

May 2013



**Improving the Health and Nutrition  
Status of Women and Children**

Promising Practices from East Africa

# Acknowledgments

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World Vision is an international partnership of Christians whose mission is to follow our Lord and Saviour Jesus Christ in working with the poor and oppressed to promote human transformation, seek justice and bear witness to the good news of the kingdom of God.

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Since 2012, the World Vision East Africa Region Health and Nutrition team has embarked on engaging with national offices to identify, document and share promising practices of **ainterventions** that have had demonstrated impact in the communities where World Vision works. This is in line with the key mandates of Learning Centres.

A Learning Centre (LC) is 'a group of people with recognised capability in a specific discipline, located in a strategic national office, who define best practices and disseminate knowledge throughout the region through face-to-face and virtual collaboration, with a focus on driving results.'<sup>1</sup>

The overall objective of knowledge management practice is to capture, disseminate, and promote the use of internal and external learning on health and nutrition programmes. World Vision continues to seek the enhancement of the quality and professionalism of its programming, with the capturing and exchange of knowledge being key to this work. In this booklet the team shares four promising practices from which national offices can learn and lessons which they can incorporate into health and nutrition programming. The four practices are:

- Traditional Birth Attendants (TBAs): Embracing TBAs and cultural practices for increased uptake of health-facility services in Alamata District, Ethiopia
- Focal Nutrition Learning Centres: Using locally available resources to improve child nutrition in Burundi
- Defaulter tracing: Using defaulter tracing for essential maternal and child health (MCH) services in Bondo District, Kenya
- Community health worker functionality assessments: A means to strengthen the health system in the region.

These practices highlight simple interventions that have led to positive outcomes in antenatal care services uptake, skilled birth attendance, nutrition, growth monitoring and promotion, immunisation uptake, and benefits accruing from a commitment to health systems strengthening.

For each of the practices, this booklet highlights the rationale for the intervention, intervention objectives, key activities taken and achievements. It also notes success factors, gaps and challenges, presenting a great learning opportunity. Case studies to illustrate benefits of some interventions are also included.

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<sup>1</sup> Africa LC High Level Operating Model V6 (2010) (internal document).

World Vision International has programmes in nine countries in East Africa that have a combined population of over 247 million. The region has unacceptably high infant and under-5 mortality rates, at 101 and 181 per 1,000 live births respectively. Affordable health interventions, when made available to the mothers and children who need them, will prevent an estimated 6.6 million child deaths worldwide and the Millennium Development Goal number 4, reduce child mortality, could be achieved by 2015.<sup>2</sup>

Child mortality in most countries in East Africa has shown a declining trend in past decades. However, both neonatal and maternal mortality have largely remained the same. In East Africa, neonatal mortality accounts for 22–31 per cent of under-5 deaths. Sadly, progress in reducing deaths has been slower for newborns than among children aged 1 month to 5 years.<sup>3</sup> Each year thousands of women die in childbirth or from complications during pregnancy. Ethiopia, Tanzania, Kenya, Uganda and Sudan are among the 21 countries with the most maternal and under-5 deaths in 2008.



Chronic malnutrition is a developmental problem and silent emergency in all countries in the region. This is worsened by the humanitarian emergency, which threatens the lives of children and the affected population in the region. A recent Demographic and Health Survey (DHS) report in 2011 showed that the prevalence of stunting is as high as 58 per cent in Burundi; underweight remained a critical public health problem in the region (in Ethiopia underweight prevalence declined from 41 per cent to 29 per cent between 2000 and 2011<sup>4</sup>); and wasting remained high in chronically food-insecure areas such as Somalia, Kenya and south Sudan (15 per cent to 23 per cent).<sup>5</sup> According to the same report, anaemia is the major nutritional disorder among children and pregnant women in the region, resulting in adverse pregnancy outcomes as well as underweight babies.

Countries in East Africa Region have made good progress in the fight against HIV infection. In the past decade, the prevalence of HIV has dropped by more than 40 per cent in a number of countries. Uganda had made good progress but now seems to be losing the battle; around 2007, the prevalence was 4.3 per cent but that has now risen to 7.3 per cent, the highest in the region. Somalia has the lowest, at 1.4 per cent.<sup>6</sup> In spite of the progress made, the prevalence is unacceptably high across the nine countries.

<sup>2</sup> Global Health Council, *A Global Health Council Position Paper on Child Health* (2007).

<sup>3</sup> Countdown to 2015, *Countdown to 2015: Decade Report (2000–2010)*.

<sup>4</sup> Ethiopian Demographic and Health Survey (2011).

<sup>5</sup> UNICEF, *Progress on Child and Maternal Nutrition* (2009).

<sup>6</sup> Country progress reports 2012 (internal documents).

The overall goal of the East Africa regional health nutrition and HIV and AIDS strategy is to contribute to the improvement of the health and nutritional status of women and children in WV operational areas, working in partnership to develop the capacities of national offices (NOs) to design, implement and monitor high impact and cost-effective health, nutrition and HIV and AIDS programmes.

Since 2012, the East Africa Region health and nutrition team has begun to engage with NOs to identify, document and share promising practices of interventions that have made a difference. Four practices are presented in this booklet. Some of these practices have fully been published by the respective NOs (e.g. Burundi); dissemination events for these practices have been held (Ethiopia and Rwanda); and learning has been gleaned from what other partners are doing (defaulter tracing for essential services in Bondo District, Kenya).

The region has decided to work strategically through the community health system, and since November 2011, has supported NOs to conduct community health worker (CHW) assessments as a way of contributing towards health systems strengthening (HSS). HSS is a health and nutrition strategic approach focusing on equipping CHWs to facilitate implementation of core health and nutrition interventions. In this booklet we share our experience conducting the assessments, and we provide a case study from Uganda showing progress following investments in community health structures.

We hope this booklet will be beneficial to you. Many thanks to our team members, Joan Mugenzi and Sisay Sinamo, for taking the lead on this exercise, and to the various national office teams that contributed to the compilation of this booklet.

Mesfin Loha  
Director, Health and HIV and AIDS



## I.1 Rationale for the intervention

Alamata Town District health centre is one of 47 district facilities that fall under the Mekelle Regional Health Bureau in the northern part of Ethiopia. It is located in the Southern Tigray Zone. Among the eight districts in this zone, Alamata Town District, which serves a population of 37,600 people, emerged as the worst institutional delivery health service provider for four consecutive years (2005–2008). The health-facility deliveries in this area were appalling, as the regional health bureau noted.

The Alamata Town District health office noted the low rating but took no action to improve the situation. It was clear there was good antenatal care (ANC) during the first and second trimesters of pregnancy but low institutional delivery.

Part of Alamata's explanation for poor performance was the possibility of poor counselling. They thought of preparing posters on institutional delivery but did not act on that.

This scenario led the head of the Mekelle Regional Health Office to comment that the Alamata facility was better off 'keeping cattle,' observing that there was no service. The Alamata Town District health office received this comment in the midst of a lack of equipment and delivery tools.

The regional feedback, along with a threat to close the facility if the poor performance continued, became a wake-up call for the Alamata Town District health services to take action on the gap they were already aware of. Although there was an ongoing plan and achievement review and reflection, the low performance remained due to lack of readiness among the health workers to change the situation. Later the health workers started to identify solutions, one of which was linking with the community health workers and nurse health extension workers (HEWs), which helped the health workers to plan and achieve better performance.

Among the key actions was a study on institutional delivery in the community. The study, carried out in June 2010, found 53 children without immunisation and 169 pregnant women without ANC follow-up. Discussions were held with the mothers, and health workers identified pertinent issues that called for attention.

Key issues raised by mothers were the perceptions that:

- only women with problems deliver at health facilities
- there was a shortage of staff at the health facilities
- the delivery environment was unhygienic, carrying the risk of HIV due to contamination.

Health personnel also identified positive cultural practices and beliefs that kept women preferring to deliver at home. Such practices included the coffee ceremony at the onset of labour, preparatory materials such as utilities for making porridge, celebration of the birth, and the spiritual relevance of calling on Mother Mary at the time of delivery.

Besides these practices and beliefs, the service charge and the absence of delivery services at the health centre during off-duty hours (5 p.m. – 8 a.m.) were other hindrances to some mothers.

Although the health workers believed it was not possible to change the situation, one supervisor proposed the idea of bringing pregnant women and traditional birth attendants together to change the situation. The response from some of the colleagues was, 'Is it possible?' With hesitation the idea was moved forward, and later other colleagues started to support it and a district goal was set to see mothers delivering in the health facilities.

