consultation meeting was held to present the study proposal and receive feedback for conducting an economic evaluation of arPZQ for pre-school age children (PSAC) in Tanzania. The STEPPS project is being implemented in Tanzania to introduce arPZQ, an oro-dispersible formulation approved for children under six. The project will compare two delivery models: T&T through maternal and child health clinics and MDA alongside school-based programs, while also piloting community awareness strategy known as the Community Anti-Schistosoma Advocates (CASA). In this context, an economic evaluation of arPZQ is planned as a secondary outcome of STEPPS to generate evidence to inform national decision-making and future program scale-up.

The meeting convened over 20 stakeholders from the Ministry of Health, President's Officer Regional Administration and Local Government, academic and research institutions (National Institute for Medical Research, Muhimbili University of Health and Allied Sciences, Kilimanjaro Clinical Research Institute, Muhimbili National Hospital), regulatory and financing bodies (Tanzania Medicines & Medical Devices Authority, NHIF), and development partners (WHO, UNDP, Program for Appropriate Technology in Health), facilitated by the HITAP team. Key points included choosing between cost-effectiveness analysis and cost-benefit analysis, defining comparators, outcome measures, time horizons, subgroup analyses by region and disease type, and parameters for sensitivity analyses. Participants confirmed that the analysis would focus on the STEPPS target population and compare two delivery models: MDA, and T&T via maternal and child health (MCH) clinics, against the current standard of no treatment for (PSAC). The evaluation will adopt a societal perspective, accounting for both health and economic outcomes, and use a 10-year time horizon, with sensitivity analyses conducted for longer-term impacts of arPZQ treatment. A Markov model was proposed, with subgroup analyses by region and schistosomiasis type due to epidemiological variation.

Stakeholders identified relevant data sources, including national surveys, health information systems, hospital records, and the real-world utilization data from the STEPPS project. However, data gaps persist in estimating costs of complications and long-term outcomes, for which expert elicitation and secondary data analysis were recommended. Next steps include refining the model structure, confirming data plans, engaging local collaborators in high-prevalence regions, and coordinating closely with the STEPPS implementation team. The meeting summary shared with participants is provided in **Annex 3**.

Study visit debrief

On the following day, 9 May, the NIMR and HITAP teams held a meeting to debrief on the training and stakeholder consultation, to identify next steps for the study. Overall, both teams agreed that the training was successful in achieving its objectives, while also recognizing that a continuous effort for capacity building is needed to ensure the sustainable institutionalization of HTA. Further discussion on the study took place, which included epidemiological data, complications and outcomes to be considered, time horizon, costing data, consideration of the impacts of CASA, and other analysis plans. The epidemiological data on schistosomiasis is more readily available for school age children (SAC), and this may serve as a proxy to estimate disease progression in PSAC. For complications and outcomes, analyses will require separate breakdowns for SAC and adults, if available. A 10-year time horizon is proposed for the analysis, as both the intervention and comparator groups would have left school and likely transitioned to community-based treatment programs within this period. For those untreated people with schistosomiasis, longer-term impacts on employment and education can be explored beyond the 10-year model results. The meeting concluded with the next steps of the study where the study protocol and model framework will be developed according to the consensus.

Outcomes of the study visit

Overall outcomes

The visit successfully enhanced understanding of HTA processes among Tanzanian stakeholders, aligned priorities for the economic evaluation of arPZQ, and outlined immediate next steps for advancing HTA institutionalization, including the approval of guidelines and establishment of a national HTA committee. The stakeholder meeting provided critical feedback on the protocol for the study on economic evaluation of arPZQ for PSAC in Tanzania and identified next steps. It also allowed teams from NIMR and HITAP to meet and discuss mechanisms of working together. In addition, other potential avenues for collaboration were identified, such as knowledge sharing on having a peritoneal dialysis first policy, as the case study from Thailand on this topic was presented during the training. Other research opportunities, such as anti-microbial resistance (AMR), cervical cancer, health benefits package design, were also discussed.

