

# REACH

Ending Child Hunger and Undernutrition

---

## **Acting at Scale: Implementation Case Studies**

Micronutrient Supplementation and Fortification

February 2009

# Context

---

## **The following document is part of the REACH *Acting at Scale* set of materials**

- The documents' aim is to provide highly condensed information and lessons learned for scaling up REACH-promoted interventions to support field practitioners and other interested parties
- They are intended to become a living set of materials, updated periodically by the REACH Global Interagency Team
- These materials are a first step towards a larger REACH Knowledge Sharing service, which will be developed over time

## **The full set of *Acting at Scale* materials includes**

- *An Intervention Summary*
  - An overview document containing key facts for all of the 11 promoted interventions
- *Intervention Guides* for each of the interventions<sup>1</sup>
  - Containing rationale, lessons learned, costs and further resource lists
- *Implementation Case Studies* for each of the interventions<sup>1</sup>
  - Initial set of details and lessons learned from programs implemented at scale
- *Resource Lists*
  - Lists of key documents, organizations and programs at scale
  - Included at the back of each *Intervention Guide* and in Excel spreadsheets available from the REACH Global Interagency Team

## **These materials represent a preliminary version, to be validated and refined via additional consultations**

- Prepared in Summer 2008 by the REACH Global Interagency Team, based on inputs from 56 practitioners and experts, as well as extensive desk research
- A revised Version 2 of these documents will be released in late 2008 or early 2009, incorporating feedback from initial recipients

## **If you have questions or feedback on these materials, please**

- Contact your local REACH facilitator in Lao or Mauritania, or
- Contact the REACH Interagency Team Coordinator, Denise Costa-Coitinho, at [Denise.CostaCoitinho@wfp.org](mailto:Denise.CostaCoitinho@wfp.org)

1. Breastfeeding and complementary feeding have been combined into a single document due to strong linkage in delivery

# Case study: Micronutrient fortification (I)

## Faire Tache d'Huile en Afrique de l'Ouest / Fortify West Africa

<b>Intervention:</b>	Micronutrient fortification		
<b>Program name:</b>	Faire Tache d'Huile en Afrique de l'Ouest (Fortify West Africa)	<b>Type:</b>	Physical & education component
<b>Location:</b>	8 countries of Monetary & Economic Union of West Africa (UEMOA): Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, Togo	<b>Setting:</b>	<input checked="" type="checkbox"/> Rural <input checked="" type="checkbox"/> Urban
<b>Start year:</b>	2007	<b>Duration:</b>	ongoing
<b>Target group:</b>	Entire population of all countries		
<b>Total costs:</b>	\$2.7M for 3 years	<b>Other resources used:</b>	N/A
<b>Metrics:</b>	<ul style="list-style-type: none"> <li>Awareness of fortification logo</li> <li>Coverage of fortified vegetable oil</li> <li>Further metrics to be introduced with ongoing roll-out of M&amp;E system</li> </ul>		
<b>Lead &amp; partner organizations:</b>	<ul style="list-style-type: none"> <li>Coordination (Lead), research and training: Helen Keller International</li> <li>Legislation: Ministry of Health, Ministry of Industry, Ministry of Agriculture</li> <li>Implementation through local private sector: 14 vegetable oil producers organized in the industry association AIFO-UEMOA</li> <li>Funding: GAIN, USAID, Micronutrient Initiative, Dell Foundation, Government of Taiwan</li> <li>International premix suppliers: DSM, BASF (no exclusive relationships)</li> <li>Legislation recommendations from international organizations: West African Health Organization (WAHO);UEMOA commission</li> </ul>		
<b>Description of specific country situation &amp; social context:</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>		

Note: N/A denotes 'not available' as of yet via research  
 Source: HKI West Africa project documents, expert interview

# Case study: Micronutrient fortification (II)

## Faire Tache d'Huile en Afrique de l'Ouest / Fortify West Africa

### Policy and coordination processes and organization<sup>1</sup>:

- Include multiple ministries necessary to pass required legislation
  - Assess what other ministries are required if Ministry of Health isn't sufficient
  - Identify and address other ministries' interests in order to compel cooperation

### Communication, advocacy and change management:

- Employ frequent, thoughtful and transparent communications in partnerships
- Be prepared to slow down or increase pace as partners move at different paces

### Measuring, tracking and reporting progress:

- Communicate operational and outcome results frequently and with data in order to maintain stakeholder motivation

### Funding and resource mobilization:

- Identify alternative sources of funding and develop project component specific proposals for possible co-funding
  - E.g. multiple funding sources were used for different countries and different project activities
- Leverage alternative funds from other funding sources to address funding gaps
  - E.g. fortification equipment costs were higher than estimated, other funds were reallocated
- Marry program activities to demonstrate effort to manage funds responsibly
  - One time meeting for regional fortification logo and standard adoption
  - Close timing of the start up forum and the regional public private sector dialogue

