



Supply Chains **4** Community Case Management

# CCM Supply Chain Baseline Assessment Amhara, Ethiopia 2010



# SC4CCM Project Goal

SC4CCM will **identify**, **demonstrate**, and **institutionalize** supply chain management practices that **improve the availability** and use of selected essential health products in community-based programs.

- In partnership with MOH, PFSA, RHBs, ZHDs, CCM and supply chain stakeholders



# Project Objectives

- **Conduct a baseline assessment and develop implementation plan**
- Test, identify and implement supply chain interventions
- Collaborate with partners to institutionalize improved supply chain practices
- Ensure capacity to procure quality, affordable CCM products
- Share lessons learned



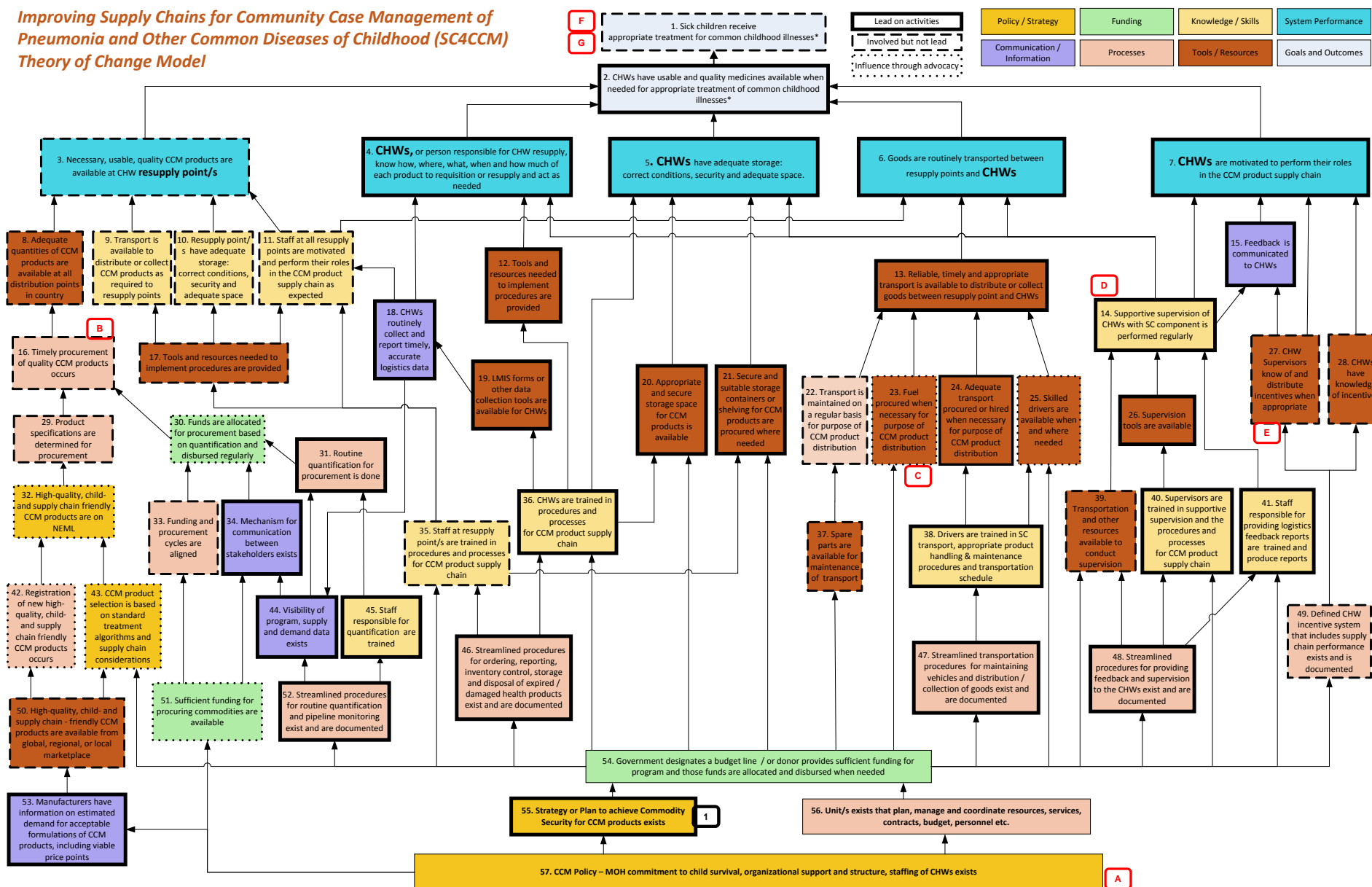
# Principles – SC4CCM Theory of Change

If effective and efficient supply chain systems can be created to ensure that community health workers have consistent access to sufficient quantities of high quality, affordable essential medicines, they will be able to dramatically improve care and treatment for children.



# Improving Supply Chains for Community Case Management of Pneumonia and Other Common Diseases of Childhood (SC4CCM)

## Theory of Change Model



# SC4CCM Core Indicators

Derived from the main country level objective and immediate preconditions

**GOAL LEVEL OBJECTIVES**  
Sick children receive appropriate treatment for common childhood illnesses

**Main Country Level Objective:**  
HEWs have usable and quality medicines available when needed for appropriate treatment of common childhood illnesses

**Precondition 1:**  
Necessary, usable, quality CCM products are available at **HEW resupply point/s**

**Precondition 2:**  
**HEWs**, or person responsible for HEW resupply, know how, where, what, when and how much of each product to requisition or resupply and act as needed

**Precondition 3:**  
**HEWs** have adequate storage: correct conditions, security and adequate space.

**Precondition 4:**  
Goods are routinely transported between resupply points and **HEWs**

**Precondition 5:**  
**HEWs** are motivated to perform their roles in the CCM product supply chain



# Methodology

Both qualitative and quantitative methods were applied:

- Logistics System Assessment Tool (LSAT)
- Key informant interviews
- Logistics Indicators Assessment Tool (LIAT)
  - Mobile phones
  - Build local capacity partnering with local evaluation group, JaRco.





# LSAT

- Two day group assessment
- Participants:
  - 36 FMOH and RHB participants
    - from Amhara:RNH (2), ZHD – North Gondar (2), Woreda - Dembiya (2), HC – Koladiba (2), HP (1)
  - 9 participants from partner organizations - Ethiopian Pharmaceutical Association, USAID|DELIVER, MSH/SPS, Save-USA, Ethiopian Public Health Association, UNICEF, SCMS, JaRco



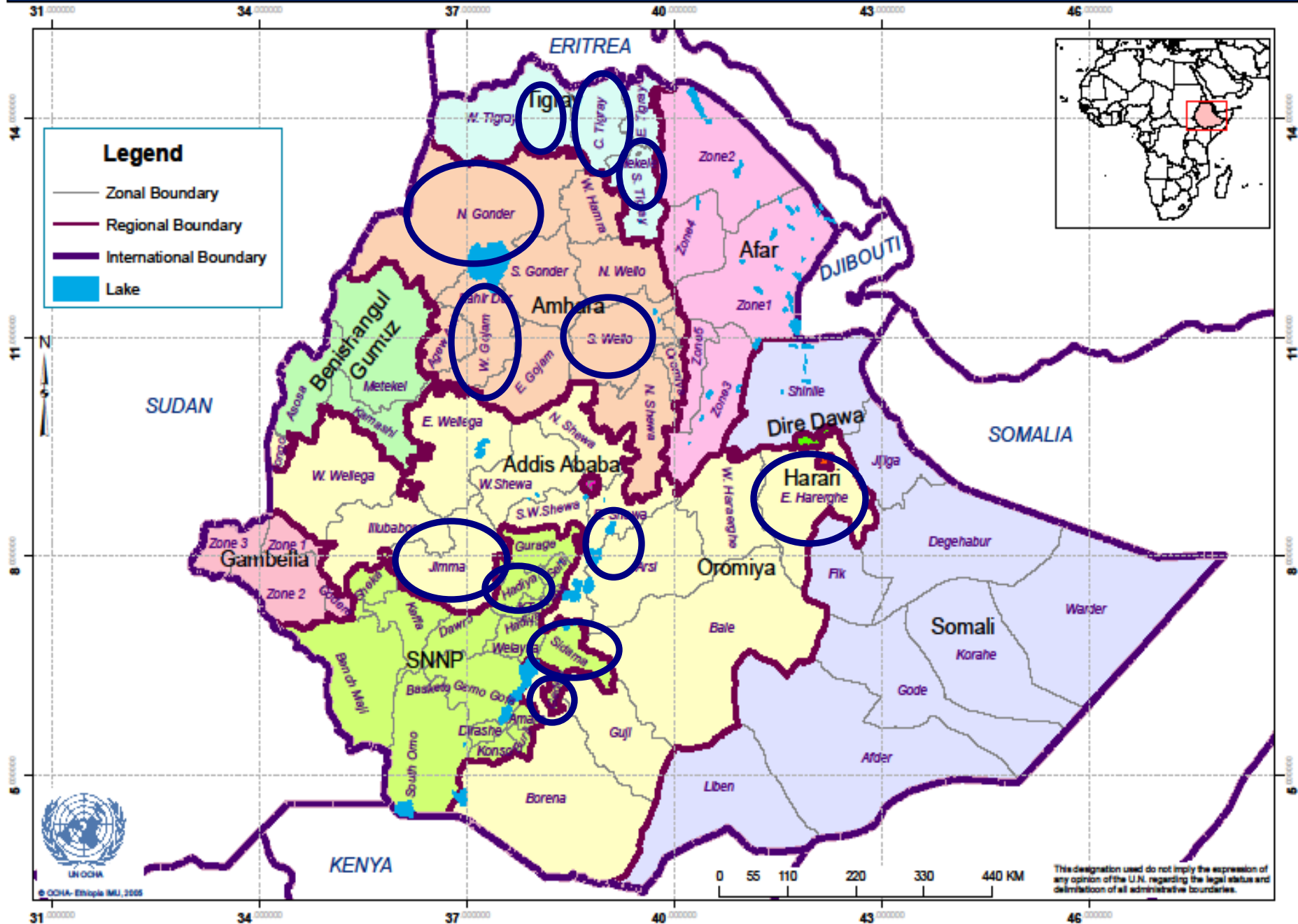


# LIAT Sampling - Amhara

Levels of Administration	Sample Size (n=)
Regional Health Bureau (RHB)	1
Zonal Health Dept (ZHD)	3
Woreda Health Office (WHO)	10
Health Center (HC)	29
Health Post (HP)	82
<b>Total</b>	<b>125</b>



# Administrative Regions of Ethiopia



**Legend**

- Zonal Boundary
- Regional Boundary
- International Boundary
- Lake



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This designation used do not imply the expression of any opinion of the U.N. regarding the legal status and delimitation of all administrative boundaries.

