

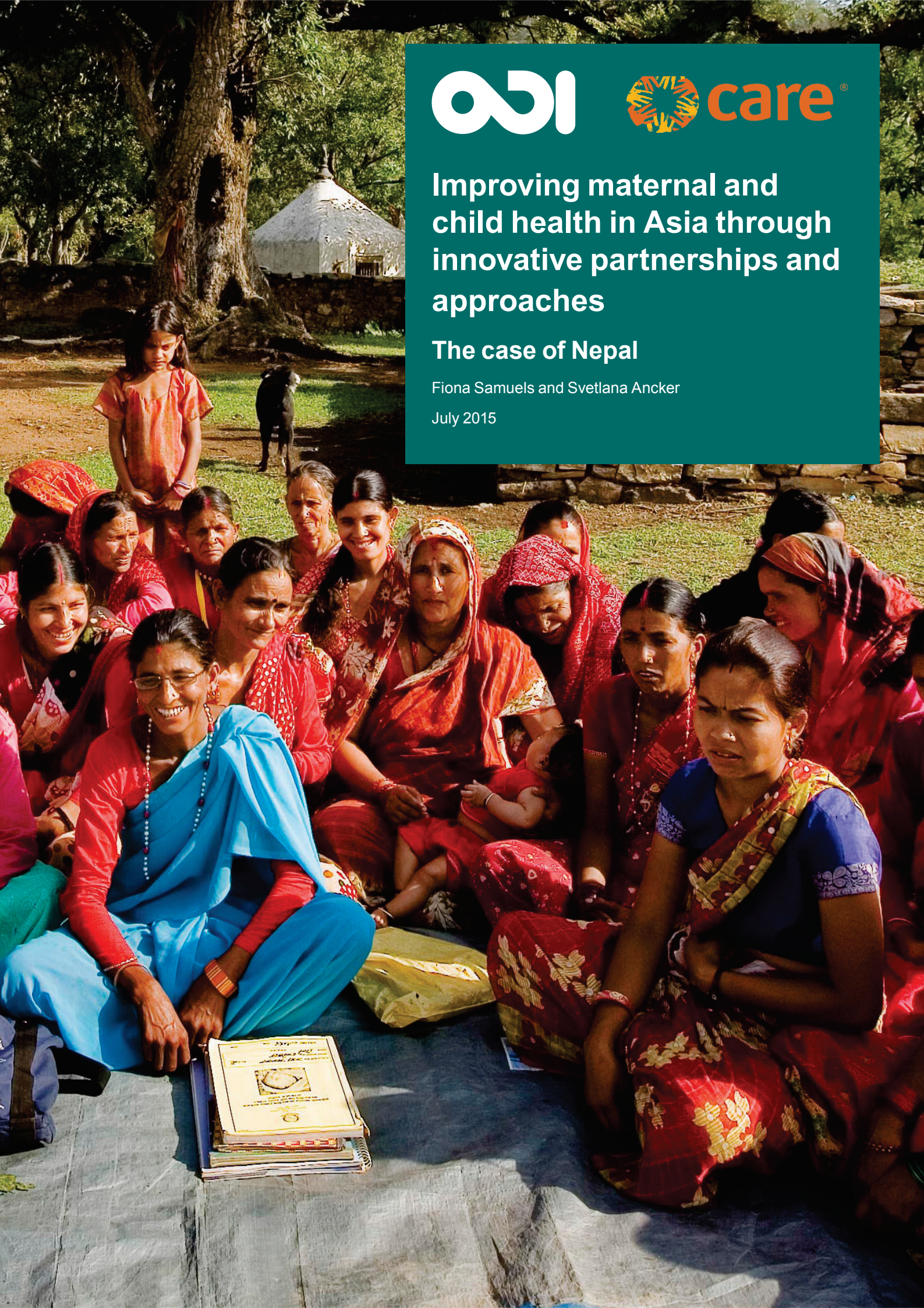


Improving maternal and child health in Asia through innovative partnerships and approaches