### Capacity building:

- Ask international premix suppliers to provide technical and analytic capacity to local producers in order to build skills

### Private sector engagement:

- Expectation management regarding the pace of action is essential
  - Private sector is prepared to move quickly, while government processes and decisions can take a long time

1. Including NGO/civil society engagement

Source: HKI West Africa project documents; expert interviews; REACH analysis

REACH\_Acting at Scale\_Case Studies\_Micronutrients\_v2.ppt

# Case study: Micronutrient fortification (III)

## Faire Tache d'Huile en Afrique de l'Ouest / Fortify West Africa

### Details on delivered intervention incl. delivery channel/method:

- HKI coordinated set up of the national alliances to fortify vegetable oil with vitamin A
- Both private and public marketing are used to maximized consumer awareness of fortification benefits
  - Public sector created common fortification logo used in all countries and also for wheat fortification
  - Public sector conducted mass media campaign including TV, radio, theatre plays, cooking programs with fortified oil, events with local celebrities, industry memorabilia (all paid by HKI funding)
  - Private sector used fortification logo and integrated key fortification messages into own marketing (paid by companies)
- Quality management is done both through private sector upstream quality assurance and government downstream controls
  - Private sector integrated fortification in regular quality management systems, created guidelines and provided training in cooperation with HKI
  - Government audits production process and samples products both in factory and off-the-shelf

### Description of monitoring & evaluation:

- HKI set up the M&E system in cooperation with the government and local/international researchers
- In the first step relatively simple surveys are used to measure coverage and awareness
- In a second step impact studies including baseline and inline surveys on micronutrient status will follow

### Lessons learned (intervention & overarching processes):

- One coordinator who leads the fortification effort is required to coordinate the various partners that are involved
- Establishing a contact person both physically close to the government is very effective in keeping up pressure for legislation
- Apart from the nutritional, technical and economic considerations the preparedness and willingness of the industry should be considered for selecting an appropriate vehicle
- A motivated and capable private sector is more effective in ensuring quality through upstream quality assurance than the government through ex-post control
- Private and public marketing should complement each other, e.g. adoption of a regional fortification logo

### Contacts:

- Shawn Baker, HKI, Vice President and Regional Director for Africa: sbaker@hki.org
- Mawuli Sablah, HKI, Regional food fortification coordinator for West Africa: msablah@hki.org

### Key documents:

- "Faire Tache d' Huile Annual Report." HKI, 2008.
- "Experience in large-scale food fortification in West Africa." HKI, 2007.
- "Faire Tache d' Huile. Implementation Plan." HKI, 2007.
- "Rapport d'Etude FRAT. Senegal." HKI, 2006.

# HKI's Fortify West Africa is a public-private fortification partnership leveraging resources across 8 countries

## Program overview

### Helen Keller International (HKI) launched the Fortify West Africa initiative in October 2007

- Initiative to deliver micronutrients at scale in the 8 West African members of UEMOA<sup>1</sup> via food fortification
- Received \$2.7M in donor funding

### Phase I yielded a partnership agreeing to mandatory vitamin A fortification of cooking oil

- Aims to reach at least 70% of the region's 15.6M children <5 (and 60M people in total)
- Began with 5 years of advocacy to build partnership, comprised of national governments, the industry association and producers, and other stakeholders

### HKI's approach includes

- Building the regulatory framework
- Developing social marketing strategies,
- Technical assistance and capacity building for producers

### HKI plans to replicate the vitamin A model to deliver iron fortification of wheat flour in same West African countries

## Lessons learned

### Build strong partnership structure and mechanisms

- Strong central coordinator to maintain momentum and communications
- Clear roles and responsibilities

### Recognize and build steps to manage the lengthiness of the process

- Install a point person to maintain pressure on the gov't to move legislation forward
- manage expectations about time, especially those of faster-moving private sector

### Consider preparedness and willingness of industry along with other selection criteria when selecting a fortification vehicle

### Build private/public quality assurance mechanisms

### Leverage public/private strengths when developing social marketing

- e.g. agreeing and building awareness of a common logo

1. Monetary and Economic Union of West Africa (UEMOA) members: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, Togo  
Source: Project documents from HKI West Africa; Expert interviews

# HKI plays a key role in initiating and fostering the regional partnership

## Good practices

### Shapes governance

- Created national cross-sector steering committee comprised of
  - Ministries of health, commerce and agriculture
  - Consumer organizations
  - Industry association
  - Donors
  - International organization, e.g. WAHO and UNICEF