## 1.2 Intervention objectives

- To reduce home deliveries to 0 per cent in the shortest time possible
- To ensure that no mother dies from labour and delivery, according to the Millennium Development Goal (MDG)

## 1.3 Key actions taken

To achieve the desired objectives, the district undertook various actions, including the following:

- Conducted a survey to identify pregnant women in the town. They found a total of 169 pregnant women (of whom 93 had Tetanus Toxoid 1 and 4 had Tetanus Toxoid 2). In addition, they identified 53 children without age-appropriate immunisation coverage. The study also helped the district health services to establish mothers' understanding of the benefits of institutional delivery and issues related to it.
- Approached WV for support, which enabled them to acquire skills through training of traditional birth attendants and awareness-raising among the mothers on the importance of institutional deliveries and the supportive supervision on site.
- Provided training to pregnant women at the health centre. It included discussions on the benefits of institutional delivery and risks of home delivery, such as HIV, bleeding, etc. The training also incorporated an understanding of the health centre environment, including showing the cleanliness of the delivery room and providing testimonials from pregnant women living with HIV. All the women who attended the training received tetanus toxoid (TT) immunisation and long-lasting insecticide-treated net. In 2010 none of the women's spouses participated in the training, so in 2011 spouses were deliberately targeted to be part of the training. This training also created a better understanding of the problems at hand, and mothers were also able to understand the services offered, the risks of home delivery and the benefits of institutional delivery.
- Trained 27 traditional birth attendants (TBAs) and 1,165 Health Development Army (HDA) workers: this assisted the health office to integrate the TBAs in the HDA. An HDA is a group of volunteers selected from the community to promote health services for five households in the community. Note that the 27 TBAs trained were part of the Alamata Town District health services prior to the facility taking deliberate steps to improve institutional delivery services. After the training, TBAs agreed to counsel and accompany pregnant women to the health facilities for delivery. One of the key success stories of this process was having the lead TBA, famous for home deliveries, refer pregnant women to the health facilities. The TBAs were attached to HEWs for supervision purposes. The telephone numbers of the HEWs and the ambulance were given to the TBAs for easy contact.
- Discussed service delivery improvements at the facility level.
- Increased the health centre and hospital focus on cleanliness, referral for use of the ambulance available at the hospital, training of health staff (one midwife and one nurse), provision of free health service delivery to pregnant women and lactating mothers, introduction of emergency obstetric care at the hospital and initiation of delivery services at the health centre. Through WV and other sources, they acquired critical materials such as a delivery couch and MCH drugs.



- Withdrew the service of providing and refilling delivery kits (gloves, soap, Gentian Violet, Tetracycline, eye ointment, cotton, etc.) to traditional birth attendants to promote institutional delivery. The district health office worked in collaboration with the Relief Society of Tigray to provide incentives for TBAs in the community.
- Institutionalised cultural practices that do not affect the health of the mother or the delivery outcome, such as the coffee ceremony, celebrating the birth of the child and placing a picture of Saint Mary in the waiting and the delivery rooms.
- Worked on ways the health workers would handle mothers when they come for delivery. This led to better practices and behaviours among the health workers, such as courtesy, creating a better delivery environment and improving the linkage with HEWs and the HDA.
- Documented all the pregnant women in each of the *kebeles* (villages); these are continually followed up to the point of delivery. This early identification, registration, referral and follow-up of mothers made a great contribution to uptake of services.
- Tracked and monitored the performance of *kebele*-level HEWs.
- Sensitised the traditional and *kebele* leaders on the need for institutional delivery and the leadership support they could provide.
- Implemented the HDA policy, which the Ethiopian government introduced around the time of improving institutional deliveries within the district. The Women Development Armies (WDAs) are community-selected volunteers and model mothers who have a better understanding and practice of the health extension packages. The health extension package comprises 16 interventions targeting the household (HH) level. They cover MCH (including nutrition), hygiene, sanitation, and infectious and communicable diseases. Each WDA leader has responsibility for five households. They know which mothers are pregnant and they refer the pregnant women to the extension workers. Currently health workers continue ongoing assessment of pregnant women and lactating mothers. Mothers receive prevention of mother-to-child transmission of HIV (PMTCT) services, and after delivery they are referred for immunisation services. Community HEWs also register all pregnant women, document the expected delivery date and follow up at home (at least 90 per cent).

The district tapped into this opportunity to integrate the 27 previously active TBAs into the HDA structure. Rather than support them to conduct deliveries, the district focused on training them on key maternal issues and turned them into mobilisers for health-facility service usage – discussing the benefits of institutional deliveries and risks of home deliveries.

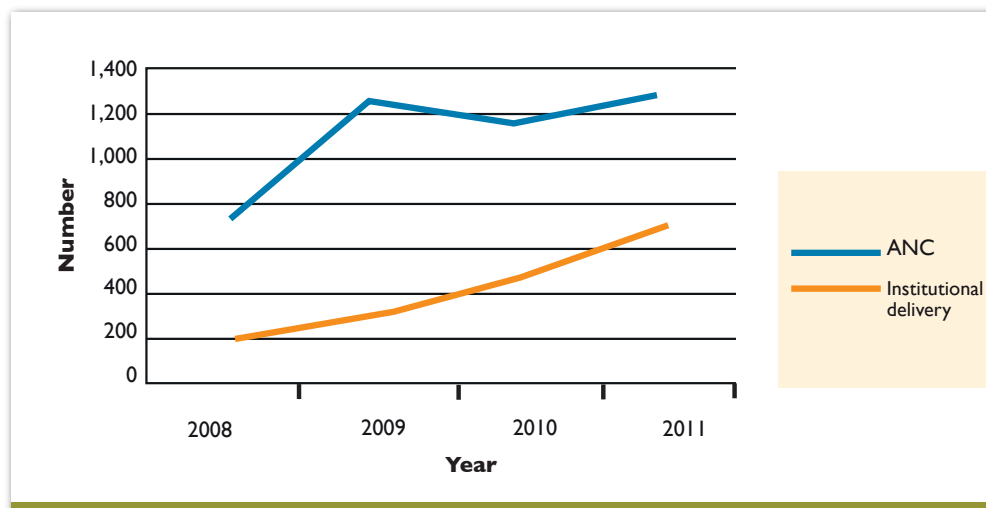
## 1.4 Achievements

Alamata Town District health services registered various achievements that resulted in the district progressing from the worst-performing district in the Southern Tigray Zone to the best-performing district. Below are highlights of achievements and trends.

## Antenatal care and institutional delivery

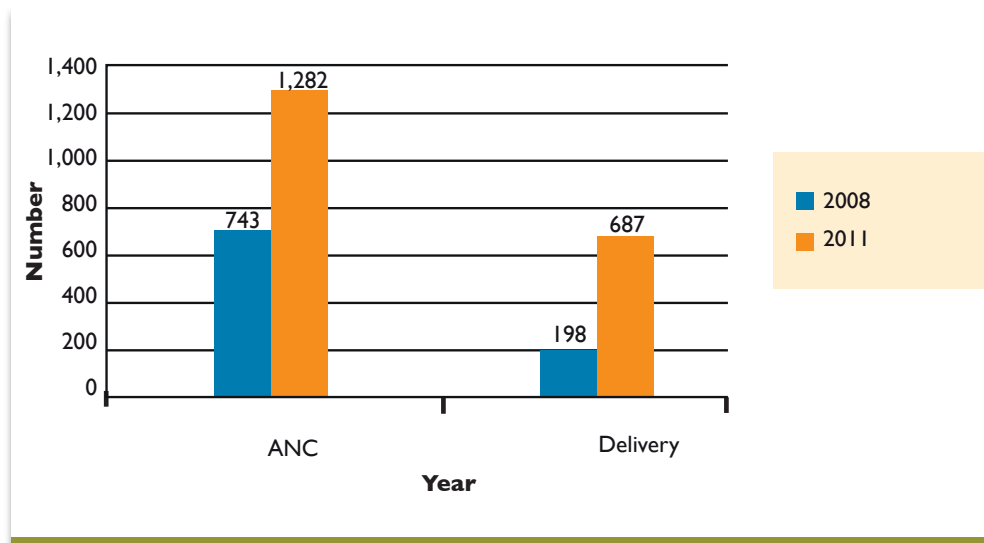
- Following the training of mothers and TBAs and the sensitisation of the community groups, a sustained increase was observed in the number of mothers coming to the health facilities for delivery. Emphasis on institutional delivery also led to an increase in the uptake of ANC after one year of intervention; there was a slight drop in year two and an increase in year three. (See Figure 1.)

**Figure 1:** Trend of ANC and institutional delivery in Alamata Town District (2008-2011)



- According to key-informant interviews with health-facility personnel, it is estimated that home deliveries have declined from 50 per cent to 7 per cent. Data for home deliveries cannot be generated from the health management information system (HMIS) because TBA activities were scrapped from the HMIS. Health-facility data showed there was a clear improvement in uptake of ANC and institutional delivery services, with an increase of 72.5 per cent in ANC services and 246.9 per cent increase in deliveries. Figure 2 shows the performance in Alamata town prior to the intervention in 2008 and again in 2011, when the analysis of the post intervention was done.

**Figure 2:** Baseline and post-intervention in Alamata Town



## Prevention of mother-to-child transmission of HIV

- The number of women who know their HIV status has increased. All women who attend ANC are tested for HIV, and those who are found positive are registered for PMTCT and linked to one of the five HIV-positive mother-support groups. Based on the July 2011 annual District Health Office report, 860 women were enrolled for PMTCT services, compared with only 38 women in 2008. This high level of enrolment can be attributed to the deliberate identification and follow-up of pregnant women for health-facility services.

## Mothers and family involvement to support MCH usage

- Mothers indicated that they are advising other mothers to deliver in health facilities. They also reported that they discussed the benefits of MCH services with their partners and asked for their support in using the services. Mothers are happy for their own and health workers' role in preventing illnesses such as HIV and ensuring delivery of healthy children.
- Regarding inclusion of men in family involvement, TBAs reported that during the WV training women were also encouraged to educate their partners on ANC and institutional delivery. The HDA also encourages men to take care of women during home visits. Participation during PMTCT and support begins at the time of the marriage. (They should test before they get married.) Currently the community is also carrying out HIV testing before marriage.