The case of Nepal

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Cover image: Community healthcare meeting, Nepal, © CARE/Kate Holt, 2010

Inside image, page 6: Health care worker in Nepal, © CARE International, 2015

Inside image, page 13: Colour coding of key indicators on maternal and neonatal child health, © CARE International, 2015

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Abbreviations

ANC	Antenatal care	POSS	Pregnancy outcome surveillance system
ANMS	Auxiliary nurse midwives	SATH	Self-applied technique for quality health
BC	Birthing centre	STIs	Sexually-transmitted infections
BCC	Behaviour change communication	VA	Verbal autopsy
BPP	Birth preparedness package	VCT	Voluntary counselling and testing
CHD	Child health division	VDCs	Village development committees
CHSB	Community health score board		
CHWs	Community health workers		
DFID	Department for international development		
DHO	District health office		
FHD	Family health division		
FP	Family planning		
FWDR	Far west development region		
GSK	GlaxoSmithKline		
HAs	Health assistants		
HFOMCs	Health facility operations and management committees		
HMIS	Health management information system		
HWs	Health workers		
INGOs	International non-governmental organisations		
MGs	Mothers groups		
MMR	Maternal mortality ratio		
MNCH	Maternal and neonatal child health		
MoHP	Ministry of health and population		
PEs	Peer educators		



This briefing is the first of a series of three that summarise key processes and outcomes emerging from an innovative partnership between CARE International UK and GlaxoSmithKline (GSK) to improve maternal and child health in six Asian countries: Afghanistan, Bangladesh, Cambodia, Laos, Myanmar and Nepal. The partnership focuses on increasing the effectiveness and capacity of frontline health workers (HWs), strengthening the health system and enhancing community mobilisation. The first phase of the partnership has been implemented from 2011-2015; a second phase is now being planned for 2015-2020. This briefing focuses on the initiative's project in Nepal: Strengthening Approaches for Maximizing Maternal, Neonatal and Reproductive Health (SAMMAN). The project completed its first 3-year phase in June 2015 and there are plans for a second project phase starting in 2015 and running until 2018.

Following an overview of maternal and neonatal child health in Nepal and in the districts covered by the project, the briefing outlines the background to the SAMMAN project itself. It then describes the key aspects of the two main project approaches: one focused on the community level, and the other on health systems. Finally, the briefing highlights the innovative tools and mechanisms that have been used by the SAMMAN project to improve maternal and child health in remote and marginalised areas of Nepal. Further details of these tools can be found in the references in the final section.

1 Overview of maternal and neonatal child health in Nepal and in SAMMAN project districts

Despite progress in maternal and neonatal child health (MNCH), Nepal still has a high rate of maternal mortality (with 281 women dying from pregnancy-related causes per 100,000 live births) and neonatal mortality (with 33 infants dying within the first month of life for every 1,000 live births). There is a high (25%) unmet need for contraception and more than 80% of women give birth at home without the help of a skilled birth attendant. In addition, only 10% of health posts, the second-lowest government health facility at district level, are able to provide labour and delivery services. There are also large disparities in access to quality MNCH services. For example, a 2009 survey of 40 districts showed that although the share of deliveries attended by a skilled provider nearly doubled between 2006 and 2009, wealthy women were 12 times more likely to be attended by a skilled health worker during delivery than women in the lowest wealth quintile (Suvedi et al., 2009).

The Far West Development Region (FWDR)¹, where the SAMMAN project is being implemented, is one of the least developed regions in Nepal. In terms of health, the FWDR compares poorly to the rest of the country: only 29% of births take place at a health facility, more than 25% of women do not go for antenatal care (ANC) check-ups, more than half of mothers (51.6%) do not go for or receive postnatal care (PNC) services and about 63% of newborns are not taken to health facilities for a PNC check. About 12% (11.8%) of the region's people have migrated to other countries for employment and other opportunities

(Government of Nepal, 2011), and migration has fuelled the HIV epidemic in the region (Vaidya and Wu, 2011).