# Limitations

- Lack of national/regional database with facilities names
- Data collected during rainy season – some sampled health posts, health centers inaccessible
- Some upgraded health centers not yet functional
- Predictable challenges associated with multi-lingual survey
  - Three languages (Amharic, Oromiffa, Tigrinya)



# Baseline Results by Core Indicators



# Tracer Products

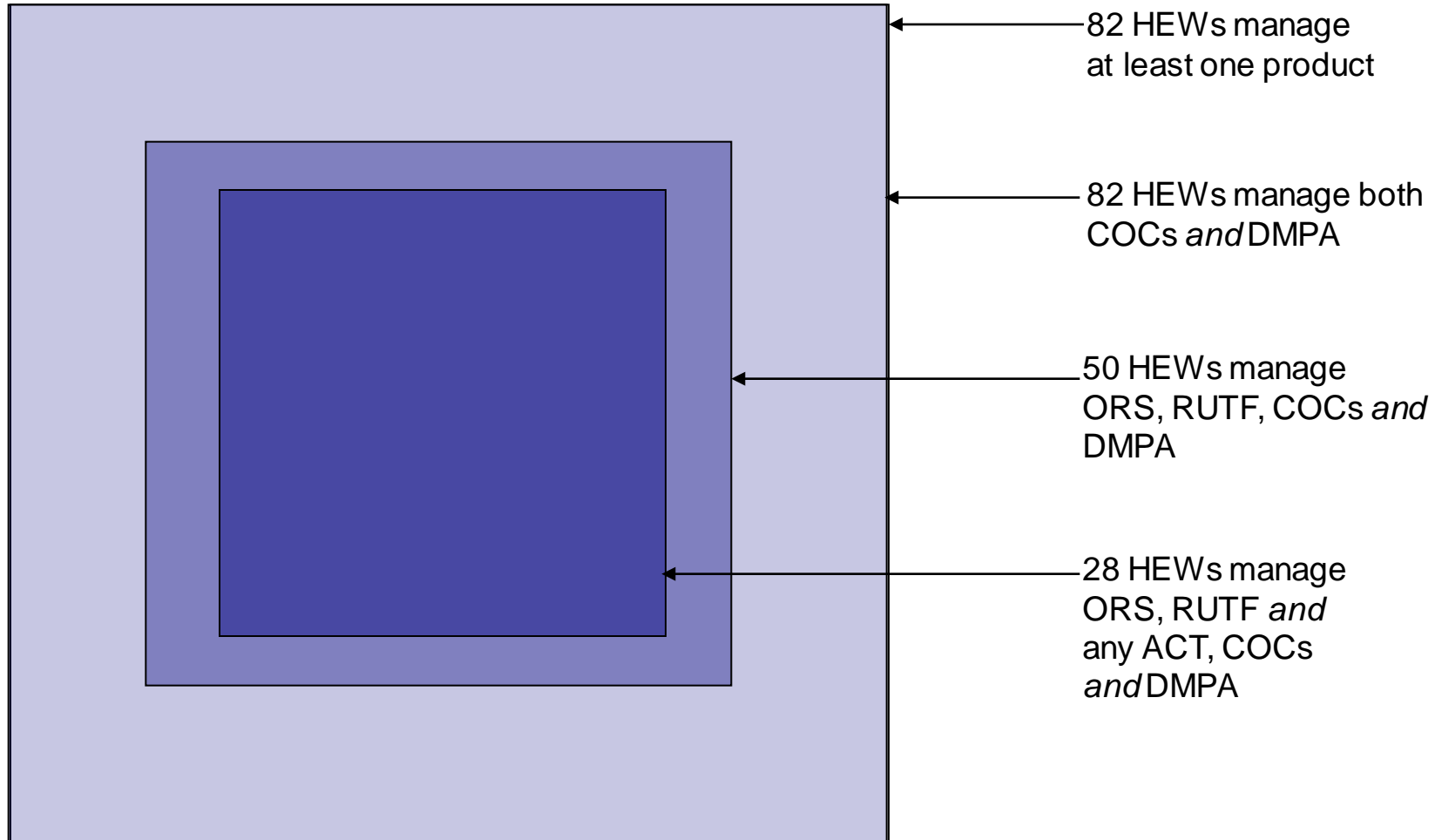


JSI Research & Training Institute, Inc.

1. cotrimoxazole 120mg tablets
2. cotrimoxazole 240mg/5ml suspension (bottles)
3. amoxicillin 250mg capsules
4. amoxicillin 125mg/5ml suspension (bottles)
5. Coartem (lumefantrine / artemether) 1 x 6 tablets
6. Coartem (lumefantrine / artemether) 2 x 6 tablets
7. chloroquine 50mg/5ml syrup (bottles)
8. malaria RDTs
9. zinc 20 mg tablets
10. ORS sachets or Oral Rehydration Salts
11. Plumpynut (RUTF) sachets
12. male condoms
13. Depo Provera or Petogen (DMPA) vials
14. Combined oral contraceptives (COC or pills)



# Describing the HEW Sample - Amhara





## **Main Country Level Objective:**

HEWs have usable and quality medicines available when needed for appropriate treatment of common childhood illnesses



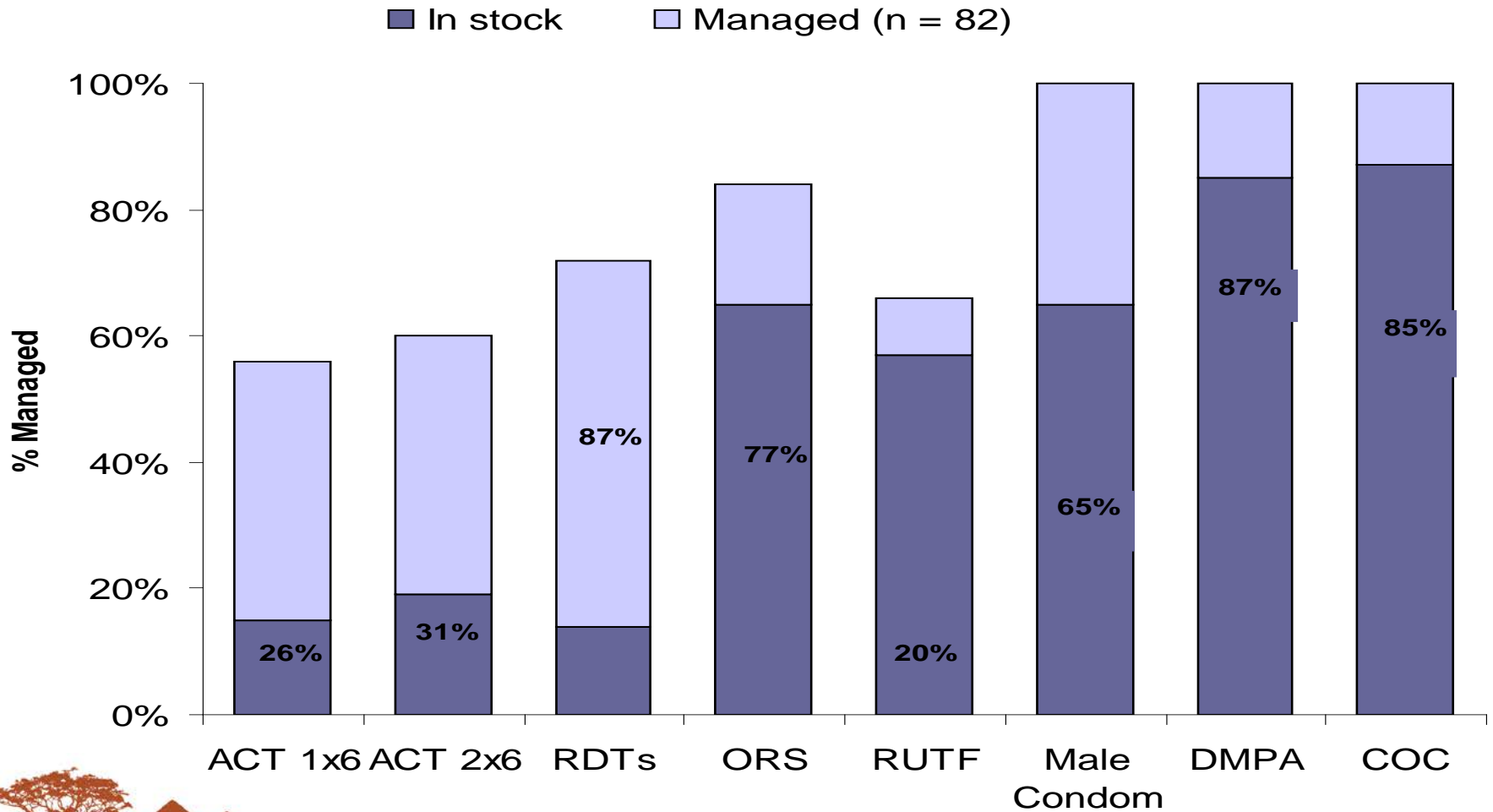


9 of 28 (**32%**) HPs with ORS, RUTF, COCs, DMPA and any ACT have them **all in stock**

27 of 50 (**54%**) HPs who manage ORS, RUTF, COCs *and* DMPA have **all in stock**

61 of 82 (**74%**) HPs manage both COCs *and* DMPA and have **all in stock**

# In Stock on DOV at HP by Product – in Amhara



Products

Supply Chains 4 Community Case Management

# Reported Reasons for Stockout - Amhara

- **do not receive all the health products ordered - 47%**
- **resupply point does not give me enough health products - 21%**
- **more and more people are coming to the health post - 47%**



