



IMPACT STORIES

**Saving Lives
& Livelihoods**

in partnership with



AFRICA CDC

Centres for Disease Control and Prevention

Safeguarding Africa's Health



Amref Health Africa

Amref Health Africa is the largest African-based and led international health development organization serving over 30 million people annually across 35 countries in sub-Saharan Africa. Strategically engaging with communities, governments, and local partners for the past 65 years, we work through our European and North American network of sister organizations on program implementation, advocacy, fundraising and partnership. Our subsidiaries include Amref Flying Doctors, Amref Enterprises Limited, and the Amref International University.

Our organization is driven by its vision to bring lasting health change in Africa and its mission to catalyze and drive community-led and people-centered health systems while addressing social determinants of health. Amref has been active in Ethiopia since the 1960s and became fully operational as of 2002.

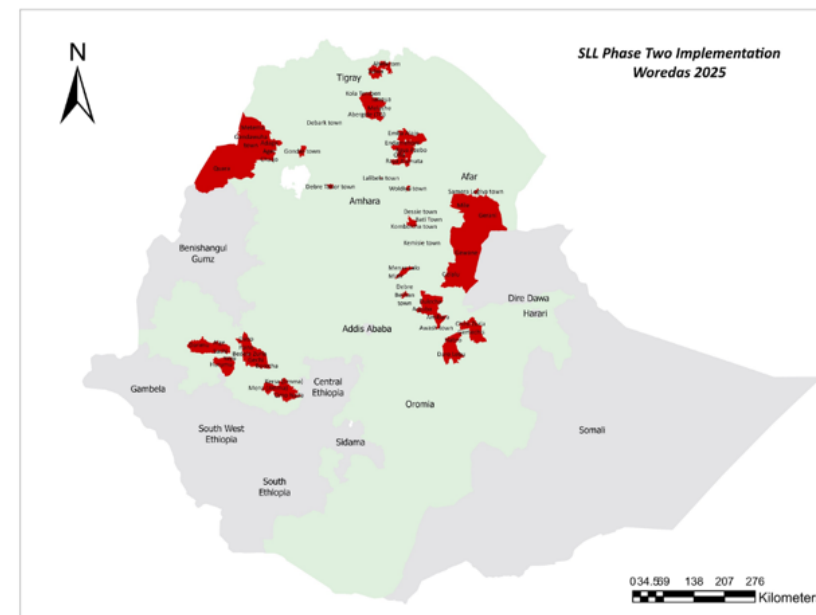
Our Program Focus Areas

- Reproductive, Maternal, Neonatal, Child, Adolescent & Youth Health and Nutrition
- Health Systems Strengthening
- Youth Development
- Water, Sanitation and Hygiene
- Disease Prevention and Control

Saving Lives and Livelihoods Program Phase II

The Africa CDC and the Mastercard Foundation have entered a new phase of their partnership under the Saving Lives and Livelihoods initiative, following the World Health Organization's declaration that the COVID-19 pandemic is no longer a public health emergency of international concern.

With financial support from the Mastercard Foundation through the Africa CDC, Amref Health Africa is collaborating with the Federal Ministry of Health (FMOH), Regional Health Bureaus (RHBs), and local health offices to implement this program across 50 woredas Oromia, Amhara, Tigray Region and Afar regions.



This Phase II initiative was designed to integrate COVID-19 vaccination into routine immunization and primary healthcare (PHC) services through life course approach and thereby strengthening Ethiopia's public health systems.

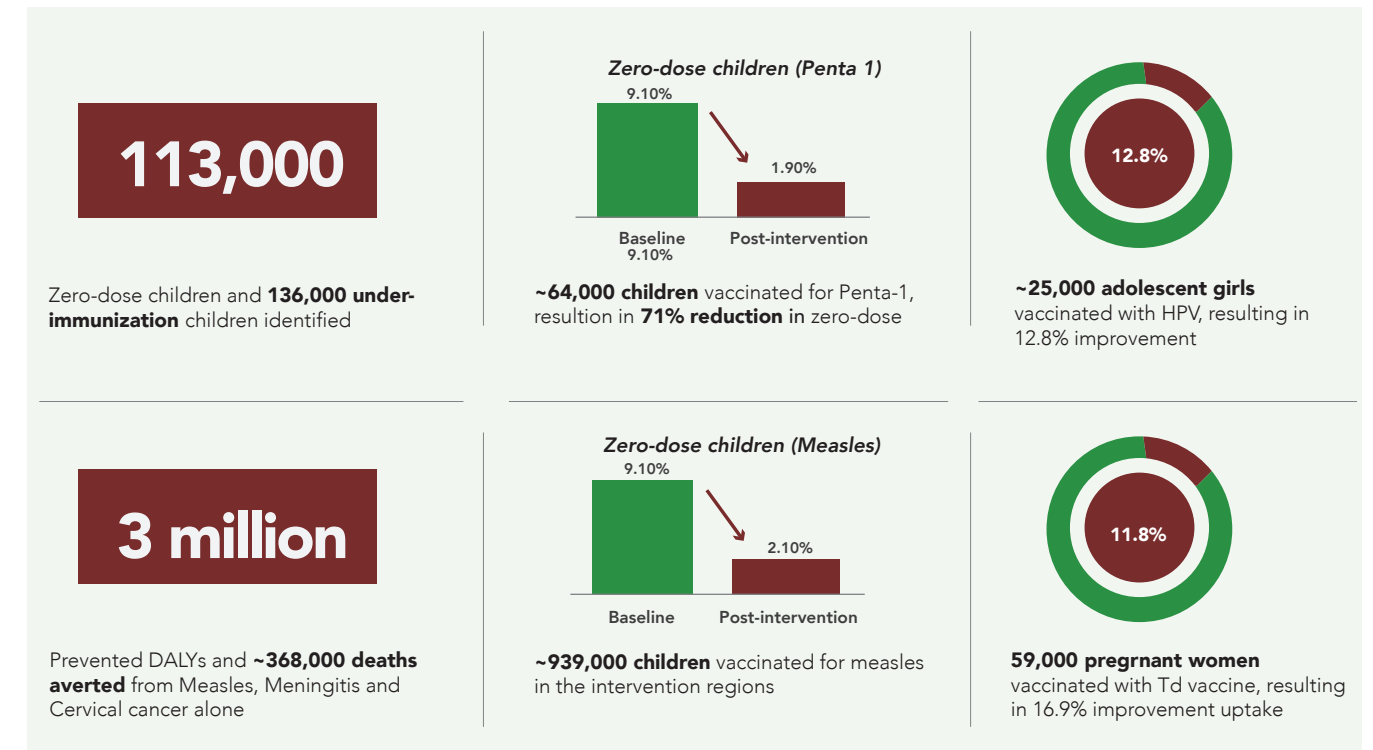
SLL Phase II Strategic Priorities

- Finishing the Job by improving Covid-19 vaccination coverage amongst the priority population groups
- “Preparing for the Next pandemic” by protecting HCWs and other priority groups from vaccine preventable diseases
- Strengthening Health Systems as part of preparations for future pandemics.