Participants' feedback

The feedback from the visit was overwhelmingly positive. Through an online feedback form, the participants were asked about the study visits' objective, contents, activities, and logistics and follow-up actions after the study visits. The participants expressed great satisfaction with the visit and its outcomes. The delegates were thankful for the commitment and expertise of the staff and facilitators, and among the activities organized, and the insightful open dialogue the most. Some participants were interested in learning about more advanced areas of HTA, but it was noted that the scope of the training was limited by the number of days. Additionally, future visits can explore having more perspectives from other countries in the sessions organized. Summary of participant's feedback is provided in **Annex 4**.

HITAP team reflections

An in-person AAR was conducted with the HITAP team to reflect on what went well and what could have been done differently (see **Annex 5** for AAR questions). Overall, the team had a positive reflection on the outcomes of the visit. They were able to carry out the objectives of the mission, while learning about the existing HTA landscape in Tanzania. The team also acknowledged the importance of the careful planning and preparation of materials, while remaining flexible to changes in logistical arrangements.

Communications outputs

Communications' posts on social media were published for the training (click here) and the stakeholder meeting (click here). Pictures from the event are available in **Annex 6**.

Future collaborations

The mission successfully enhanced understanding of HTA processes among Tanzanian stakeholders, aligned priorities for the economic evaluation of arPZQ. The mission also outlined immediate next steps for advancing HTA institutionalization, including the approval of guidelines and establishment of a national HTA committee. HITAP will continue to engage with Tanzanian partners to support the institutionalization of HTA, while exploring opportunities for future collaborations.

Annexes

Annex 1: Agenda

Advancing Health Technology Assessment in Tanzania

Training objectives

1. Understand the role of HTA for priority setting and decision making
2. Compare and contrast institutionalization of HTA in lower-middle income countries
3. Design and execute a search strategy for evidence synthesis
4. Discuss the role, design and applications of model-based economic evaluation to inform decision making

Training agenda

Day 1 (5 May 2025)		
Time	**Details of topic**	**Resource persons**
0830 – 0900	Introductions	HITAP
0900 – 0945	Tanzania's current HTA landscape, gaps and opportunities	William Reuben (Ministry of Health)
0945 – 1030	The role of HTA in priority setting and decision-making	Panupong Chaowanasawat (HITAP)
1030 – 1100	Q&A	HITAP
1100 – 1115	Break	All
1115 – 1200	Applications of HTA in priority setting and decision-making	Saudamini Dabak (HITAP)
1200 – 1230	Q&A	HITAP
1230 – 1330	Lunch	All
1330 – 1430	Exercise: Priority setting for health	Panupong Chaowanasawat (HITAP)
1430 – 1515	Exercise debrief	Saudamini Dabak (HITAP)
1515 – 1530	Break	All
1530 – 1615	Systematic reviews for evidence synthesis	Dr Brandon Chua (HITAP)
1615 – 1715	Exercise: Designing a search strategy for PubMed	Dr Brandon Chua (HITAP)
1715 – 1730	Q&A	HITAP
1730 – 1745	Day 1 debrief	HITAP
Day 2 (6 May 2025)		
Time	**Details of topic**	**Resource persons**
0830 – 0900	Recap from Day 1	HITAP
0900 – 1015	Cost considerations for economic evaluation	Panupong Chaowanasawat (HITAP)
1015 – 1030	Q&A	All
1030 – 1045	Break	HITAP
1045 – 1145	Outcomes measures for economic evaluations	Saudamini Dabak (HITAP)
1145 – 1200	Q&A	All
1200 – 1300	Lunch	All
1300 – 1400	Economic evaluations for HTA	Dr Brandon Chua (HITAP)
1400 – 1415	Q&A	All

