



# Zinc/ORS Scale-up in Nigeria

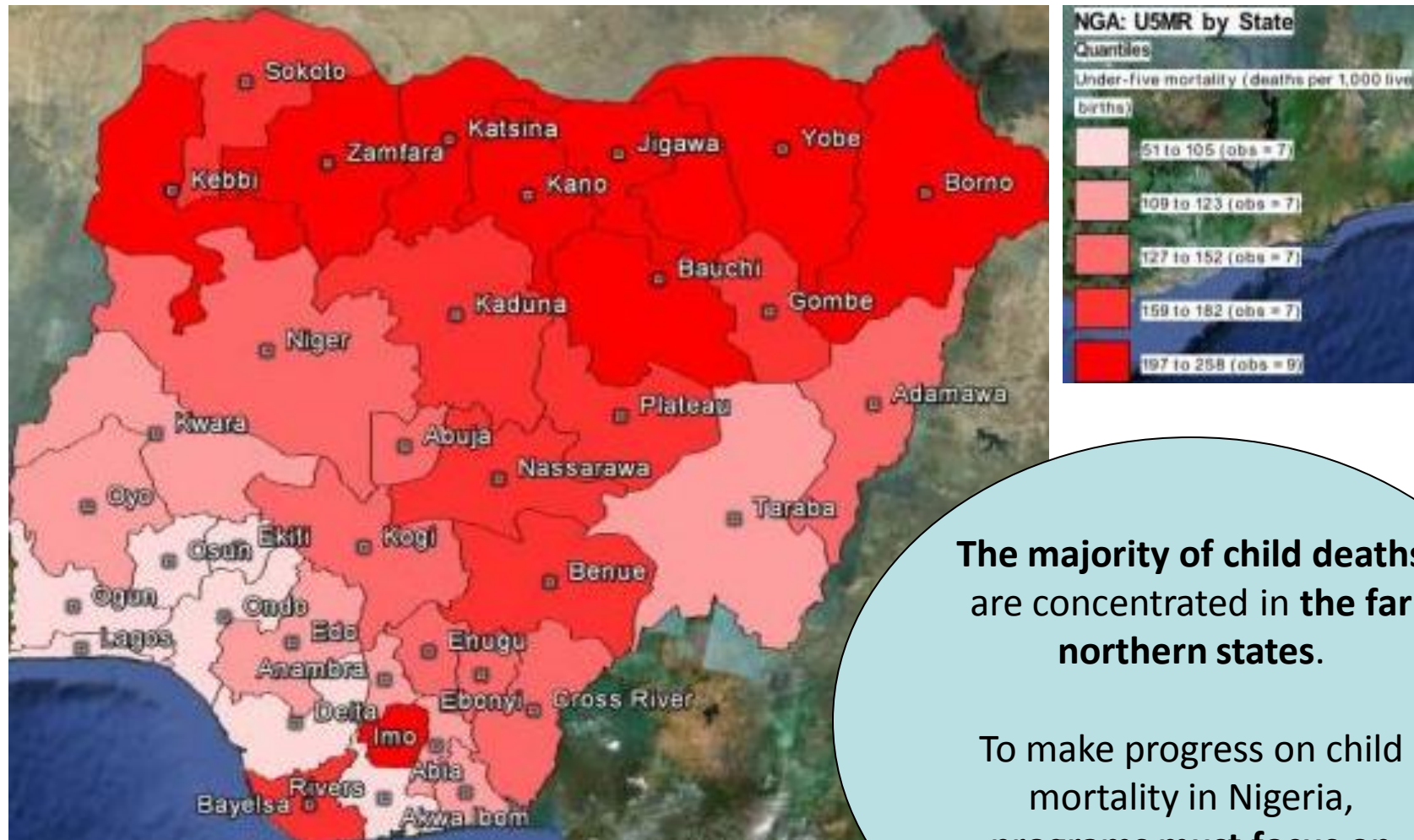
CHAI

Diarrhea & Pneumonia Working Group

June 20, New York



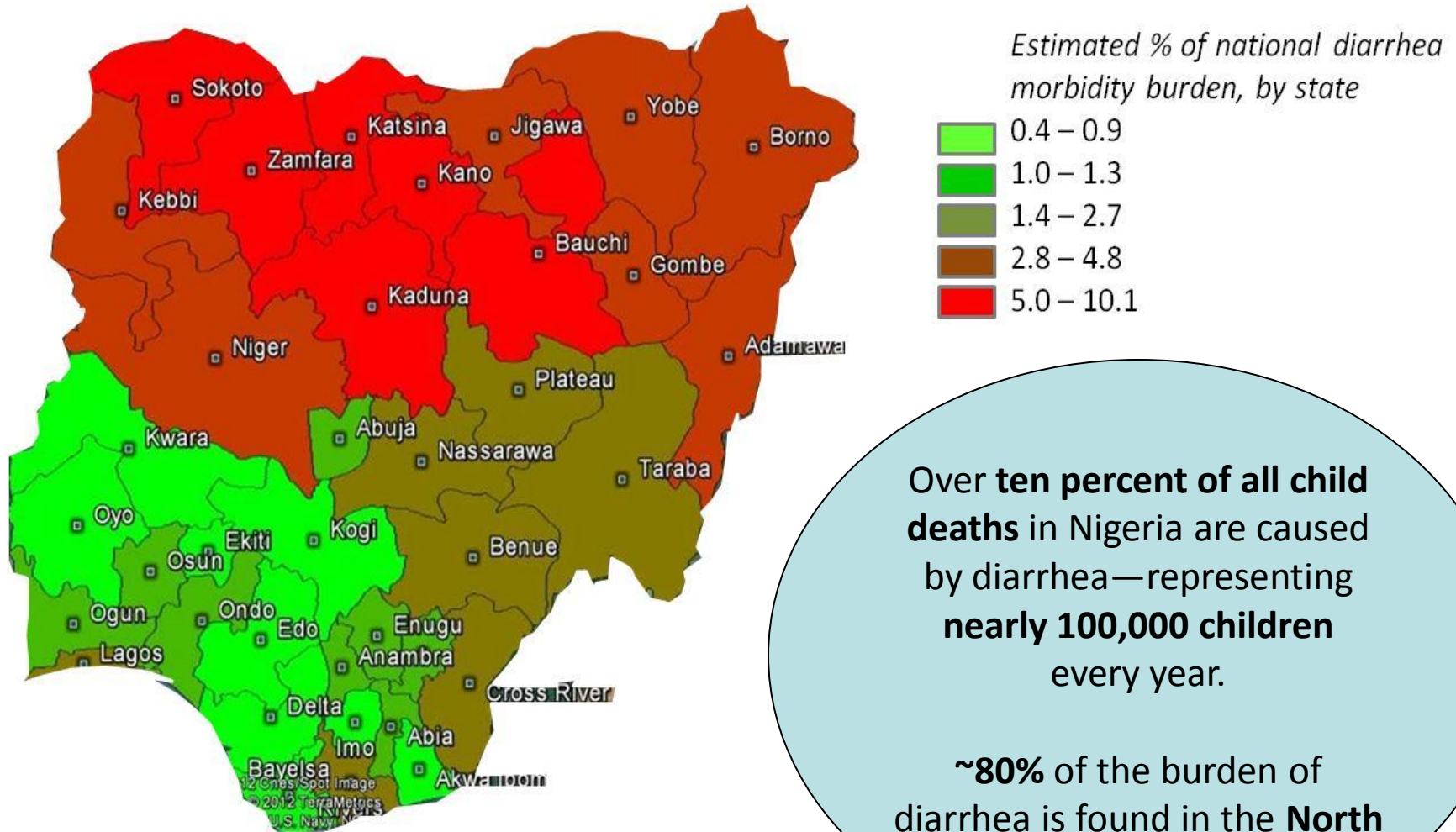
# Under-five mortality is highest in the North