## PRECONDITION 1:

Necessary, usable, quality CCM products are available at HEW resupply point/s

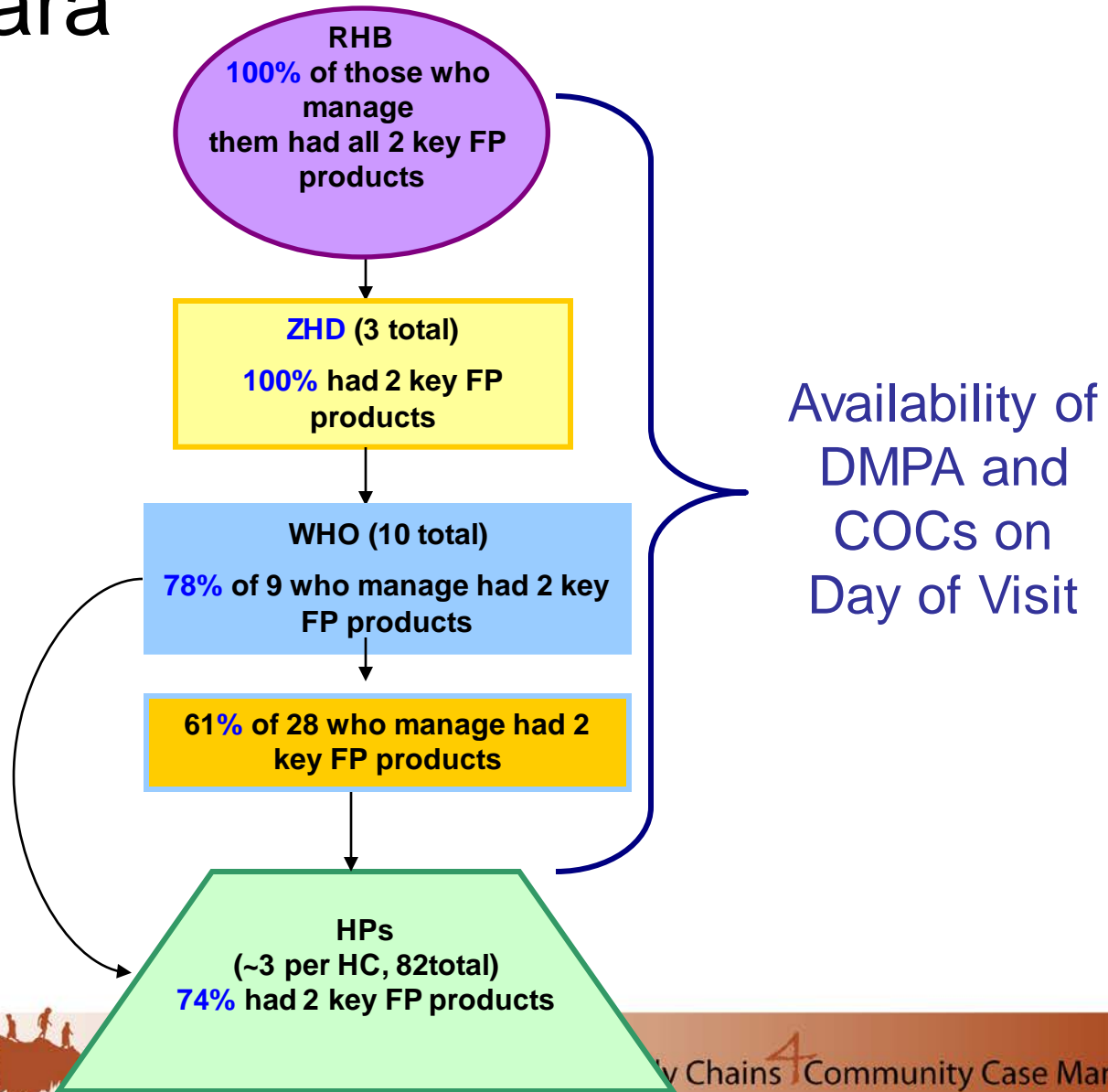
Product availability at the resupply point appears to be strongly linked to product availability at the Health Post Level for:

- DMPA
- Combination Oral Contraceptives (COC)
  - RUTF
  - ORS
  - ACTs



# Product Availability at all Levels

– in Amhara

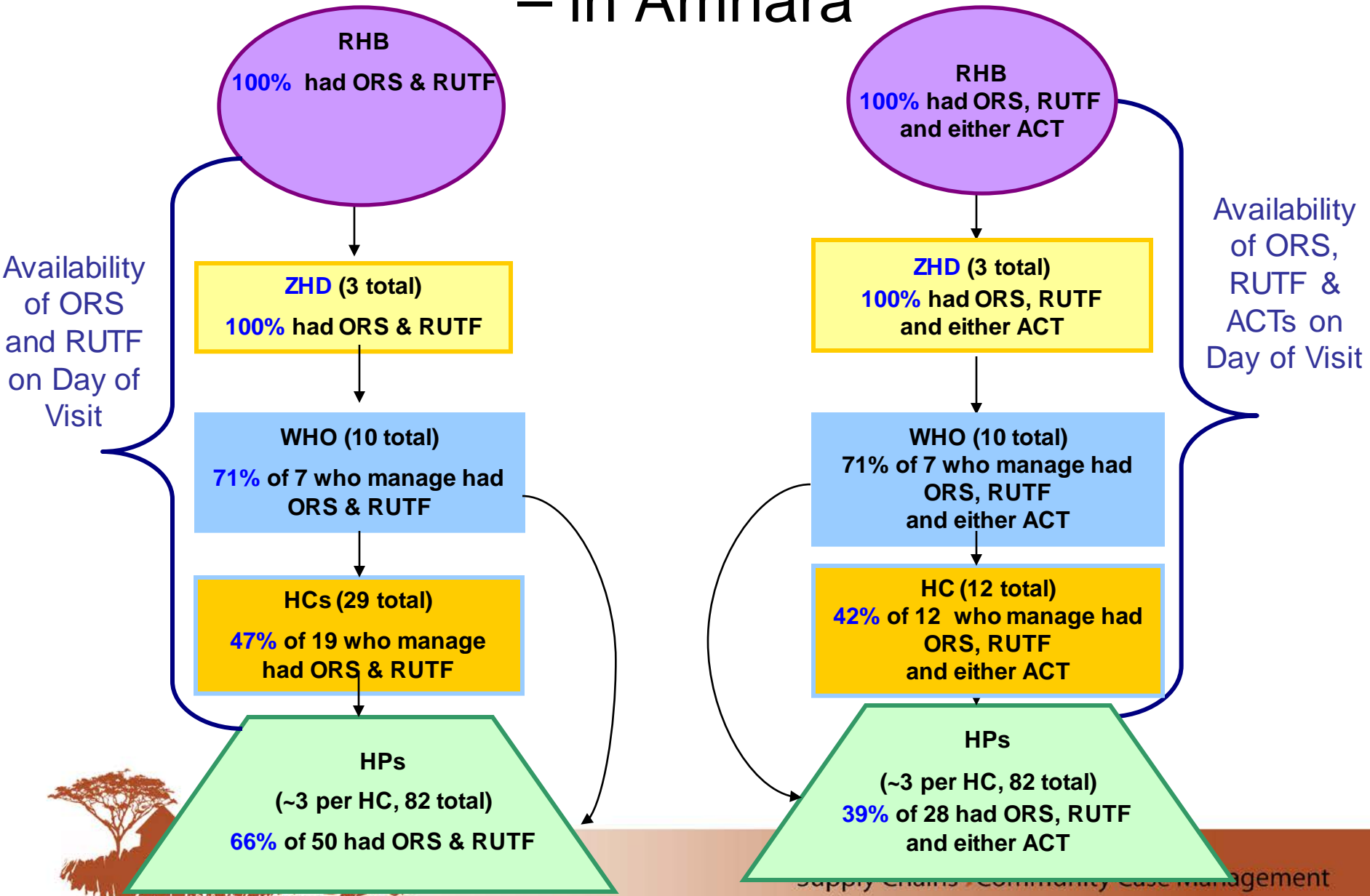


# Product Availability at all Levels (DOV)

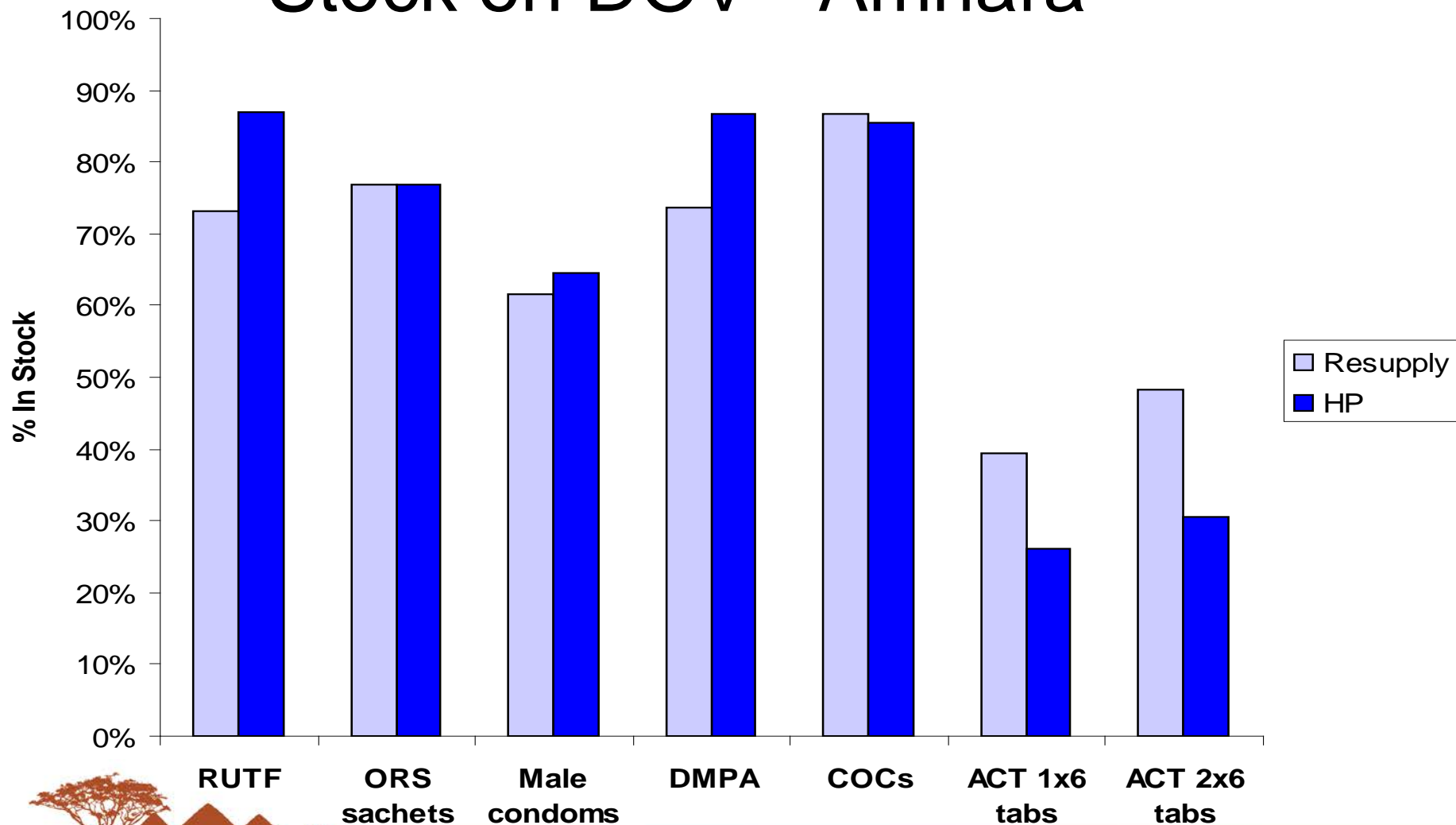


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## – in Amhara



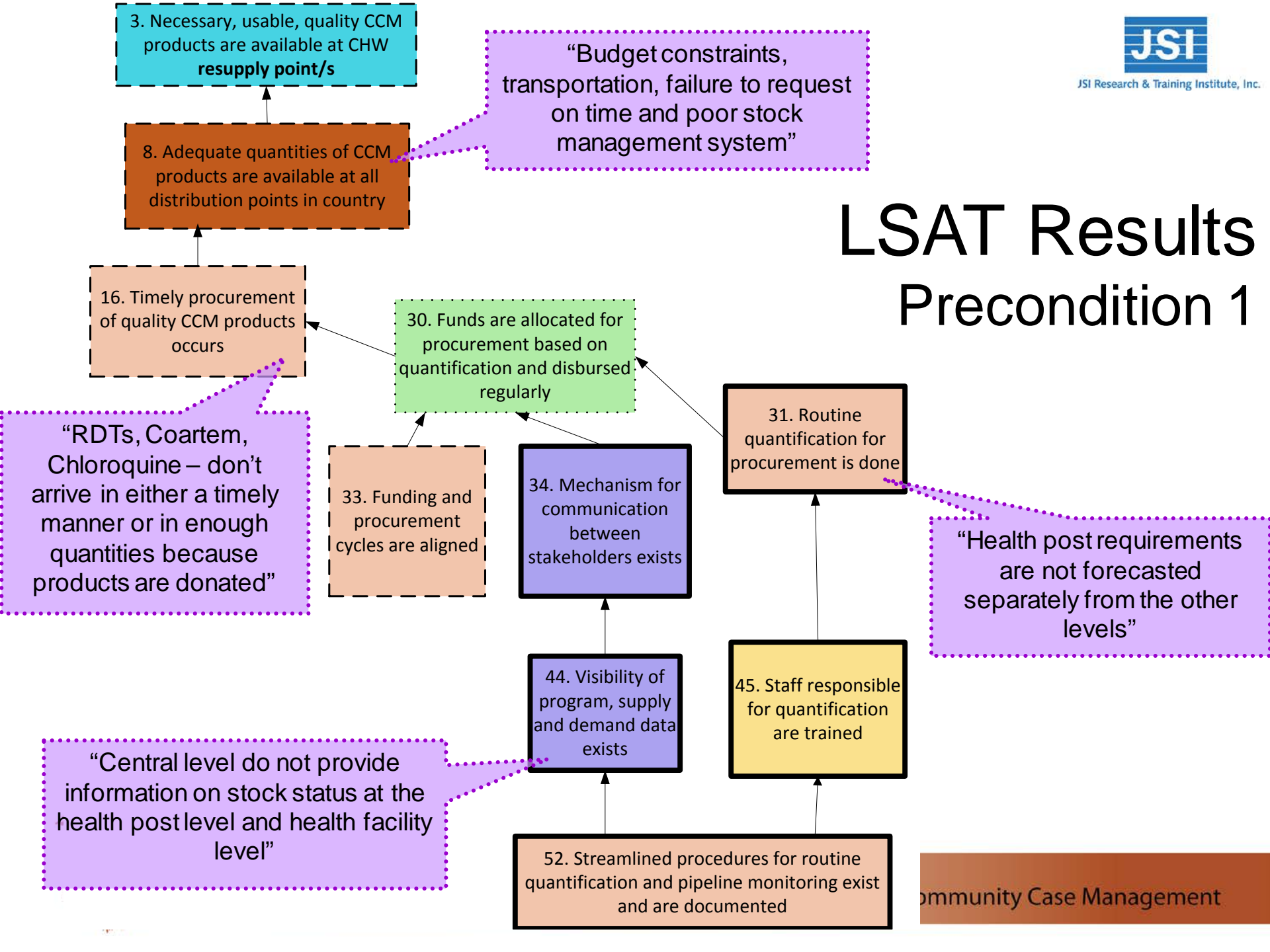
# % of Resupply Points and HPs in Stock on DOV - Amhara





# LSAT Results

## Precondition 1



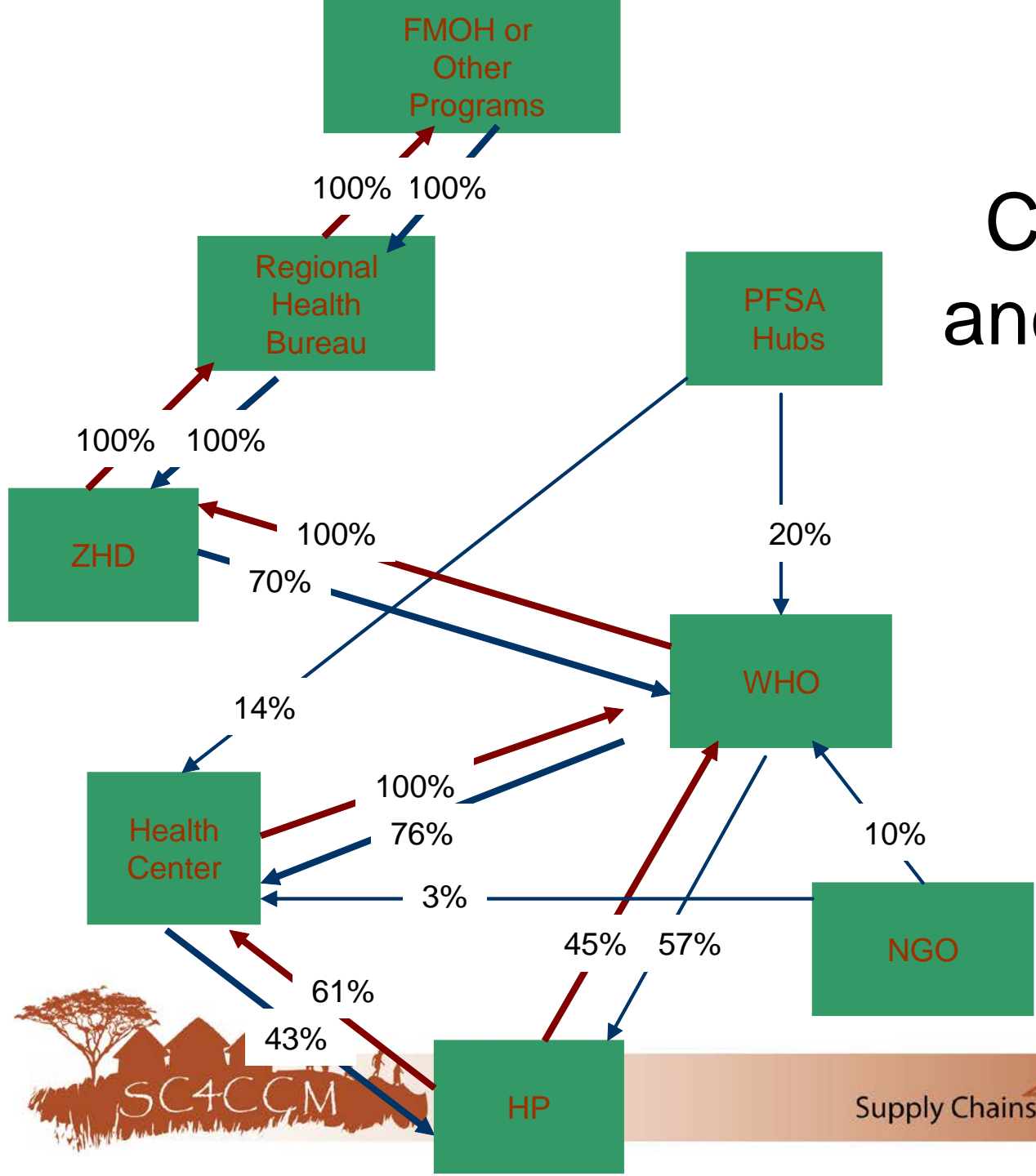
## PRECONDITION 2:

HEWs, or person responsible for HEW resupply, know how, where, what, when and how much of each product to requisition or resupply and act as needed

- Several distribution and information systems operate concurrently
- Supply chain capacity and skills are generally low, very little formal training reported
- Necessary tools to manage the logistics system are insufficient



# Flow of Commodities and Information - Amhara



Reports   
Commodities 



# SCM Formal Training - Amhara

% who reported receiving formal training on how to manage health products

- 100% of RHB respondents
- 67% of ZHD respondents
- 10% of WHO respondents
- 3% of HC respondents
- 9% of HEW respondents

**In Amhara how 48 HEWs learned to complete forms:**

**23% of HEWs reported on the job training**

**56% of HEWs reported they figured it out themselves**



# Standard Operating Procedures

## - Amhara

A copy of any written guidelines or procedures for ordering, reporting, and inventory control of health commodities were observed at:

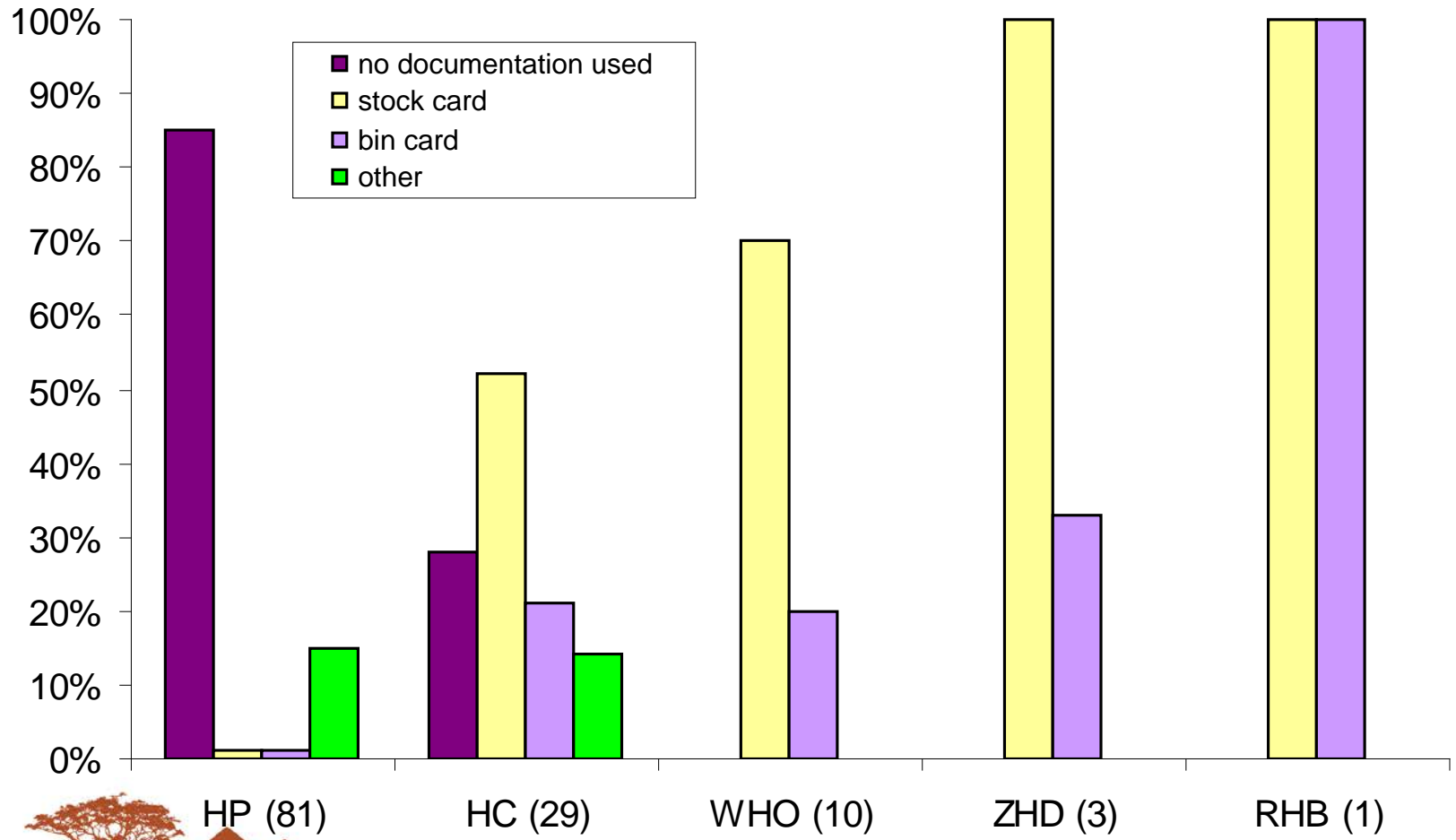
- 100% of RHBs
- 33% of ZHDs
- 20% of WHOs
- 3% of HCs
- 5% of HPs

### **Key Message:**

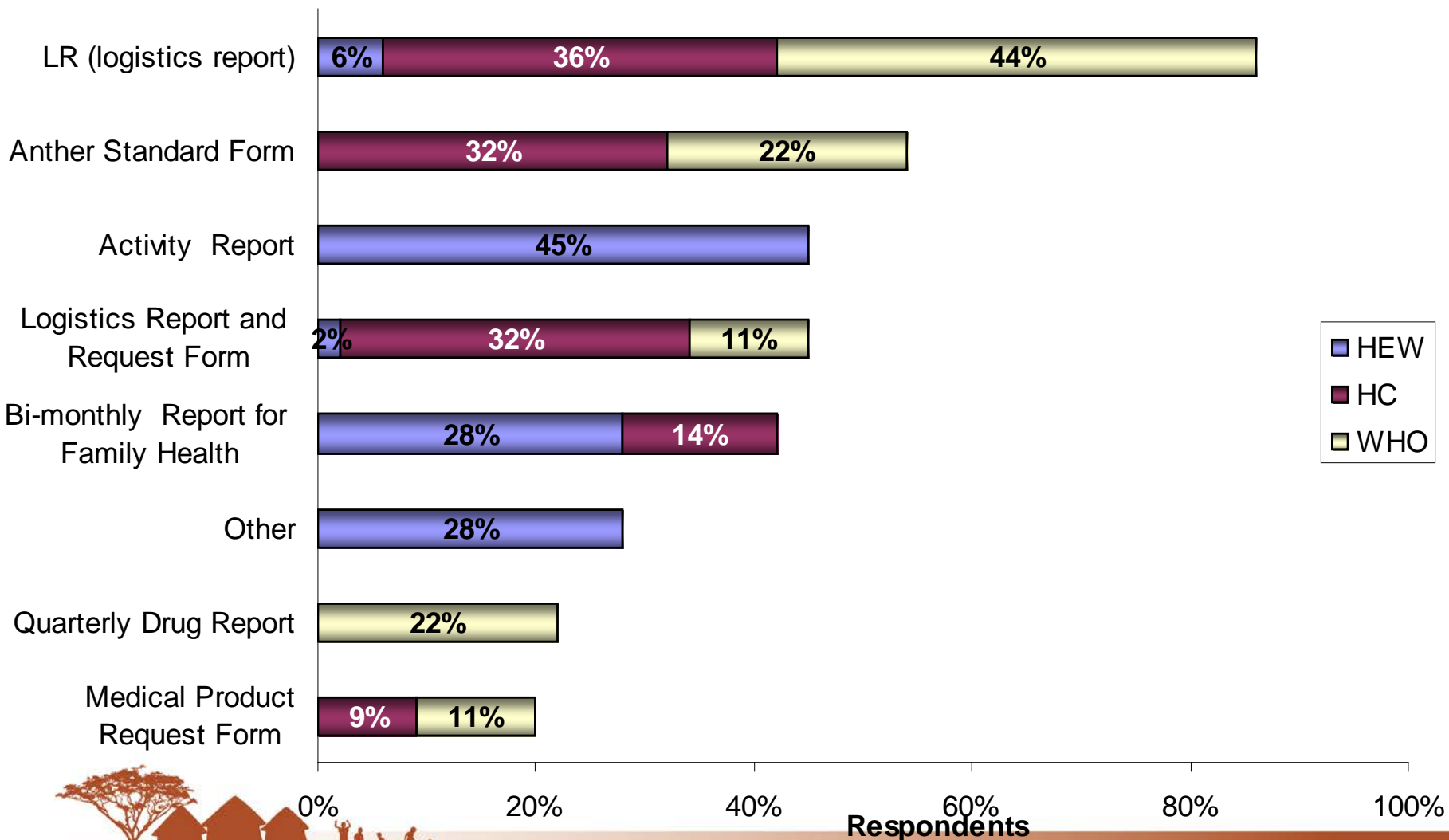
**Very few lower level facilities in the system have SOPs to reference**



# Stock Keeping Documentation: Amhara



# Types of Reports Submitted - Amhara





# Resupply Procedures for HEWs

## - Amhara

20% of HEWs report being resupplied every month,

while 70% seek resupplies only when they need them

59% of HEWs report using a request form,

but 81% of those use Model 20



# LSAT Results

## Precondition 2

4. CHWs, or person responsible for CHW resupply, know how, where, what, when and how much of each product to requisition or resupply and act as needed

18. CHWs routinely collect and report timely, accurate logistics data

12. Tools and resources needed to implement procedures are provided

19. LMIS forms or other data collection tools are available for CHWs

36. CHWs are trained in procedures and processes for CCM product supply chain

46. Streamlined procedures for ordering, reporting, inventory control, storage and disposal of expired / damaged health products exist and are documented

“HEWs do not collect dispensed-to-user data”

“No financing for logistics training for HEWs”

“Lack of standardization throughout the country “

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## PRECONDITION 3:

HEWs have adequate storage: correct conditions, security and adequate space.