1415 – 1430	Break	All
1430 – 1600	Case study discussions: Applications of model-based economic evaluations	Dr Brandon Chua (HITAP)
1600 – 1630	Q&A	HITAP
1630 – 1700	Day 2 debrief	HITAP
Day 3 (7 May 2025)		
Time	**Details of topic**	**Resource persons**
0830 – 0900	Recap from Day 2	HITAP
0900 – 1000	How can HTA be institutionalized?	Saudamini Dabak (HITAP) Panupong Chaowasanawat (HITAP)
1000 – 1015	Q&A	All
1015 – 1030	Break	All
1030 – 1200	Challenges and lessons learnt from HTA institutionalization	Saudamini Dabak (HITAP) Panupong Chaowasanawat (HITAP)
1200 – 1230	Q&A	
1230 – 1330	Lunch	All
1330 – 1500	Navigating facilitators and barriers related to policies and regulations for HTA	Saudamini Dabak (HITAP) Dr Inthira Suya (ADP)
1500 – 1515	Q&A	
1515 - 1530	Break	
1530 – 1630	Open dialogue: advancing Tanzania's HTA development	Dr Paul Kazyoba
1630 – 1700	Training debrief and Discuss next Steps	HITAP
Day 4 (8 May 2025)		
Time	**Details of topic**	**Resource persons**
0830 – 0900	Registration	
0900 – 1000	Opening remarks and overview of the project	Dr Paul Kazyoba
1000 – 1015	Presentation on the plan of the economic evaluation	Dr. Brandon Chua
1015 -1030	Break	All
1015 – 1230	Discussion: • Approach of the economic evaluation • Outcomes to consider • Data availability	All
1230 – 1330	Lunch	All
Day 5 (9 May 2025)		
Time	**Details of topic**	**Resource persons**
1000 - 1200	Debrief	NIMR, HITAP
1200 onwards	Close and travel to Dodoma	HITAP
End of program		

Annex 2: List of Participants

A. HTA Training

No.	Name	Organization
1	William Reuben	President's Office, Regional Administration and Local Government
2	Dr. Fatuma Manzi	Ifakara Health Institute
3	Isaya Mapunda	Regional Pharmacist, Kigoma Regional Health Management Team
4	Dr. Tolbert Sonda	Kilimanjaro Clinical Research Institute
5	Daudi Msasi	Chief Pharmacist, Ministry of Health, Tanzania
6	Jason Maro	Medical Stores Department, Ministry of Health, Tanzania
7	Toyi Midaba	Neglected Tropical Diseases Control Programme, Ministry of Health
8	Mohamed R Nyati	Neglected Tropical Diseases Control Programme, Ministry of Health
9	Marco W Salingu	Pharmaceutical Services Unit, Ministry of Health, Tanzania
10	Nelson Faustine	Muhimbili National Hospital
11	Dr. Saul Shemdoe	Muhimbili University of Health and Allied Sciences
12	Dr. Godfrey Smart	Muhimbili University of Health and Allied Sciences
13	Dr. Cosmas Mogasa	National Health Insurance Fund
14	Dr. David Mwenesano	National Health Insurance Fund
15	Dr. Paul Kazyoba	National Institute for Medical Research
16	Dr. Justin Omolo	National Institute for Medical Research
17	Gerald Phares	National Institute for Medical Research
18	Fedrick Mahawi	National Institute for Medical Research
19	Aifelo Sichalwe	Tanzania Medicines and Medical Devices Authority
20	Deogratius Mkembela	UNDP, Tanzania
21	Abdi Mushi	Ministry of Health, Tanzania
22	Davance Mwasomola	Mbeya Zonal Referral Hospital
23	Debora Liona	Ministry of Health, Tanzania
24	Dr. Inthira Suya	UNDP, Thailand
25	Dr. Brandon Chua	Health Intervention and Technology Assessment Program Foundation (HITAP)
26	Saudamini Dabak	Health Intervention and Technology Assessment Program Foundation (HITAP)
27	Panupong Chaowanasawat	Health Intervention and Technology Assessment Program Foundation (HITAP)