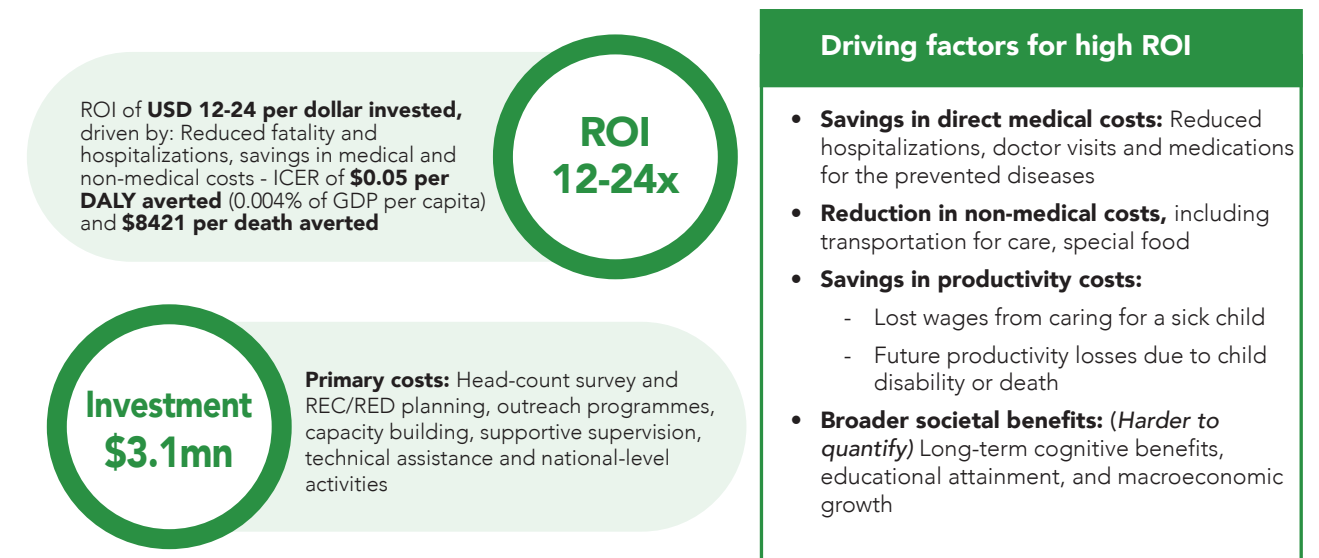
Expected Outcomes

- Immunization sites in hospitals and PHC units (fixed, outreach and mobile) strengthened.
- Life course immunization policies and programmatic tool in line with immunization agenda 2030 developed.
- Capacity building, network with global partnerships, knowledge exchange enhanced

High Level Results at a Glance



High Level Results - Value for Money



Our Stories of Change



A Mother's Hope Restored as Conflict-Born Child Receives First Vaccines



In Ethiopia, an estimated 3.9 million children have not received a single routine vaccine. These “zero-dose” children live with daily risk from diseases like measles, polio, and pneumonia—conditions that can be prevented with just a few drops or injections. Many of these children live in remote areas, while others have been cut off from health services due to conflict or displacement.

In the Tigray region, years of conflict severely disrupted basic health services, including routine immunisation. This is where we meet 3-year-old Philmon Haylome, from a small village in Hahayle district.

Philmon's mother, Kisanet Teklay, remembers how the conflict changed everything.

“My child was born during the fighting. Health services had stopped. I thought once a child grew older, he could no longer be vaccinated,” she said. For three years, Philmon remained unprotected, making him vulnerable to diseases that continue to claim young lives.

That changed with the Saving Lives and Livelihoods (SLL) Project, implemented by Amref Health Africa, in partnership with Africa CDC and funded by the Mastercard Foundation.

Through an integrated digital headcount and mobile outreach campaign, trained health teams, including community health volunteers, travelled to remote and underserved communities, right to the homes of families like Philmon's. When health workers reached Philmon's village, they identified him as a zero-dose child and ensured he received three life-saving doses, protecting him against seven deadly vaccine-preventable diseases.

For Kisanet, the relief is immeasurable. *“Today, my child is vaccinated. I am so happy. I no longer worry about him getting sick or paying for treatment,”* she shared with a smile.

Philmon is one of more than 3,000 zero-dose children identified and vaccinated through the project in hard-to-reach areas of Ethiopia. But his story represents something bigger: hope returning, systems rebuilding, and children receiving a second chance at a healthy life.

During a recent SLL-supported campaign alone, over 40,000 children, including zero-dose and under-vaccinated children, received routine immunisations across four regions. This is part of SLL's commitment to deliver more than two million child and adult vaccine doses nationwide.

With renewed confidence, Kisanet now dreams boldly for her son.

“I want him to grow up healthy and maybe become a doctor,” she says proudly.

Philmon's journey shows that when communities are reached with compassion, innovation, and determination, no child needs to be left behind. Despite conflict and years of missed opportunities, protection is possible and futures can be rewritten.

The Power Behind the Needle: How Technical Assistance is Reviving Immunisation in Tigray

When we think of immunisation, we often picture vaccines, needles, and clinics. But behind every successful shot lies a strong support system, one of its most vital pillars is technical assistance (TA).