Standards for appropriate storage conditions are not fulfilled at all levels



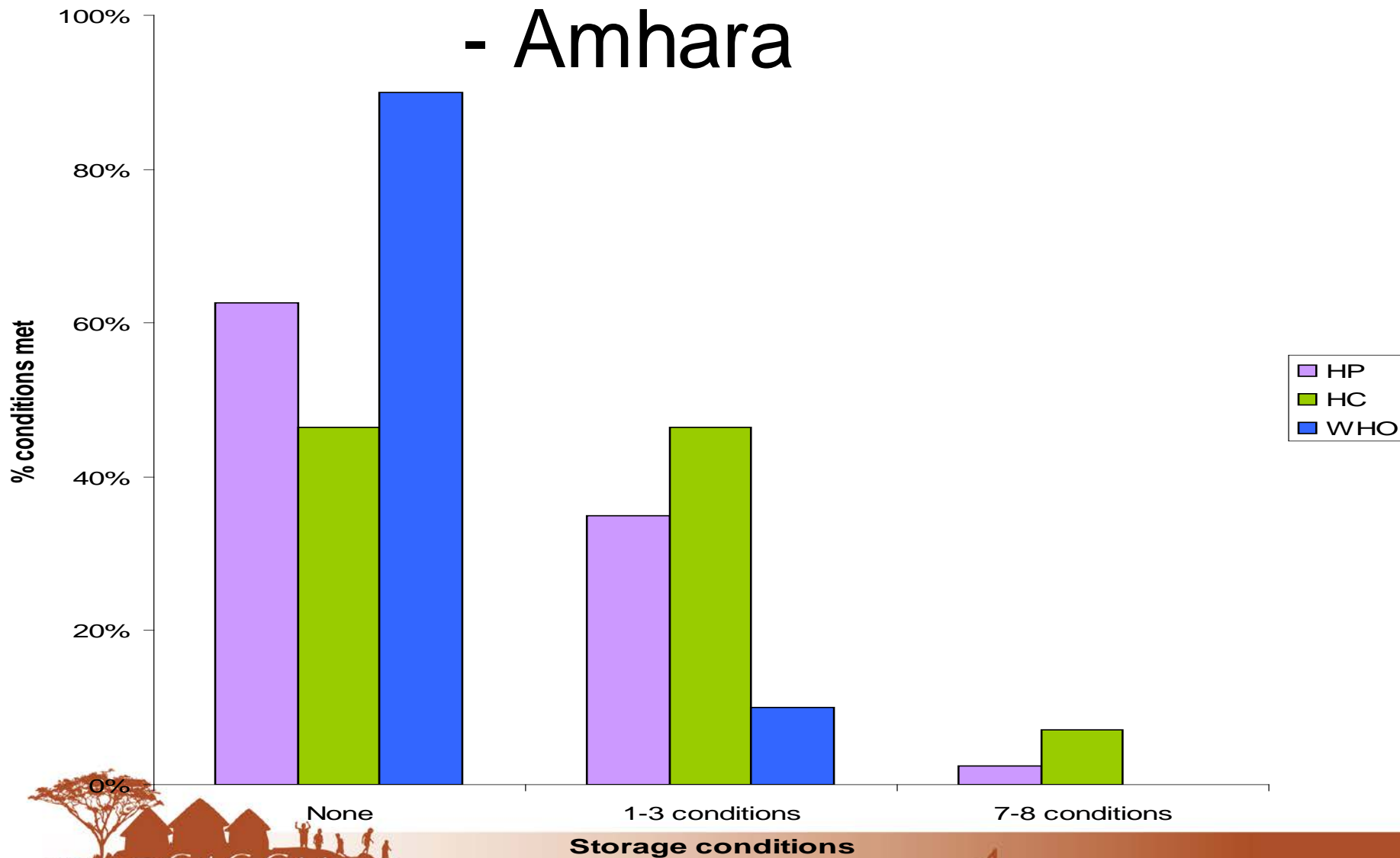
# Satisfactory Storage Conditions

Health products are stored:

- separately to damaged and/or expired health products
- in an area free of rodents or insects
- securely with a lock and key, and with limited access
- in an area that is protected from direct sunlight
- at the appropriate temperature
- on shelves or stacked off the floor in stacks and away from walls
- in a clean, dry, well-lit and well-ventilated storeroom
- in an area that is accessible during all normal working hours.
- so that first-to-expire, first-out (FEFO) is observed
- separately to insecticides and chemicals



# Adequate Storage Conditions - Amhara



# LSAT Results Precondition 3

5. **CHWs** have adequate storage:  
correct conditions, security and adequate space.

HPs have  
adequate storage

20. Appropriate  
and secure  
storage space  
for CCM  
products is  
available

21. Secure and  
suitable storage  
containers or  
shelving for CCM  
products are  
procured where  
needed

Insufficient  
shelving at HPs



## PRECONDITION 4:

Goods are routinely transported between resupply points and **HEWs**

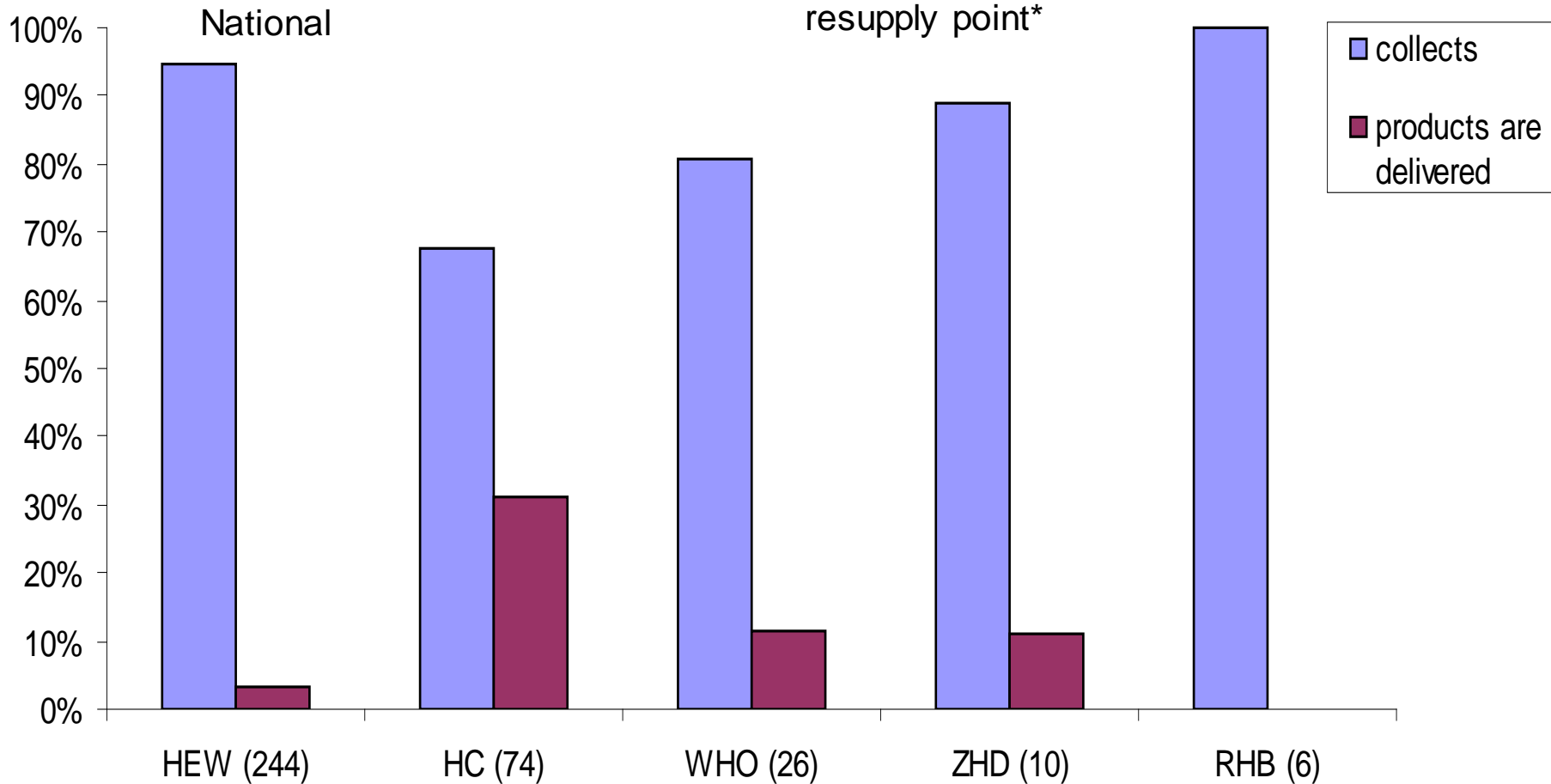
- Health posts are generally located in remote areas that are difficult to reach particularly during rainy season
- **33%** of 39 HEWs in Amhara with problems related to collecting or receiving health products reported **lack of transport** as the major constraint