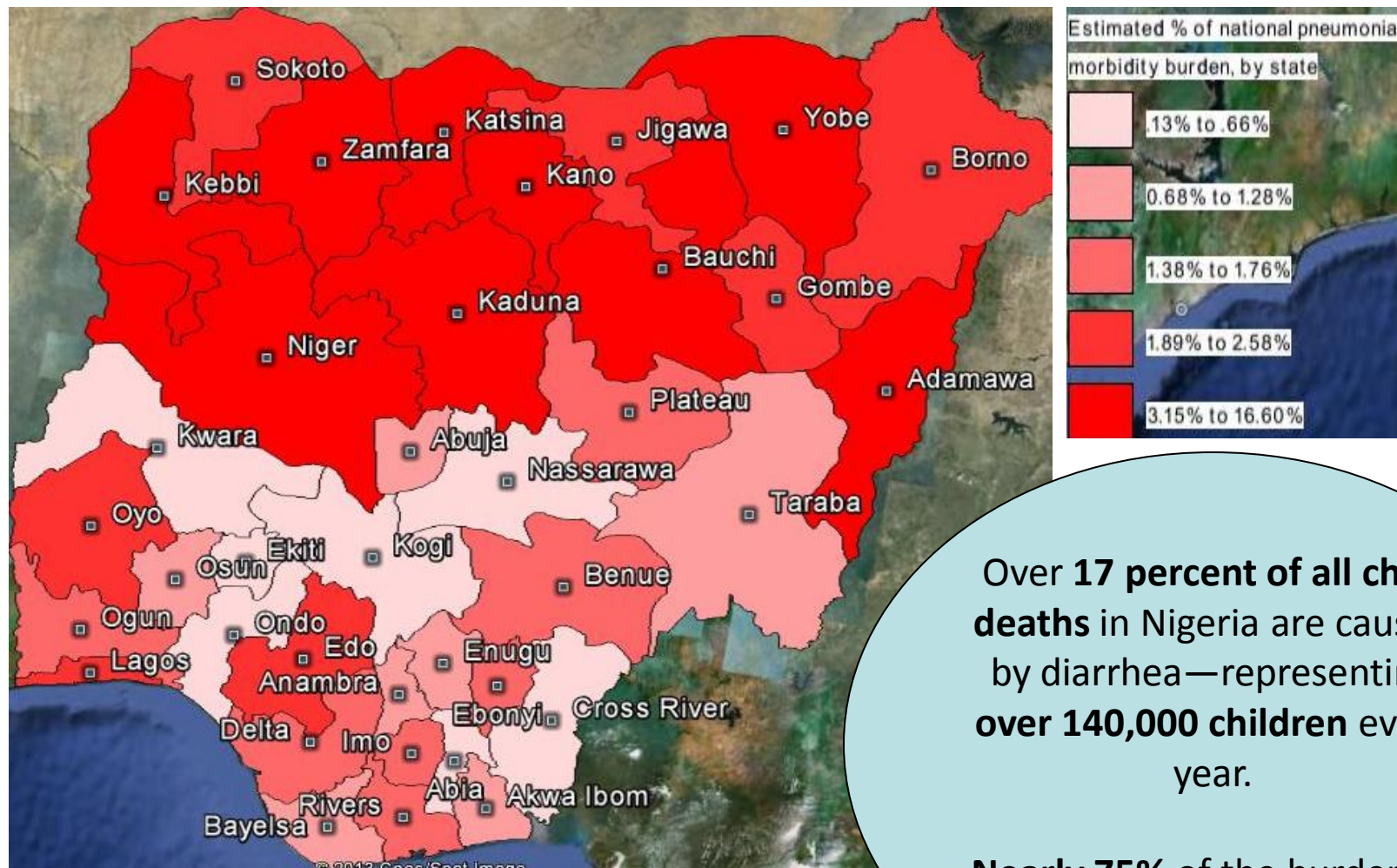
**The majority of child deaths are concentrated in the far northern states.**

**To make progress on child mortality in Nigeria, programs must focus on these states.**

# Diarrhea morbidity affects the North disproportionately



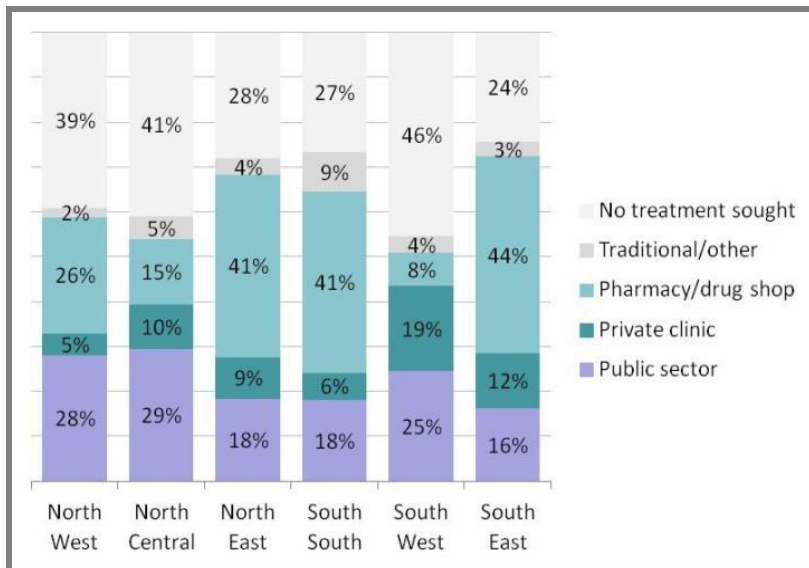
# Pneumonia morbidity affects the North disproportionately