### Facilitates the process

- Seconded a regional food advisor to the UEMOA commission
  - Physical presence keeps up momentum at UEMOA and speeds up legislation process
- Held workshops to convince government and private sector of fortification benefits
  - Presentations of the population based survey results for vehicle identification
  - Discussion of technicalities of fortification
- Organized stakeholder meetings for standard setting and regulatory framework consulting
- Communicated frequently about project progress
- Trained company staff in fortification process management and quality assurance

### Provides knowledge

### Conducts M&E

- Currently measures coverage and awareness
  - Surveys on coverage of fortified products and recognition of fortification logo by population group and by geography
- Plans to introduce impact measurement in cooperation with local and international researchers
  - Baseline surveys on micronutrient status already done in a few countries
  - Inline surveys and impact assessment to follow

# Additional lessons learned in building fortification partnerships

---

## Partnership building

- Frequent, thoughtful and transparent communication is key to sustaining trust in partners
- Understand how to slow down or increase pace as partners move at different paces
- Adapt to different environmental contextual differences within different industries, countries, partners and institutions
- Need to combine formalities with informalities to solving problems

## Implementation

- Rapid roll-out of program activities to ensure maximum results using scarce resources
- Tenacity and focus are critical for achieving rapid results and this should be complemented by continuous monitoring and evaluation of activities

## Funding

- Identify alternative sources of funding and develop project component specific proposals for possible co-funding.
- Leverage alternative funds from other funding sources to address funding gaps

## Cost management

- Marry program activities to maximize cost effectiveness
  - One time meeting for regional fortification logo and standard adoption
  - Close timing of the start up forum and the regional public private sector dialogue



# Case study: Micronutrient supplementation (I)

## Scaling Up Zinc treatment for Young children with diarrhea (SUZY), Bangladesh

<b>Intervention:</b>	Micronutrient supplementation		
<b>Program name:</b>	SUZY - Scaling Up Zinc treatment for Young children with diarrhea	<b>Type:</b>	Physical & Education component
<b>Location:</b>	Bangladesh (country-wide)	<b>Setting:</b>	<input checked="" type="checkbox"/> Rural <input checked="" type="checkbox"/> Urban
<b>Start year:</b>	2006 (tablet launch)	<b>Duration:</b>	ongoing
<b>Ongoing?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<b>Target group:</b>	Entire <5 population of Bangladesh (~19 m), with primary focus on the poor and undernourished		
<b>Total costs:</b>	\$3M for whole program	<b>Other resources used:</b>	N/A
<b>Metrics:</b>	<ul style="list-style-type: none"> <li>• Outcome: Awareness that zinc treatment should be applied: 90% among urban mothers and 50% among rural mothers</li> <li>• Outcome: More zinc prescribed now than antibiotics</li> <li>• Outcome: Usage of zinc treatment in urban/non-slum up from 10% to 35%, in urban/slum up to 18-20%, in rural from 0% to 10%, in municipalities from 2-4% to 18-20%</li> </ul>		
<b>Lead &amp; partner organizations:</b>	<ul style="list-style-type: none"> <li>• Coordination, formative research and training: ICDDR,B (International Centre for Diarrhoeal Disease Research)</li> <li>• Funding: The Bill and Melinda Gates Foundation (grant received in 2003)</li> <li>• Distribution: private sector (stores and drug shops, with plan to most to more general OTC sites)</li> <li>• Distribution and drug approval: Ministry of Health and Family Welfare (through health system)</li> <li>• Local production of the zinc tablets: The ACME Laboratories (Bangladesh pharma company); no experience in marketing OTC</li> <li>• Mass media campaign: Dhansiri Media Production House (advertisement agency)</li> </ul>		
<b>Description of specific country situation &amp; social context:</b>	<ul style="list-style-type: none"> <li>• Large proportion of the population in Bangladesh lacks access to sufficient amounts of zinc-rich foods</li> <li>• Resulting widespread zinc deficiency leads to stunting and increased susceptibility to illness (diarrhea, childhood pneumonia) and death, especially among young children</li> <li>• 90-95% of healthcare-seeking behavior leads to private providers</li> <li>• Extremely strong tradition and coverage by NGOs for social services</li> </ul>		