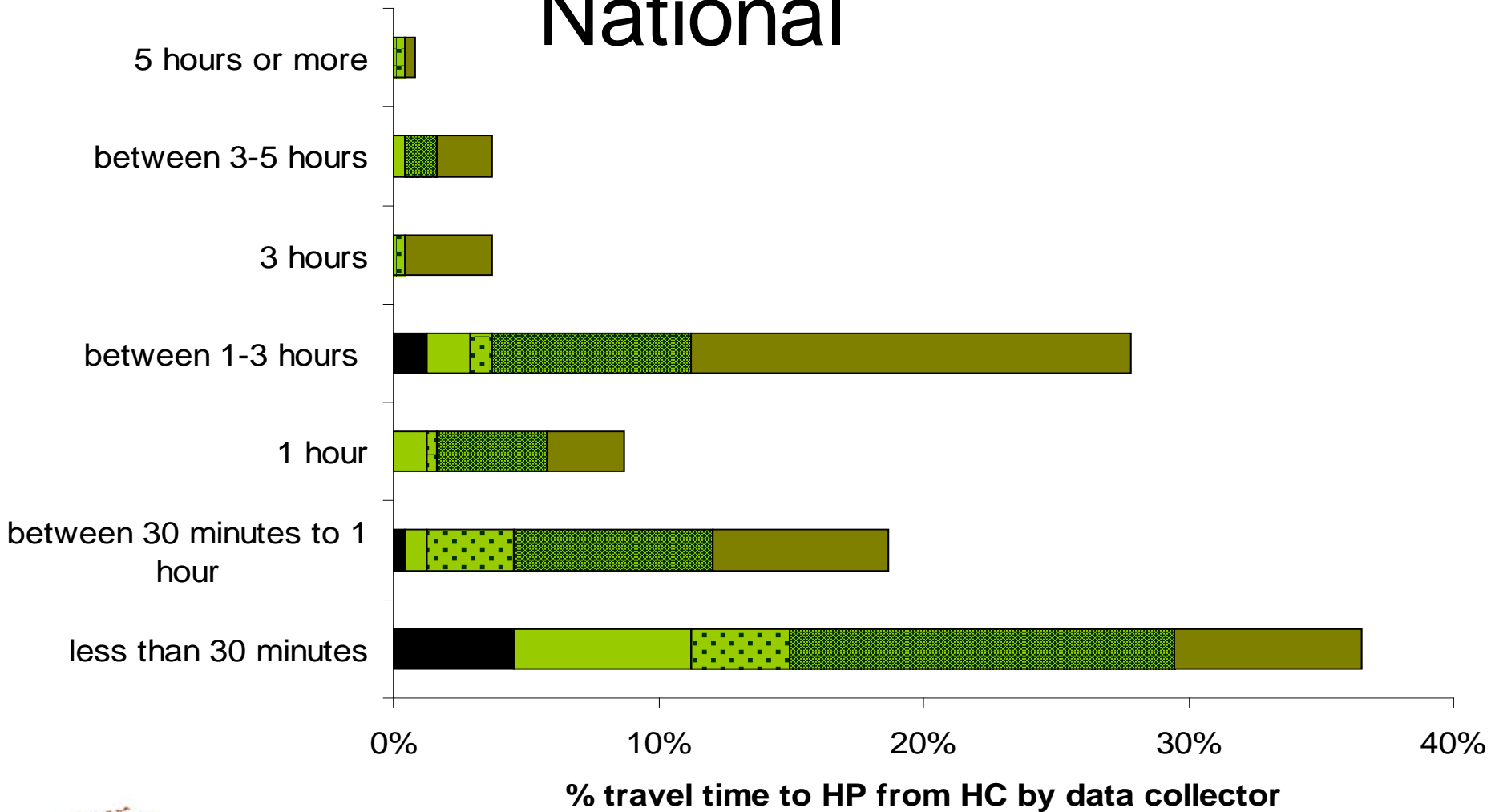
# Delivery & Collection of Products

In Amhara of 81 HEWs who collect products, **70%** walk on foot, **37%** use public transport and **17%** use animal transport to get to their resupply point\*



# Travel Time and Road Condition

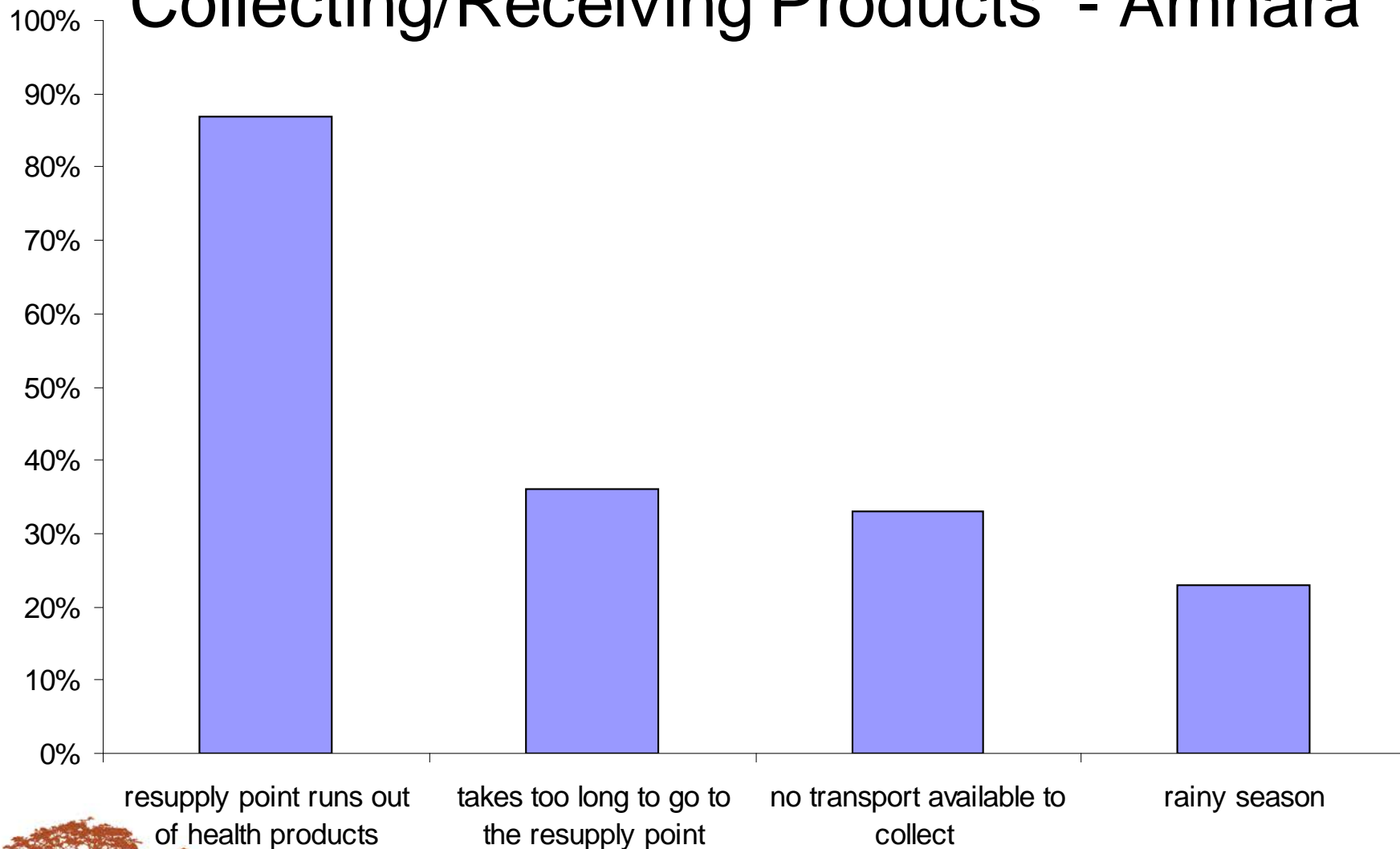
## National



- All tarmac
- About half tarmac, rest in good condition
- About half tarmac, rest in bad condition
- All dirt in good condition
- All dirt in bad condition

# HEW Reported Problems

## Collecting/Receiving Products - Amhara



# LSAT Results

## Precondition 4

6. Goods are routinely transported between resupply points and **CHWs**

13. Reliable, timely and appropriate transport is available to distribute or collect goods between resupply point and CHWs

24. Adequate transport procured or hired when necessary for purpose of CCM product distribution

47. Streamlined transportation procedures for maintaining vehicles and distribution /collection of goods exist and are documented

HEW both collect and receive deliveries, but mostly collect. Sometimes HEW Supervisors distribute to HEWs when they visit.

Not enough funding for fuel, vehicles, spare parts, etc



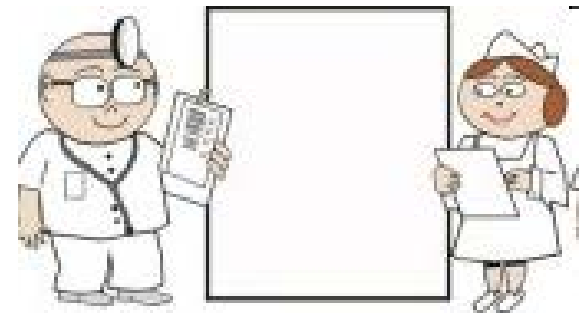
## PRECONDITION 5:

HEWs are motivated to perform their roles in the CCM product supply chain

- High rates and frequency of supervision
  - Supervision not identified as a source of motivation
- **60%** of HEWs report high levels of job satisfaction



