

Costing study of interventions to optimize outreach Service to reach ZD children in Addis Ababa

Alemnesh Angelo
Senior Analyst
Health Financing

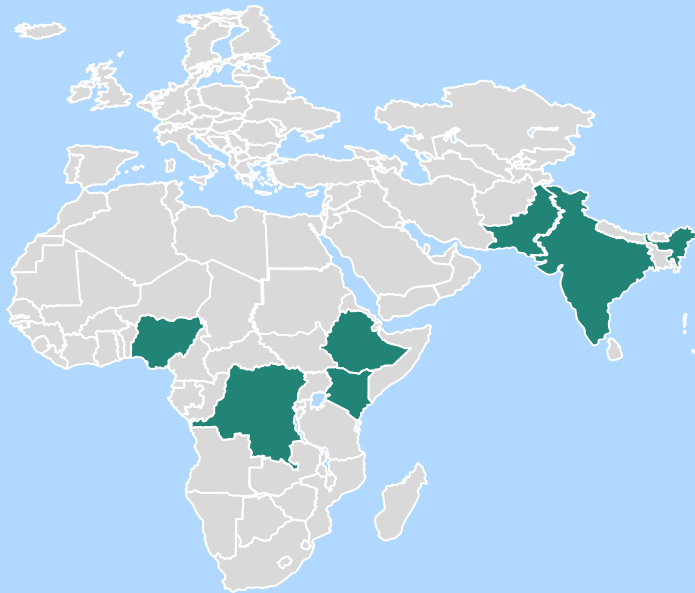
July 2025



**IMMUNIZATION
ECONOMICS.ORG**

Background: ZDLA is a multi county project aimed at uncovering the root cause of ZD, co-creating, testing, and continuously improving solutions by engaging the community and stakeholders