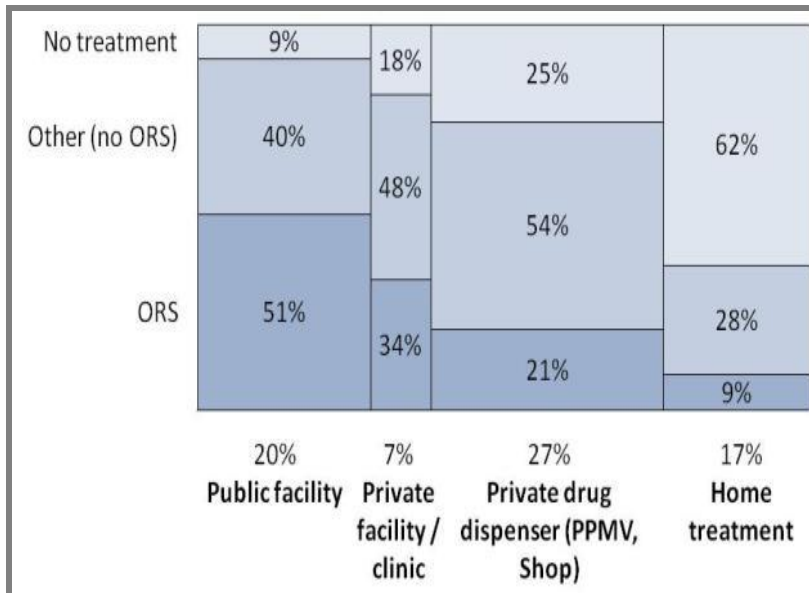
Over **17 percent** of all child deaths in Nigeria are caused by diarrhea—representing over **140,000** children every year.

Nearly **75%** of the burden of pneumonia is found in the **North**

# Access to treatment and treatment seeking behavior varies across regions



- In the **North**:
  - ~30-40% do not leave their home to seek care
  - ~30% goes to the public sector
  - ~30%-40% to the private sector
- In the **South**:
  - ~25-50% do not leave their home to seek care
  - ~15-25% goes to the public sector
  - ~27%-56% to the private sector
- **BUT: Over 30% of children treated at home receive some allopathic treatment**



- Appropriate treatment is more likely in the public sector
- There is still a **major opportunity for scale-up in private sector channels**.
- Hence, the private sector remains a critical channel, particularly for our target population: low-income families in rural areas.

# As of mid-2013, a foundation for implementation has been laid.

**National scale-up plan endorsed**

- *The National Essential Medicines Scale-Up Plan* was endorsed by the Government of Nigeria in early 2012 and is a key pillar of the Government's SOML.

**OTC status secured for zinc**

- NAFDAC categorized zinc and ORS as OTC drugs for sale in mid-2012.

**Amoxicillin as 1<sup>st</sup>-line treatment**

- Amoxicillin has been recommended as 1<sup>st</sup>-line treatment and cotrimoxazole as 2<sup>nd</sup> -line for iCCM and IMCI. To support the change, the national treatment guidelines will need to be updated to reflect these

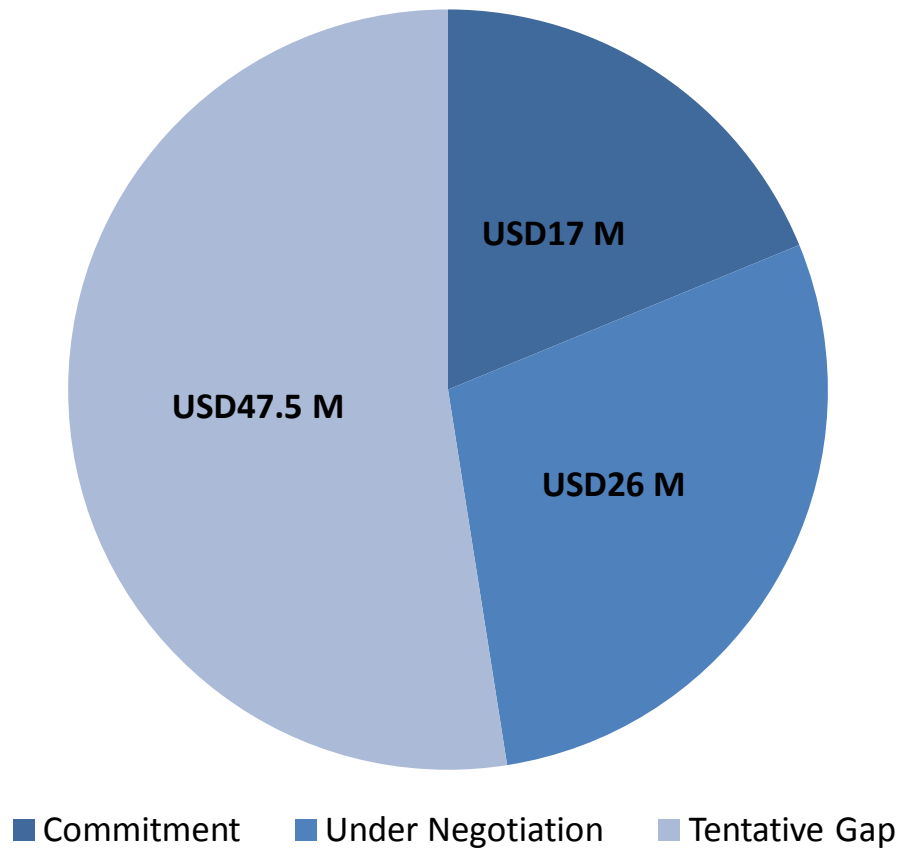
**Favorable policy change for amoxicillin**

- The Bill and Melinda Gates Foundation and USAID have committed funding for case management studies for pneumonia. PCN waivers are being sought for these programs

**Coordination mechanism established**

- NPHCDA and FMOH established a Coordinating Mechanism Committee. Partners include: CHAI (secretariat), MI, NAFDAC, PATHS2, PCN, PMG MAN, SFH, SHOPS, SURE-P, USAID, WBF Africa, NMCP, UNICEF and UNH4. The committee currently meets on a monthly basis.