Note: N/A denotes 'not available' as of yet via research

Source: SUZY homepage and project documents, expert interview

REACH\_Acting at Scale\_Case Studies\_Micronutrients\_v2.ppt

# Case study: Micronutrient supplementation (II)

## Scaling Up Zinc treatment for Young children with diarrhea (SUZY), Bangladesh

<b>Policy and coordination processes and organization<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>• Included both top and mid-level MoH staff to gain government buy-in <ul style="list-style-type: none"> <li>– Senior-level advisory/steering committee created to provide oversight</li> <li>– Planning and implementation committee including agency &amp; mid-level MoH staff</li> </ul> </li> </ul>
<b>Communication, advocacy and change management:</b>	<ul style="list-style-type: none"> <li>• Performed robust stakeholder analysis to identify key opinion leaders <ul style="list-style-type: none"> <li>– SUZY identified the Bangladesh Pediatric Association to be key to persuading providers of zinc's safety and efficacy</li> <li>– Village Doctors Association (representing over 200,000 unregulated providers)</li> </ul> </li> </ul>
<b>Measuring, tracking and reporting progress:</b>	<ul style="list-style-type: none"> <li>• Constant activity that monitors use of zinc, ORS, ORT, antibiotics, household management practices and expenditures. Surveys are stratified by urban slum and non-slum, smaller city (municipal) and rural households</li> </ul>
<b>Funding and resource mobilization:</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Capacity building:</b>	<ul style="list-style-type: none"> <li>• ICDDR,B trained distribution partners and public health staff</li> <li>• Developed and employed training manuals and videos for distribution partners</li> </ul>
<b>Private sector engagement:</b>	<ul style="list-style-type: none"> <li>• Built a public private partnership based an analysis of where private sector skills were uniquely required <ul style="list-style-type: none"> <li>– Patent bought from international pharma – strong research and development capabilities</li> <li>– Production of tablets through local pharma – cheap, but trained labour; available production facilities; easy logistics</li> <li>– Development of mass media campaign by marketing agency – local consumer insights; experience with mass media</li> <li>– Distribution through stores and supermarkets – large distribution network; regular point of contact with consumers</li> </ul> </li> </ul>

1. Including NGO/civil society engagement

Note: N/A denotes 'not available' as of yet via research

Source: Project documents; expert interviews; REACH analysis

# Case study: Micronutrient supplementation (III)

## Scaling Up Zinc treatment for Young children with diarrhea (SUZY), Bangladesh

### Details on delivered intervention incl. delivery channel/method:

- Dual marketing approach:
  - Social marketing mass media campaign targeting caretakers: television commercials, radio commercials, press advertisements, billboards (developed by Dhansiri Media Production House); message designed to reach poor populations
  - Campaign targeting providers: tailored to each varied target group such as licensed allopaths (MBBS degree), lower-level trained health providers and unlicensed providers (who serve the large majority of the poor)
- Distribution channels: private sector (sales price 25c per pack of 10 tablets); facilities of the Ministry of Health and Family Welfare (free of charge); distribution easy as tablets have long shelf life of 3 years and are stable, without cold chain requirements
- Trainings provided for distribution partners and to health staff including 2,500 village doctors

### Description of monitoring & evaluation:

- Evaluation every 4 months via household surveys targeting households that had a child who had experienced diarrhea in past 2 weeks
- Differentiated between 4 regions: urban/slum, urban/non-slum, rural and municipalities

### Lessons learned (intervention & overarching processes):

- Plan out clear stakeholder strategy from the beginning: Include mid-level people in the health system together with top-level
- Focus marketing on mothers AND providers (dual marketing approach). Key challenge was to convince providers as they make more profit by selling antibiotics
- Cooperation with Bangladesh Pediatric Association turned out to be effective in convincing doctors and providers
- Pharma corp. are not comfortable dealing with unregulated drug providers and do not have capacity to deal with 200k providers
- Encourage mothers to provide full package of 10 tablets. Sometimes providers don't want to ask mothers to pay for full package, not realizing need to complete the course. Sometimes mothers didn't understand the message for this need.

### Contacts:

- Charles P. Larson: [clarson@icddrb.org](mailto:clarson@icddrb.org)
- Tracey Lynn Perez Koehlmoos, Principal Investigator: [tracey@icddrb.org](mailto:tracey@icddrb.org)

### Key documents:

- [www.icddrb.org/activity/index.jsp?activityObjectID=448](http://www.icddrb.org/activity/index.jsp?activityObjectID=448)
- "The Suzy Story." Presentation of ICDDR, 2008.
- "Childhood diarrhea management practices in Bangladesh." Larson, 2006.
- "Zinc Treatment of Under-Five Children." Larson, 2006.
- "Provider Oriented Promotion of Drugs by Pharmaceutical Sales Representatives in Bangladesh." IDCCRB.

Source: SUZY homepage and project documents, expert interview

REACH\_Acting at Scale\_Case Studies\_Micronutrients\_v2.ppt

# Bangladesh's Scaling Up Zinc Treatment for Young Children (SUZY) created broad awareness of zinc as diarrhea treatment

## Program overview

### Diarrhea is a wide-spread problem in Bangladesh and is not appropriately treated

- Zinc treatment can avert 30–75K child deaths p.a.

