



# How bicycles are reaching Uganda's last mile in healthcare

In Uganda's remotest corners, a humble bicycle is proving to be a quiet game changer in healthcare delivery. From cutting travel time for community health workers to improving access to life-saving services, a silent mobility shift is unfolding, efficiently, and on two wheels.

BY PROMISE TWINAMUKYE

Lucy Akoli, a community health extension worker (CHEW), spends her days checking on the sick in her village, referring patients to health facilities, and following up with HIV drug defaulters. But until recently, mobility was her greatest challenge.

"I used to walk for hours; three to the Health Centre III, and one to the Centre II. That meant I could only visit one or two people in a day," she recalls. On foot, she could cover only five households per week. That changed a year and a half ago when she received a heavy-duty bicycle designed for rural terrain.

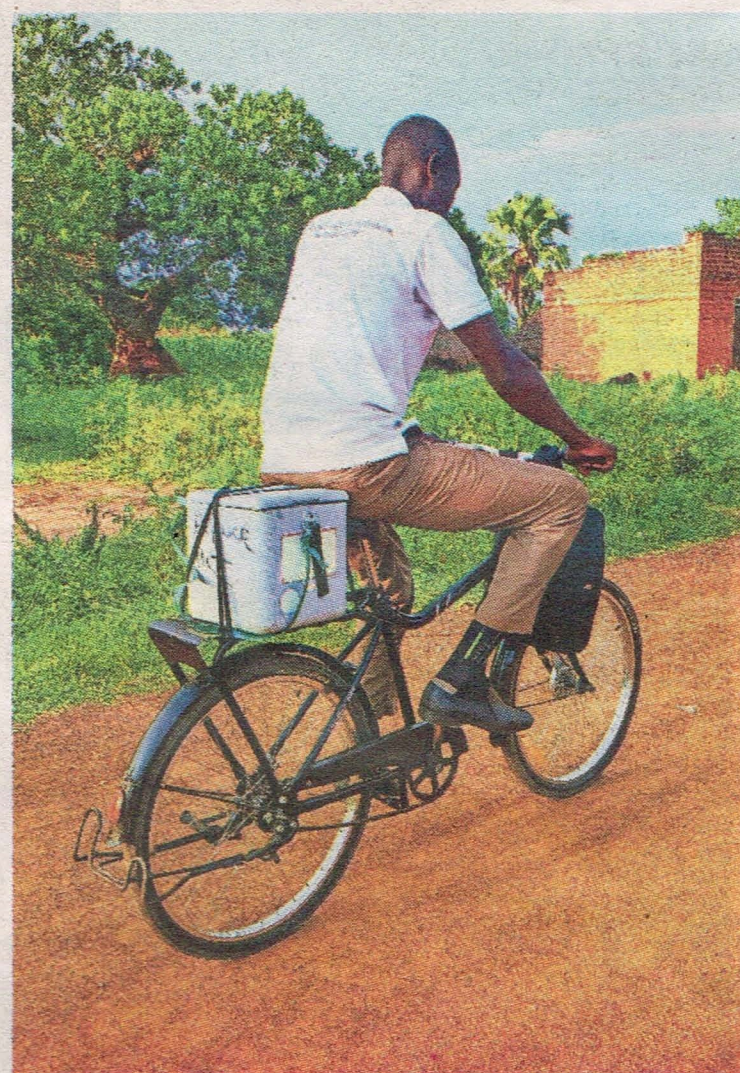
Now, she says, "What used to take me two days, I

now do in one morning. We call it the village ambulance."

Her work has not only become more efficient but also more respected. The bicycle, which she lends to fellow village health team members when needed, has enabled her to run errands, pick up her children from school, and use money she previously spent on transport for better family meals.

"I can feed my family meat, now that I do not have to spend on transport to health facilities and patients' homes," she says with a smile.

Akoli is one of hundreds of health workers in Lira and Mayuge districts who received bicycles through a mobility programme supporting CHEWs in rural Uganda. The initiative, developed in collaboration with the Ministry of Health, is designed to bridge



the gap between underserved communities and essential health services.