# Total funding need for Diarrhea and Pneumonia Scale-Up, 2012 - 2015



- Total estimated funding need: ~USD90.5 mln (updated figure)
- Committed funding from:
  - NORAD
  - MI
  - USAID
  - Private Sector
  - SURE-P
- Funding under consideration from:
  - CIDA
  - BMGF
  - DFID

# Progress through Q2 2013

## 1. **Partner coordination & resource mobilization**

- Secured commitments toward zinc/ORS scale-up from 15 organizations and counting.
- NORAD: USD 9M grant to CHAI to start implementation in three states: Kano, Lagos, and Rivers.
- Finalizing second USD14M grant to expand program implementation to 5 additional states (tentative selection: Kaduna, Katsina, Niger, Bauchi, Cross-Rivers).
- At least one additional major investment is being planned for 2014.
- Joint workplan/activity mapping document and M&E Framework development initiated

## 2. **Provider & consumer demand generation**

- Completed Market Activation Plan for producing a national marketing campaign.
- Completed qualitative research on consumer and provider studies
- RFP issued for activation and creative demand generation messaging
- PCN finalized and began implementing childhood illness management in CME for PPMVs, CPs

## 3. **Supplier engagement**

- Fidson, Emzor, Tyonex and CHI—four major pharmaceutical suppliers—have registered zinc/ORS products
- CHI launched zinc/ORS in Q1; Olpharm launched zinc in Q2; Emzor, Fidson to launch Q3
- Engaged pharmaceutical companies on cost-reduction opportunities and co-packaging designs

## 4. **Regulatory environment**

- NAFDAC confirmed zinc and ORS as OTC products; PCN added zinc to list of PPMV-approved medications.
- NAFDAC appointed a focal person to oversee the progress of zinc and ORS registration dossiers.



# In order to scale up zinc/ORS, several barriers need to be overcome

## Affordable Supply

Retail prices of the zinc/ORS products are high, due to high ex-factory prices and highly fragmented distribution chain that accumulate high, variable mark-ups. **Most products are therefore more expensive in rural markets than urban.**

## Distribution

Very few pharmaceutical products reach rural markets because distribution systems are fragmented and inefficient, promotional activities in rural markets cost more money and reach fewer people, and rural markets are perceived to have lower consumer spending profiles.

## Provider demand

Public sector: Public health centers struggle to provide quality health services, due to limited availability of stock and training.

Private sector: Private drug sellers typically untrained, leading to inconsistent and poor treatment of diarrheal diseases. Consumers' preferences play a strong role in product selection when attending PPMVs, often leading to inappropriate treatment.

## Caregiver demand

Diarrhea perceived as normal for young children in Nigeria. Caregivers cite teething as a major cause of diarrhea. Alternative treatment regimens are often preferred, and treatment itself is frequently unaffordable.

## Scale

Due to anemic demand, suppliers have limited incentive to invest in distribution and promotion of zinc and ORS, resulting in reduced competition, poor product access and high consumer prices.

# Nigeria's zn/ORS supply landscape has improved dramatically since 2012

## Supplier engagement efforts are bearing fruit:

- By mid-2012, there was only one Nigerian manufacturer of L-ORS, and no local manufacturers of dispersible zinc tablets suitable for pediatric use.
- As of Q2 2013, after intensive engagement by CHAI through quarterly zinc/ORS supplier forums, both zinc and L-ORS products are now available in Nigeria.

## NAFDAC and PCN have secured an improved regulatory environment:

- NAFDAC has confirmed zinc & ORS as OTC products; PCN has added zinc to the list of PPMV-approved medications
- NAFDAC has appointed a focal person to oversee the progress of zinc and ORS registration dossiers.

ORS Products							
Supplier	CHI	Emzor	Fidson	Tyonex	Olpharm	Archy	Sam-Ace
Brand name	CHI ORS	Emzorlyte	TBC	Orasure	Olpharm ORS	N/A	TBC
Product Registered	Yes	Yes	Yes	Yes	Awaiting approval	N/A	Awaiting approval
Zinc Products							
Brand name	Paediatric Zinc Sulphate	TBC	Motitec	Zinc Sulphate	Baby Zinc	TBC	N/A
Product Registered	Yes	Yes	Yes	Yes	Awaiting approval	Awaiting approval	N/A

# The national coordinating mechanism ensures that partner activities are in line with the national plan, and are rolled out to be complementary

	North-Central							North-East						North-West						
State	Abuja	Benue	Kogi	Kwara	Nas'rawa	Niger	Plateau	Adamawa	Bauchi	Borno	Gombe	Taraba	Yobe	Jigawa	Kaduna	Kano	Katsina	Kebbi	Sokoto	Zamfara
BtL DtP - PPMV Training	SFH	SHOPS,SFH			SHOPS	(CHAI)			(CHAI)						SFH, (CHAI)	SFH, CHAI	SFH	SFH	SFH	SFH
BtL DtP - PPMV Detailing	SFH	SHOPS, SFH			SHOPS	(CHAI)			(CHAI)						SFH, (CHAI)	SFH, CHAI	SFH, (CHAI)	SFH	SFH	SFH
BtL DtP - Pharmacists		SHOPS, SFH			SHOPS	(CHAI)			(CHAI)						(CHAI)	CHAI	(CHAI)			
BtL DtC	P2					(CHAI)			(CHAI)					P2	SFH, P2	SFH, CHAI, P2	SFH, (CHAI)	SFH	SFH	SFH
AtL - Radio	SFH		WBF	WBF		(CHAI)			(CHAI)						SFH	SFH, WBF	SFH	SFH	SFH	SFH
AtL - TV	SFH		WBF	WBF												CHAI, WBF				
AtL - SMS																				
AtL - Print			WBF	WBF												WBF				
Public Facility Supply	P2												MI, WINNN	P2, MI, WINNN	P2	P2	MI, WINNN	WINNN		MI, WINNN
Private Facility Supply						(CHAI)			(CHAI)						(CHAI)	CHAI	(CHAI)			
State Procurement	P2												MI, WINNN	P2, MI, WINNN	P2	P2	MI, WINNN	WINNN		MI, WINNN
Community Distribution	SFH	SFH											MI,	MI		SFH	SFH, MI	SFH	SFH	SFH, MI
Public Facility Training	P2					(CHAI)			(CHAI)				MI, WINNN	P2, MI, WINNN	P2 (CHAI)	P2	MI, WINNN	WINNN		MI, WINNN
State Coordination						(CHAI)			(CHAI)						(CHAI)	CHAI	(CHAI)			
Diarrhea Burden - Zone Leaders	1.02%	1.87%	0.46%	0.62%	1.50%	3.30%	2.53%	2.83%	10.08%	2.79%	3.97%	1.61%	4.54%	3.56%	6.58%	7.40%	10.05%	4.81%	4.99%	6.66%

Key				
(CHAI)	Org is negotiating funding for this activity.	SHOPS	Org is funded for this activity	No org identified for this activity.