### ICDDR, B initiated a public-private-sector partnership in 2006 to launch a zinc tablet for diarrhea treatment

- Advocated at government for drug approval and political commitment for the program
- Launched marketing campaign targeting providers as well as mothers
- Bought patent from international pharma company and transferred it to local company that carries out production of the tablets
- Organized funding from Gates foundation (\$3M)

### A private sector distribution was chosen as 90–95% of health care market are served by private providers

### SUZY has been successful in increasing awareness and application of zinc treatment

- 90% of urban and 50% of rural mothers are aware that zinc should be used as diarrhea treatment
- Zinc already used by 35% of urban mothers for diarrhea treatment (up from 10%)

## Lessons learned

### Perform robust stakeholder analysis to identify key opinion leaders

- SUZY identified the Bangladesh Pediatric Association to be key to persuading providers of zinc's safety and efficacy
- SUZY needed to redesign its gov't strategy after mid-level public health officials resisted the commitment provided by their senior leaders

### Invest in formative research to understand consumers

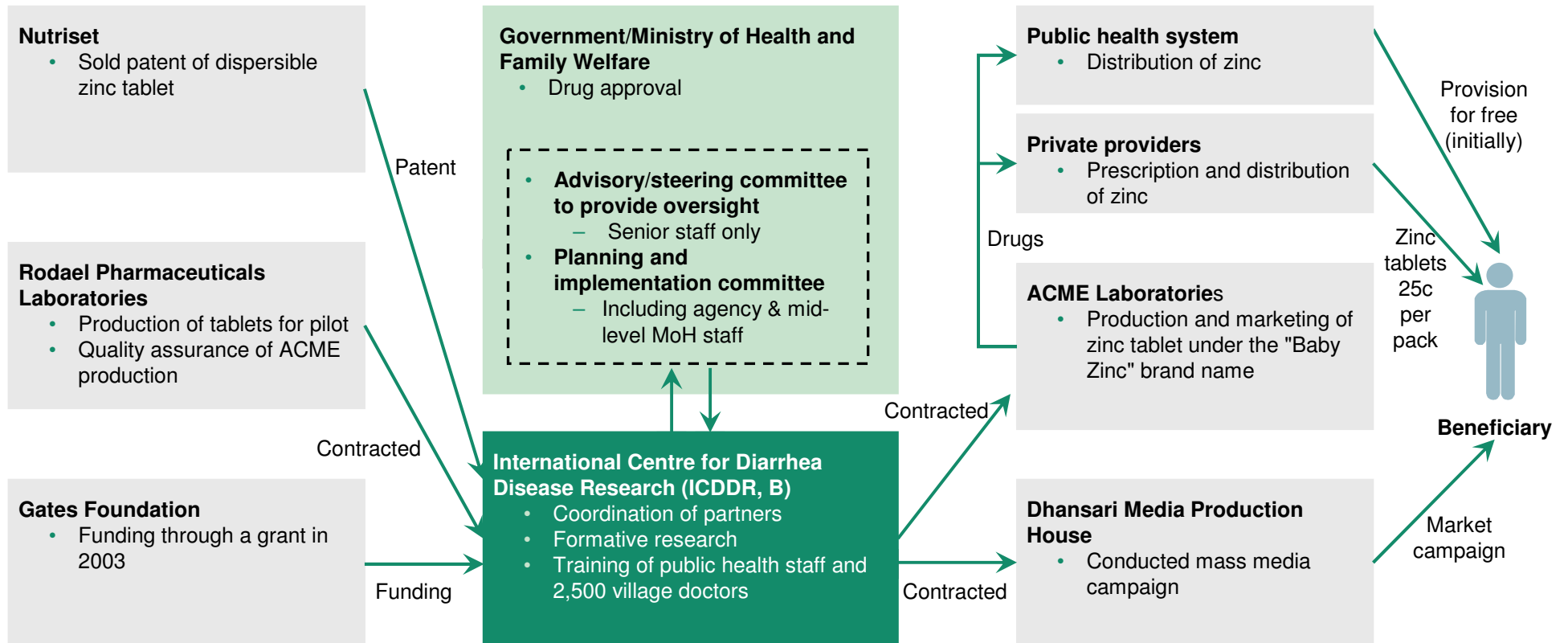
- SUZY undertook market research to understand what messages would appeal to the target group and induce behavior change
- SUZY learned that both mothers and providers are key to treatment decision making, and built messages for both audiences

### Identify and leverage each partner's strengths

- SUZY analyzed local manufacturers' strengths
- hired a media specialist to overcome gap in knowledge of OTC marketing

