



# Study objectives

Kenya (Homabay and Migori) and Tanzania (Igunga)

- 1. Assess the SCI implementation costs
  - What were the costs for FCI?
- 2. Determine the SCI maintenance costs
  - What it will cost in the future to maintain the SCI?
- 3. Establish the SCI replication costs
  - What it would cost to implement the SCI in other districts?



# Methodology (1/3)

- Includes Incremental costs from the point of view of a government
  - Excludes health personnel, supplies, and infrastructures already in place
- Types of costs
  - Fees; Equipment; Renovation; Maintenance and repair;
     Fuel cost; Licensing fees for the referral system equipment;
     Printing; Meetings and trainings; Travel.



# Methodology (2/3)

- Data collection for unit costs and inputs
  - Retrospective analysis of budgets, reports, and all available documents from FCI headquarters, and the field offices in Kenya and Tanzania.
  - Per activity: Activity 1 to 5 of Intervention 1 OR Activity 1 and 2 of Intervention 2
  - Per cost type: Implementation OR Maintenance OR both
- Average monthly exchange rate: Converted into US
- Inflation rate = 2.67%



# Methodology (3/3)

- Intervention 1: Health Sector Strengthening
  - Activity 1: Strengthening health services management and introducing quality improvement approaches
  - Activity 2: Making structural improvements to health facilities
  - Activity 3: Providing maternal health equipment and consumables
  - Activity 4: Strengthening communication and referral system
  - Activity 5: Strengthening provider skills and competencies
- Intervention 2: Behavior Change Communication (BCC)
  - Activity 1: Developing BCC messages/materials
  - Activity 2: Implementing BCC campaign



# **Results: Implementation costs**

	Total cost (US\$) 2002-06	Cost per delivery with SBA/year (US\$)	Cost per capita (US\$)	Per capita THE (average exchange rate US\$)*
Igunga	559,095	15.0	1.7	12
Homabay	364,469	10.6	0.6	20
Migori	277,140	10.6	0.6	20

<sup>\*</sup> Source: World Health Organization. WHO Statistical Information System. 2004



# **Results: Implementation costs**

	lgunga (US\$)	Homabay (US\$)	Migori (US\$)
Activity 1: Strengthening HS management and introducing quality improvement approaches	23,158.6	16,010.2	18,420.0
Activity 2: Structural improvements	17,861.6	75,206.1	99,866.5
Activity 3: MH equipment and consum.	67,413.2	56,037.1	94,773.4
Activity 4: Strengthening communication and referral system	105,715.2	11,097.2	9,511.9
Activity 5: Strengthening provider skills and competencies	191,893.4	58,554.2	54,568.3
BCC Intervention	153,052.0	147,564.6	-
Total	559,094.9	364,469.4	277,140.1



#### **Results: Maintenance costs**

	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)	Year 6 (US\$)
Igunga	8,256.92	64,945.40	42,059.31	75,117.54
Homabay	304.29	3,007.22	52,621.58	50,346.01
Migori	128.44	3,180.69	34,124.20	29,718.72

#### Main items

- Equipment and consumables
- Educational materials for BCC campaign
- LSS and PAC trainings



#### **Results: Maintenance costs**

#### • Example:

 The cost of re-purchasing and maintaining maternal health equipment in Igunga for 29 facilities is as follows:

2004	2005	2006	2007	2008
5,220.3	5,414.8	7,913.2	5,841.8	52,748.9

— For 1 facility:

2004	2005	2006	2007	2008
190.4	186.7	272.9	201.4	1,818.9

# Results: Replication costs (Tanzania)

Activity 1: Strengthening health services management and intro	oducing quality improvement approaches
Training PPC Register	13 US\$ per maternity staff
Training computer skills	231 US\$ per trained person
COPEtraining	6,748 US\$ for a district hospital
Supervision and follow-up	
Indent	736 US\$ for 23 facilities
Referral system	187 US\$ for a district
Activity 2: Structural improvements to health facilities	
Solar power system	1,578 US\$ per facility
Activity 3: Maternal health equipment and consumables	
Equipment	2,010 US\$ per facility
Indent training	197 US\$ per trained person
Activity 4: Strengthening communication and referral system	
Ambulance	44,551 US\$
Equipment	5,861 US\$ per facility
Licensing fees	693 US\$ per radio call system per year
Radio call books	93 US\$ per facility
Referral forms	34 US\$ per facility
Activity 5: Strengthening provider skills and competencies	
LSStraining	1,534 US\$ per trained person (training
	conducted every year)
	23,347 US\$ per district
PAC training	1,045 US\$ per trained person (training
	conducted every two years)
Behavior Change Communication Intervention	
	166,419 US\$ for a district with a
	population of about 325,000 or of about
	14,000 births per year
Evaluation Studies	
Facility gap assessment	10,880 per district



# Results: Replication costs (Kenya)

Activity 1: Strengthening health services management and introducing quality improvement			
approaches			
HMIStraining	97 US\$ per trained person		
Maternal health registers and	4,448 US\$ per district		
register schedule (Printing			
and distribution)			
COPE	1,151 US\$ per facility		
Supervision and follow-up	182 US\$ per facility		
Activity 2: Structural improvemen	nts to health facilities		
Renovations	7,190 US\$ per facility renovated		
Solar power system	2,895 US\$ per facility		
Water supply system	578 US\$ per facility		
Activity 3: Maternal health equipn	nent and consumables		
<u>Equipment</u>	2,753 US\$ per facility		
Activity 4: Strengthening commun	nication and referral system		
Cell phone purchase	80 US\$ per facility		
Cell phone annual charge	299 US\$ per year per facility		
Activity 5: Strengthening provider skills and competencies			
LSStraining	820 US\$ per trained person (training conducted every year)		
PAC training	796 US\$ per trained person (training conducted every 2 years)		
Clinical flowcharts (Printing)	45 US\$ per facility		
DHMT orientation	739 US\$ per district		
Behavior Change Communication Intervention			
	125,810 US\$ for a district with a population of about 337,000 or of about 13,400 births per year		
Evaluation Studies			
Rapid assessment	10,880 US\$ per district		



### **Results: Replication costs**

- Example 1: If MOH wants to train health personnel in LSS, it would cost about 1,534 US\$ per trained person in Tanzania and, on average, 820 US\$ per trained person in Kenya.
- Example 2: Equipping health facilities with medical and maternal health equipment would cost, per facility, about 2,010 US\$ in Tanzania and 2,753 US\$ in Kenya.
- Opportunities for economies of scale



#### **Conclusions**

- Additional investments required
  - Example: recruitment and deployment of additional SBA cadres, upgrading of health facilities
- Spillover effect of investments in MCH
  - Poverty
  - Child survival
  - Non-obstetric benefits



# Thank you

