



# Transforming Rural Health Systems Through Innovative Supply Chain Solutions: A Case from Northern Ghana

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## Presentation Outline



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# The Challenge – Last-Mile Health Commodity Access

- 40% of rural health facilities in Ghana **report frequent stockouts of essential medicines** (MoH, 2023).
- WHO recommends that safe childbirth by SBAs requires 28 essential birth practices (EBPs) of which 23 require one or more supplies
- CHPS compounds serve as the **first point of care** for over 70% of rural populations.
- Poor infrastructure, fragmented logistics, and weak data systems hinder last-mile delivery.
- True last-mile delivery is a major challenge and needs urgent and innovative intervention



# Health Systems as Change Agents



- Health systems can **drive innovation** to resolve service bottlenecks.
- WHO 2022: “Strengthened logistics and data systems are critical enablers of resilient health systems.”
- GHS and CRS repositioned district health systems as operational leaders through system reform.



# Context – Northern Ghana



*Photo source: The Hauns in Africa*

- Northern Ghana includes the Northern, Upper East, Upper West, North East, and Savannah Regions.
- Combined, these regions cover a land area of approximately **97,700 square kilometers**
- Predominantly rural with dispersed populations and limited infrastructure.
- Higher poverty rates compared to southern regions
- Multidimensional poverty rate of approximately **45.7%**, impacting access to healthcare

# The Innovation – Rural Health Commodity Supply Chain Management (R-HCSCM) System



- Key Components:
  - GPS-tracked motorized tricycles for health commodity delivery.
  - Refurbished cross-docking stations.
  - WhatsApp-based stock-out alert system.
  - Staff training in supply chain protocols.

# Implementation & Reach



204 GHS staff trained in six districts.



10 GPS-tracked vehicles deployed.



63 CHPS compounds served.



34 essential medical commodities delivered.



~32.14 metric tons transported in 22 months.

## Results – Health System Performance Outcomes

1

**Stockout rates dropped by up to 60%** across participating CHPS compounds.

2

Increased facility-based service delivery due to improved medicine availability.

3

Enhanced system responsiveness through real-time monitoring and alerts.



# Lessons Learned

## LESSONS LEARNED



- Local ownership and capacity building are essential.
- ICT tools (even simple platforms like WhatsApp) can be **powerful enablers** of health system change.
- Cross-sectoral collaboration (CRS + GHS + community actors) enhances system sustainability.

# Scale-up and Policy Integration



## GHANA MINISTRY OF HEALTH POLICY ROADMAP



- GHS endorsed R-HCSCM for **national scale-up**.
- CRS engaged with MoH's Supply Chain Master Plan (2024–2028) for alignment.
- Model aligns with SDG 3 (Health) and 9 (Infrastructure/Innovation).

## Conclusion & Call to Action



Health systems, when empowered, are **agents of sustainable change**.



The R-HCSCM model demonstrates how rural systems can drive equity and efficiency.



**Call to Action:** Invest in ICT and localized logistics to achieve universal health coverage in hard-to-reach areas.

# Thank You

