Title II Program Areas in Kenya

- Food for the Hungry (FHK)
- CARE
- ADRA
Data Collection Timeline

2004
Awardee Baseline Survey

2008
Tufts R1 Qualitative

2009
Awardee Endline Survey

2010

2011
Tufts R2 Qualitative

Tufts R3 Qual + Survey
Key Data Sources

Exit Strategy

- Title II Awardee documents
- Qualitative interviews

Service Provision

- Service provider focus group discussions (FGDs)
- Participatory ratings
- Provider survey

Participation

- Beneficiary FGDs
- Participation survey

Behaviors and Impact

- Baseline reports
- Endline and follow-on household survey
- Secondary data
Exit Strategy:

- Ministry of Health (MOH) linkages intended to provide community health worker (CHW) supervision, training, supplies

- Improved health practices would be self-sustaining

- Supplemental rations were withdrawn to be replaced with locally available nutritious foods

Key Assumptions:

- MOH has capacity, resources, and motivation to supervise CHWs

- CHWs would continue work without remuneration or other benefit

- The benefit of service delivery would outweigh CHW opportunity costs

- Mothers could access locally available nutritious foods and obtain resources needed for other practices
Health Service Providers

% Reporting Still Serving at Follow-Up

Time Spent in Service

% Received Any Training

% Reporting Resources Were Sufficient

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on either McNemar’s exact chi-squared test or Wilcoxon signed rank test
Health Service Providers’ Mean Ratings During and Post-Project

Mean Health Service Providers’ Ratings\(^1\) (CARE+ADRA+FHK)

- Capacity
- Linkages
- Resources
- Benefits
- Motivation

During Post

“Now that there is no food, we are finding that the mothers are not bringing their children for weighing or for meetings.” – CHW LogoLogo

“There is no way that we can leave our houses and train the community and at the end of it, the community cannot pay us. It is better we concentrate on our own families.” – CHNF, Kyoani

\(^1\) All changes Sig. at p < 0.001 using Wilcoxon signed rank test
Overall, health, water, and sanitation participation indices* declined significantly between the end of the DAP and follow-up in all project areas.

<table>
<thead>
<tr>
<th></th>
<th>% Participating During</th>
<th>% Sustained Participation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child &lt; 5yrs taken to GMP/health facility(^1)</td>
<td>97.3%</td>
<td>96.6%</td>
<td>N.S.</td>
</tr>
<tr>
<td>ADRA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received any health advice/counseling</td>
<td>91.9%</td>
<td>93.7%</td>
<td>N.S.</td>
</tr>
<tr>
<td>Received any inputs for a child &lt; 5yrs(^1)</td>
<td>74.3%</td>
<td>77.1%</td>
<td>N.S.</td>
</tr>
<tr>
<td>CARE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was no sustained or increased participation in health activities in the CARE project area post-project.

\(^1\) Prevalences only for HHs with children < 5; results not significant based on McNemar's chi-squared test

* Participation indices were constructed from the participation modules created by the Tufts team. The index is the sum of reported activities that a given respondent participated in during each time period. HHs with children have larger indices representing additional activities that were specific to HHs with children < 5.
Sustainability of MCHN Behaviors

Exclusive Breastfeeding for Children < 6 mo

Mothers Reporting Giving Children Extra Food During Diarrhea

HHs Reporting Taking Child to GMP

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on Pearson's or McNemar's chi-squared test
Malnutrition and Disease Impacts

Wasting

Stunting

*p < 0.05; **p < 0.01; ***p < 0.001; Sig. based on Pearson’s chi-squared test
What’s Working

- Practices that do not need outside resources are more likely to be sustained.
- People will continue participation/practices when new Awardee offers resources or incentives.
- Participation during and after program was often a significant predictor of improved practices.

What’s Not Working

- Exit strategy did not account for resources, capacity, or motivation, or linkages.
- Health service delivery by CHWs declined in all project areas, post-project.
- “Know thy linkage”: MOH linkage was not realistic.
- There is no simple substitute for free food. Rations act as disincentive to continue participation.
Water and Sanitation Sector
WatSan Exit Strategy

Exit Strategy:

- Water committees trained to take over technical and managerial aspects of maintaining water points
- User fees raised will cover operating costs and maintenance of water points

Key Assumptions:

- Water committees can source further technical assistance
- Water source will be reliable, adequate, accessible, and of good quality
- Community will demand and pay for water
Water Committees

% Reporting Source of Revenue

% Reporting Revenue Sufficient

% Collected User Fees

% Maintained Linkages w/Other Water Committees

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s exact chi-squared test
Water Committees

% Reporting Water Point Needed Repair

% Reporting Water Point Repaired When Needed

% Received Support

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s exact chi-squared test
“We are confident we will continue because our group was strong even before CARE came.” – Water Com., Suba

“The community perceives the activities as a failure since the water sources that were done by the project have either dried up or were too salty for use.” – Water Com., Ikutha
Diarrheal Disease Impacts

Diarrhea Incidence

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on Pearson’s chi-squared test
WatSan Sector Exit Strategies: Lessons Learned

What’s Working

- Water committee exit strategy model is reasonably successful when there is sufficient consumer demand.
- Consumer willingness-to-pay depends on abundance, quality, and reliability of H₂O.
- Participants in water-system activities during and post-project more likely to purify water.