ZDLA country projects



ZDLA Human Centred Design Approach

- Unpack the root causes of why children are not vaccinated

- Continuously learn and improve



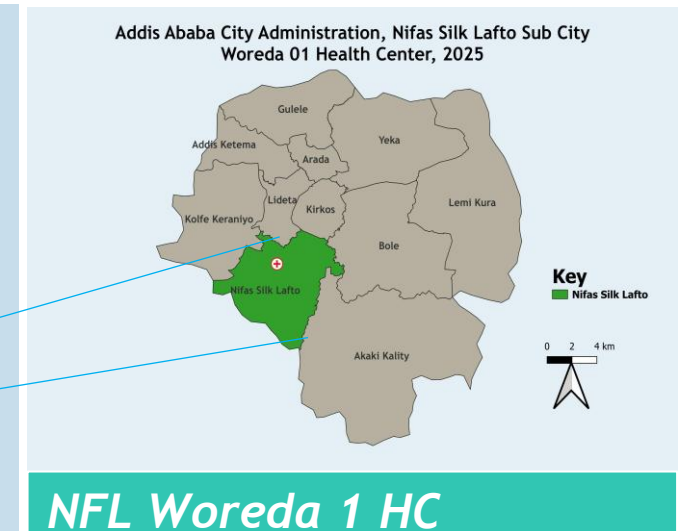
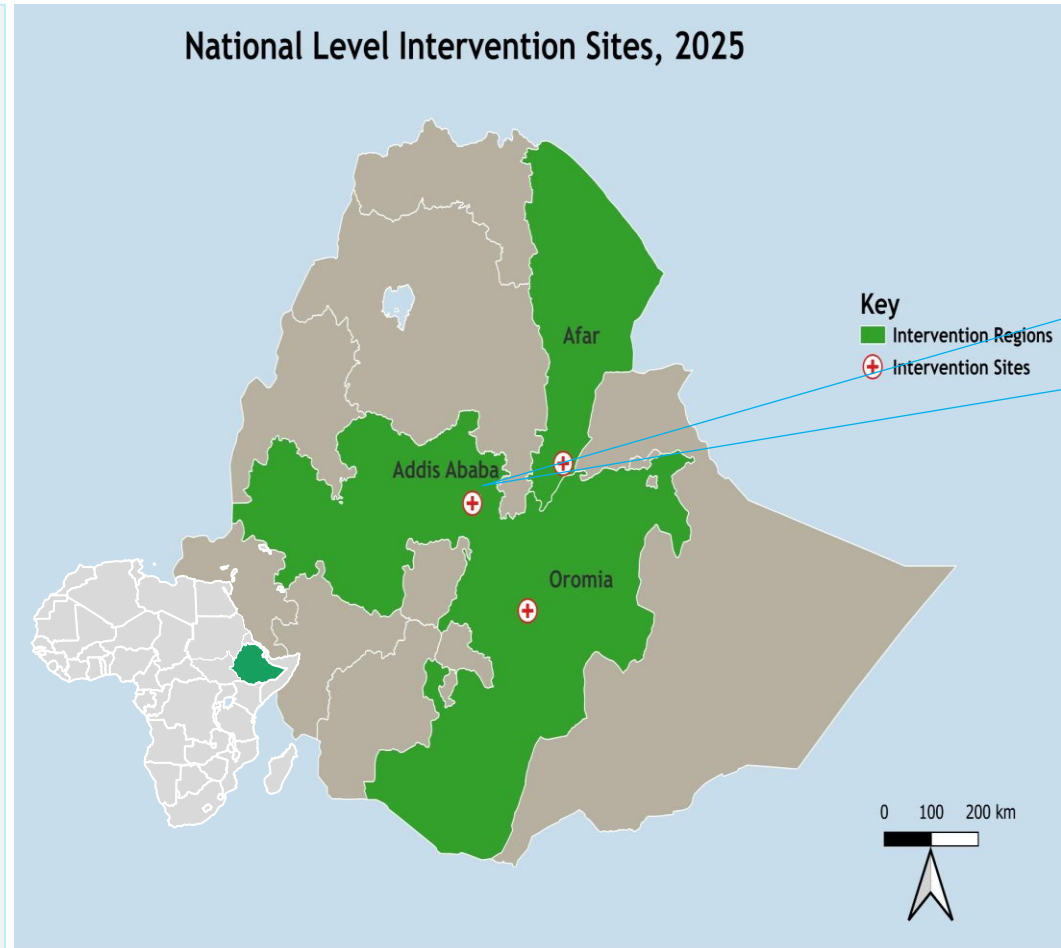
- Solutions with communities, health care workers, and government