Scale is simply too large for one partner to fill. The national coordinating mechanism is **mapping partner efforts** to ensure that the high burden areas are covered and efforts are complementary - if a partner is primarily focused on demand generation in a particular area, the coordinating mechanism helps to ensure that another partner is securing supply in the same area.

# CHAI has secured funding from one donor to support scale-up over the next 3 years in select states – with another potential donor onboard

## Objective:

To increase usage of ORS/zinc from <1% to 50% in Nigeria by end of 2015

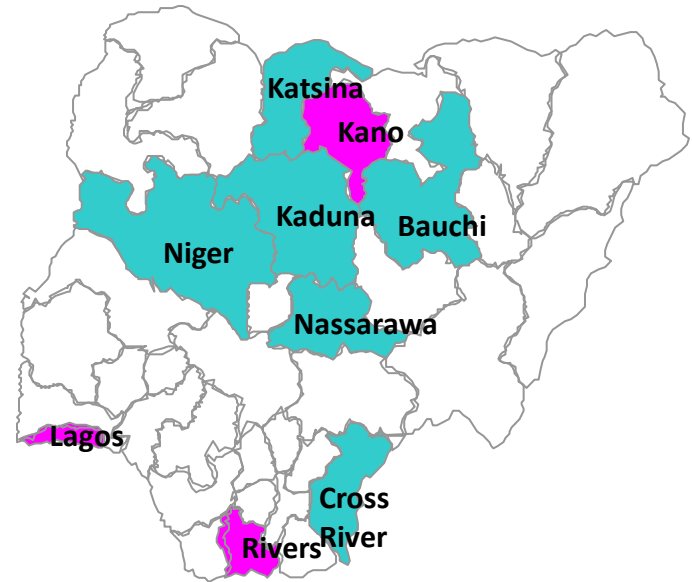
## Geographic focus:

Kano, Lagos, and Rivers (Phase 1)  
Bauchi, Cross River, Kaduna, Katsina, Nassarawa, and Niger (Phase 2)

## Duration:

February 2013 – Dec 2015

These 8 states represent 51% of the national diarrhea burden



## Key Program Components:

- 1) Generate demand:** Target consumers/providers based on analysis of most effective messages and communication channels; developing creative solutions to reach beyond traditional urban markets
- 2) Catalyze political will:** Mobilize and harmonize investments from governments and partners toward state-wide scale up goals
- 3) Ensure supply of zinc/ORS:** Ensure wide-spread availability of affordable, high-quality products in public and private sector

# At the national level, Nigeria will institutionalize zn/ORS for diarrhea treatment

## **Nigeria will solidify gains and expand progress on supply, availability, and provision.**

Creating a durable framework for scale-up that can be leveraged by states.

### **Supply**

- Forecasts help suppliers plan production cycles;
- Identify and act on cost reduction opportunities (CoGS, Distribution, Regulation);
- Product innovation research and support improves cost and demand.

### **Availability**

- Work with MoH, NPHCDA to solidify progress on federal procurement and supply through SURE-P, MSS, and MNCHWs;
- Lobby Faith-Based health networks (i.e. CHAN, ECWA) to stock ORS and Zinc.
- Lobby health insurance networks (i.e. NHIS, Hygeia) to cover ORS and Zinc.

### **Provision**

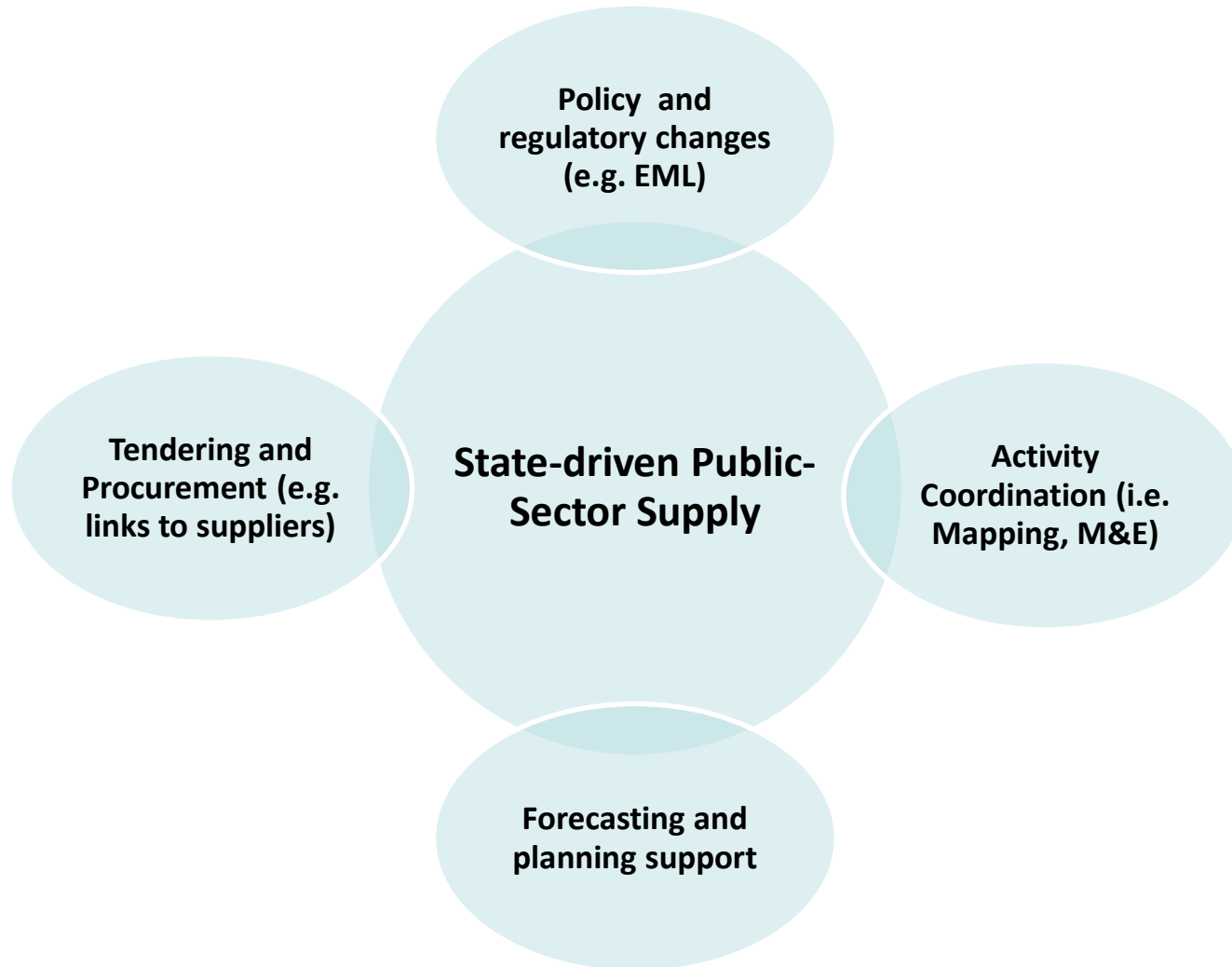
- Develop national curricula and job aides for retailers (i.e. PPMVs, CPs) and CHEWs;
- Integrate diarrhea management curricula into PCN CER for PPMVs, NAPPMED seminars, and ACPN CER for CPs;
- Integrate diarrhea management curricula into pre-service training for CHEWs.