Selam Luel, a regional Technical Assistant for Amref Health Africa's Saving Lives and Livelihoods (SLL) Phase II Project in Tigray, Northern Ethiopia, exemplifies how effective technical support can transform immunisation systems from within. Following the 2024 National Immunisation Programme Evaluation, which highlighted critical staffing shortages and operational gaps, Selam was deployed to help rebuild immunisation systems in one of Ethiopia's most affected regions.

Working closely with the Tigray Regional Health Bureau, Selam delivers hands-on support: training frontline health workers, strengthening cold chain logistics, enhancing digital microplanning, and improving data quality systems.

"Every coaching session is about empowering others to deliver quality services," Selam shares. "It's about translating national strategies into real action and results at the grassroots level."

During the 10-day national integrated measles and COVID-19 vaccination campaign in Adwa district, Selam's technical guidance helped improve vaccine handling, outreach planning, and health worker confidence.

"TA is not just guidance, it's about building capable, confident health teams who can sustain quality service delivery," she adds.

Selam's work is part of Amref's broader strategy to embed technical excellence in health system strengthening, especially in fragile and post-conflict settings like Tigray. Her leadership is helping to restore disrupted services and boost vaccine uptake in communities where health access remains precarious.

And her impact is most clearly reflected in stories like Philmon's, featured in the preceding story, where strengthened support on the ground is translating into better services for families.



Selam providing TA at the 10 days national immunization campaign supported by Amref Ethiopia

No Roads, No Clinics, No Problem: Amref Delivers Life Saving Vaccine in Hard-to-Reach Area

In the remote village of Gerseli Got 02 Kebele in Mille district, Afar Region, Ethiopia, 49-year-old Abdu Mohammed stands as a testament to the resilience of underserved communities navigating complex barriers to health care. As the head of his household, Abdu has long struggled to access basic health services for his family, especially life-saving vaccines

“When we need to visit a health facility, our only option is to hire a Bajaj (three-wheeled taxi), which costs about ETB 350 (USD 2.53) for a one-way trip,” Abdu shared. “That’s simply unaffordable for us. The journey itself is difficult, rocky roads, scorching heat, and long travel times. For families like mine, especially those with young children, the cost and hardship involved often force us to delay or skip essential services like immunisations.”

For years, the absence of nearby health services left Abdu’s family, and many others, in fear. But that changed with the arrival of the Saving Lives and Livelihoods (SLL) Phase II Project, supported by the Mastercard Foundation and implemented by Amref Health Africa in partnership with Africa CDC.

“I never imagined that healthcare would one day come directly to our home,” Abdu said. “Today, I’m truly grateful. My 4-year-old son, Mohammed Abdu, who had never received any vaccinations before, finally got the immunisations he needed. I also received the COVID-19 vaccine for the first time. We no longer have to travel long distances or spend money we can’t afford. I deeply appreciate what this project has done for us.”

To address the immunisation gap, the SLL project deployed hundreds of mobile health teams across Ethiopia. In Phase II alone, the teams reached over 700,000 households, identifying zero-dose and under-vaccinated individuals and providing COVID-19 and routine immunisations to more than 30,000 people, often on the same day.

According to the the Federal Ministry of Health (MoH) 2021 report Ethiopia has an estimated 3.9 million zero-dose children, those who have never received a routine vaccine, and 54% of eligible adults remain unvaccinated against COVID-19. Through tailored interventions like door-to-door outreach and integrated vaccination campaigns, the SLL project is bridging these gaps and building confidence in health systems.

Phase II of the initiative continues to prioritise equity and access by reaching the most marginalised communities, including those in conflict-affected and geographically isolated regions. For families like Abdu’s, this commitment has translated into more than just vaccines, it has restored dignity, trust, and hope for a healthier future.



From Hesitancy to Hope: How Rahma is Building Vaccine Trust in Afar

In the arid, remote stretches of Mille Woreda in Ethiopia's Afar Region, 28-year-old Rahma Jemal walks from village to village, not with fanfare, but with quiet determination. As a Health Extension Worker at Mille Health Center, Rahma delivers essential primary healthcare services, including COVID-19 vaccinations. But for her, the mission goes beyond medical care; it's about rebuilding trust in health systems and bringing health equity to the hardest-to-reach communities.

One of Rahma's biggest challenges is vaccine hesitancy. "Some people in my community often resist getting the COVID-19 vaccine," she explains. "To build trust, I led by example. I got vaccinated in front of them, then vaccinated others. That simple act gave people confidence."

Through the Saving Lives and Livelihoods (SLL) Phase II project, funded by the Mastercard Foundation via Africa CDC and implemented by Amref Health Africa in Ethiopia, Rahma received targeted training on integrated vaccination campaigns. This not only deepened her technical knowledge but also boosted her advocacy and communication skills.

Reaching remote households, however, comes with logistical challenges, from rough terrain to intense heat. Thanks to the SLL project, Rahma and other frontline health workers received critical logistical support, including transportation, helping them access hard-to-reach communities.

"I usually face strong challenges from the arid landscape and harsh weather," she shares. "But now, I'm able to reach more people, safely and consistently."

Rahma is one of over 6,000 health workers trained under SLL Phase II, contributing to the vaccination of 30,000+ individuals across 50 districts in four regions. Her story reflects how trusted, well-supported community health workers are key to driving vaccine confidence and improving preparedness for future pandemics.

Globally, COVID-19 vaccines are estimated to have saved 14.4 million lives (WHO). Yet, vulnerable populations, like older adults, those with underlying conditions, and health workers, remain at risk. The adapted SLL Phase II project continues to address these gaps by investing in frontline health workers under a broader health systems strengthening approach.

Rahma's dream is clear: "To eliminate all vaccine-preventable diseases in my community by ensuring no one is left behind."

Her journey reminds us that real change doesn't just come from high-level policies, it begins with people like Rahma, working tirelessly in their communities, powered by knowledge, trust, and purpose.



The Rise of a Youth Advocate Who Is Helping Strengthen Ethiopia's Immunisation System

At just 24 years old, Tsedenia Tadele carries a story that reflects the lived experiences of millions of young people across Ethiopia. Born and raised in a country where over 70% of the population is under 30, she grew up full of ambition, but like many young graduates, her path was shaped by uncertainty.