- Test and implement solutions

Government uptake & sustainability

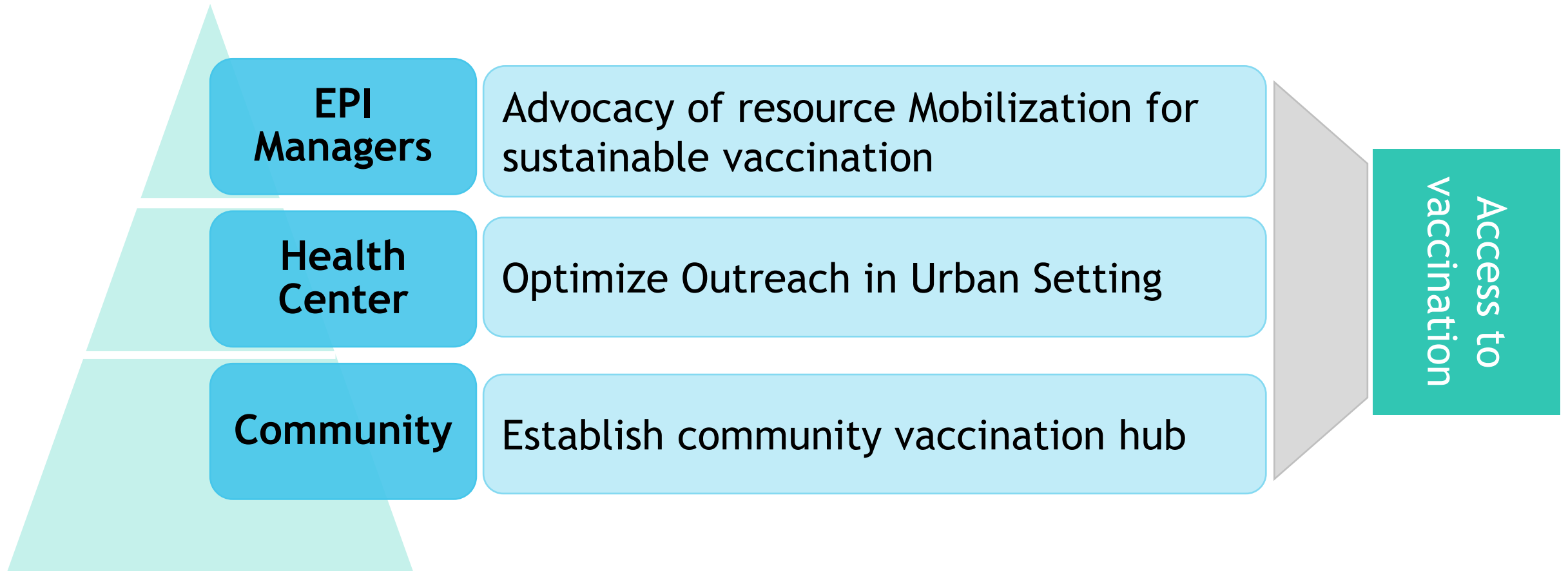
Background: CHIA implementing ZD and ZDLA projects in Ethiopia with the financial support of Gavi, BMGF and ELMA

- Ethiopia ranked 3rd* with 917k ZD children
- CHAI is implementing ZD project in 15 woredas of 5 regions
- Supported by Gavi, BMGF and ELMA.
- ZDLA interventions are in place across three sites
- Scope of this study is on **Addis Ababa**



- Established in 2014
- Catchment: three districts (D1+D14+D15)
- Population :51,580
- ZD prevalence: 2.5%**

Interventions: Three co-created interventions prioritized and rolled out to address structural barriers to vaccination access



Objective & Methodology: Estimate the cost of reaching ZD children using ingredient-based, payers' perspective, & retrospective approach