### Encourage and help launch local private sector zinc manufacturing to ensure sustainable supply

# The high number of partners engaged in SUZY requires strong central coordination



# Government engagement at the right times and levels critical to SUZY's success

---

## Key advocacy and relationship management learnings

---

- Performing safety studies was critical for convincing government of effectiveness of zinc treatment
- Including all government stakeholders, both mid- and high-level staff of the MoH through both a steering and an implementation committee was key to get government buy-in
- Personal relationship building with government officials was critical to build trust in the SUZY program
- Formative research on currently applied diarrhea treatment was needed to foster support for the program

## Benefits/outcomes

---

- Government quickly approved the zinc drug formulation as an over-the-counter drug
- SUZY received access to public health staff in order to train them in zinc treatment and to create awareness for the benefits of zinc treatment
- Government distributed zinc tablets through primary health care delivery system

# Private sector is critical to delivery in Bangladesh

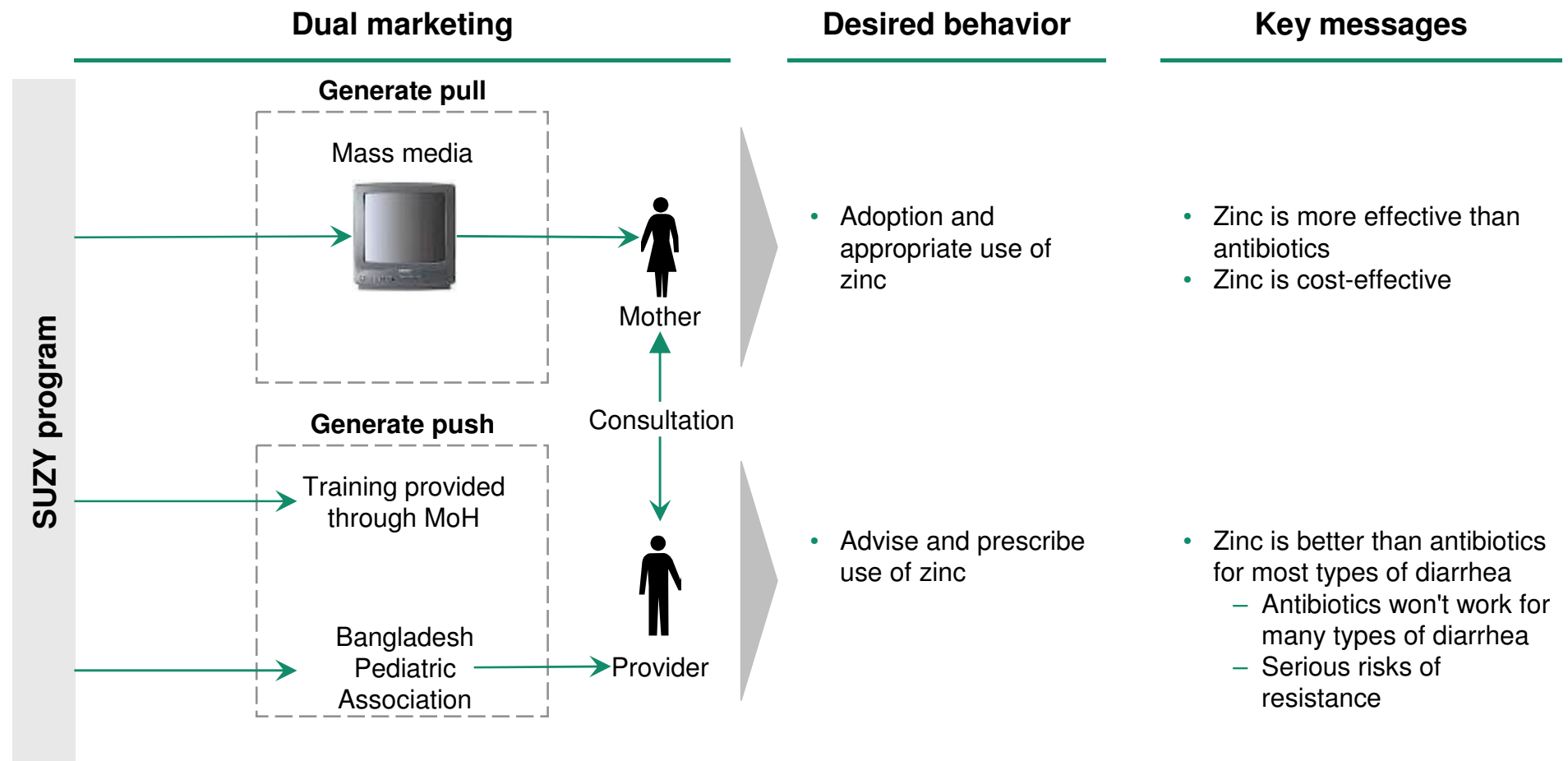
Formative research demonstrated that 90 to 95% of healthcare delivered by private providers