## 1.5 Success factors, gaps, challenges

### Success factors

- The close interest of the Mekelle Regional Health Bureau in what was happening with the health services in Alamata
- The Alamata Town District health services team's commitment to addressing the problem of poor performance
- The decision to conduct a study to clearly understand and define the problem of home deliveries
- The adoption/integration of cultural practices and beliefs valued in home deliveries, such as the coffee ceremony and celebration of the birth
- The availability of partners such as Intra Health, Organization of Social Services for AIDS and World Vision to support various components of the intervention
- Winning over the chief TBA
- Understanding the risks and benefits of home and health-centre delivery
- Using HIV, an already felt problem, as an entry point of emphasis for institutional deliveries
- Introduction of the Women Development Army, with one of its roles being to ensure close follow-up and counselling of mothers
- District provision that if a woman dies as a result of a home delivery, the TBA and husband are held responsible for that maternal death
- Use of critical community structures such as elders, Kebele leaders and faith-based organisations to emphasise the message of the benefits of institutional deliveries
- Continued training of TBAs, mothers and spouses, and leaders on the benefits of institutional deliveries and the risks associated with home deliveries

## Gaps

- Shortage of finances for training, hence heavy reliance on partners such as World Vision.
- Lack of emphasis on the birth preparedness plan. For instance, mothers have to call for the ambulance at the onset of labour.
- Shortage of delivery equipment (e.g. vacuums, Ambubag, delivery sets, Autoclave).

## Challenges

- Cultural beliefs (such as fear of death and fear of annoying the spirits in the home, which can result in death), systems and practices. Some of these beliefs have had an impact on the appreciation of immunisation and family-planning services.
- Limited male involvement in PMTCT services.
- Unwillingness of some TBAs to stop home-delivery services in the community because they fear a loss of dignity and they feel they are addressing a need. 'I will not stop helping mothers deliver at home because I have a call to humanity for the mothers who still want to deliver at home,' said one TBA in a Focus Group Discussion (FGD).

## 2 Focal Nutrition Learning Centres: Using locally available resources to improve child nutrition in Burundi

### 2.1 Rationale for the intervention

Burundi is faced with a burden of chronic malnutrition. According to the 2010 DHS report, three out of five children under 5 (58 per cent) suffer from stunting; almost half of these (27 per cent) suffer severe chronic malnutrition, while 6 per cent are wasted. The State of the World's Children report 2009 (UNICEF), states that 39 per cent of children under 5 are underweight (moderate and severe malnutrition, 2000–2007). Anaemia prevalence in children aged 6 months to 59 months is also high, standing at 45 per cent according to the 2010 DHS report. Poor feeding practices, poor hygiene and a high prevalence of communicable diseases contribute to the high level of malnutrition within Burundi communities.

A 2010 Knowledge, Attitude and Practice study by UNICEF shows that complementary feeding after six months is insufficient in both quality and quantity. The same study showed only 32.9 per cent of children under 2 receive three meals a day. The quality and diversity of meals is not adequate. Only 27.8 per cent of children from rural areas aged 6 months to 11 months receive a meal containing the three food groups. The food is poor in protein. The children eat mainly grains, tubers and other roots (45.5 per cent) and fruits and vegetables (27.7 per cent), while the number who receive meat, eggs or milk products is low (7 per cent for meat, 8.8 per cent for eggs and 6 per cent for milk products).

A review of the survey findings in the World Vision operation area showed high levels of chronic malnutrition among children under 5 (Table I).

**Table I:** Malnutrition levels in Burundi area development programmes (ADPs)

ADP	Stunting	Underweight	Wasting (GAM)	Year survey conducted
Bugenyuzi	53.0%	37.9%	6.2%	July 2009
Gashoho	55.3%	32.4%	4.8%	Oct 2010
Gasowre	57.8%	35.4%	5.6%	Nov 2010
Gitaba	54.0%	34.9%	7.4%	June 2012
Ntunda	63.7%	31.0%	5.7%	July 2012

### 2.2 Intervention objectives

- Rehabilitate malnourished children
- To prevent new cases of malnourishment
- To sustain best practices using locally available food stuffs

### 2.3 Key actions taken

To fulfil the objectives, World Vision Burundi introduced the *Foyer d'Apprentissage et de Rehabilitation Nutritionelle* – FARN (Nutrition Education and Rehabilitation Centers). FARN is a local learning centre where mothers learn about complementary feeding practices in order to improve the well-being of children affected by malnutrition.<sup>7</sup>

<sup>7</sup> *Focal Nutrition Learning Centers: Using Locally Available Resources to Improve Child Nutrition. Field Experience in Burundi* (August 2012) (internal document).

This approach, endorsed by Burundi's Ministry of Health (MoH), is being implemented in World Vision ADPs. FARN uses similar principles to Positive Deviance Hearth (PD/Hearth) and its purpose is to rehabilitate malnourished children under 5 by using locally available food products, mobilising the community and inducing behaviour change using the behaviour change communication approach.

## About PD/Hearth

PD/Hearth is an internationally proven community-based model for rehabilitating malnourished children in their own homes. It targets moderately and severely underweight children aged between 6 months and 36 months. World Vision followed all the steps for its FARN implementation. Community mobilisation started with engagement of the local leaders and identification of volunteers. The community set its own criteria to select volunteers: can read and write; has well-nourished children; has a clean house, having a toilet and with animals living in a separate building; is a model in the community; and can commit time to facilitate the FARN sessions and work for the community for free. Both sexes were equally represented. The main activities of the volunteers were as follows:

- Sensitise the community and conduct screening.
- Maintain the registers with child's name, mother's name, father's name, child's age, child's weight and height at admission and after 12 days and 30 days, attendance at FARN sessions and date.
- Analyse the data and capture records of all the children identified as moderately malnourished for rehabilitation in FARN, or refer children with severe malnutrition.
- Suggest recommended food types and other contribution for FARN sessions.
- Follow up mothers in their homes after the 12 days of FARN sessions. This ensures that mothers continue practising the behaviours they learn during the FARN sessions, such as diversifying the food and washing their hands before preparing the food and feeding. The fact that they are not having readmissions is an indicator that the mothers are practising what they learn.
- Identify and prepare the location for PD/Hearth sessions. The home where the Hearth was established had to belong to a Positive Deviant family – a family with a well-nourished child. It also needed to be hygienic, spacious and easily accessible by most members of the community.
- Mobilise the mothers to contribute water, firewood and food such as sweet potatoes, cassava, bananas, beans and vegetables. In some sessions mothers contributed 100 Burundi francs each, which was used to buy cooking oil, small fish and groundnuts. World Vision provided cooking utensils, mats and the tarpaulin for shade.
- Through hill<sup>8</sup> leadership, sensitise the communities on Growth Monitoring Promotion (GMP) and remind mothers to take their children for GMP activities.

For each hill, positive deviance inquiry (PDI) was conducted once. Since there is only one hill-level leadership and volunteer group conducting the session at each hill, there was only one FARN session conducted in one household. During the training of facilitators, a food composition table was used to calculate the nutritional requirements, which were then converted to the local units. However, filling the iron requirement from locally available foods during the menu-planning meeting was not possible. Table 2 shows a child's sample menu prepared during training. It was not possible for all volunteers to conduct visits every one to two days. They did, however, manage to conduct weekly visits, depending on the need.

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<sup>8</sup> A hill is a local administrative unit at the village level in Burundi.



**Table 2:** Sample menu prepared during a Hearth session

Food/meal	Weight in grams	Home measurement
1. Lengalenga	80 gms	Handful
2. Cassava (pate)	25 gms	2 Tablespoonful
3. Haricot beans	50 gms	Handful
4. Oil	10 gms	2 Tablespoonful
5. Salt	2 gms	2 Pinches
6. Groundnut	50 gms	Handful
<b>Snack</b>		
Banana	48 gms	1 small piece

## 2.4 Achievements

### Sessions held and volunteers mobilised

Two hundred and five sessions were successfully conducted in 48 hills (see Table 3). A total of 510 volunteers were trained to facilitate the FARN sessions.

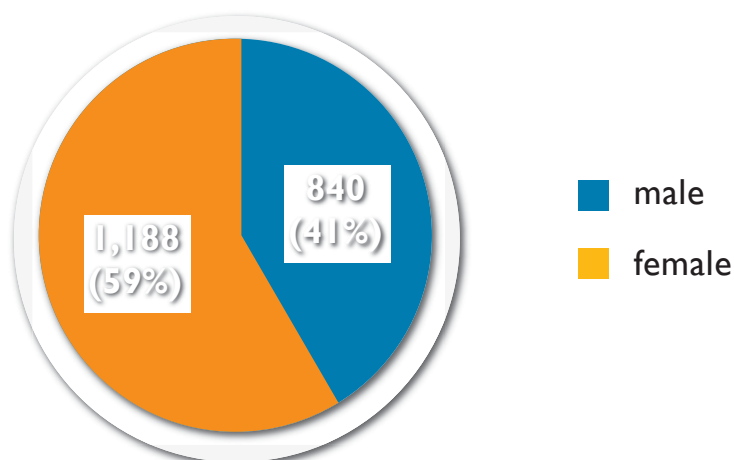
**Table 3:** Number of health sessions conducted and volunteers trained, by ADP

ADP	Hills	# of sessions			Children admitted			# of children rehabilitated		
		2010	2011	2012	2010	2011	2012	2010	2011	2012
Rugazi	12	24 (2 sessions per hill)	26	16	433	301	177	419	219	152
Gashoho	6		7	12		82	104		67	82
Gasorwe	11		19	32		155	308		131	218
Cankuzo	8		16 (two sessions per hill)	35		236	434		162	549
Rutegama	5		3	7		22	75		16	69
Mushikamo	6		2 (one session per hill)	6		26	78		19	54
<b>Total</b>	<b>48</b>		<b>205</b>			<b>2,431</b>			<b>2,157</b>	