What’s not working

- Shifting water table, saline water, supply issues affected community willingness-to-pay.
- Lack of fee collection leads to inoperability of water point.
- Participation in water-related activities sometimes predictive of improved WatSan practices.
-Evidence shows decline in post-project use of improved water source, latrine access.
Agriculture Sector
Agriculture Exit Strategy

Exit Strategy:
- Extension farmers (EFs) would charge fee for service
- Ministry of Agriculture (MOA) linkage intended to provide EFs, Farmer Associations (FA) supervision, training, supplies
- Tree seedling producers (TSPs)/seed multipliers (SMs) would afford needed inputs from sales of goods
- Adoption of improved farming methods would be self-sustaining
- Farmers would be linked to markets

Key Assumptions:
- EFs, TSP/SMs motivated by profit
- MOA has capacity, resources, motivation to supervise EFs/FAs
- Community demand for services/goods would be sustained
- Growing conditions would be favorable
- Market links would prove profitable and motivate farmers
CARE: Farmer Association
Service Delivery

% Able to Cover Expenses

% Developed Formal Input Supply Relationships

% Developed Formal Arrangements with Buyers

% with Reliable Source of Market Information

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s chi-squared test
“We have no linkage. The GOK officers just drive through the community at their own convenience.” – Seed Multiplier, Matulani

“We still apply the same skills and knowledge that we learnt. When we make mistakes, the plants die but we learn from it the right thing to do next time.” – Tree Seedling Promoter, Kwa Vonza
Changes in Utilization of Improved Agricultural Practices, by Awardees

Changes in Improved Ag Practice Indices Between Endline and Follow-Up

<table>
<thead>
<tr>
<th>Practice</th>
<th>CARE Endline</th>
<th>CARE Follow-Up</th>
<th>FHK Endline</th>
<th>FHK Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tillage</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td>***</td>
</tr>
<tr>
<td>Improved DTC seeds</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Timely sowing</td>
<td>***</td>
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<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Timely weeding</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Timely harvesting</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Use compost and other organic matter in garden</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Use animal manure in garden</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Terracing</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Intercropping</td>
<td>***</td>
<td>***</td>
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</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on Pearson’s chi-squared test
CARE: TASK Contract Agriculture

% TASK HHs Producing Under Contract During vs. Post-Project

% TASK FA Members and Non-FA Members Producing Under Contract At Follow-Up

Above charts: * p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s chi-squared test

Above table: * p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on Pearson’s chi-squared test
Agriculture Sector Exit Strategies: Lessons Learned

What’s Working

- Overall, “improved practices” were maintained or increased.
- Those engaging in contracts had more improved practices post-project than those not.
- Farmers engaging in contracts had higher incomes post-project.

What’s Not Working

- EF model is similar to CHW model – and, similarly, services declined significantly.
- A fee-for-service model by EFs is possible, but requires pre-exit introduction and practice.
- FA group activities, linkages, resources, capacity, and participation declined post-project. So did engaging in contracts.
- “Know thy linkage” – MOA did not have sufficient capacity.
Livestock Sector
Livestock Exit Strategy

Exit Strategy:

- Community-based animal health workers (CBAHWs) trained to provide services for a fee
- CBAHWs linked to the Department of Veterinary Services for continued technical assistance

Key Assumptions:

- Fees raised would allow CBAHWs to replenish their kits, access transport
- Profit received would motivate CBAHWs
- Continued technical support would maintain quality and motivation
- Community would demand services in lieu of GOK
Community-Based Animal Health Workers

Time Spent in Service

<table>
<thead>
<tr>
<th></th>
<th>Mean Hrs/Month</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FHK</strong></td>
<td>20 <strong>NS</strong></td>
</tr>
<tr>
<td><strong>ADRA</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

% Maintaining Linkages

<table>
<thead>
<tr>
<th></th>
<th>% Charging Fees for Service</th>
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<tbody>
<tr>
<td><strong>FHK</strong></td>
<td>NS</td>
</tr>
<tr>
<td><strong>ADRA</strong></td>
<td>NS</td>
</tr>
</tbody>
</table>