	<b>International pharma companies</b>	<b>Local pharma company</b>	<b>Local marketing agency</b>	<b>Stores and supermarkets</b>	<b>Private providers</b>
<b>Role</b>	<ul style="list-style-type: none"> <li>• Provided patent for the drug formulation</li> <li>• Quality-assurance of local producer</li> </ul>	<ul style="list-style-type: none"> <li>• Cost-effective and quality-assured production of tablets</li> </ul>	<ul style="list-style-type: none"> <li>• Development and rollout of social marketing campaign</li> </ul>	<ul style="list-style-type: none"> <li>• Tablet sales and distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Prescription and sales of zinc treatment</li> </ul>
<b>Key strengths</b>	<ul style="list-style-type: none"> <li>• Strong research, development capabilities</li> <li>• Production and quality assurance know-how</li> </ul>	<ul style="list-style-type: none"> <li>• Cost-effective trained local labor</li> <li>• Available production facilities close to market</li> <li>• Easy logistics</li> </ul>	<ul style="list-style-type: none"> <li>• Local consumer insights</li> <li>• Experience in large-scale marketing campaigns</li> </ul>	<ul style="list-style-type: none"> <li>• Large distribution network</li> <li>• Regular point of contact with beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>• High influence on customer decisions</li> <li>• 90-95% market share</li> </ul>
<b>Incentives</b>	<ul style="list-style-type: none"> <li>• Sold patent for \$250K</li> </ul>	<ul style="list-style-type: none"> <li>• Product margin</li> </ul>	<ul style="list-style-type: none"> <li>• Fees for creating marketing campaign</li> </ul>	<ul style="list-style-type: none"> <li>• Profit</li> </ul>	<ul style="list-style-type: none"> <li>• Profit through sale of zinc treatment                             <ul style="list-style-type: none"> <li>– Although margins are lower than those of antibiotics</li> </ul> </li> </ul>

**ICDDR,B coordinated and contracted all the partners**

Source: Expert interviews

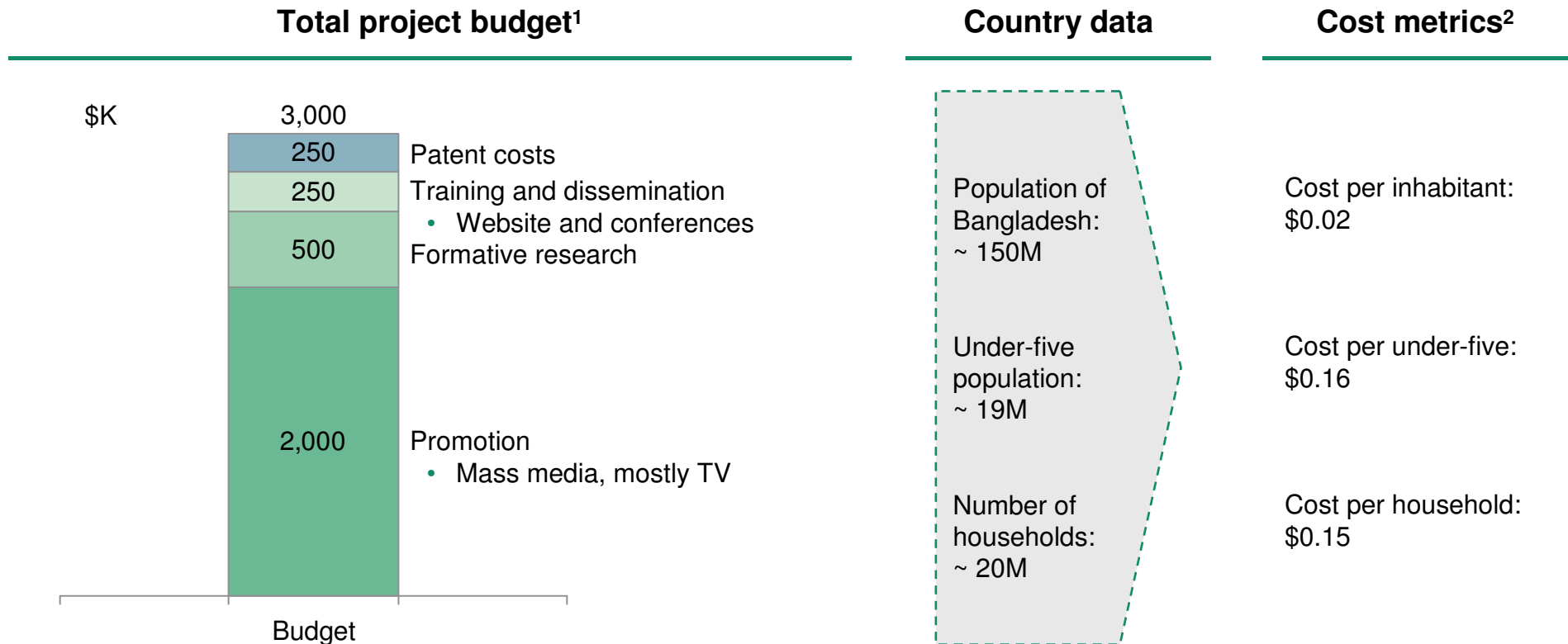
# Employed a dual marketing approach to both key decision makers: mothers and providers