## Children covered in FARN sessions

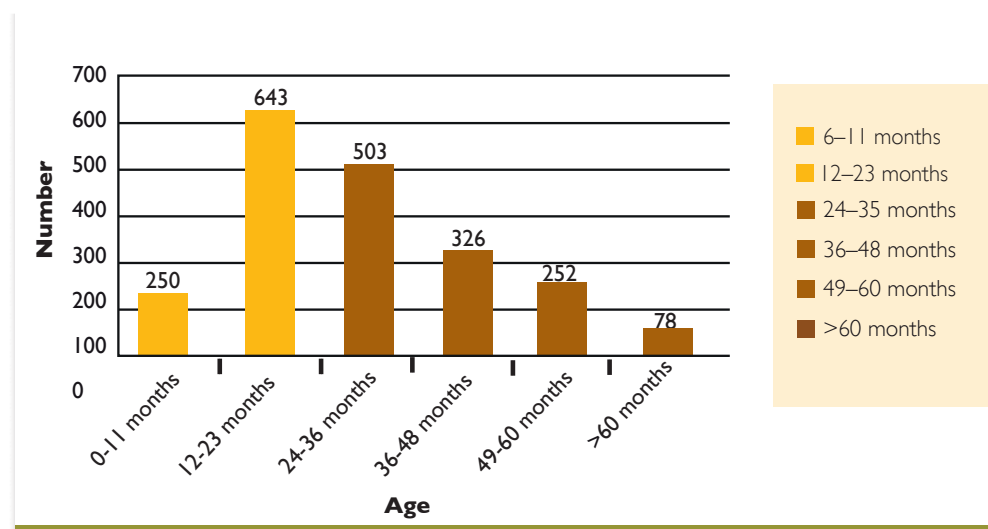
Out of the 10,568 children screened, 2,052 children were found to be underweight and malnourished and were admitted to WV FARN sessions in FY 2011 and 2012. The average number of children per FARN session was 11. Among the participants, 59 per cent were female and 41 per cent male children under 5 (Figure 3).

**Figure 3:** Total number of children in WV FARN program in 2011 and 2012 (N=2,028)



The majority of children who participated in the Hearth sessions were aged 12 months to 23 months, followed by those aged 24 months to 35 months. Nearly half (43.5 per cent) of the total number of children who participated in the FARN sessions were under the age of 24 months (Figure 4). This provides a huge window of opportunity to prevent the impact of chronic malnutrition and its irreversible consequences.

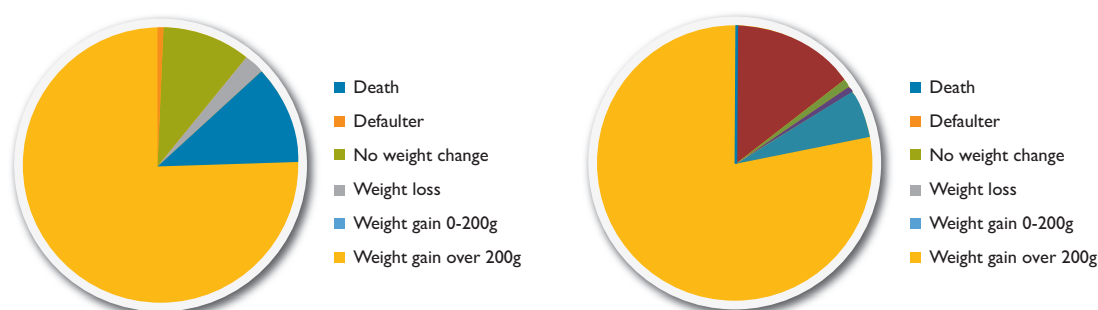
**Figure 4:** Age distribution of children admitted to FARN 2011 & 2012 (n=2,052)



## Rehabilitation outcome

**Recovery rate at 12 days and 30 days of FARN sessions:** Among 2,052 children in the programme, 2,022 completed the 12-day sessions. Of those, 1,526 (76 per cent) gained the weight needed for transfer to the home visit, with a 1 per cent defaulter rate (Figure 5). During the 2011 implementation period, many of the FARN sessions did not measure the weight of children at 30 days. This is because the volunteers were not trained to track the weight of children once they were discharged from the programme. However, in 2012 the volunteers weighed a total of 807 children and compared their weight with their admission weight. Overall, 631 (78 per cent) of the children had gained over 400g at one month, meeting the programme graduation criteria. At 30 days, the proportion of children defaulting from the programme had increased to 14 per cent (Figures 5 and 6).

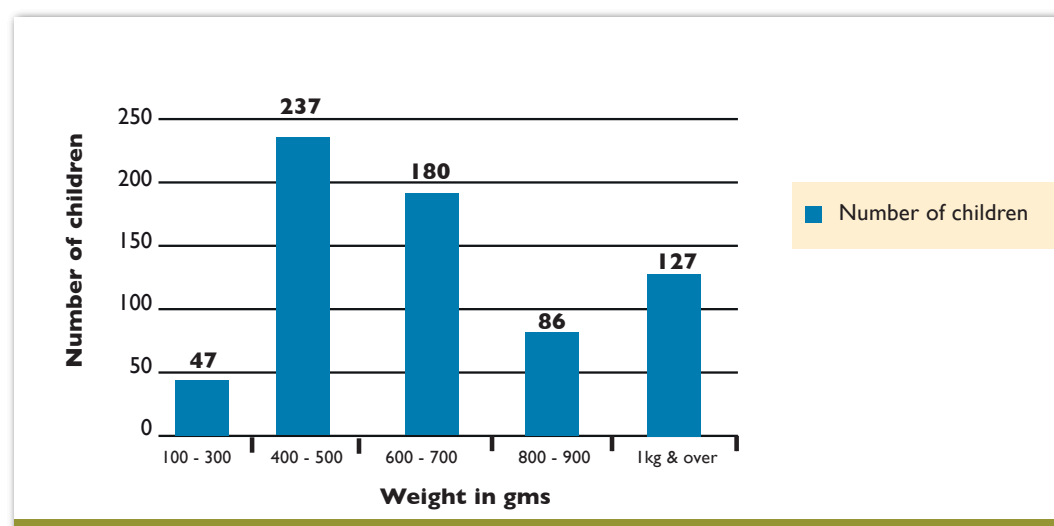
**Figure 5:** FARN outcome indicators at 12 days (N=2,022) **Figure 6:** FARN outcome at 30 days (N=807)



The outcome of the integrated health services was that children received benefits such as deworming, vitamin A and the linkage to health services. The ADP manager at Gashoho stated that children in their ADP were enjoying good health. The local government also extended its request to expand the service.

**Average weight gain:** By the end of the 12 days, the average weight gain of the programme was 373g. By the end of the 30 days the average weight gain was 689g. The distribution of the weight gain is summarised in Figure 7 below.

**Figure 7:** Distribution of weight gain by the of 30 days (n=677)



## Impact of FARN on overall malnutrition in the community

Growth analysis using the World Health Organization (WHO) standard: Using Standardized Monitoring and Assessment for Relief Transition (SMART) software, workers conducted analysis to assess the level of malnutrition at admission, at 12 days and after 30 days of involvement in the FARN programme. Improvements in child growth are shown in Table 4. The result was that the level of severe underweight has declined from 49.2 per cent to 17.2 per cent (WAZ score  $< -3$  SD, see Table 4). There is little change in moderate malnutrition, which could be the result of movement of many of the children from severe malnutrition.

**Table 4:** Levels of malnutrition after FARN sessions (N=677)

	No Malnutrition	At Risk of malnutrition (WAZ $< 0$ & $> -1$ SD)	Mild Malnutrition (WAZ $< -1$ & $> -2$ SD)	Moderate malnutrition (WAZ $< -2$ & $> -3$ SD)	Severe Malnutrition (WAZ $< -3$ SD)
Admission	0.0%	4.9%	16.2%	29.8%	49.2%
12 days	1.5%	6.7%	20.2%	31.9%	39.7%
30 days	2.3%	17.4%	37.0%	26.1%	17.2%

### Case study I: World Vision field experience and its contribution to the development of national level FARN guidelines

The FARN approach is among the community-based nutrition components of the national protocol of management of acute malnutrition which was validated in April 2010. After the protocol validation, the nutrition department of the government of Burundi and its partners embarked on a process to develop FARN national guidelines. WV Burundi was among the partners that contributed to the development of these guidelines. A meeting of various partners was held in the MoH in 2011 to present the FARN approaches they were using. World Vision participated in this meeting and shared the Rugazi FARN experience. In August 2011, at the request of MoH, World Vision shared the guidelines it is using to roll out FARN in its operation areas. A five-day workshop was organised in Gitega Province in December 2011 to design the first draft of FARN guidelines for Burundi.

WV Burundi's Health, Nutrition and HIV programme officer was on the six-member committee tasked to finalise the draft guidelines. The other committee members were from International Medical Corps, World Food Programme (WFP), UNICEF and the government. Based on the recommendation of the Gitega workshop, the committee conducted a field visit to FARN sites, including World Vision's, and reviewed the implementation feasibility and drew lessons before finalising the FARN guidelines.