% Able to Replenish Supplies

<table>
<thead>
<tr>
<th></th>
<th>% Maintaining Linkages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FHK</strong></td>
<td>NS</td>
</tr>
<tr>
<td><strong>ADRA</strong></td>
<td>NS</td>
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</table>

% Charging Fees for Service

<table>
<thead>
<tr>
<th></th>
<th>% Charging Fees for Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FHK</strong></td>
<td>NS</td>
</tr>
<tr>
<td><strong>ADRA</strong></td>
<td>NS</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s exact chi-squared test
“Now that we have more customers, we are able to increase the amount of fees we are collecting and we can build our capital.” – Paravet, Kanyongonyo

“The CBAHWs have a code of ethics for their members, therefore, while originally FH provided supervision, today the association controls itself.” – CBAHW, Kalacha
Participation in Livestock Activities

**FHK: Use of CBAHW Services**

- Had a trained CBAHW in location
- Used CBAHW Services in past 3 mo.

**ADRA: Use of CBAHW Services**

- Received services from a paravet related to health care for any animals
- If received services, services were paid for

* p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s chi-squared test
Livestock Mortality

FHK: % Lost Animals to Disease

**p < 0.01; Sig. based on McNemar’s chi-squared test

FHK: Median Livestock Lost to Disease

Note: No changes in #s of livestock lost in FHK were sig.; Sig. tests not possible w/ADRA data
Livestock Sector Exit Strategies: Lessons Learned

What’s Working

- Fee-for-service model largely successful: Many CBAHWs continued service provision, charging fees, and purchasing supplies.

- Linkage to Department of Veterinary Services mutually beneficial and thus largely sustained.

- Use of and payment for CBAHW services increased over time in ADRA. Qualitative data in FH showed great continued demand for CBAHW services.

- Livestock mortality declined post-project – a visible benefit.

What’s not Working

- Horizontal linkages among CBAHW groups decreased.
Microfinance Sector (COSAMO)
**COSAMO Exit Strategy**

**Exit Strategy:**
- CARE worked only with pre-existing community-based organizations
- No external investment needed
- Emphasis on early independent operation
- Resource people trained to provide technical assistance after CARE’s exit
- Self-regulated and -governed

**Key Assumptions:**
- Strong institutional capacity
- Own funds = more buy-in
- Profits will motivate members
- Community-based trainer motivated by training fee
- Strong sense of obligation to pay back loans
88% of COSAMO groups said member dues made up main source of revenue post-project.
## CARE: COSAMO Sustained or Increased Participation

<table>
<thead>
<tr>
<th>COSAMO</th>
<th>% Participating During</th>
<th>% Participating Post</th>
<th>% Sustained Participation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit Savings w/COSAMO</td>
<td>96.9%</td>
<td>96.7%</td>
<td>97.7%</td>
<td>N.S.</td>
</tr>
<tr>
<td>Take Loans From COSAMO</td>
<td>86.5%</td>
<td>90.1%</td>
<td>97.6%</td>
<td>*</td>
</tr>
</tbody>
</table>

### During vs. Post

<table>
<thead>
<tr>
<th></th>
<th>During</th>
<th>Post</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean # Loans Distributed by COSAMO</td>
<td>2.4 (0.1)</td>
<td>4.1 (0.1)</td>
<td>***</td>
</tr>
</tbody>
</table>

Note: * p < 0.05; ** p < 0.01; *** p < 0.001; Sig. based on McNemar’s or Pearson’s chi-squared test
“Since we started this thing (COSAMO), we are now people. We were not people back then. Our eyes were open, but we were not seeing. We now have a voice, and we are people in our community.” – ASAWO Group, Rusinga

“During the CARE DAP time, we were still emerging from the ‘dark age’ of poverty, lack of money and wife beating because we depended on our husbands to pay bills yet they had no access to money. We had not fully realized the potential CARE had for us. Now we have.” – Bondo Awino COSAMO, Rachuonyo
Microfinance Sector (COSAMO)
Exit Strategies: Lessons Learned

What’s Working

- COSAMO model highly successful: sustained service delivery
- Sustained capacity, motivation, resources
- Sustained beneficiary utilization, impact
- No outside seed money
- Intensive modular training program built solid technical and managerial capacity
- Graduated independent operation as Awardee withdrew progressively
- No vertical linkages – each COSAMO acts as an independent pod
- Horizontal links maintained as new groups were formed and members transferred knowledge
- Resource person can be “hired” by COSAMO groups for technical assistance
Acknowledgment and Disclaimer