Source: Expert interviews



# SUZY's strong emphasis on household decision-making is reflected in its large marketing budget

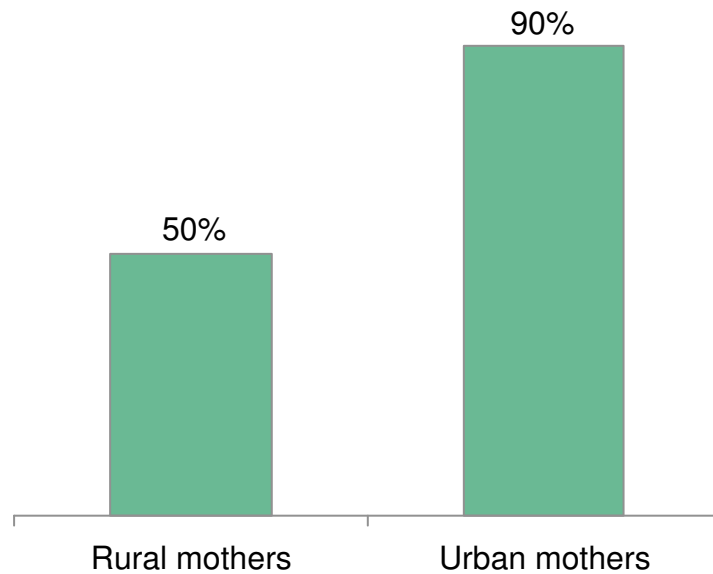


Source: Expert interviews; WHO World Health Statistics 2007

# SUZY successfully creates awareness and adoption of zinc treatment

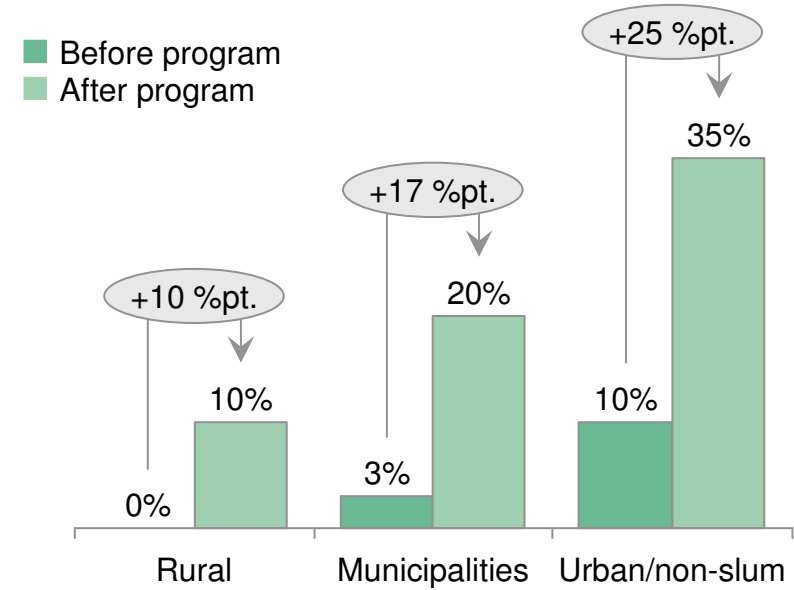
## Demonstrated increased awareness of zinc...

Mothers who are aware of zinc as an effective treatment after launching SUZY



## ...as well as increased selection of zinc as treatment for diarrhea

Mothers who use zinc as a diarrhea treatment



**More zinc is prescribed now than antibiotics**

## Experts consulted

---

- **Shawn Baker**, HKI Senegal, VP and Regional Director for Africa
- **Ian Darnton-Hill**, UNICEF micronutrient expert
- **Bruno Kistner**, DSM, Nutrition Improvement Program
- **Charles Larson**, SUZY Program Director
- **Luc Laviolette**, Micronutrient Initiative, Regional Director, Asia
- **Mawuli Sablah**, HKI Senegal, Regional Food Fortification Coordinator
- **Dominic Schonfeld**, GAIN IYCF
- **Tina van den Briel**, WFP, Nutrition