World Vision was invited to participate in the finalisation and adoption of the FARN national guidelines workshop held on April 26 and 27, 2012, in Gitega Province. During this meeting, the World Vision Nutritionist specialist Aristide Madagasha made a presentation on the World Vision implementation strategy. The decision to request World Vision to make a presentation followed a joint UNICEF-WFP field visit to Rutegama, Rugazi and Gasorwe ADPs, April 24 and 25, 2012.

Following this meeting, a technical committee was set up to finalise the FARN national guidelines document. Again, World Vision was selected to be a part of this committee, which also had representatives from UNICEF, WFP and the Ministry of Health nutrition department. World Vision's major input was required for implementation modalities, especially budgeting for FARN session activities, specifying key inputs that need to be planned.

During the first week of the national forum for nutrition and food security (December 2011) WFP and UNICEF asked World Vision to make a presentation on PD/Hearth and the implementation process. It was the first time the government organised a forum to discuss nutrition and food security issues with all the partners involved in nutrition and food security activities. The forum also attracted participation from regional leaders of UN agencies.

## 2.5 Success factors, gaps, challenges

### Success factors

- Community participation and active involvement is the backbone of the FARN programme – a key success factor. Community involvement can include providing leadership, sensitisation, identification and support to the volunteers, identifying households to host the FARN sessions and contributing the food and equipment needed for the FARN sessions. The health promotion technician for Karuzi describes the community as highly willing to participate and contribute to the FARN sessions.
- The experience at Gashoho ADP illustrates the community contribution. The FARN sessions are organised with volunteers selected from the community with the leadership of the hill leaders. The group has about equal representation of men and women. This has helped to involve men in the promotion of the programme. Currently 115 trained volunteer community workers are actively involved, with a retention rate of 95.8 per cent. World Vision provides a raincoat and a transport allowance when the volunteers travel for training, but there is no other incentive.
- In one of the community meetings a volunteer said, 'We are working for our own children in the community and the children of Burundi. We work to protect them from illnesses; we are happy with the work and will continue working until there are no malnourished children in the community. The relationship with the family is good and that is motivation for us.'
- Initially men thought that if the mothers took food from their homes to the sessions, then the children at home would not have enough to eat. Fathers also did not understand how mothers could spend 12 days at the Hearth sessions. Volunteers and community leaders held discussions with the men and realised that one of the major concerns was the time the mothers spent at the Hearth sessions. They agreed to spend a maximum of two hours at any Hearth session.
- Before starting PD/Hearth, World Vision entered a Memorandum of Understanding with the MoH to implement FARN in the community. As the implementation started, World Vision field teams met with the district and provincial offices to discuss the implementation process. Table 5 describes how partners were involved during the FARN implementation.

**Table 5:** Role of Partners' in FARN implementation

Partners	Role of partners
HC/health promotion technicians	<ul style="list-style-type: none"><li>• Follow up activities and monitoring of rehabilitated children.</li><li>• Training volunteers.</li><li>• Conduct screening and growth monitoring, de-worming and vitamin A supplementation.</li><li>• Examination of children with malnutrition and treat them, select cases and treat for illnesses and refer cases with medical complication to stabilisation centre.</li><li>• Training, sensitisation of mothers and supervision of community health workers and volunteers' activities in the community.</li></ul>
The District and Provinces	<ul style="list-style-type: none"><li>• Supervision and extension plans to other areas but these are at early phase.</li><li>• Ownership of the approach and support.</li></ul>
Community and Hill leaders	<ul style="list-style-type: none"><li>• Sensitisation and community mobilisation.</li><li>• Support to the volunteers to effectively provide their services.</li><li>• Contribute food, refer children for screening.</li></ul>
World Vision	<ul style="list-style-type: none"><li>• Facilitate MoU with partners and allocate the fund.</li><li>• Transport fee during training, conduct joint supervision and review meeting.</li><li>• Assign focal person.</li><li>• Implement integrated projects that support FARN activities.</li><li>• Shared its experience and provided a field-based learning to inform the national FARN guideline development (refer to the case study I).</li></ul>

## Challenges

During a key-informant interview Alexis Kabona, a Pathfinder employee who works on health and nutrition programmes in the district, identified the following challenges to FARN implementation: over-population, limited land size and low family-planning practice.

Other major challenges emerged from key-informant interviews and focus group discussions with World Vision staff, health workers, provincial and district officials, volunteers, and the beneficiaries. They are summarised as follows:

- lack of growth monitoring and promotion in the community
- lack of institutionalisation of the FARN activities as part of the outreach activities; only children who come to the curative services are currently getting growth monitoring
- limited field-level staff and lack of transportation to conduct on-site support and ensure quality of the FARN sessions and data management
- food shortage in some seasons and lack of or poor quality of oil
- mothers bringing similar types of food
- reluctance of some community members, for religious reasons, to allow weighing of children
- high population pressure
- women's lack of decision-making power on resources.



## 3 Defaulter tracing: Using defaulter tracing for essential maternal and child health (MCH) services in Bondo District, Kenya

### 3.1 Rationale for the intervention

Bondo is one of 37 districts of Nyanza Province in Kenya, with a total area of 1,084 km<sup>2</sup>, of which 500 km<sup>2</sup> is Lake Victoria, the second largest fresh water lake in the world. It borders Busia District to the west, Siaya District to the north, Suba District to the south and Rarieda District to the east. There are six inhabited islands and 66 beaches.

Bondo District has one of the highest infant mortality rates in Kenya, at 110 infants per 1,000 live births, while the under-5 mortality rate is 208 per 1,000 live births. Maternal mortality stands at 620 per 100,000 live births, well above the national figure of 488 per 100,000 recorded by the Kenya Demographic and Health Survey 2008–2009.

The district has 34 health facilities, comprising 1 hospital, 7 health centres and 26 dispensaries. The government owns the hospital, 6 health centres and 18 dispensaries; the others are owned by private sector/faith based organisations.

For three or four consecutive years the indicators for essential MCH services were not good, with skilled birth attendance standing at 17 per cent, full immunisation in the 50s, fourth ANC visit and family planning (FP) low. The Annual Operating Plan 6 (AoP) indicators became a decisive point in May 2011. Immunisation coverage was below 60 per cent, though the national target is 80 per cent; FP uptake was around 46 per cent; and ANC visits were also low (Bondo MoH). There were cases of drop out for services, meaning that those who initially reported for services did not return. There was no understanding of why clients were dropping out. It was equally confusing that, with the high numbers of CHWs, the district could not meet its targets. This observation indicated a need for an evidence base for decision-making. The district implemented the community health strategy in 2010 to ensure community use of the health facilities. However, realignment of community units to new policy started in March 2011.

The mission of community health services is for the community to become the means of social transformation for development at the community level by establishing equitable, effective and efficient community health services in community units all over Kenya.

The key focus for Bondo District was to revamp the CHW structure and establish a focus on defaulter tracing for immunisation and ANC. They did this by introducing an exit desk at all health centres, staffed by CHWs on a rotational basis; they also introduced an appointments diary in which they could track continuing users of health services and map the defaulters.

The district determined to change its seemingly gloomy scenario with AoP 7 (2011/2012). 'We thought we could accelerate CU coverage,' said Joel Milambo, community health strategy focal person, charged with ensuring the rollout of the new community health strategy. The District Health Management Team (DHMT) wanted a system that would be able to account for defaulters, especially pregnant women and children aged under 1 year, besides accounting for other health services.

### 3.2 Intervention objectives

Strengthening of defaulter tracing for essential MCH services by introducing an exit desk and an appointments diary in all health facilities was guided by three objectives:

- to improve community and facility linkage
- to establish an evidence base to inform MCH planning in the health facilities
- to improve uptake of ANC and immunisation services for mothers and children under 1 year.

### 3.3 Key actions taken

The district took the following actions as a way of strengthening the community health services strategy:

- revamped the old CHW structure, which had one CHW covering 20 HHs, and followed the new policy guidelines (2010) that provide for one CHW per 100 HHs; this new structure informed the recruitment of CHWs
- recruited CHWs and CHC members as per the new policy guidelines
- trained the CHWs
- conducted household mapping and registration, which is now done every six months
- instituted performance-based assessment for CHWs, identifying specific targets to meet
- hired an additional 10 community health extension workers (CHEWs) to supervise the CHW structure
- engaged key stakeholders, including provincial administrators such as chief, village heads, assistant chief
- disseminated the revised MoH reporting tools
- strengthened community dialogue days (discussing health issues with the community, informed by the indicators on the chalkboard) and action days (executing an action plan agreed on during the dialogue days) on a monthly basis
- introduced the exit desk staffed by CHWs on rotational basis
- introduced an appointments diary as a way of tracking defaulters at the exit desk.

### Engaging community health workers

#### Recruitment

From March to May 2011 the district placed advertisements in various sub locations, calling for CHWs. The village heads then identified CHWs to involve in the process. These were sent to the chief's *baraza* (community meeting), where they were vetted and recruited, following government guidelines. Recruitment took place between May and July 2011.

#### Training

After recruitment, CHWs received orientation and training on the community health services strategy in their respective sublocations. The last major CHW training that focused on community strategy was conducted in October 2011. Due to limited resources, this training ran for 10 days instead of the stipulated six weeks. The 10-day training covered community case management; community HMIS; TB/HIV; disease prevention and control; water, sanitation and hygiene (WASH); and community maternal and newborn health. It is important to note that all 363 CHWs have received training.

#### Job aids

Following training, CHWs received various tools to do their work, including the household register (MoH 513), the CHW service delivery logbook (MoH 514), which is filled in on a monthly basis to generate data, and a chalkboard for the health facilities. The chalkboard provides a glimpse of the health status of any given facility. CHWs also received the standard MoH community referral forms.