Key Objectives

Assess the incremental cost of reaching ZD children

Analyze the key cost drivers and implication

Data collection

Structured data collection instrument

Pretested and complemented by observation at OR site

Costing Study Methodology

Ingredient-based costing

Payers' perspective

Retrospective

Cost of ZD Intervention

Financial Cost

- Per dime cost
- Renovation cos
- Transport cost

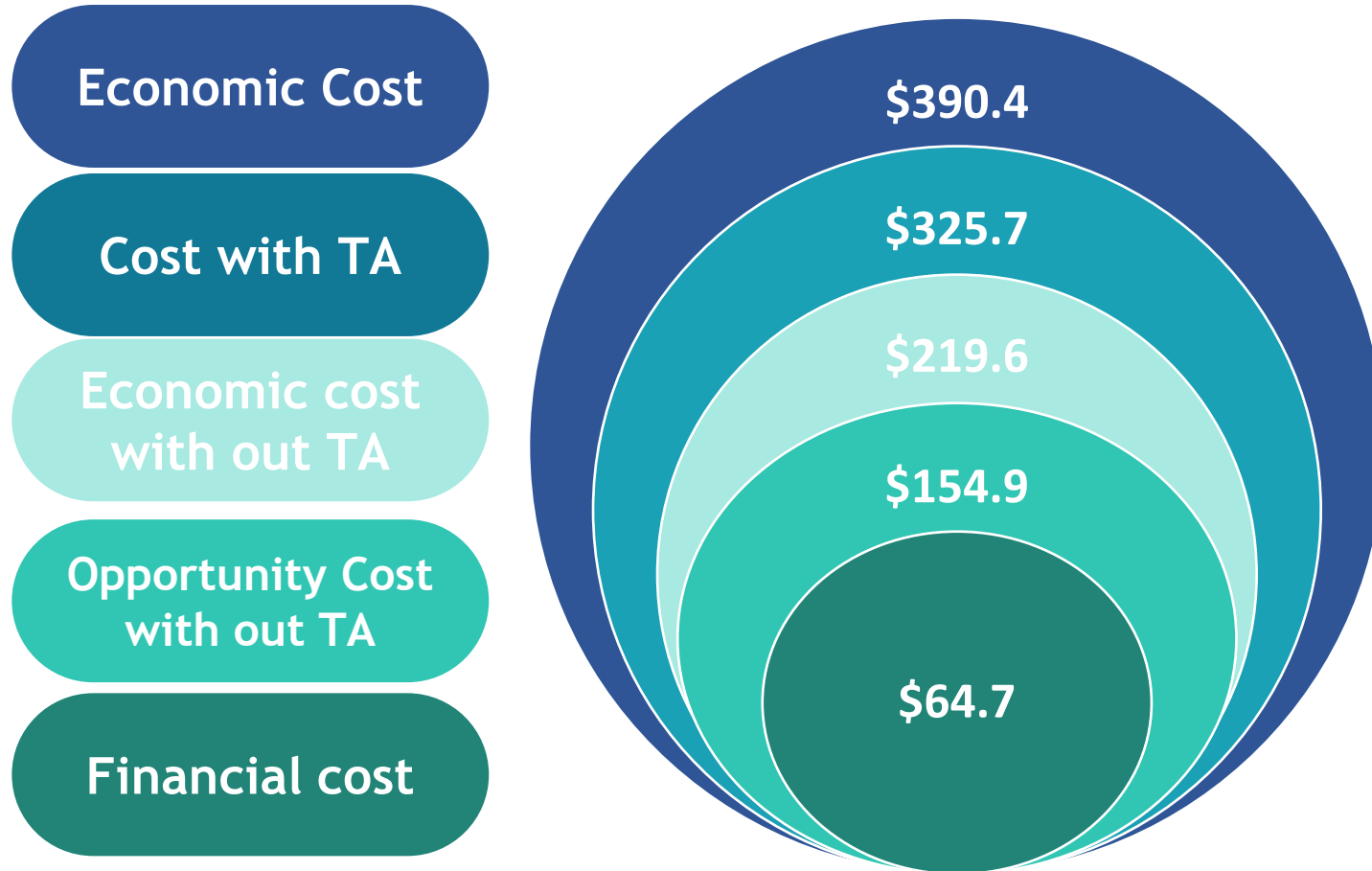
+

Opportunity Cost

- Capital investment
- Volunteers time
- Donations/ transfers
- TA time

Cost of vaccine and injection supplies are excluded

Results: The incremental financial and economic cost of implementing ZDLA interventions range from \$65 to \$390 per month