After completing her Bachelor of Science in Public Health from Mekelle University, Tsedenia found herself in a crowded job market with few opportunities. The COVID-19 pandemic had interrupted her education, stalled the economy, and left thousands of young professionals unsure of where to begin.

"It didn't break my spirit," she says. "I knew I wanted to work in public health, but the opportunities just weren't there. I had to stay patient, stay hopeful, and keep trying."

Youth unemployment remains one of Ethiopia's biggest challenges. Nearly one in four urban youth are jobless. Young women face the greatest barrier, with unemployment rates twice as high as young men. But Tsedenia refused to give up.

Her turning point came when she joined Amref Health Africa in Ethiopia as an intern for the **Saving Lives and Livelihoods (SLL)** project, a groundbreaking partnership between the [Africa CDC](#) and the [Mastercard Foundation](#).



Tsedenia Tadele – presenting the roles of youth in immunisation during the SLL review meeting that engaged project stakeholders at Bishoftu town, Ethiopia

From the moment she joined, Tsedenia threw herself into the work. She supported the coordination of health worker training, organised vaccination outreach campaigns, and became an outspoken advocate for meaningful youth participation in immunisation programmes.

"Today, I'm proud to be part of the SLL project," she says. "COVID-19 once disrupted my education, but now I'm helping stop its transmission. This is more than a job as it feels like I am taking back my future."

Through her internship, Tsedenia has grown into a trusted young professional, gaining the hands-on skills and confidence needed to pursue a career in global health. But even more importantly, she has become a role model for other young people searching for their chance to contribute.

During a recent project review meeting in Bishoftu, she stood in front of key stakeholders such as government officials, partner organisations, and senior health leaders, to share a message she now champions:

"As a young public health leader, I am advocating for the role of youth in digitalisation, demand creation, and vaccine delivery. I will continue to serve as a brand ambassador for the SLL project and encourage more young people to take meaningful roles in advancing immunisation."

Her journey demonstrates what happens when young people are given not just an opportunity, but a platform.

With nearly 90% of the SLL project workforce made up of young professionals, the initiative has become a powerful incubator for the next generation of public health leaders. It aligns with Amref Health Africa's growing commitment to youth leadership and the Mastercard Foundation's **Young Africa Works** strategy, which aims to connect 30 million young Africans to dignified employment by 2030.

For Tsedenia, what began as an internship has become a calling, a chance to shape the health of her community while building the career she once thought was out of reach.

Her story is a reminder that when young people are empowered, supported, and trusted, they don't just transform their own lives, they also transform systems.





Afar's Frontline Voices Working to Reach Every Child

In Ethiopia's Afar region, one of the hottest and most remote places on earth, reaching children with routine vaccines is a daily challenge. But for health workers like Mohammed Ahmed, a Technical Assistant with the Saving Lives and Livelihoods (SLL) Phase II Project, no child should be left behind regardless of where they come from.

Below, Mohammed shares his journey and the realities of delivering immunisation services in pastoralist communities.

Q: Mohammed, how does it feel to work on the Saving Lives and Livelihoods project?

Mohammed: Honestly, it's inspiring. The project gives us the chance to see real change—children getting vaccinated for the first time, parents feeling hopeful again. I'm proud to be part of that.

Q: What does your role involve?

Mohammed: I support districts to strengthen routine immunisation, integrate COVID-19 vaccines, and improve digital data systems. I work closely with health workers and local leaders to make immunisation services more reliable and accessible.

Q: What progress have you seen so far?

Mohammed: Working in Afar is tough. The environment is harsh—extreme heat, long distances, dry riverbeds, and constant movement of pastoralist families. Fixed health posts don't always work here. We rely on mobile teams, travel early in the morning, and partner with local health workers who understand the terrain and the culture. But the impact we make keeps me motivated.

Q: Why is immunisation more complex in this region?

Mohammed: Vaccines require a cold chain, precise timing, and consistent follow-ups. With mobile populations, it's easy for children to miss doses. One missed visit can put a child at serious risk, so we must be organised and responsive.

Q: How do you ensure no child is left behind?

Mohammed: We map pastoralist routes, send mobile teams, and meet families where they are. Community leaders and health workers play a huge role in building trust. We don't wait for people to come to services, we bring services to the people.

Q: What difference has SLL Phase II made in the region?

Mohammed: The project has helped integrate COVID-19 vaccines with routine services, improved planning through digital headcounts, trained teams, expanded catch-up campaigns, and increased community awareness. It is strengthening the health system from the ground up.

Q: What impact do you hope to see by the project's end?

Mohammed: I hope to see higher and more equal vaccination coverage, especially for children, women, and older pastoralists. With better logistics and stronger mobile services, I believe we can reach every community.

Q: What are your personal aspirations as a public health leader?

Mohammed: I want to champion health equity. My dream is to see health services that truly fit the pastoralist lifestyle, mobile clinics, well-trained local workers, strong cold chain systems, and culturally respectful health education.

Q: Any message you'd like to leave us with?

Mohammed: I'm grateful to all the health workers, community leaders, and partners who make this possible. Real change comes from working together. Let's keep moving toward a healthier Ethiopia, and Africa at large.

Mohammed's story shows what progress looks like when community knowledge, innovative strategies, and committed health workers come together. In Afar, where distance and extreme weather conditions create daily challenges, the SLL Phase II Project has helped ensure that every child has a fair chance at a healthy life.

The SLL project, implemented by Amref Health Africa in partnership with Africa CDC and funded by the Mastercard Foundation, is strengthening Ethiopia's immunisation system through training, digital innovations, outreach services, and community engagement.

Bridging the Immunization Gap Through Inter-generational Engagement

In Kemise, a town in eastern Amhara, Ethiopia, catch-up vaccination rates stayed low despite continuous health education and outreach. A widespread hesitancy and rumor, that a tragic measles case in a nearby kebele was caused by vaccination had fueled deep community hesitancy.

To bridge the gap, the Amref-led SLL project, a flagship partnership between Mastercard and the Africa CDC, recognized the power of local dynamics. It harnessed the critical roles of both elders and youth to build community trust through locally acceptable, culturally sound engagement, uniting community and religious elders with young volunteers.