Besides the tools, CHWs received other job aids such as badges, bags and Information, Education and Communication (IEC) materials specifically focusing on MCH.

### **Household mapping and registration**

Following the training, the first CHW activity was household mapping and registration. Depending on the number of households a CHW had to cover, the exercise took from five days (for those with less than 100 HHs) to two weeks (for CHWs with more than 200 HHs). The mapping was done with a key focus of establishing a number of MCH-related indicators, including the number of pregnant women, number of children under 1 year, number of children exclusively breastfed, number of women of reproductive age.

### **Target setting**

After the mapping exercise, CHWs set targets to achieve on a monthly basis. The idea behind this exercise was to ensure that as the CHWs did their work, they had a true picture of their catchment areas and would know what particular households to prioritise for visits.

### **Continuing training**

The CHWs received continuous training from various partners. Some of the training provided was on mother-child integrated programming, reporting tools and infection prevention and control.

### **Staffing the exit desk**

On every working day (Monday to Friday), an assigned CHW will be at the health facility from 8 a.m. to 4 p.m. and will generate a list of patients who are expected to come for services and those who have defaulted. This process is facilitated through an appointments diary.

### **The appointments diary**

The appointments diary is a critical tool designed to track continuing service users. The service users are identified from the ANC and immunisation registers. It was noted, however, from the visited sites that use of this tool is not standardised. The entries vary with the CHWs. In one case, for example, diary entries reflected a compiled list of defaulters at the end of the day; others had simply marked participants, providing no summaries, and records for some months were missing. In another diary, both new and continuing clients were registered.

As the appointments diary was distributed to the health facilities, no specific training on its use was provided. This left the CHWs without adequate support for using the tool.

### **Remuneration**

Community health workers are volunteers. Bondo District, however, is fortunate to have a partner Maternal and Child Health Integrated Programme who has committed to provide a stipend of 2,000 Kenyan shillings (Kshs – approximately US\$25) to the 363 CHWs in the area. This stipend is based on the amount stipulated in Kenya's March 2011 community strategy policy guidelines. However, the stipend is not guaranteed. A worker must score at least five out of seven points in a month in order to receive this money. The areas assessed for performance are:

- referral of at least two pregnant women
- referral of a child for immunisation
- participation in dialogue and action days
- household visits
- complete and timely submission of reports
- community mobilisation
- defaulter tracing.

**Figure 8:** Defaulter tracing flow chart



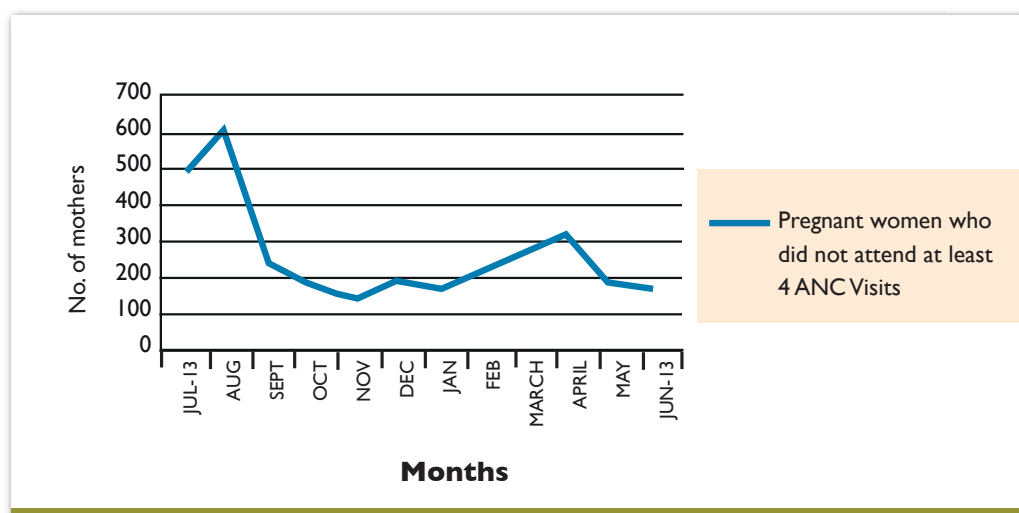
### 3.4 Achievements

Strengthening the defaulter tracing for essential MCH services with the introduction of an appointments diary was the key activity in Bondo District, guided by three objectives. This section spells out the achievements the district has registered from June 2011 to July 2012.

#### The appointments diary

The appointments diary to facilitate defaulter tracing was successfully introduced in all the three divisions, enabling Bondo District to track targets and generate data that inform their planning. One of the indicators of interest for management is the number of pregnant women who do not attend at least four ANC visits as shown in Figure 9. The DHMT indicated that tracking such information enables them to systematically plan for improvement as they are now able to generate an evidence base.

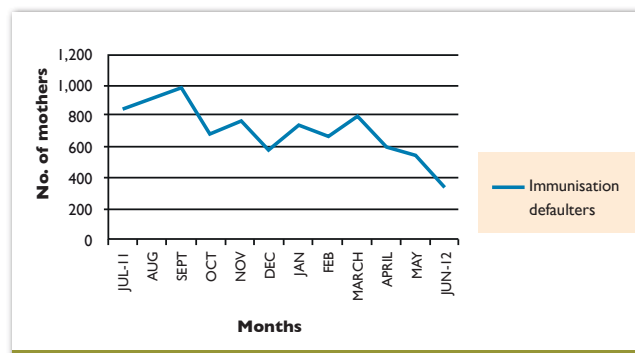
**Figure 9:** ANC non-attendance in Bondo District



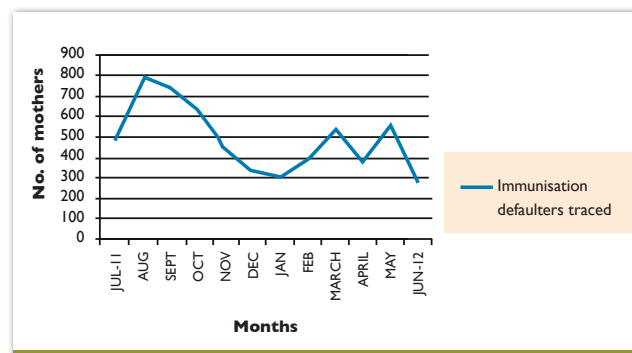
#### Defaulter tracing

Although it was not possible to establish all defaulters identified across the different services, there were records for immunisation (recording both defaulters that were identified and those who were traced and subsequently took up services). Another proxy indicator for defaulter tracing was the number of pregnant woman referred, as shown in Figures 10, 11 and 12.

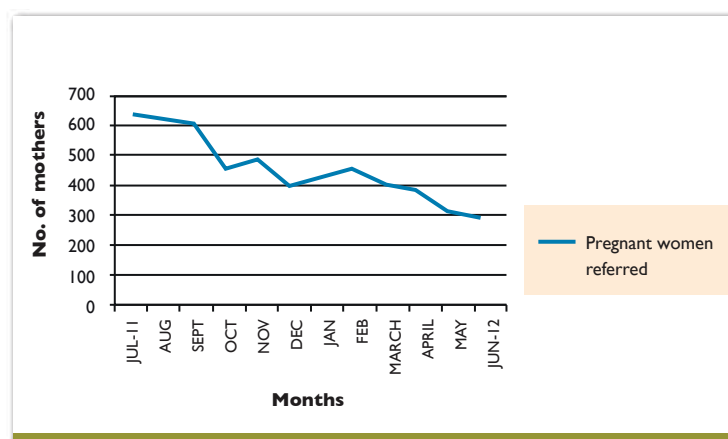
**Figure 10: Immunisation defaulters identified in Bondo District**



**Figure 11: Immunisation defaulters traced**



**Figure 12: Pregnant women referred to the health facilities in Bondo District**



## Strengthening health structures

The district established 26 community units (100 per cent) coverage, recruited 52 CHEWs and identified 260 community members.

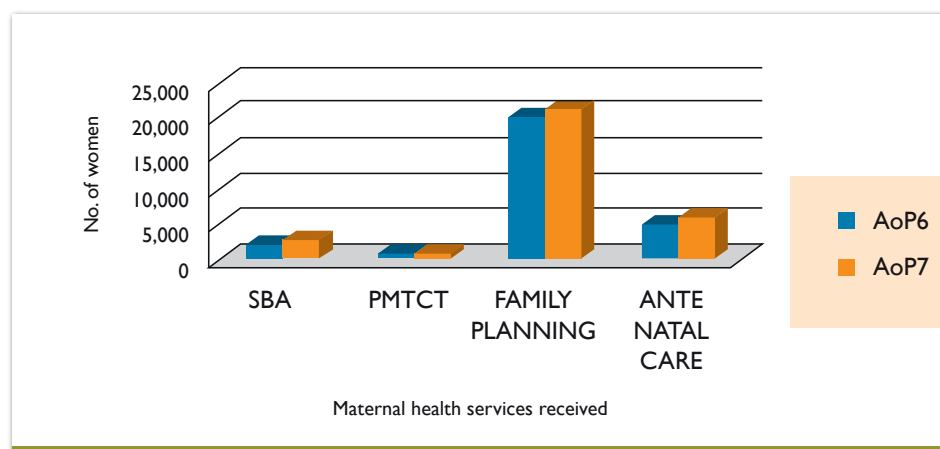
There was notable improvement in the level of commitment of CHWs. Respondents revealed that with the old policy, in which one CHW was assigned 20 HHs, CHWs were too many, and there was no demonstrable impact of their work.

