



በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ  
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA  
የመድኃኒት ፈንድና አቅርቦት ኤጀንሲ  
PHARMACEUTICALS FUND AND SUPPLY AGENCY (PFSA)



# Vaccine Supply Chain Transition

14<sup>th</sup> TechNet Conference

11-15 May 2015

Bangkok, Thailand



በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ  
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA  
የመድኃኒት ፈንድና አቅርቦት ኤጀንሲ  
PHARMACEUTICALS FUND AND SUPPLY AGENCY (PFSA)



የኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ  
የጤና ጥበቃ ሚኒስቴር  
Federal Democratic Republic of Ethiopia  
Ministry of Health



በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ  
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA  
የመድኃኒት ፈንድና አቅርቦት ኤጀንሲ  
PHARMACEUTICALS FUND AND SUPPLY AGENCY (PFSA)



## Presentation Outline

- Introduction
- Transition strategy for vaccines
- Achievements
- Challenges
- Way forward

# Country Background



- ✓ Ethiopia: located in northeast Africa
- ✓ Area: 1,104,300 square kilometers
- ✓ Total Population: ~90 million (CSA projection for 2014)
- ✓ Average size of household: 4.6
- ✓ Ethiopia is decentralized country:
  - 9 Administrative Regional States
  - 2 City Administrations



## Strategic Components of the Supply Chain

- Improve availability of affordable essential pharmaceuticals at health facilities from the average 55% to 100%
- Delivery to public health facilities on average every 2 months (pull/ordering basis)
- Reduce overall pharmaceuticals wastage from average 8% to less than 2%
- **Rational use of medicines (managerial component)**
- Enhance the construction of infrastructure and distribution networks (within 180 -300 km radius)
- Strengthen revolving drug fund (RDF) utilization and its management
- Strengthen information links and use for efficient and effective health commodity management

# Spatial Distribution of PFSA Hubs in the Country





## Existing Country Context for Vaccine Distribution

Cold Chain system for vaccines and other cold storage requiring health commodities consists of five levels, following the FMOH administrative structures:

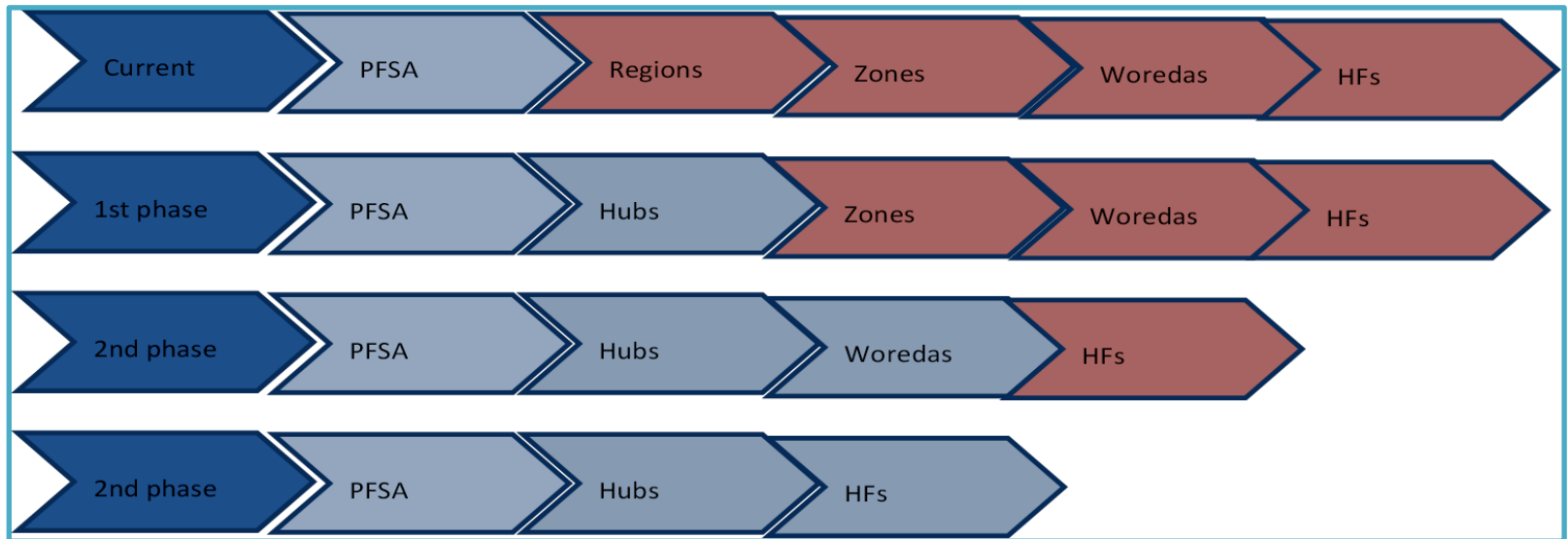


# Transition Strategy for Vaccines

- Policy decision in 2013 to transfer responsibility for vaccine supply chain to Pharmaceuticals Fund & Supply Agency (PFSA), Federal agency responsible for distribution of essential medicines and most other health commodities
- **Rationale:**
  - Professional SC Agency (PFSA) with expertise
  - Successful record: availability of basket of essential medicines c. 90%
  - GFATM, GAVI, USAID already investing in PFSA (warehouses, vehicles, capacity building)
  - Potential synergies for storage, distribution, information systems, etc.



# Transition Strategy for Vaccines (cont.)



To implement the transition process there will be two activities undertaken simultaneously:

- ✓ The transition process in selected (three) Phase I Hubs
- ✓ Implement preparatory activities for the remaining hubs to fully transit vaccine supply chain management.





# Supply Chain Comparison

	Essential Medicines	Vaccines
Administration	PFSA – Federal SC Agency which supports MOH in its mission	MOH administrative structures (devolved)
# Levels	Three Central - PFSA hub - Facility	Five Central - Regional - Zonal - Woreda (District) - Facility
HR Capacity	Dedicated SC professionals	Poorly training, transient healthcare providers
Infrastructure	<ul style="list-style-type: none"> <li>•New, well-designed warehouses (11 upgrades + 6 new) with cold rooms</li> <li>•Dedicated fleet with new cold trucks</li> </ul>	<ul style="list-style-type: none"> <li>•Existing cold rooms</li> <li>•General purpose vehicles and no cold trucks</li> </ul>
Information Systems	Automated at center and hub level, live dashboards for data visibility. Paper-based at facility level	Old paper system – very limited data visibility
Delivery Schedule	Bi-monthly	Quarterly for center to region and monthly at lower levels

# Transition Strategy (cont.)

1. Develop transition plan
2. Procure infrastructure – cold rooms, cold trucks
3. Create a coordinating body:  
PFSA, FMOH, JSI, UNICEF, WHO, CHAI (Federal level) & also at regional/hub level
4. Phased approach (allows learning, lessens risk)
  - a. Take over management of central cold store
  - b. Distribution of vaccines for campaigns (before routine)
  - c. Begin distribution from 3 hubs (only)
  - d. Adapt inventory management/LMIS tools already used by PFSA to vaccines (before transition)



## Achievements

### Infrastructure:

- 20 refrigerated trucks procured and deployed
- 17 cold rooms procured; installation begins in May

### Storage & Distribution:

- PFSA managing vaccine stores at central level
- PFSA distributing vaccines for campaigns to woreda level
- Distribution of vaccines from first hub began in April

### System Design:

- SOPs for vaccine management prepared & reviewed in April
- Distribution analysis carried out for one hub, including analysis of monthly vs. bimonthly delivery



## Achievements (cont.)

- Management Information Systems
  - Existing inventory management software for essential medicines (HCMIS) expanded and deployed to manage vaccines at central & regional cold rooms
  - HCMIS currently being used at xx RHBs and hubs
  - Vaccine specific features (e.g. VVM) added & implemented
  - HCMIS Dashboard provides live vaccine commodity data for central and regional levels



## Challenges

- Cold room maintenance – shortage of expertise, need to develop internal capacity within PFSA  
Replenishment: coverage targets/demographics vs. consumption
  - Resupply schedules: monthly vs. bimonthly given cold storage constraints and transport costs
- Direct delivery to facilities as a goal: current plans are for delivery to Zones and woreda level only due to constraints of resource and capacity at the health institution.



## Way Forward

- Enhance learning process from the implementation of vaccine roles in center and Phase I hubs.
- Replicate good practices from the transition in Phase I sites to the next group (Phase II includes 8 hubs)
- Install new cold chain equipment in all PFSA hubs
- Coordinate the supply chain transition with the programmatic aspects of EPI
- Enhance capacity building at all levels for management of supply chain for vaccines and related supplies.



በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ  
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

የመድኃኒት ፈንድና አቅርቦት ኤጀንሲ

PHARMACEUTICALS FUND AND SUPPLY AGENCY (PFSA)

☎ 011-275 17 70, 011-276 06 76, 011-75 06 74 ☎ 011-155 32 77, 011 275 25 55 ✉ 21904 E-mail: pfsa@ethionet.et



# Thank you!