Youth groups who education and mobilization vaccination campaigns, Kemise town

The project supported and mobilized youth volunteers aged 10-24 to play a vital role in addressing local health issues, especially by mapping communities to identify zero-dose children and working to integrate vital services, such as adult vaccination. However, they faced a stubborn challenge

Faced with this stagnation, the youth volunteers refused to give up. They posed a crucial question: “What solution can we find to protect our community, and how can we break this cycle of hesitancy?” This simple question sparked a transformative shift in strategy. It led to a collaborative meeting involving not just health workers and volunteers, but also community and religious leaders, the trusted elders of Kemise.



Catch-up vaccination campaign, Kemise town

The answer was a powerful, intergenerational alliance. Established four medical outreach teams, each jointly led by health professionals, youth volunteers and religious leaders. The youth brought their mapping data, energy, and peer influence. The religious leaders brought their moral authority, deep community trust, and resonant voices.



Community and religious leaders' sensitization for mobilization of vaccination activities

Armed with a shared mission, these teams began purposeful household visits. The presence of a respected elder immediately opened doors and fostered trust where suspicion once lingered. The religious leaders would eloquently frame childhood vaccination within a context of faith and communal responsibility, emphasizing the moral duty to preserve life and protect children from harm. They became the credible, compassionate voice for the science the youth were promoting.

This simple yet profound partnership, bridging the generational gap, yielded dramatic and swift results. The combined force of youthful dedication and elder wisdom dismantled misinformation. Caregivers, seeing their community leaders stand side-by-side with passionate young volunteers, felt reassured.

The outcome was clear and measurable: Catch-up vaccination coverage in the Kemise area increased by a remarkable 55%. Eligible children finally received their recommended vaccines at both fixed and outreach sites, protected from preventable diseases.

The success in Kemise Town demonstrates that the intergenerational engagement model did more than boost a vaccination rate; it strengthened the very fabric of the community, creating a resilient blueprint for tackling future health challenges together. The story of Kemise



Mothers and their children mobilized and linked to local health facilities by youth and community leaders

The success in Kemise Town demonstrates that the intergenerational engagement model did more than boost a vaccination rate; it strengthened the very fabric of the community, creating a resilient blueprint for tackling future health challenges together. The story of Kemise is a testament to what happens when young agents of change and community leaders of trust unite for a common good.

In one year alone, the SLL phase II project reached and vaccinated millions of children and adults in urban and rural settings, breaking the social, geographic, and logistic barriers of under-vaccination.

Key Strategic Support of the SLL Project

National Immunization Strategy (NIS) Development

The SLL Project has provided a meaningful financial and technical support to Ethiopia's National Immunization Strategy (NIS) development process:

- Supported the situational assessment at national and sub-national level
- Contributed evidence for NIS development (National Immunization Program Evaluation, GESI, Headcount)
- Engaged as TWG and provided technical inputs and facilitation during consultative workshops with MoH, RHBs, and partners
- Supported the drafting and refinement of the final NIS draft with IA2030 and national health priorities. This engagement ensured the NIS is evidence-based, equity-focused, and implementation-oriented.



Strategic Learning and Global Knowledge Exchange

SLL has strategically invested in global and regional learning platforms to strengthen national capacity and inform policy and practice:

- Facilitated a Life-Course Immunization Learning Visit to Nigeria, enabling Ethiopian MoH and partner teams to learn from integrated Immunization models across the life course
- Engaged in the African Advanced Vaccinology (Afro-ADVAC) Course in South Africa, contributed high-level technical vaccinology expertise
- Participated in CPHIA 2025, Africa's biggest public health conference, and engaged in high-level policy dialogues on immunisation equity, health systems strengthening, and health security
- Engaged strategic engagement in the Digital Health Forum in Kenya- Learn from regional best practices in digital health



High-Level Vaccinology Training – First of Its Kind in Ethiopia

Under the SLL Project, Ethiopia conducted its first-ever high-level Basic Vaccinology Course:

- Designed and delivered with international vaccinology trainers
- Implemented in collaboration with MoH, Africa CDC, Gavi, and partners
- Targeted senior national and regional Immunization professionals and program leaders
- This milestone training significantly strengthened national immunization leadership capacity and established a foundation for sustainable, locally led vaccinology training in Ethiopia.



Evidence Generation – SLL’s Initiatives

Gender and Vaccine Acceptance in Ethiopia: A Mixed-Methods Assessment of Hesitancy, Decision-Making, and Equity

Background

Vaccination is a transformative and cost-effective public health intervention, preventing an estimated 4.4 million deaths annually and reducing the burden of vaccine-preventable diseases, particularly among children under five. Achieving herd immunity requires high vaccine acceptance, caregivers’ willingness to follow recommended schedules. Yet global gaps persist: over 20 million infants miss at least one routine dose each year, and more than 13 million are “zero-dose” children who have never received basic immunizations. These gaps reflect supply-side barriers (poverty, remoteness, insecurity) and demand-side barriers, including vaccine hesitancy, defined by WHO as delay or refusal despite vaccine availability. Hesitancy is shaped by trust, convenience, and perceived risk, and is often intensified by misinformation, cultural beliefs, and systemic distrust.

Ethiopia has expanded immunization through the Expanded Program on Immunization (EPI) and the Health Extension Program (HEP), yet inequities remain, especially in pastoralist, conflict-affected, and hard-to-reach areas. Gender dynamics may contribute to these gaps but remain underexplored. Women are typically the primary caregivers responsible for clinic visits and child health, but may face time poverty, limited autonomy, and economic dependence. Men often control household finances and key decisions while being less engaged in routine services and more exposed to misinformation via peer networks and social media. These gendered roles can shape vaccine behaviors, delays, and missed doses.

Study Methods

This study used a community-based mixed-methods design across four regions, Amhara, Oromia, Afar, and Tigray, covering ten woredas in rural and urban kebeles. Quantitative data were collected using a cross-sectional survey of caregivers of children under five in intervention areas. A multistage stratified sampling approach selected households, producing a final analytic sample of 980 caregivers (target 992).