## Increase in uptake of maternal child health services

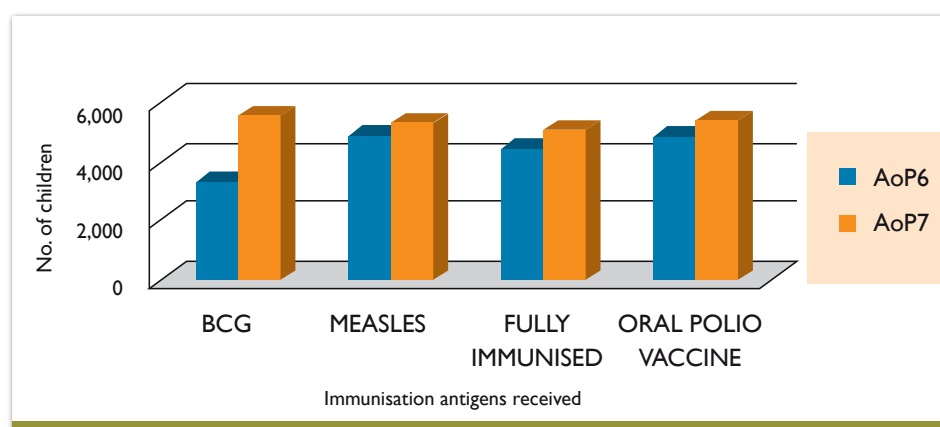
There was an increase in uptake of MCH services. Attendance at the fourth ANC appointment increased by 17 per cent (from 4,995 clients in AoP 6 [2010/11] to 5,868 clients in AoP 7 [2011/12]), skilled birth attendance by 28 per cent (2,444 mothers in AoP 6 compared with 2850 in AoP 7), family planning by 6 per cent (20,335 clients in AoP 6 compared with 21,478 in AoP7) and PMTCT by 9 per cent (1,122 mothers in AoP 6 compared with 1,226 mothers in AoP 7). (See Figure 13.) Uptake of immunisation services for *Bacillus Calmette–Guérin* (BCG) increased by 67 per cent (5,484 children received the BCG antigen in AoP 7 compared to 3,277 the previous year). (See figure 14.)



**Figure 13:** Uptake of key maternal health services in Bondo District



**Figure 14:** Uptake of immunisation services in Bondo District



## Case study 2: ANC and Immunisation support groups at Got Matar Health Centre

The process of defaulter tracing for essential MCH services led to some other innovations. Got Matar Health Centre, a centre that was elevated from a dispensary level at the beginning of this year, introduced ANC-and-immunisation support groups.

According to the nurse in charge of this facility, this effort has seen more mothers complete the four ANC visits and all mothers in the group delivering at the facility. The other benefit is that mothers in the groups have been able to do exclusive breastfeeding. The groups run on their own. The facility becomes involved only to provide technical support when mothers are grappling with practical questions. Mothers meet on a monthly basis, and they have introduced 'Merry-go-rounds', where each mother contributes Kshs30. The money is pooled and given to one mother. Mothers are encouraged to use this money for their birth plans. The facility also ensures that mothers' ANC visits are scheduled on the same day as their support group meetings.

The facility has not gone without challenges: 'The dispensary was gazetted as a health centre, but in terms of staffing we have remained where we are,' said the nurse in charge. 'The workload is too much. We are multi-tasking to manage.'

## 3.5 Success factors, gaps, challenges

### Success factors

- Commitment of a partner to provide the performance-based monetary incentive. The government of Kenya stipulates a monthly stipend for CHWs of Kshs2,000 (approximately US\$25).
- Integration of the CHWs into the mainstream health-facility service provision, which won them more respect from the communities

### Gaps

- A lot is being done on the ground, but there is no systematic way of capturing the defaulter tracing activities that have reportedly been spread across all the 26 community units. The 363 CHWs are doing a lot of work that may go unrecognised due to lack of evidence.
- There has not been any detailed training on defaulter tracing for all cadres of health workers. This may affect the quality of service.

### Challenges

- Some religious practices (e.g. those of Nomiya church and the Roho movement, which keep children indoors for three months before 'exposing them' to the surrounding environment) results in members of such sects defaulting from key services.
- The migration pattern of the boarder population affects the outcome of the services. It is easy to lose follow-up as populations are not in one space.
- Sustainability of the programme beyond a committed partner is questionable.
- The quality of the data is a challenge. A number of indicators are not consistently recorded, which might lead to under- or over-reporting of results.
- Whilst the target for CHWs is form-four completion, the stipend, which is a major motivation, is not attractive enough to the target recruits. In an interview with a CHEW, he revealed that most of the recruits are below form four. People below this level find it very difficult to conceptualise the issues. The CHEWs have to spend more time addressing gaps.

### Service-specific challenges

- Long waiting time for the ANC profile, in some cases up to seven hours, especially for the first visit. This may affect subsequent visits. Part of the explanation for this is that government policy guidelines provide for detailed engagement with a mother on the first visit. One DHMT member said they need to treat clients as if they will not see them again.
- Fear of taking the HIV test.
- Pain of the vaccination shot.
- Perception that HCs are simply making profit off the user fees.
- Perception that male health workers will make sexual advances to the women.

## Time and costing analysis

### Time

The majority of CHWs who participated in the FGDs indicated that it takes an average of one-and-a-half to two hours to convince a defaulter to go back to the health facility for services. Some cases can take up to two days. This is dependent on a client's relationship with the CHW, client's perception of quality of services at the health facility, the level of support from the spouse, conflicting interests (e.g. whether to attend to other pressing needs) and distance to be covered. It is possible that such extra hours spent doing programme work may fail to be captured when planning CHWs staff hours and in turn become a source of demotivation.

### Costing analysis

It was not possible to ascertain the actual cost of what it takes to run a defaulter training. However, the following elements are of significant importance:

**Training:** This is a key component and a major expenditure area of a defaulter tracing programme. It is imperative that all training cost inputs be captured to paint a clear picture of what it takes to initiate and maintain a defaulter tracing programme. Demand for additional training sessions was expressed by CHWs in most the FGDs.

**Reporting tools and job aids:** Another major area of consumable expenditure worth costing is the community health information system, which includes development, production and distribution of the following reporting tools: household register (MoH 513), service delivery notebook (MoH 514), CHEWs summary report (MoH 515), CHW standardised referral form, mother and child health booklet (MoH 216), child clinic card, immunisation register (MoH 510), ANC register (MoH 45) and chalkboard (MoH 516). Currently these are procured in Nairobi and distributed to the field. Occasional shortages were reported by the District Medical Officer of Health (DMOH); in such cases, the forms are photocopied locally. Along with these are job aids/tools such as IEC materials, bags, T-shirts and badges which are issued to CHWs to facilitate their work.

**Airtime:** CHW use of the health facility's mobile phone to trace defaulters was reported. This has a cost implication in the purchase of air time to make calls.

CHW calls to escort clients to the hospital were reported in one FGD. It is important to capture these gestures as they have a bearing on the pressure of work on the CHW and the CHW may also be spending his or her own money to transport the defaulter.

**CHEWs' direct support to the CHWs:** This is another area that requires costing to monetise the inputs. These include supportive supervision, updates, on-job training and feedback sessions.

**Transport facilitation for CHWs e.g. bicycles:** CHWs receive bicycles to facilitate their home visits as well as motivate them. However, many of the CHWs have not yet received bicycles.

## 4 Community health worker (CHW) functionality assessments: A means to strengthen the health system in the region

### 4.1 Rationale for the intervention

The USAID Health Care Improvement (HCI) project developed the Community Health Worker Assessment and Improvement Matrix (CHW AIM) toolkit to help organisations assess CHW programme functionality and improve programme performance. Built around a core of 15 components deemed essential for effective programmes, CHW AIM includes a guided self-assessment and performance-improvement process to help organisations identify programme strengths and address gaps. Through discussion and review of current practices, the process assists understanding of best practices, builds consensus about and commitment to change and provides guidance for improving functionality.

CHW AIM assists the assessment, improvement and planning of CHW programmes by deepening understanding of the elements of successful programmes and the use of best practices as an evidence-based approach to improvement. The assessment is based on alignment with national guidelines.

World Vision International made a decision to use the CHW AIM in 2011. In East Africa, health systems strengthening is one of the health and nutrition strategic approaches focusing on equipping CHWs to facilitate implementation of core health and nutrition interventions. The tool was therefore embraced to achieve the focus on HSS.

### 4.2 Intervention objectives

The CHW AIM tool has clearly spelt out objectives for any functionality assessment. These objectives provide the basis for strengthening a community health system. The three objectives are:

- to assess functionality and guide improvement in programmes delivering services at the community level
- to provide action planning and best practices to assist in strengthening programmes
- to map functional CHW programmes and gaps in coverage.

### 4.3 Key actions taken

- Review of country CHW policy.
- Adaptation of the validation tool as per the CHW policy.
- A three-day stakeholders workshop for the scoring of the programmatic components. This activity includes reviewing the tool and providing a clear explanation of what is entailed.
- A validation exercise – interviewing CHWs to validate the information provided in the stakeholders workshop
- A review of the scores normally provided in the initial meeting with stakeholders.
- Development of an improvement matrix clearly spelling out what actions need to be done, and who does what  
Various stakeholders usually take up different aspects for improvement.