# State strategies will pursue increased public-sector supply and state-coordination

**Partners will work with State governments to advocate for and support public-sector supply.**

Partners will support state governments to coordinate scale-up and introduce supportive policy.

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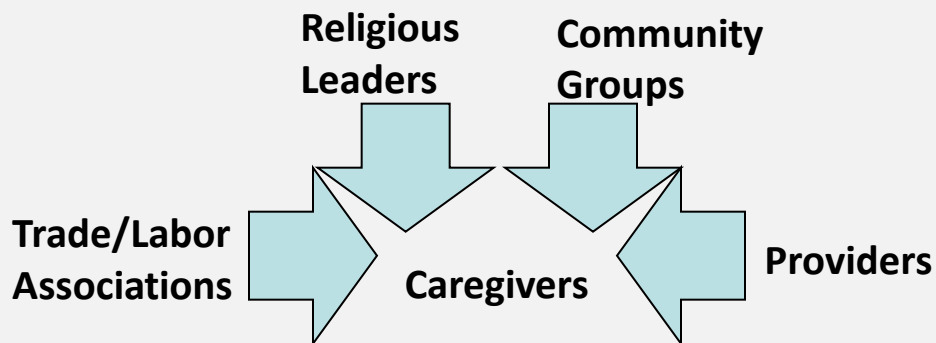
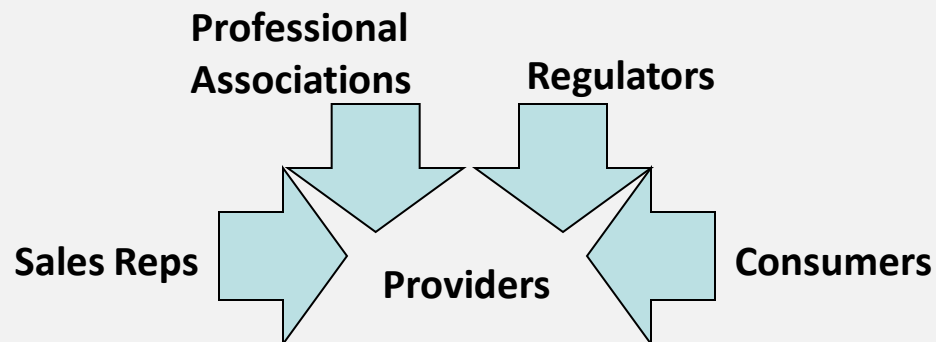


# Demand generation strategies will employ influencer marketing through a combination of high-impact channels

**Various groups can be used to enhance the effectiveness and extend the reach of messaging.**

State strategies will identify and engage the most influential opinion leaders.