Qualitative data were used to deepen interpretation and included 26 in-depth interviews (IDIs), 24 exit interviews, and 11 key informant interviews (KIIs) with caregivers, providers, community leaders, and health officials. Semi-structured guides were informed by the WHO Behavioural and Social Drivers (BeSD) framework and adapted to explore gender roles and decision-making.

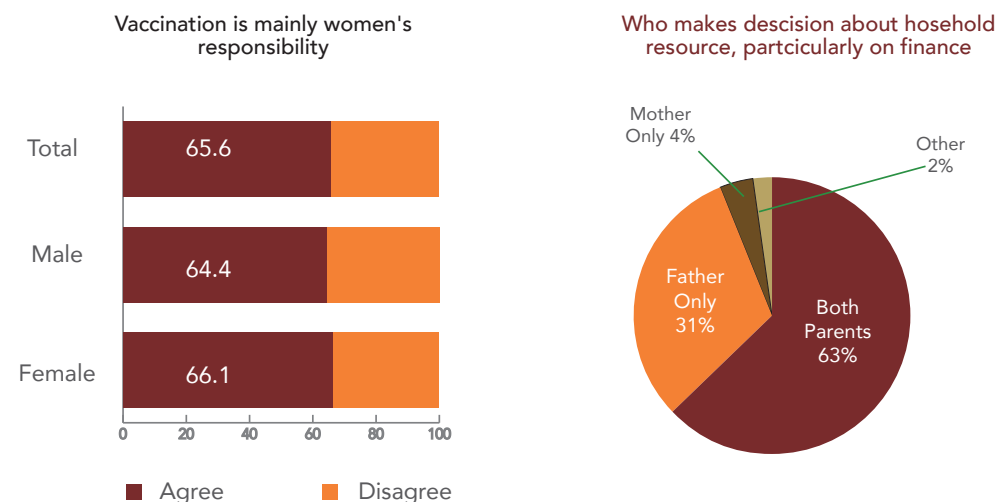
Key Findings

Overall vaccine acceptance was very high (93.5%) and nearly identical among female (93.6%) and male (93.3%) caregivers. Confidence in vaccine importance (98.2%), safety (96.6%), and trust in health workers (96.4%) suggests a strong immunization culture and continued value of Ethiopia’s primary health care platform.

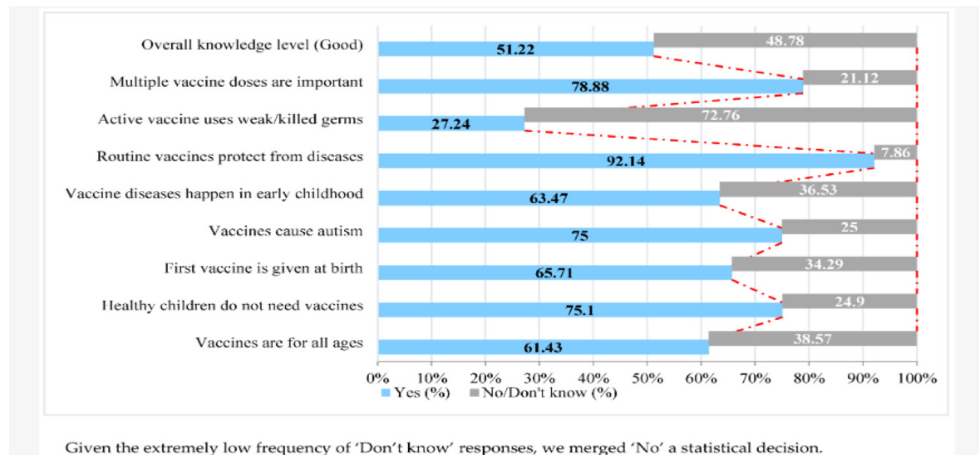
However, a composite hesitancy index showed that 51.1% of caregivers demonstrated some degree of hesitancy much higher than self-reported hesitancy (21.9%), indicating likely underreporting and that hesitancy often manifests as doubt or delay rather than refusal. Hesitancy was higher among men (56.3%) than women (48.4%). Qualitative findings linked male hesitancy to lower involvement in immunization processes, greater exposure to rumors through male-dominated social spaces and digital platforms, and employment-related time constraints, especially in urban settings. Women, by contrast, had more frequent contact with health workers and stronger social reinforcement for immunization, contributing to higher confidence.

Support from family and religious leaders reduced hesitancy. Women reported higher levels of such encouragement than men, underscoring the importance of social networks. The findings also highlight that education improves acceptance, yet a paradox emerged: some educated urban men were more likely to circulate or believe misinformation, showing that education alone is insufficient without targeted, gender-sensitive communication.

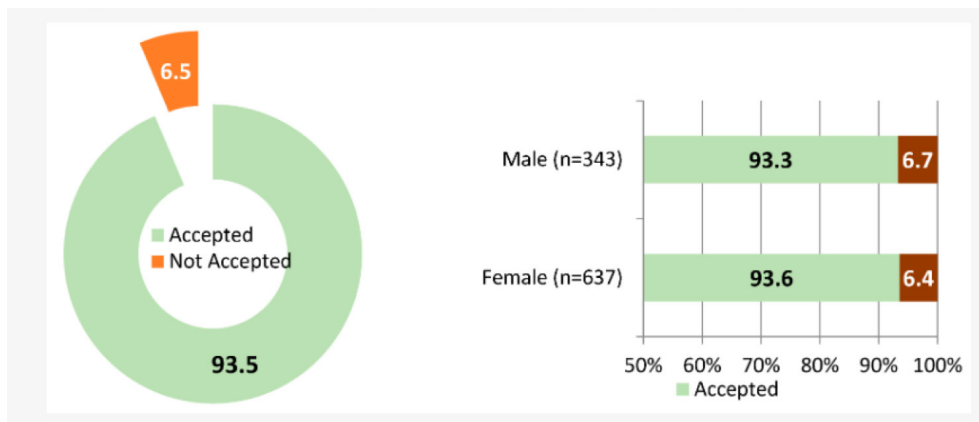
Attitudes on child vaccination as primarily the mother’s responsibility and who makes decision about household resources, particularly on finance, June 2025.



Overall and item-specific knowledge levels on immunization, June 2025



Overall vaccine acceptance and disaggregation by gender, June 2025.