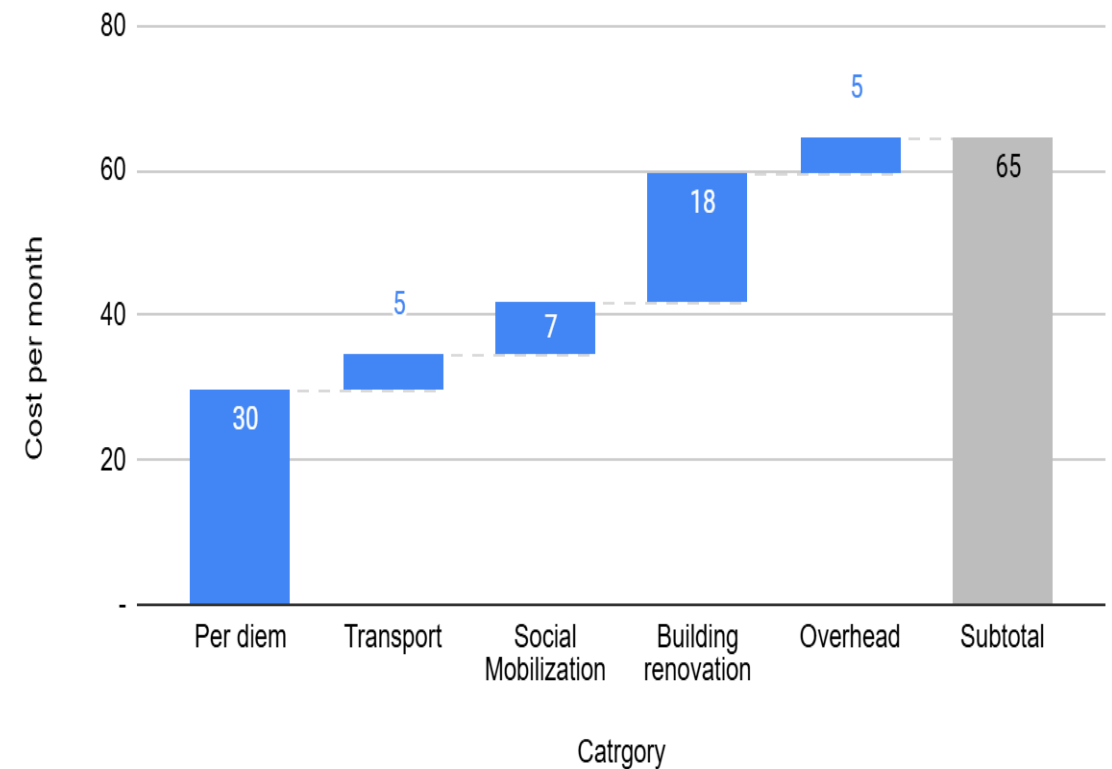
High economic vs financial cost due to:

- Heavy reliance on the existing HR & volunteers
- Investment in improving existing assets
- Leveraging transferred furniture

Result: Per diem accounts for significant part the of financial cost (46%) followed by renovation (28%), social mobilization(11%), & transport cost (7%)