B. List of participants: Stakeholder consultation for economic evaluation of arpraziquantel for pre-school children in Tanzania

Date: 8 May 2025
Time: 9am-1pm
Location: Rafiki Hotel, Dodoma, Tanzania

Attendees

S/N	Name	Institution
1	Dr Fatuma Manzi	Ifakara Health Institute
2	Isaya Mapunda	Regional Pharmacist, Kigoma Regional Health Management Team
3	Dr Tolbert Sonda	Kilimanjaro Clinical Research Institute
4	Daudi Msasi	Chief Pharmacist, Ministry of Health
5	Jason Maro	Medical Stores Department, Ministry of Health
6	Toyi Midaba	Ag Programme Manager, Neglected Tropical Diseases Control Programme, Ministry of Health
7	Mohamed R Nyati	Neglected Tropical Diseases Control Programme, Ministry of Health
8	Marco W Salingu	Pharmaceutical Services Unit, Ministry of Health
9	Nelson Faustine	Muhimbili National Hospital
10	Dr Saul Shemdoe	Muhimbili University of Health and Allied Sciences
11	Dr Godfrey Smart	Muhimbili University of Health and Allied Sciences
12	Dr Cosmas Mogasa	National Health Insurance Fund
13	Dr Paul Kazyoba	National Institute for Medical Research
14	Dr Justin Omolo	National Institute for Medical Research
15	Gerald Phares	National Institute for Medical Research
16	Fedrick Mahawi	National Institute for Medical Research
17	John Gamaliel	PATH
18	Aifelo Sichalwe	Tanzania Medicines and Medical Devices Authority
19	Deogratius Mkembela	UNDP, Tanzania
20	Dr January Zilabumba	World Health Organization

Facilitators

S/N	Name	Institution
1	Dr Brandon Chua	Health Intervention and Assessment Program Foundation
2	Saudamini Dabak	Health Intervention and Assessment Program Foundation
3	Panupong Chaowanasawat	Health Intervention and Assessment Program Foundation

Annex 3: Meeting summary of stakeholder consultation

Stakeholder consultation for economic evaluation of arpraziquantel for pre-school children in Tanzania

Date: 8 May 2025
Time: 9am-1pm
Location: Rafiki Hotel, Dodoma, Tanzania

Summary of discussion

1. **Background on arpraziquantel (arPZQ)**
    - Approved 150mg oro-dispersible tablet for the treatment of schistosomiasis for age 3 months to 6 years
    - Received positive scientific opinion European Medicines Agency (EMA) in Dec 2023.
    - Included in WHO List of Prequalified Medicinal Products in May 2024.

2. **Background of STEPPS project in Tanzania**
    - Implementation research for delivery of arPZQ through two delivery strategies
        - Test and treat (T&T): To be done through maternal child health (MCH) clinics, where patients will be tested, and treated if positive.
        - Mass drug administration (MDA): treat all target population through integration in the community and school age children (SAC) MDA.
    - The study will also evaluate the impact of an awareness building program called the Community Anti-Schistosoma Advocates (CASA) strategy.
    - The primary outcome for STEPPS is the effectiveness and acceptability of the delivery models measured through the uptake of arPZQ.
    - A secondary outcome for STEPPS is an economic evaluation.

3. **Agreed elements of the economic evaluation**
    - Scope of analysis according to PICO framework
        - Population
            - Pre-school age children (PSAC), specifically 24-59 months old, in line with the STEPPS project
        - Intervention
            - arPZQ through MDA (once or twice a year) or T&T
        - Comparator
            - Usual care, where there is no treatment until 6 years old (where there is SAC program available)
        - Outcome
            - Focus on health-related outcomes, including adverse effects of treatment, and selected schistosomiasis-related complications
    - Type of analysis: Cost benefit analysis (CBA), with consideration for cost-effectiveness analysis (CEA) or cost-utility analysis (CUA).
    - Perspective: Societal
    - Model type: Markov model
    - Time horizon: 10 years, with consideration for longer term horizon