### Process of rolling out the functionality assessments

Opportunities to adapt the tool came with grant opportunities that were intended to work through the existing community health structures, specifically the East Africa Maternal, Newborn and Child Health (EAMNeCH); Access to Infant and Maternal Health (AIM-Health); Sustainable Transformation in Agriculture and Nutrition (SUSTAIN) in Tanzania; and Act for Lifesaving Actions to Reach Mothers (ALARM) in Burundi.

The East Africa health and nutrition team has worked with NOs to support engagement with ministries of health to profile the importance of CHW functionality assessment as a key process in community health systems strengthening. Accordingly, representatives from five NO health teams and MoH delegates were supported to attend the community health worker programme sustainability and scalability meeting organised by USAID-HCI in June 2012.

CHW AIM proposes 15 programmatic components that have been found to contribute to an effective CHW programme based on international best practices. These are recruitment, CHW role, initial training, continuing training, equipment and supplies, supervision, individual performance evaluation, incentives, community involvement, referral system, opportunity for advancement, documentation and information management, linkages to health systems, programme performance evaluation and country ownership.

For each of the 15 components, four levels of functionality are described: non-functional (level 0), partially functional (1), functional (2), and highly functional as defined by suggested best practices (level 3).

## 4.4 Achievements

The initial assessments were done in November 2011, and these continued throughout calendar year 2012. So far 15 assessments have been conducted, and 27 are planned for FY13. (See Table 6.)

**Table 6:** CHW functionality assessment status, December 2012

National office	Number of assessments done	Funded by	Districts covered	Total # of districts in which WV is operational	Assessments planned for FY13	Number of health facilities covered
Burundi	2	ALARM – AusAid	2	8	2	19
Kenya	5	AIM – Irish Aid	1	55	11	15
		EANMNeCH	1			
		Sponsorship	3			
Rwanda	1	EANMNeCH- AusAid	1	13	9	22
Tanzania	2	AIM	2	21	0	11
			1		1	15
		EANMNeCH	8			133
		SUSTAIN-Canada				
Uganda	5	ADP budget	6	30	4	68
		AIM				
		EANMNeCH				
		CHN campaign				
<b>Total</b>	<b>15</b>		<b>25</b>	<b>127</b>	<b>27</b>	<b>283</b>

These assessments have strengthened World Vision's collaboration with the WHO. In Uganda, for example, World Vision worked closely with WHO in conducting the CHW functionality assessment alongside a health services availability mapping (SAM) in two districts. Although WHO had been conducting SAMs in Uganda, the team mentioned they had never done an assessment at the first level of service provision.

In Rwanda, World Vision is closely working with WHO and the MoH for the assessments planned for FY13.

Through the assessments conducted so far, CHW programme functionality was found to either be non-functional or partially functional, a finding that reveals the need to pay attention to this first level of service provision, given that WV is community based.

A consistent trend in findings (14 out of 15 assessments) is that of highest scores in recruitment and initial training, with lowest scores in equipment and supplies, supervision, incentives and referral system.

For the various assessments done, an improvement action plan was developed as a means to follow up prioritised areas for systems strengthening. Kitgum District, where a special project was solicited, is a good example of what happens once the functionality assessment is done and an improvement matrix is developed.

### **Case Study 3: Kitgum District in Uganda benefits from the CHW systems strengthening approach**

*By Geoffrey Babughirana, EAMNeCH project manager, and Anita Komukama, research and documentation officer*

The EAMNeCH five-year project was started in July 2011 with the purpose of improving maternal, newborn and child health (MNCH) in selected communities four East African countries: Kenya (Kilifi District), Rwanda (Gicumbi District), Tanzania (Kilindi District) and Uganda (Kitgum District).

The project areas were chosen because of poor health outcomes, particularly related to MNCH and specifically MDGs 4 and 5. They had weak health systems, characterised by inadequate government capacity to recruit, train and retain motivated health personnel at both the community and facility levels. Health information systems were weak, with a lack of information flowing from communities to the Ministry of Health and vice versa. Despite many households growing food for themselves, nutrition knowledge around storage and usage was inadequate. Access to appropriate sanitation services and hygiene knowledge was also limited. Policies relating to MNCH services existed; however, their implementation in the four project areas was weak.

The major approach for the US\$9 million project is ensuring increased access to services through improved health system strengthening and education at both the community and facility level.

Through the Kitgum Cluster In Uganda, World Vision is partnering with the Kitgum District Local Government to implement the EAMNeCH project to contribute to the improvement of maternal newborn and child health in Lagoro and Mucwini sub-counties by 2016. The project supports the District Health Team (DHT) in an endeavour to improve equitable access to and demand for MNCH services

One of the avenues through which access to and demand for MNCH services has been solidified is through the support of the Ministry of Health's community health care system of Village Health Teams (VHT). This entails supporting the linkage between the households in the community and the health system for increased access to MNCH. The VHT members are empowered to educate and promote health-care practices, hygiene and sanitation; promotion of maternal and child health; conduct active case finding; appropriate timely referral to the nearest health unit; and mobilising for health services at the integrated outreach posts. However, for the VHTs to be able to contribute positively to the above outcomes, the district needed to know the status of their functionality, using the Ministry of Health 2010 VHT strategy as the bench mark.

Using the CHW AIM tool, the overall assessment revealed that the CHW programme is at a partially functional stage. Supervision, individual performance evaluation, opportunity for advancement, and documentation and information management were found to be in critical need of improvement.

Whereas there were seemingly 321 VHT members, 255 (79 per cent) did not qualify to be VHTs as they had not undertaken the five-day basic training as stipulated in the Uganda VHT policy. Of the 321 who were doing VHT-related work, 47 per cent reported having the basic tools and equipment to serve the 7,617 households in 120 villages.

### Intervention

With the findings from the assessment, the EAMNeCH project embarked on a district-led process to implement a systematic VHT capacity-building plan. Since then 255 VHT members have been trained and equipped with the basic toolkit (register, counselling cards, participants' manual for reference, and referral form). VHTs do quality village walks and they update their registers on a monthly basis. Each of the VHT members is in charge of at least 30 households.

To strengthen the linkage between the health centre and the community, the project is supporting and facilitating VHT monthly review and status update meetings. On average, 157 VHT members interact with the health centre staff. These meetings remind VHTs of their monthly schedules, including mobilisation for outreaches, WASH implementation, upcoming mass immunisation campaigns, quality VHT village walks, updating registers, reporting and submission of reports.

As part of the support offered to the health centres to contribute to the government's Primary Health Care strategy, the project has undertaken to support the VHTs as they conduct mobilisation and monthly outreach sessions. A total of 30 static outreach posts are being supported every month to conduct GMP, ANC and prenatal care (PNC) services. Two VHT members on a rotational schedule at the health centres support the health workers in this regard. VHTs mobilise for these outreaches whenever they take place.

### Achievements

- In a period of 18 months following the intervention, the overall rating has improved from 42 per cent to 68 per cent. The district generally still has a challenge with two components: opportunity for advancement, and incentives and remuneration. The project is part of the work of the team that is facilitating a VHT productivity study conducted by MoH; the plan is that this will guide the system on how to provide performance-based sustainable pay for the VHTs.

- Data from the HMIS from June to December 2012 presents evidence that, due to the intensification of integrated outreaches, 230 of the 781 First ANC attendances received the services through the outreaches, giving a 29.4 per cent contribution; of the 434 fourth ANC attendances, 146 received the services through the outreach services, giving a 33.6 per cent contribution. This applies to all the other indicators in the HMIS.
- From the recently concluded Lot Quality Assurance Sampling survey conducted and comparing to the baseline survey, it was established that VHT support of pregnant women had increased from 30.8 per cent to 42 per cent; coverage for counselling on ferrous sulphate and folic acid (FEFA) for the last pregnancy increased from 34.5 per cent to 48 per cent; and 17.5 per cent to 61.1 per cent coverage on health education (that includes danger signs in pregnancy using a job aid) for the last pregnancy. It is also important to note that attendance at outreach GMP sessions, including weighing and charting the child health card, increased from zero to 74 per cent. \
- Due to the efforts of the VHTs in doing community mobilisation for integrated outreaches, cumulatively for the reporting period (June 2012–December, 2012) 4,817 children have been offered GMP services and 791 women offered ANC services, of whom 376 have taken FEFA at the outreach, 212 have taken the HIV test to contribute to the elimination of mother-to-child transmission of HIV (eMTCT), and 415 were given intermittent presumptive treatment as a presumptive treatment for malaria during pregnancy. Because the project is gender sensitive, 40 couples were tested for HIV; 264 were offered PNC services; 264 took a family-planning service; and 55 men received a family-planning service.

#### Cost of intervention

So far, over a period of two years, the costs have totalled US\$40,943. This includes support to the integrated community outreach (\$3,700), monthly coordination meeting with the health centre staff (\$12,300) and capacity building, including the VHT functionality assessment processes (\$24,943).

## 4.5 Success factors, gaps, challenges

### Success factors

- A new focus on community health, especially as 2015 draws near and MDGs 4 and 5 are far from reaching their targets. Now, with the one million CHWs initiative launched in January 2013, there is a window of opportunity for embracing CHWs.

### Gaps

- Limited knowledge of CHW policies, even among cadres of the health system that are meant to provide guidance and support to CHWs, is a setback to ensuring functionality of CHW systems.

### Challenges

- The approach does not evaluate the quality of services delivered by individual health workers. The methodology relies on secondary evidence and self-reports for assessment; therefore, information collected cannot be used to evaluate individual CHW performance or CHW contributions to coverage, effectiveness or impact.





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