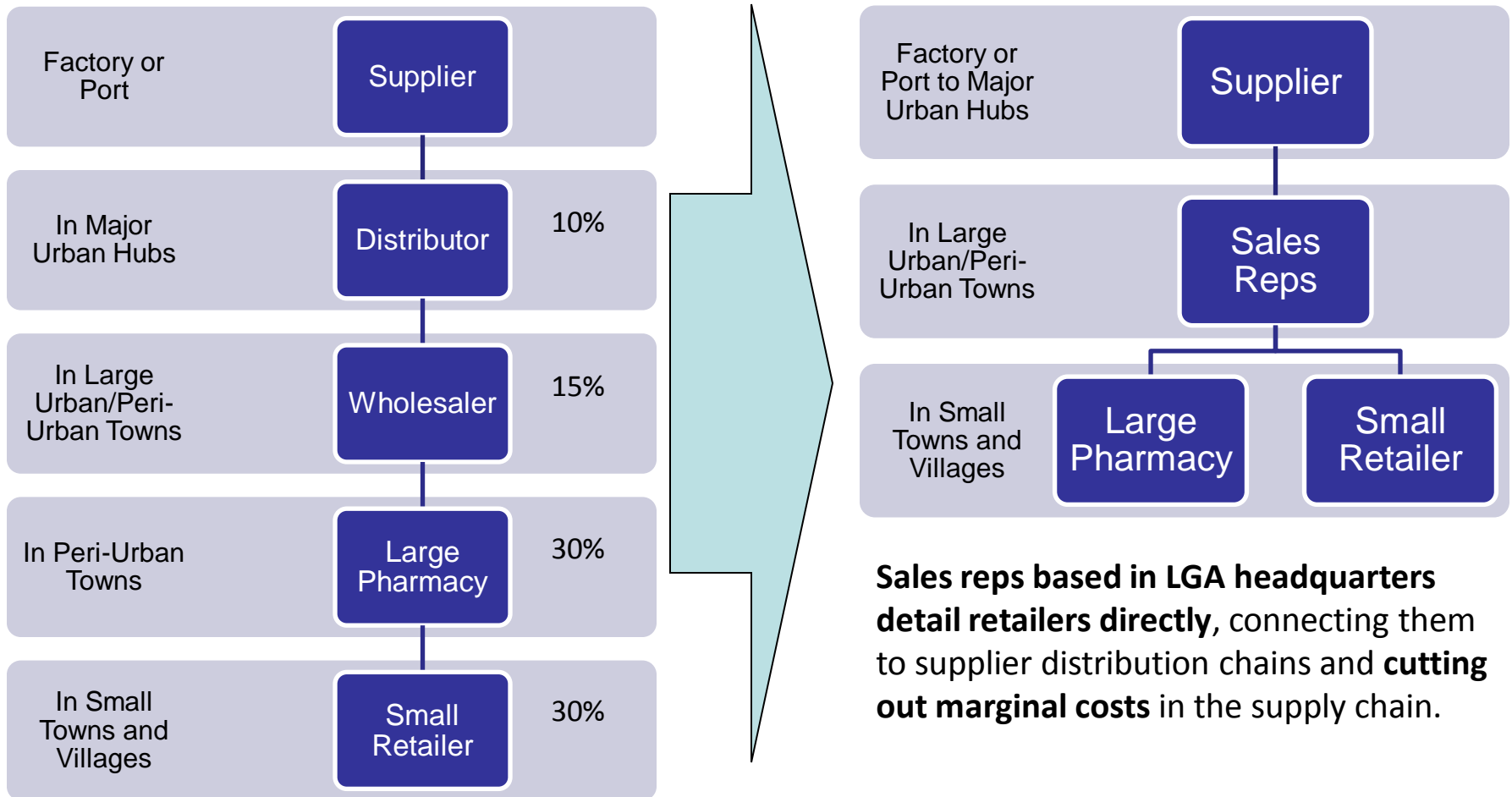
- Sales reps **encourage stocking** and distribute **point-of-sale materials**.
- Professional associations (e.g. NAPPMED) **endorse zn/ORS** and **promote appropriate care** to members.
- Regulators **train providers on diarrhea management** through continuing education requirements.
- Consumers **influence stocking behavior** through requests for zn/ORS.



- Trade (e.g. NURTW) associations engaged to **reach their members**, as well as **visibly promote zn/ORS**.
- Religious leaders deliver messaging through **sermons and congregation activities**.
- Community groups **promote appropriate care** at the grassroots through their members.
- Providers **influence caregiver treatment choices** at routine services like ANCs and Immunization clinics.

# CHAI aims to shift the fragmented, high-markup distribution landscape toward a more efficient system to directly serve rural retailers

Using a disseminated sales force targeting retailers in peri-urban and rural areas.





# Priorities for Q3

## **1. Partner coordination and resource mobilization**

- State-level mapping and advocacy to help secure inclusion of zinc/ORS on state essential medicines lists and increased awareness of OTC status.
- Joint workplan/Activity mapping document
- Joint M&E Framework

## **2. Provider and consumer demand generation**

- Launch marketing campaign in urban Lagos, Kano and Rivers
- Baseline survey for zinc/ORS scale-up

## **3. Supplier engagement**

- Help suppliers drive down costs by identifying cost-saving opportunities
- Formalize packaging formats and design

## **4. Regulatory environment**

- Work with NAFDAC to clarify position on WHO-approved ORS formulation
- Continue to monitor registration approvals for zinc and ORS

## Key lessons learned: planning and implementation

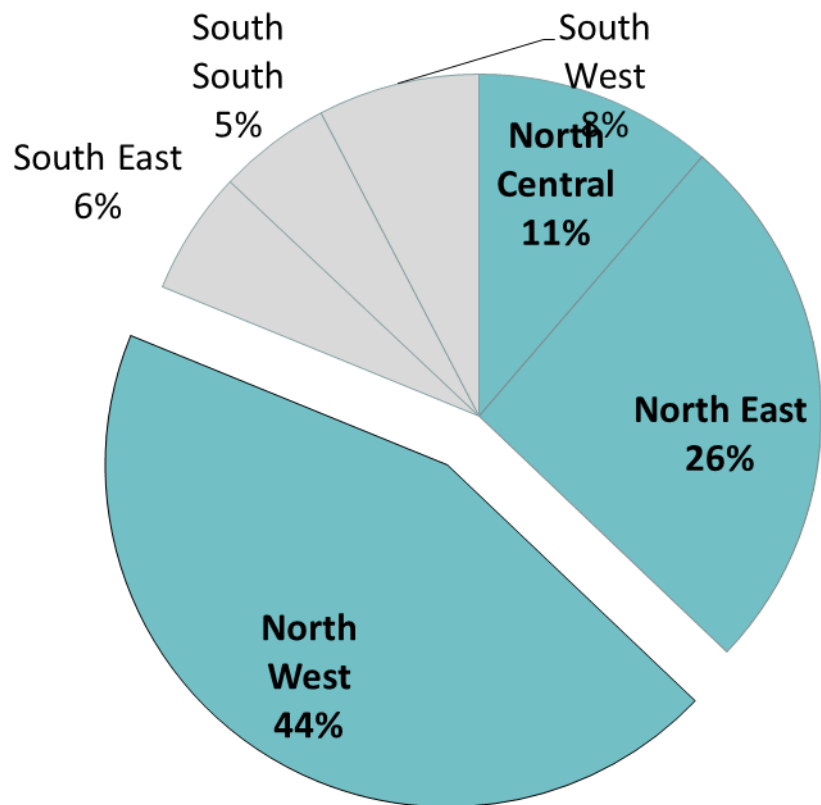
- **Developing a supply base takes a really long time and has a high attrition rate.** Start early and with many suppliers. Also, when in doubt, play them against each other.
- **No one works at workshops.** Most progress is made through one-on-one negotiations with partners and stakeholders.
- **Generating interest and momentum is the easy part.** Moving forward on implementation requires detailed planning, sustained leadership, and an excess of communication and coordination.
- **Start coordinating early.** Not having a full picture of who's doing what, where from the beginning can lead to early overlaps.