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The contents are the responsibility of Tufts University and do not necessarily reflect the views of USAID or the United States Government.
Thank You!!
### Annex: Sustainability of Health/WatSan Participation (Indices)* by Awardee

<table>
<thead>
<tr>
<th>Awardee</th>
<th># of Activities Per Period</th>
<th>Mean During</th>
<th>Mean Post</th>
<th>Sig. (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FHK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH w/Child &lt; 5</td>
<td>0–12</td>
<td>7.9 (0.1)</td>
<td>5.7 (0.1)</td>
<td>* ↓</td>
</tr>
<tr>
<td>HH w/o Child &lt; 5</td>
<td>0–7</td>
<td>2.2 (0.2)</td>
<td>0.9 (0.1)</td>
<td>* ↓</td>
</tr>
<tr>
<td><strong>ADRA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH w/Child &lt; 5</td>
<td>0–11</td>
<td>5.7 (0.1)</td>
<td>5.0 (0.1)</td>
<td>* ↓</td>
</tr>
<tr>
<td>HH w/o Child &lt; 5</td>
<td>0–7</td>
<td>2.5 (0.2)</td>
<td>1.9 (0.2)</td>
<td>* ↓</td>
</tr>
<tr>
<td><strong>CARE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All WASEH HH</td>
<td>0–9</td>
<td>5.6 (0.1)</td>
<td>3.6 (0.1)</td>
<td>* ↓</td>
</tr>
</tbody>
</table>

* Participation indices were constructed from the participation modules created by the Tufts team. The index is the sum of reported activities that a given respondent participated in during each time period. The child indices are larger representing additional activities that were specific to HH with children < 5.
Annex: Health and WatSan Outcomes Regressions – FHK

- **Dependent variables:**
  1) Handwashing index (0–7)
  2) Water purification (Y/N)
  3) ≥ 3mo of iron supplementation during last pregnancy (Y/N)

- **Independent variables:**
  - Participation Index (# of activities during and post-project)
  - Served as CHW/contact mother
  - Received CHW visit and/or health advice
  - Participated in water-related construction projects (Models 1 and 2 only)

- Also controlled for: number of income sources, dependency ratio, mountain region, mother educated
Participation indices: participation in more activities was significantly positively correlated with all three improved behaviors.

All three activities were positively correlated with improved behaviors, with *sustained participation* having strongest effects.

**Striking results:**
- CHWs and contact mothers who served both during and post-project were 7.7X as likely to purify water, 4.1X as likely to take iron, and reported 0.8 more handwashing behaviors (all p < 0.001; reference group no participation during/post).
- Those receiving a visit/advice both during and post-project were 4.5X as likely to purify water, 5.2 as likely to take iron, and reported 0.5 more handwashing behaviors.
Annex: Health and WatSan Outcomes Regression – CARE

- **Dependent variables:**
  1. Water and Sanitation Index (0–12)
  2. Handwashing index (0–5)
  3. Water purification (Y/N)

- **Independent variables:**
  - Participation Index (# of activities during and post-project)
  - Join/Attend Water Management Committee (WMC)
  - Water System Training
  - Water System Seek/Receive Services
  - Served as an Artisan
  - Water System Community Based Activities
  - Water and Sanitation Training

- Also controlled for: monthly HH expenditure (USD), education level of HH head, female-headed HH, presence of children < 5, total member count, dependency ratio, reported presence of Community Management Committee, and access to water within 1km
Participation indices: participation in more activities was significantly positively correlated with improved handwashing and water purification, but not improved WatSan practices overall.

All three activities were positively correlated with some improved behaviors, with sustained participation having strongest effects in water purification and WatSan practice models.

Striking results:
- Being an artisan was negatively correlated with all dependent variables.
- Presence of an area CMC was significant in all models.
Annex: Health Outcomes Regressions – ADRA

- **Dependent variables:**
  1) Handwashing index (0–7)
  2) Water purification (Y/N)

- **Independent variables:**
  - Participation Index (# of activities during project and # of activities post-project)
  - Join/Attend Water Management Committee
  - Seek/Receive Water Management Committee Services
  - Seek/Receive Services Community Health and Nutrition Worker Services

- Also controlled for: presence of children < 5, total income, education level of HH head, dependency ratio, access to water <1hr
Indices of participation “During” the project and “Post” project were significant and positively correlated with a greater likelihood of water purification and increased handwashing occasions.

Both indices were positively correlated with some improved behaviors, with sustained participation having strongest effects.

Striking results:
- HH that sought or received services from a community health worker during and after the program had .49 (p < 0.001) more handwashing occasions on average, and were 1.86*X more likely to purify water.
- HH heads with a higher level of education were 1.09X more likely to purify their water.