## Data that speaks volumes

A recent assessment shared at the Pedal for Change Forum in Kampala highlights the bicycle's transformative impact. Community health workers have more than doubled their weekly household reach, travel time to facilities has nearly halved, and transport costs have dropped significantly. Many now use bicycles to transport sick patients, particularly in emergencies where ambulances are not available.

For CHEWs such as Akoli, many of whom are women working in physically demanding environments, these bi-

For Community Health Extension Workers, having a reliable bicycle is the difference between reaching a handful of households—or an entire community. PHOTOS/PROMISE TWINAMUKYE

## ENHANCING HEALTHCARE ACCESS THROUGH BICYCLES

### Increased Proximity to Health Facilities:

A national study revealed that the percentage of Ugandans within a one-hour walking distance to the nearest Health Center II is 71.73%. This figure rises to 90.57% when bicycles are utilized. Similarly, access to Health Center III improves from 53.05% to 80.57% with bicycle use, highlighting bicycles as a "pro-poor" tool enhancing health equity.

### Maternal Health Improvements:

In the Busoga region, the introduction of bicycle ambulances has contributed to a reduction in the maternal mortality ratio from 336 to 189 per 100,000 live births. These ambulances, equipped with pedal-assist systems reaching speeds up to 30 km/h, enable expectant mothers to reach health centers in approximately 12 minutes.

### HIV/AIDS Outreach:

In the Teso region, 110 bicycles were distributed to Village Health Teams (VHTs) and peer supporters to enhance HIV/AIDS outreach. This initiative aims to reach individuals in remote areas, particularly the 18% of people living with HIV who have discontinued treatment or relocated.

### Broader Impacts of Bicycle Integration

**Economic Empowerment:** A randomized controlled trial indicated that households receiving bicycles experienced a 43% increase in average monthly income. Community health workers with bicycles served 63% more households, significantly expanding healthcare access in remote areas.

**Community Health Services:** World Vision Uganda, in partnership with World Bicycle Relief, provided 200 bicycles to VHTs, enhancing their ability to deliver essential health services such as immunizations and health education in rural areas.

**Emergency Response:** Organizations like Wheels 4 Life have supplied ambulance bikes equipped with custom-built trailers, facilitating patient transport in areas inaccessible to motor vehicles due to poor road conditions.



cycles are more than tools of transport. They represent empowerment. Workers now spend more time with each household, improving care quality for chronic conditions and maternal health.

## Addressing the mobility blind spot

Specioza Namakula, a monitoring and evaluation expert in the programme, notes that transportation remains an overlooked aspect of healthcare planning.

"For community workers, having a reliable means of movement is the difference between reaching a handful of households or an entire community," she explains.

As Uganda scales up its national CHEWs programme, the issue of mobility is gaining attention. Dr Diana Atwine, the Permanent Secretary of the Ministry of Health, emphasises that tools enabling healthcare workers to reach those in need are essen-

tial to improving national health outcomes. So far, about 3,000 of the 21,000 intended CHEWs have been trained, and bicycles have been distributed to 331 workers in Lira and Mayuge.

Dr Atwine notes that the programme is already showing results, with notable declines in both communicable and non-communicable diseases in areas served by mobile CHEWs.

"When you invest one dollar in a community health worker, you get 10 dollars in return," she says, underscoring the value of low-cost interventions.

What happens without bicycles? Yet, many CHEWs across the country still struggle with mobility. Caroline Namukasa, a CHEW from Kyotera, says her work is hampered by distance and unreliable boda boda riders, which she occasionally hires with personal funds.

"Sometimes you make an appoint-

ment and the boda comes 30 minutes late. That delays everything," she says. Bushy paths and long treks back home also pose security concerns.

To promote sustainability, the programme includes training local bicycle mechanics in every community that receives bikes. With one mechanic assigned for every 50 to 100 bicycles, health workers have access to timely, affordable maintenance. The bicycles are also assembled locally, further boosting employment and local economies.

The integration of bicycles into Uganda's healthcare strategy is quietly proving its worth. While challenges remain, especially for health workers yet to receive bikes, the story unfolding in villages like Akoli's suggests that something as simple as a bicycle can steer a country closer to universal health coverage—one pedal at a time.

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