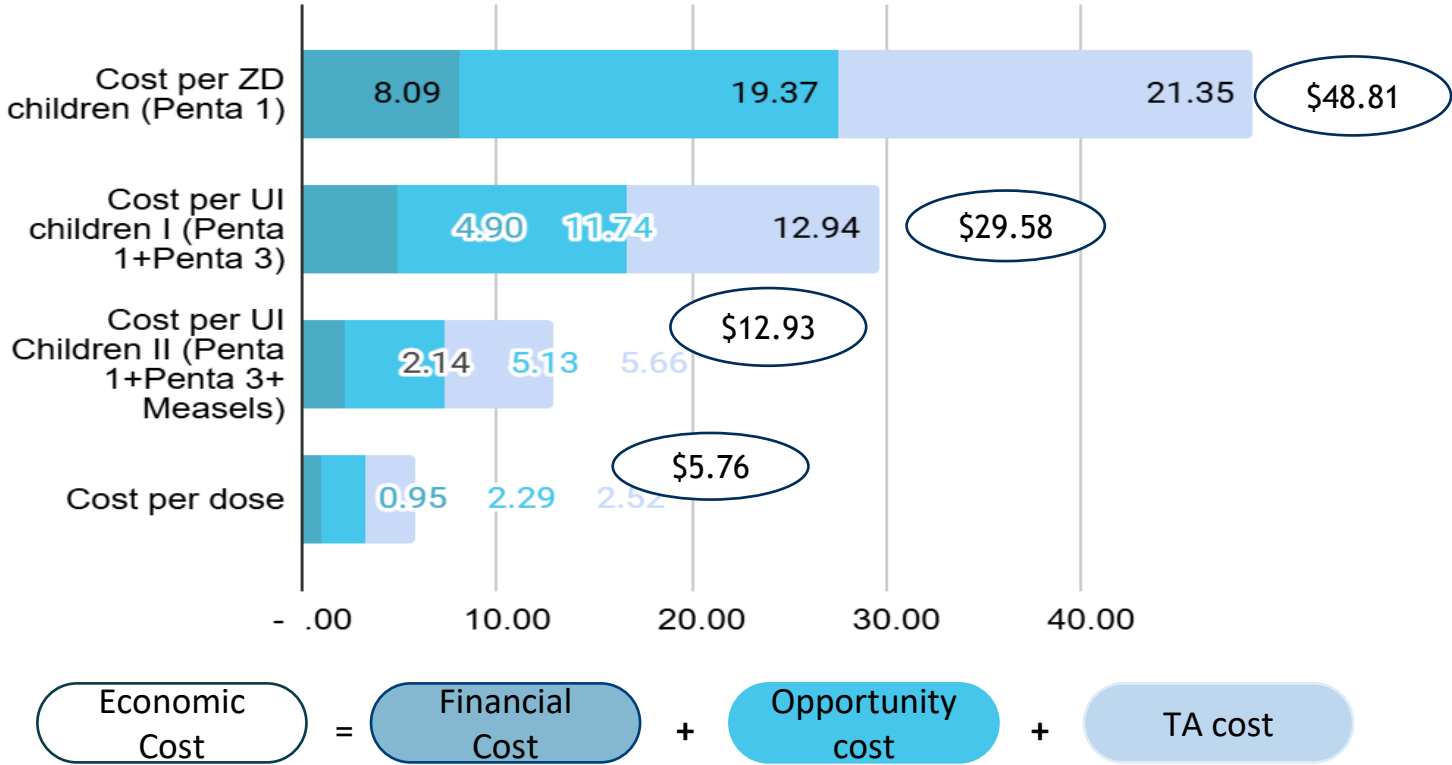
Cost Category	Share of FC	Share of EC
HR Cost	0%	8%
Per diem	46%	8%
Volunteer HR	0%	9%
Transport	8%	11%
Furniture	0%	3%
Social Mob	11%	2%
Renovation	28%	13%
Overhead	7%	2%
TA time	0%	44%
Total	100%	100%

Financial Cost build-up per month (USD)



Result : The financial cost of vaccinating ZD children estimated at \$8.1 while Economic cost range from \$27.4 to \$48.8 including TA time

Incremental Cost of Vaccination



Key Takeaways

High incremental cost per ZD children and per doze compared to routine vaccine delivery (\$ 1.57* and \$1.37 for Ethiopia and LMICs, respectively)

- Targeting marginal group in high vaccination coverage setting (87%)
- No economies of scale

Comparing with cost for reaching UI and ZD children in Uganda and India, it is low (\$17.51* to \$63.29*)

• Source: ThinkWell. 2024. Immunization Delivery Cost Catalogue. Geneva:

Key Insights and implication



Cost Difference

- Significant differences in financial and economic costs arise from reliance on the existing workforce, volunteers, and other resources.



Cost Drivers

- Per diem, HR, renovation, and transport are major components of financial costs and economic costs.



Cost of reaching UI and ZD children

- Cost of reaching UI and ZD children in urban slum is more expensive compared to routine child vaccination.
- Incremental cost estimates to reach UI and ZD children are below that of Uganda and India but with different context



Intervention Effectiveness

- Further research and evidence needed to get insight on effectiveness and determine return on investment

Thank you

Alemnesh Angelo

aangelo@clintonhealthaccess.org



**IMMUNIZATION
ECONOMICS.ORG**