The FWDR is also characterised by gender discrimination. This includes limited investment in the girl child, the persistence of child marriage, specific traditions like *Chhaupadi*², *Badi*³ and a belief in witchcraft, patriarchal/discriminatory traditions like untouchability, restricted mobility for girls, and disparity in division of labour. The FWDR is very disconnected from the capital, Kathmandu, because of its remoteness, but it has a large number and a long history of humanitarian and development programmes run by international non-governmental organisations (INGOs) and the government.

CARE has been working in the FWDR for more than 32 years, particularly in the districts of Doti, Kailali, and Dadeldhura where the SAMMAN project is being implemented (Figure 1).

Kailali has the largest population in the FWDR, with 775,709 people (Government of Nepal, 2014). The district is known for its large number of former bonded labourers, who are poor and lack awareness of and access to reproductive health services, such as ante-natal check-ups and safe delivery. The maternal mortality ratio (MMR) in Kailali district is far higher, 263 deaths per 100,000 live births, than the national average of 229 per 100,000 (Suvedi et al., 2009). The MMR is even higher for some groups within Kailali – the Terai/Madhese people and members of lower-caste groups – at 307 per 100,000 (Suvedi et al., 2009).

1 Nepal is divided into three ecological zones – Mountain, Hill, and Terai – and five development regions: Eastern, Central, Western, Mid-Western and Far Western.

2 Chhaupadi relates to a range of restrictions placed on menstruating girls and women, including isolating them from other members of the household during menstruation, not allowing them to enter the kitchen or to touch water and food, and preventing them from eating milk products.

3 Badi refers to the so-called untouchable caste in Hindu religion. For decades, poverty has led Badi women to support their impoverished families through sex work, often from puberty. While for some this ends at marriage, the majority work as sex workers until they are no longer able to attract customers.

Figure 1 Map of Nepal showing SAMMAN project sites (Kailali, Dadeldhura, Doti)



Doti is a hilly district, with difficult terrain and is, therefore, relatively isolated. Accessibility to health facilities is challenging and mothers face problems in accessing quality health care because of the distance to health facilities and their extreme poverty, especially during their pregnancy and delivery, when they need emergency obstetric support and when taking care of their newborns. Over 40% of the district's people are considered to be poor and marginalised. Doti district has a high proportion of Dalit ('untouchable') caste members and a 2008-2009 study on maternal mortality and morbidity found that their MMR stands at 273 deaths per 100,000 live births, exceeding the national average by 44 deaths (Suvedi et al., 2009).

Dadeldhura is also a hilly district and faces various constraints and challenges in relation to MNCH. Approximately 27% of births are attended by a skilled provider, contraceptive prevalence stands at just 22.9% and 43% of mothers receive postnatal care. The district has the highest number of maternal deaths per year in the region, and there are significant numbers of neonatal deaths and stillbirths (Government of Nepal, 2009).

1.1 Overview of the GSK 20% Reinvestment Initiative and the CARE-GSK partnership

To help respond to a shortage of 7 million health workers worldwide and a growing overall burden of disease, CARE International UK has entered into partnership with GlaxoSmithKline (GSK) as the implementing partner of GSK's 20% Reinvestment Initiative in Asia. This corporate community investment initiative aims to reinvest 20% of company's profits into strengthening of community health systems in a number of least developed countries

where GSK operates. This strategic partnership between CARE and GSK focuses on improving MNCH by improving the quantity and quality of frontline community health workers in the most remote and marginalised communities in Afghanistan, Bangladesh, Cambodia, Laos, Myanmar and Nepal. Through a mix of programming, lesson-learning and advocacy efforts, the initiative hopes to galvanise further national and international action on the health workforce issue. The CARE-GSK partnership is about to complete its first phase (2011-2015) and plans to continue and scale up its projects in 2015-2020.