4. **Program-related considerations discussed**
    - The current care model for schistosomiasis was clarified as the following:
        - PSAC (<6 years old): no treatment
        - SAC (6 years to 14 years old): SAC program
        - above 14 years old: community/adult programs
    - MDA is informed by precision mapping, that is done to focus efforts in high prevalence areas.
    - The economic evaluation can consider capturing the impacts of a missed MDA, in a setting where twice a year MDA is planned
    - It is challenging to determine the frequency of arPZQ treatment now, as it relates to disease burden, and also has cost implications.
    - The time of treatment is an important consideration. For example, treatment prior to snail breeding season would disrupt the transmission cycle more effectively than treatment in other seasons. MDA involves treatment at one or two fixed timing times a year, while T&T can be anytime throughout the year.
    - Socio-cultural factors and awareness of disease may affect adherence to treatment.
    - The impact of WASH interventions, and environmental control were discussed and the limitations of the current analysis plan focusing on human health were acknowledged.

5. **Disease considerations discussed**
    - Urogenital schistosomiasis (*Schistosoma haematobium*) should be distinguished from intestinal schistosomiasis (*Schistosoma mansoni* and *Schistosoma japonicum*), and they have different measurements for infection intensity.
        - Intestinal schistosomiasis: eggs per gram of feces
        - Urogenital schistosomiasis: eggs per 10ml of urine
    - Infection intensity should be distinguished from disease severity
        - Disease severity considers disability associated with schistosomiasis
        - Additional dimensions of disease severity of infection may consider biomarkers, and co-infection with other diseases

6. **Cost data considerations discussed**
    - Cost items will be gathered from the STEPPS project, and other primary data collection.
    - There will be challenges in estimating cost of complications, since such cost data are not routinely captured.

7. **Outcomes data considerations discussed**
    - Published data on complications (shared during the meeting) may not be reflective for Tanzania.
    - Top few complications, including causes of death, from dispensaries and health facilities in Tanzania can be considered.
    - Female genital schistosomiasis (FGS) is an emerging concern.

8. **Analysis considerations discussed**
    - There are challenges in quantifying benefits for a cost benefit analysis. A CEA or CUA may be considered alongside the CBA.
    - A simple cost analysis may also be meaningful in informing program scale-up.

- Subgroup analysis can be done by sub-regions as it is linked to varying prevalence and infection intensity. Program budgets are allocated by sub-districts.
- Sensitivity analysis of key data inputs will be conducted to understand the impacts of uncertainties in data inputs.
- Time horizon of the analysis was discussed as follows:
  - A longer time horizon beyond 10 years may be explored, and may be of relevance to other settings with schistosomiasis
  - Time horizon may be informed by how long it takes for complications to occur.
  - It is unlikely that the schistosomiasis program will run a lifetime as treatment (e.g. MDA) will likely cease when the prevalence falls below the 1% threshold.
- Adverse effects of treatment with arPZQ are expected to be small based on available literature, but its impact can be explored in sensitivity analysis

9. Stakeholder involvement

- Epidemiologists and mathematicians for validation of model assumptions and findings.
- Clinicians or program coordinators from Sengerema and Kome Island where there is high disease prevalence.