# Supervision - Amhara



**92%** supervisors reported providing supervision to HEWs at least every month



**70%** HEWs reported receiving a supervisory visit at least every month



**Where did Supervision take place?**

**96%** at the health post

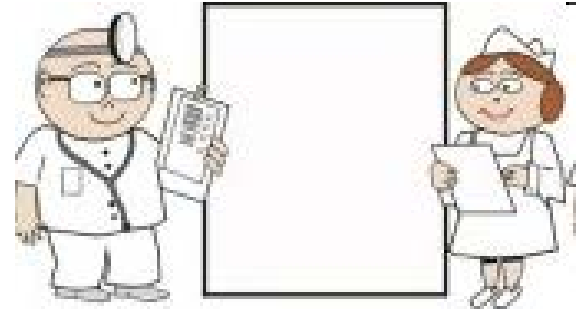
**57%** at the village or community



# Who do HEWs Receive Supervision From? - Amhara



**70%**  
Health Extension  
Worker  
Supervisors

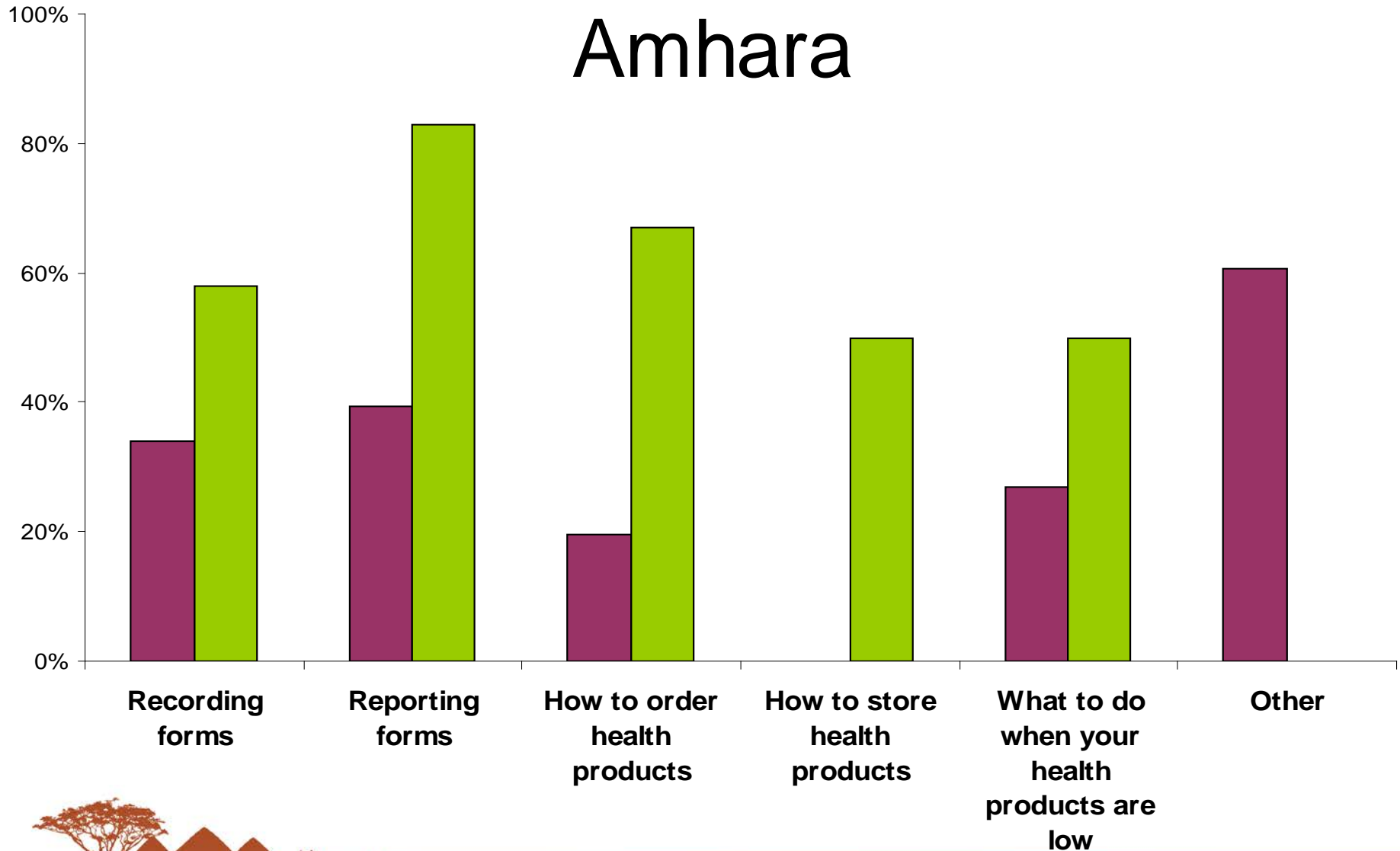


**43%**  
Woreda Health  
Office Focal  
Person



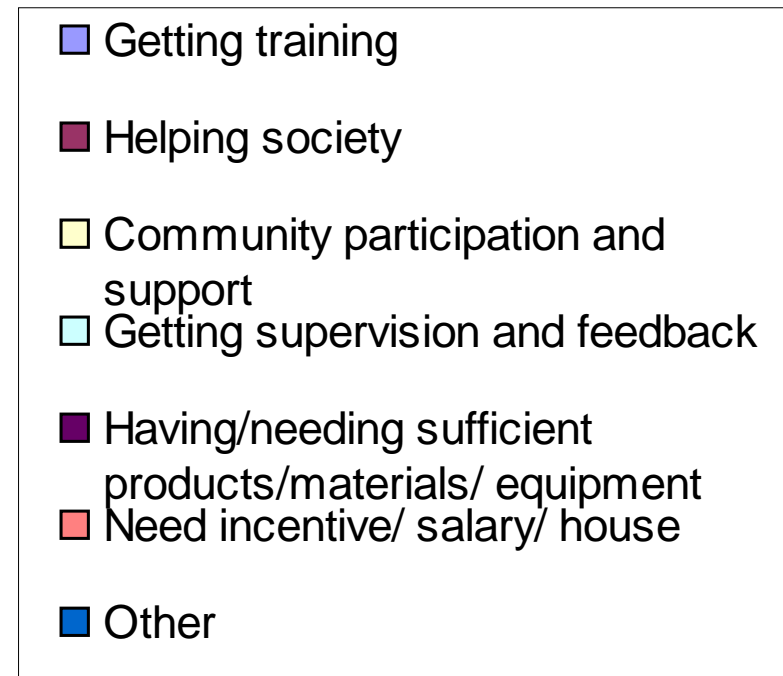
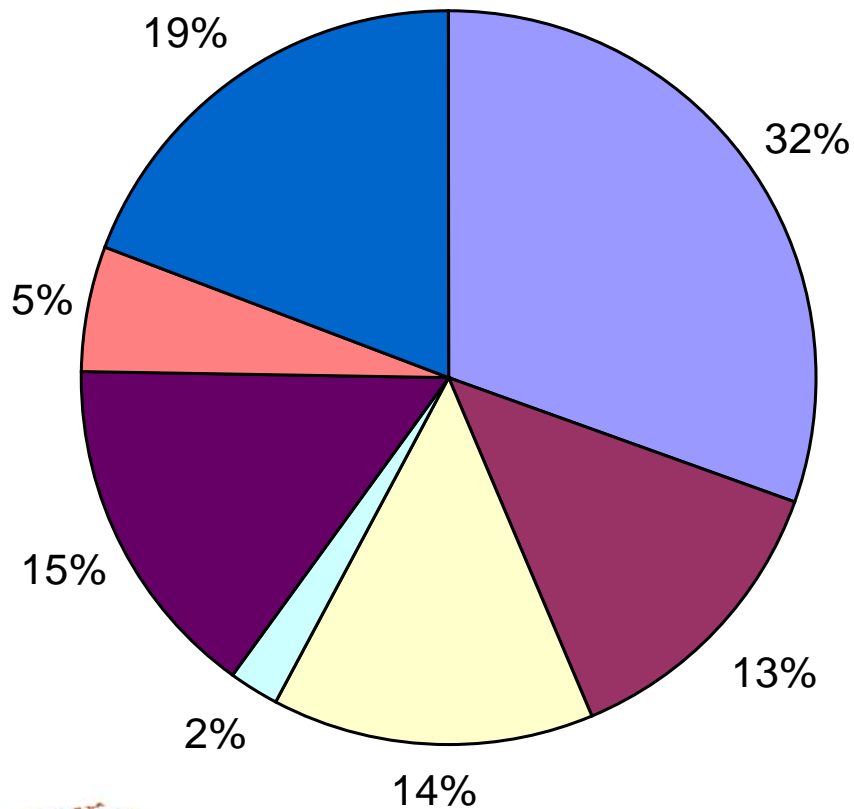
# Reported Areas of Supervision

## Amhara



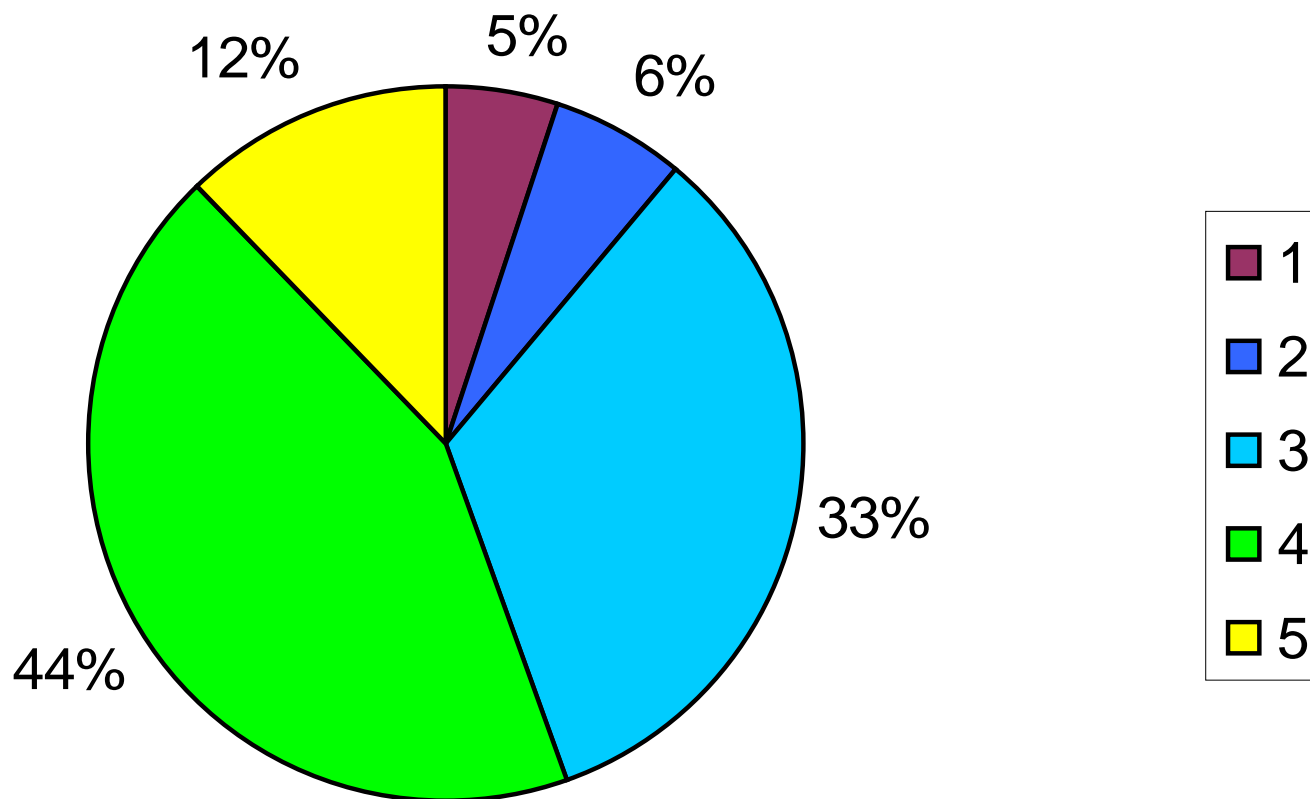


# Sources of Motivation for HEWs - National



# HEW Self-Reported Job Satisfaction - Amhara

(1-5 with 5 being highest satisfaction)



# LSAT Results

## Precondition 5

7. CHWs are motivated to perform their roles in the CCM product supply chain

15. Feedback is communicated to CHWs

14. Supportive supervision of CHWs with SC component is performed regularly

27. CHW Supervisors know of and distribute incentives when appropriate

28. CHWs have knowledge of incentives

26. Supervision tools are available

“Different job aids for supervisors of HEWs”

“No funds for different planned activities.”

39. Transportation and other resources available to conduct supervision

40. Supervisors are trained in supportive supervision and the procedures and processes for CCM product supply chain

41. Staff responsible for providing logistics feedback reports are trained and produce reports

“Lack of incentives/ motivation mechanisms”

48. Streamlined procedures for providing feedback and supervision to the CHWs exist and are documented

49. Defined CHW incentive system that includes supply chain performance exists and is documented



# Access to Communication Technology - Amhara

- Cell phones are widely (**83%**) available at HEW level

however...



- only **37%** of HEWs have adequate network coverage
- only **18%** of HEWs have a source to recharge their phones

# Thank You