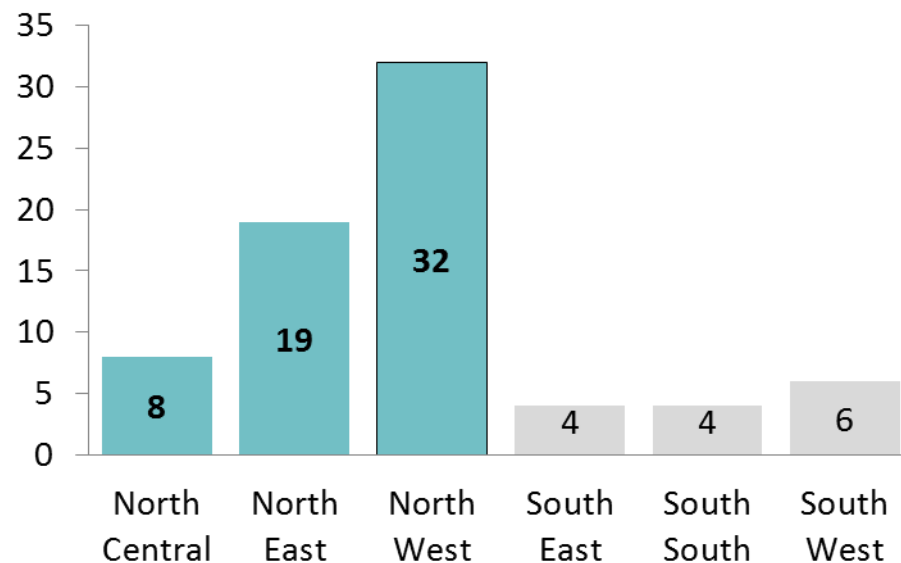
# Diarrhea morbidity affects the North disproportionately

**Northern Nigeria accounts for over 80% of the country's diarrhea burden.**

The Northwest zone alone accounts for 44% of child diarrhea cases – Over **32 mln** cases annually.



**Est. Yearly U5 Diarrhea Cases per Zone, millions**



# PLACEHOLDER: build out synthesis on how we're thinking about consumer demand

Where are mothers going?	Public facility	Private clinic	PPMV/ Pharmacy	Home / shop/ traditional h.
Share	23%	9%	31%	34%
Current ORS use	51%	34%	21%	9%
Current AB/AM use	~50-70%	~50-60%	~40-55%	~15-20%
Provider characteristics	CHEW Nurse Doctor	Nurse Doctor	Skilled retailer	Unskilled retailer
Provider Influencers	KOLs, Medical Reps, Canvassers	KOLs, Medical Reps	Medical Reps, Canvassers, Skilled HCPs	Canvassers, Customer Demand
Level of provider influence	High	High	Moderate	Low
Other Influencer Channels	Facility based services (ANC, immunization) MNCHWs Community networks		Limited facility based services Community networks MNCHWs (?)	

# Initial state selection will be based on disease burden, early market potential, ease of penetration, and existing partnerships

## State-level implementation will begin in Lagos, Kano, and Rivers.

These three states represent ~10% of Nigeria's diarrhea burden and are geographically representative.

Zone	State	Population	% of National Burden
North-West	Katsina	5,801,584	8.83%
	<b>Kano</b>	<b>9,113,605</b>	<b>6.50%</b>
	Zamfara	3,278,873	5.85%
	Kaduna	6,113,503	5.78%
	Sokoto	3,702,676	4.38%
	Kebbi	3,256,541	4.22%
	Jigawa	4,361,002	3.13%

Zone	State	Population	% of National Burden
South-East	<b>Rivers</b>	<b>5,198,716</b>	<b>1.39%</b>
	C/River	2,882,988	1.23%
	Akwa Ibom	3,902,051	0.80%
	Delta	4,112,445	0.65%
	Edo	3,233,366	0.65%
	Bayelsa	1,704,515	0.42%

Zone	State	Population	% of National Burden
South-West	<b>Lagos</b>	<b>9,113,605</b>	<b>2.39%</b>
	Osun	3,416,959	1.12%
	Ondo	3,460,877	1.11%
	Ogun	3,751,140	0.95%
	Oyo	5,580,894	0.79%
	Ekiti	2,398,357	0.34%

### Why Start here?

- High burden relative other states in their regions;
- Multiple partners already on ground, providing opportunities for early collaboration;
- Major commercial centers where suppliers have existing distribution infrastructure;
- Existing CHAI presence and relationships, decreasing start-up time;
- Representative of major Nigerian geopolitical regions.

# Subsequent state selection will be driven by disease burden and penetration potential

**Additional focus states will be added as funding becomes available.**

CHAI anticipates two additional “waves” of states, with full implementation covering 12-15 states.

Zone	State	Total Pop	% Nat'l Burden
North-Central	Abuja	1,557,883	1.02%
	Benue	4,677,684	1.87%
	Kogi	3,634,710	0.46%
	Kwara	2,628,719	0.62%
	Nassarawa	2,065,728	1.50%
	Niger	4,379,462	3.30%
	Plateau	3,524,094	2.53%

Zone	State	Total Pop	% Nat'l Burden
North-East	Adamawa	3,512,330	2.83%
	Bauchi	5,184,585	10.08%
	Borno	4,602,239	2.79%
	Gombe	2,609,639	3.97%
	Taraba	2,550,722	1.61%
	Yobe	2,573,843	4.54%

Zone	State	Total Pop	% Nat'l Burden
North-West	Jigawa	4,821,150	3.56%
	Kaduna	6,725,722	6.58%
	Kano	10,403,262	7.40%
	Katsina	6,421,968	10.05%
	Kebbi	3,590,520	4.81%
	Sokoto	4,098,695	4.99%
	Zamfara	3,614,043	6.66%

Zone	State	Total Pop	% Nat'l Burden
South-South	Akwa Ibom	4,346,157	0.91%
	Bayelsa	1,888,436	0.48%
	C/River	3,202,865	1.40%
	Delta	4,543,700	0.74%
	Edo	3,568,019	0.74%
	Rivers	5,748,818	1.58%

Zone	State	Total Pop	% Nat'l Burden
South-East	Abia	3,141,926	1.04%
	Anambra	4,636,429	1.15%
	Ebonyi	2,409,662	1.15%
	Enugu	3,611,218	1.07%
	Imo	4,362,444	0.92%

Zone	State	Total Pop	% Nat'l Burden
South-West	Ekiti	2,643,268	0.39%
	Lagos	9,992,896	2.72%
	Ogun	4,133,173	1.08%
	Ondo	3,814,907	1.27%
	Osun	3,795,518	1.28%
	Oyo	6,199,141	0.90%

Wave 1
Wave 2
Wave 3