1.2 SAMMAN overview

The overall goal of the 2012-2015 SAMMAN project in Nepal is to improve MNCH by strengthening and increasing the effectiveness of frontline health workers to have a positive impact on MNCH goals. Specific objectives include the following:

- Increase the capacity of health workers at community level
- Enhance the effectiveness of community health systems
- Enhance the effectiveness of community mobilisation, and
- Leverage lessons learned on how to improve the effectiveness of health workers to increase their impact on maternal, neonatal and child health

The SAMMAN project works in close collaboration with Nepal's Ministry of Health and Population (MoHP) and its regional and district offices, community health centres, local NGOs, frontline health workers (HWs) and communities – a multi-layered approach to help

build a stronger healthcare delivery system. It does so by enhancing the skills of frontline HWs, including government-backed Community Midwives, other auxiliary health workers in health facilities and Female Community Health Volunteers (FCHVs), by providing equipment and supplies to health centres, and by facilitating effective supervision, coordination and support between HWs, FCHVs, government health centres and communities.

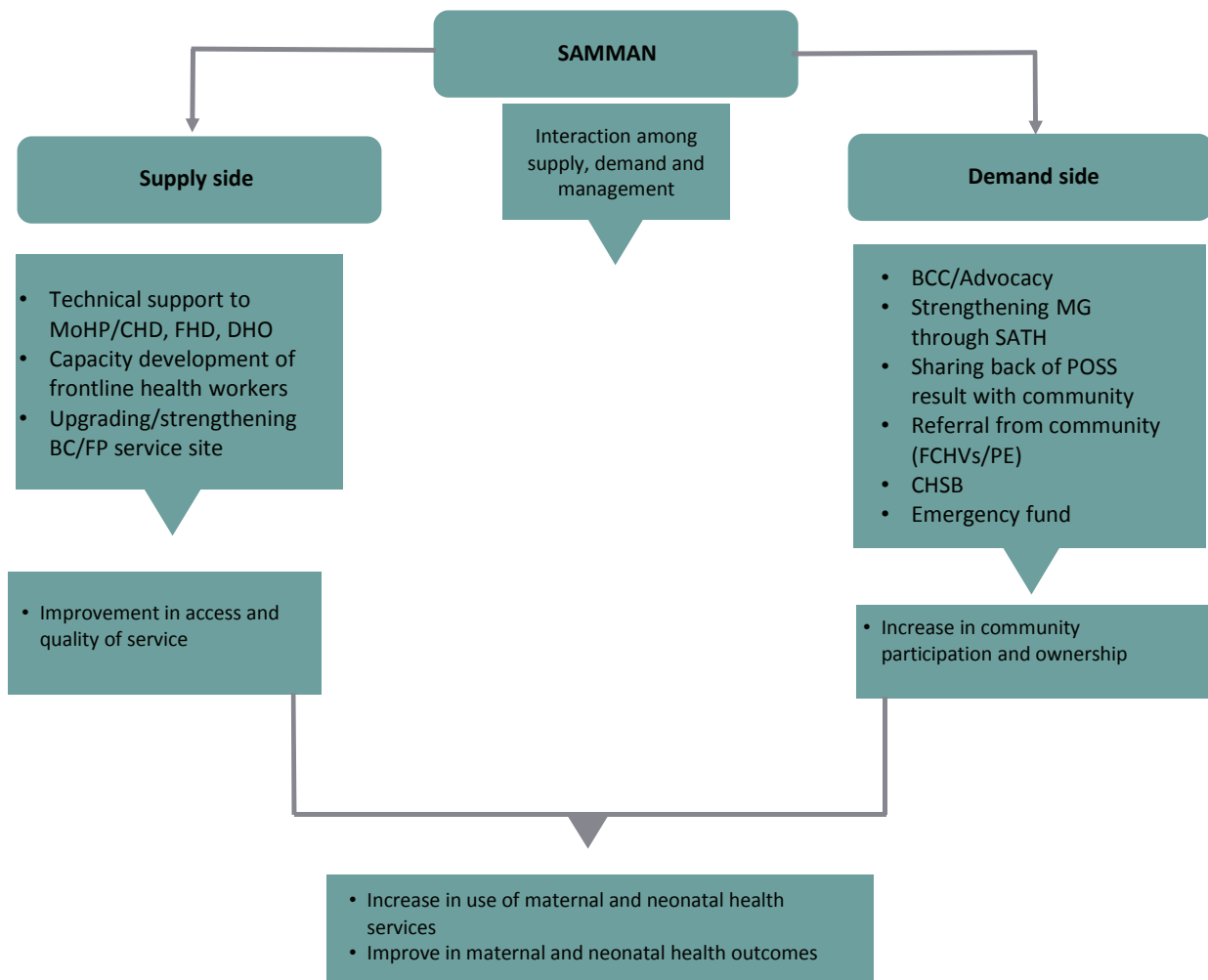
As well as building on existing structures and institutions, the project has used a number of innovative tools developed by CARE Nepal, such the Self-Applied Technique for Quality Health (SATH) where community members and frontline HWs participate in the mapping/identification of pregnant women, new mothers and newborn babies, track their use of healthcare services and discuss in Mothers Groups (MGs) the services, check-ups and care each mother needs and why.