Conclusion and Implications

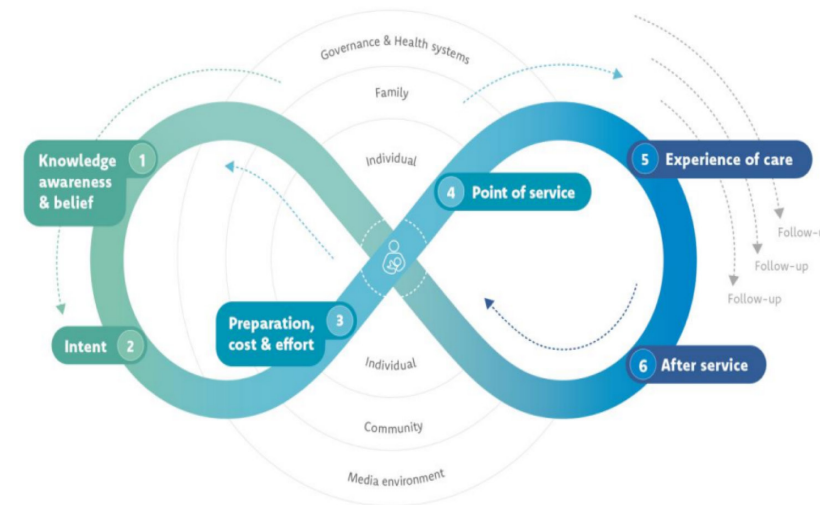
This study finds high vaccine acceptance in Ethiopia, but persistent and often hidden hesitancy, especially among men and urban caregivers, driven by gender norms, misinformation, and time constraints. To close equity gaps, Ethiopia’s EPI and HEP should adopt gender-transformative strategies that promote shared parental responsibility, engage men through workplaces, religious institutions, and male-led community groups, and strengthen tailored communication and rumor management, particularly in urban areas. Service delivery should better accommodate working caregivers through flexible hours, mobile outreach, and workplace vaccination. Finally, routine monitoring should include gender-disaggregated indicators and composite measures that capture nuanced hesitancy, supporting more responsive, equitable immunization programming.

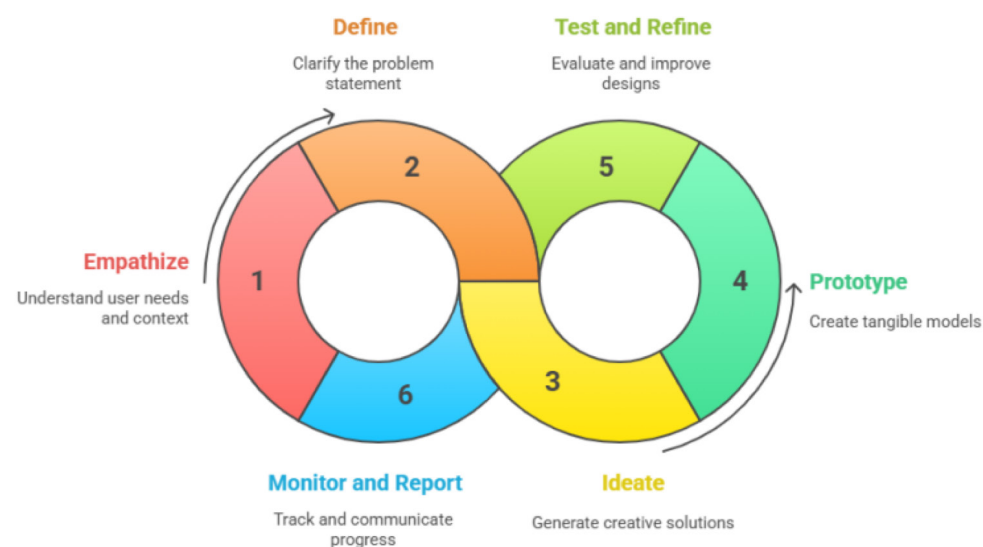
Optimization Vaccination Program through Human Center Design: Targeting Coverage Gaps Across Age Groups

Despite over four decades of implementation of the Expanded Program on Immunization (EPI) in Ethiopia, vaccination coverage remains suboptimal, with childhood immunization increasing from 14% in 2000 to only 44% in 2023 and millions of children remaining zero-dose or under-immunized.

This study aimed to identify the key barriers and enablers influencing immunization acceptance and uptake across the vaccination journey, using a Human-Centered Design (HCD) approach to inform more responsive and effective immunization programming. A mixed-methods study was conducted from October 6–25, 2025, across 10 SLL woredas in four regions of Ethiopia (Afar, Amhara, Oromia, and Tigray). The study engaged diverse immunization target groups, including caregivers of children, adolescent girls, fathers, community and religious leaders, women leaders, and health workers across primary health care levels. Quantitative surveys were administered to 800 participants, complemented by in-depth interviews, key informant interviews, and focus group discussions.

Findings indicate that while awareness of vaccination is high, gaps persist in knowledge related to vaccination schedules, service locations, and follow-up, with misinformation, social norms, gender dynamics, and trust significantly shaping uptake. Structural barriers, including geographic access, service reliability, and health system constraints, interact with behavioural and social factors such as household decision-making power, stigma, and competing responsibilities.





For HPV and COVID-19 vaccination, knowledge, trust in information sources, and positive vaccination experiences were key predictors of uptake. Facility assessments showed generally strong technical readiness and vaccinator competence, though communication with clients and occasional stock shortages remain challenges.

Overall, the study concludes that improving immunization coverage requires addressing technical, social, and behavioural barriers simultaneously, and highlights the value of HCD-informed, people-centered solutions to optimize service delivery, build trust, and close equity gaps across the immunization continuum.

Disparities and Barriers to Life-Course Vaccination in Ethiopia: Evidence from a Household Survey

Background

Vaccination prevents an estimated 4–5 million deaths each year from diseases such as measles, pertussis, polio, pneumonia, rotavirus diarrhea, and tetanus. Yet major inequities persist. In 2022, an estimated 20 million children globally missed DPT vaccination, including a large share of “zero-dose” children who have never received any routine vaccine. These children are concentrated in fragile, conflict-affected, and geographically isolated settings where poverty, weak systems, and insecurity intersect. The Immunization Agenda 2030 (IA2030) prioritizes closing these gaps through equity-focused strategies, but progress is constrained by barriers such as geographic inaccessibility, socioeconomic marginalization, weak coordination, and behavioral hesitancy, especially for newer vaccines.