10. Potential sources of data proposed by stakeholders

Data type	Sources
Population characteristics	
Number of target population	• National Bureau of Statistics • Ministry of Health • Program specialists (national level) • Demographic survey/district level/ward
National/ NTD program coverage	• NTDCP, Ministry of Health • DHIS2 • Program specialists (national level)
School enrolment/ attendance	• TAMISEMU • Local government authority • Ministry of Education, Districts/regional education office • National Bureau of Statistics • Tanzania Demographic & Health survey • President's Office, Regional Administration and Local Government
Age to start work	• National Bureau of Statistics • International Labour Organization • UNICEF • World Bank • Ministry of labour • Global Economy • World Bank • Local government authority
All-cause mortality	• Ministry of Health • Demographic health survey • National Bureau of Statistics • Global burden of diseases • Demographic Data, Local Health Facilities • DHIS2 • World Health Organization • World bank
Clinical	
arPZQ effectiveness	• Systemic review and meta-analysis
Schistosomiasis prevalence	• ESPEN • World Health Organization • Systemic review and meta-analysis
Schistosomiasis incidence	• National Institute of Medical Research • Catholic University of Health and Allied Sciences • Schistosomiasis workbook ESPEN-WHO • DHIS2
Schistosomiasis re-infection	• DHIS2 • Systemic review and meta-analysis
Schistosomiasis complications	• Ministry of Health • Tertiary hospitals, Bugando hospital, Sekou toure hospital • National Institute for Medical Research • Catholic University of Health and Allied Sciences (CUHAS) • NTDC program • Systematic review and meta-analysis • National survey • DHIS2 • Head of Sub-district/Ward
Schistosomiasis related mortality	• Health facilities • GoTHOMIS, Afya care • Bugando hospital • NTDC program • Systematic review and meta-analysis • National survey • DHIS2
% symptomatic from schistosomiasis	• Ministry of Health • National Institute for Medical Research • Sekou Toure regional referral hospital • Bugando Medical Centre and hospital in lake zone • DHIS2 • NTDC program
% symptomatic seeking care	• NTD Program, MoH • BMC and hospital in lake zone • DHIS2

Compliance	• Systemic review and meta-analysis
Follow up for complications	• Tertiary level hospital, Regional Hospitals • Systemic review and meta-analysis
Adverse events	• Tanzania Food and Drug Authority • Systemic review and meta-analysis
Cost	
Cost of arpzq	• Tanzania Medicines and Medical Devices Authority • TRA • GPSA • WHO • MOH, MSD • Supplier
Cost of training	• MOH, MSD, PSU • TAMISEMU • National Institute for Medical Research • NTD Programme (Annual per district - 30 million)
Cost of delivering arPZQ	• MOH, MSD • TAMISEMU • National Health Insurance Fund • Healthcare Providers • Tanzania Medicines & Medical Devices Authority (TMDA) • NTDC program • Interview/household survey
Cost of managing complications	• Tanzania Medicines and Medical Devices Authority • Council/District Hospitals • PHC • NTDC program
Median wage	• National Bureau of Statistics
Others	
Human water contact	• Catholic University of Health and Allied Sciences • National Institute of Medical Research, Mwanza Centre
WASH	• Ministry of Water • District/Town Councils (DHO/THO office)
Program geographical presentation	• Regional Medical Officer
Time to seek care	• Interview/household survey
Manager time input	• Interview/household survey
Others	• ESPEN/EPIRIT - WHO Database

Annex 4: After-action review questions

After-action review for the Tanzania mission, 5 - 8 May 2025

The purpose of this AAR is to summarize the experience from the Tanzania mission between 5 – 8 May 2025. This survey covers all areas including:

- academics (e.g., agenda development, session planning, session content, flow of content, time, and duration of session),
- logistics (e.g., location, food, and transportation),
- partnership or engagement with partners,
- internal capacity building etc.

Please provide your input based on your experience during your responsible session(s) or during the overall visit.

1. What did we expect to happen?
2. What really happened?
3. What went well? and why did it go well?
4. What would you do differently for the next study visit hosted by HITAP?
5. Any suggestions at all?

Annex 5: Event photographs

Wrap up of Health Technology Assessment capacity strengthening workshop (5-7 May)

Stakeholder consultation for economic evaluation of arpraziquantel in Tanzania (8 May)

Delegates learning about formulating a search strategy for health technology assessment, facilitated by Dr Brandon Chua

Delegates learning decision rules for Health Technology Assessment, facilitated by Panupong Chaowanaswat and Saudamini Dabak

Delegates learn about measuring outcomes for economic evaluations, facilitated by Saudamini Dabak