Ethiopia continues to face substantial disparities. In 2019, 46.5% of children aged 12–35 months were reported unvaccinated. Recent efforts, including the WHO “Big Catch-Up” approach, have reached nearly 959,000 zero-dose children, increasing coverage from 16% to 24% by mid-2025. However, coverage varies sharply by livelihood and region: agrarian and urban areas often reach 86–89%, while pastoral and rural settings can be as low as 22%, with zero-dose rates up to 69%. Life-course vaccines also lag: HPV coverage has declined over time, maternal Td remains suboptimal, and COVID-19 coverage is uneven. Most evidence focuses on childhood immunization, leaving limited data on vaccination across adolescence and adulthood.

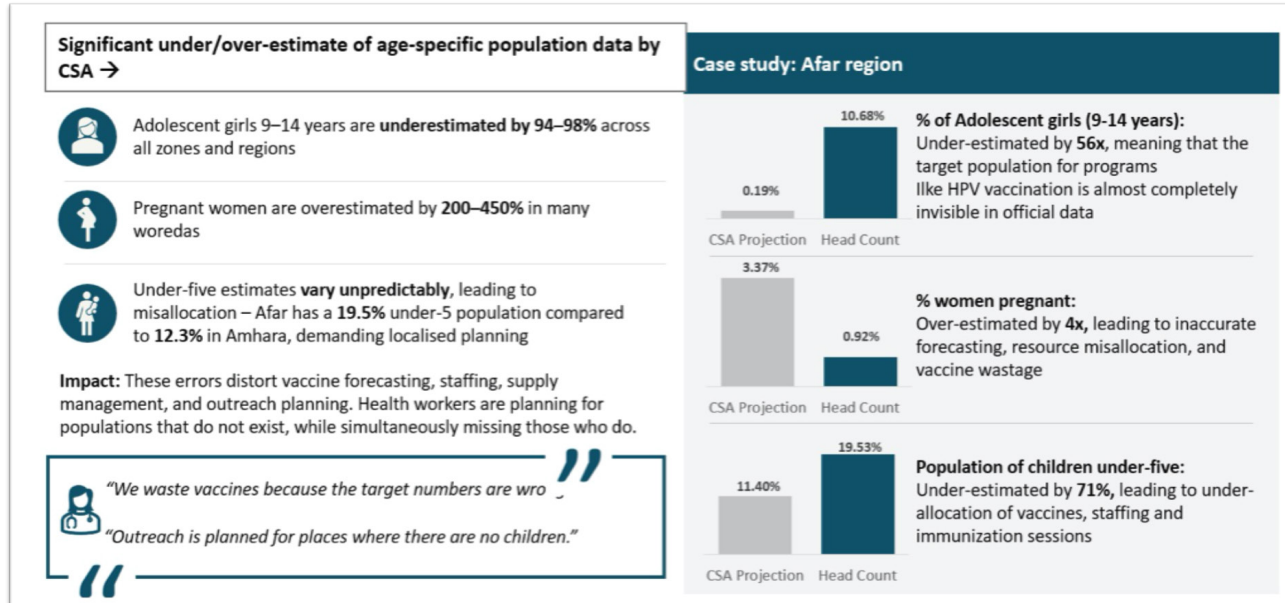
Study Methods

This study used a cross-sectional household survey with multi-stage cluster sampling to assess life-course vaccination coverage, disparities, and barriers in four regions, Afar, Amhara, Oromia, and Tigray, implemented by Amref Health Africa in collaboration with Ethiopia’s Ministry of Health under the Saving Lives and Livelihoods (SLL) project. The survey covered 57 woredas (15 urban and 42 rural): 10 in Afar, 15 in Amhara, 15 in Oromia, and 17 in Tigray. In total, 1.2 million households and 5.3 million people were enumerated, including 502,193 children under five, 312,019 girls aged 9–14, 78,140 pregnant women, and 2.5 million adults ≥ 12 years. GPS coordinates were recorded for about 70% of households.

Key Findings

The highest concentration of zero-dose and under-immunized children was found in rural and pastoralist woredas, while substantial gaps were also documented for HPV and COVID-19 across all regions. Overall, about 14% of children had received no vaccinations and 62% were under-immunized, with stark livelihood differences: 9% zero-dose in agrarian areas versus 69% in

pastoral settings; under-immunization was 60% in agrarian areas versus 92% in pastoral areas. Afar showed particularly high zero-dose prevalence (up to 25%), while Amhara and Tigray reported stronger performance for key childhood antigens (often above 90%), likely influenced by intensive outreach mechanisms in some areas. Life-course coverage remained lower for Td among pregnant women (79.6%), HPV (75.3%), and COVID-19 (53.8%).



Geographic access mattered, but not alone. While households more than 10 km from facilities had higher zero-dose risk, a large share of missed vaccination occurred within 5 km of a facility, highlighting the importance of demand-side barriers such as fear of side effects, misinformation, and low awareness.

Conclusion and Implication

Ethiopia has made progress in childhood vaccination, yet life-course inequities remain entrenched, especially in pastoralist and underserved settings. Coverage for HPV, Td, and COVID-19 continues to lag, reflecting combined supply and demand barriers. Findings support integrated strategies: geospatial microplanning, mobile outreach, expanded delivery platforms beyond schools, stronger integration with ANC and community services, and culturally tailored communication to address hesitancy. By linking large-scale household data with service delivery and spatial mapping, this study provides actionable evidence to inform “Big Catch-Up” planning and advance IA2030 equity commitments.





Amref Health Africa in Ethiopia
Office: +251 116 630 552
E-mail: info.ethiopia@amref.org
P.O.Box: 20855 Code 1000 Addis Ababa, Ethiopia

www.amref.org  [amrefethiopia](https://www.facebook.com/amrefethiopia)  [@amrefethiopia](https://twitter.com/amrefethiopia)

*Amref Health Africa in Ethiopia
Communication Unit*