The SATH and other tools, such as the Community Health Score Board (CHSB) (see section 3.2), also enable the community to have a say in how health centres are performing and the quality of services provided, creating a positive way for communities and health officials to interact.

Through such engagement at the community, district and regional levels, SAMMAN creates demand for health services and strengthens the ability of the health system to respond to communities' needs.

In total, the project reached 351,089 direct beneficiaries between 2012 and 2015, including women of reproductive age, pregnant and post-natal women and their babies. It also reached 591,461 indirect beneficiaries, such as relatives and other members of the community, and trained 1,472 Community Health Workers (CHWs) and 2,115 FCHVs. Figure 2 shows the various components of the SAMMAN project, highlighting both supply and demand side interventions. On the supply side, the health systems strengthening aspect has provided support to frontline HWs and has strengthened and upgraded different levels of health centres, aiming to improve access and the quality of services. On the demand side, behavioural change activities and advocacy with local government have been carried out, and, as we will discuss later in this briefing, a range of processes at community level have been supported that have, in turn, increased community ownership and participation.

Figure 2 The components of the SAMMAN project



2 Approaches to strengthen community-level institutions and health systems

This section is divided into the two main approaches used in the SAMMAN project: the first focuses on strengthening community level institutions and people and the second focuses on strengthening different aspects of the health system.

2.1 Community strengthening

Working in close collaboration with the MoHP, CARE has strengthened the capacity of two key cadres of health workers working at community level: FCHVs and peer educators (PEs). CARE has also strengthened the capacities of Village Development Committees (VDCs) and the Health Facility Operations and Management Committees (HFOMCs), which represent the lower tier of government working at community level.

Female Community Health Volunteers (FCHVs)

The FCHVs programme was initiated by the Government of Nepal in 1988 to support national health goals through community involvement in public health activities. FCHVs are unpaid, voluntary female workers who are nominated by their communities and MGs to provide health education and referrals to health facilities at the community level. Many FCHVs have 15-20 years' experience and are highly respected as health experts in their communities. They offer pre- and antenatal care, guidance on breastfeeding, general advice on health and family planning and steer local women through pregnancy and motherhood. FCHVs also hold monthly MG meetings where they provide health information and facilitate community dialogue on maternal health concerns. Working collaboratively with other HWs, FCHVs provide a critical link between the community and formal health services and institutions and have been successfully trained to conduct a number of additional services, including Birth Preparedness Planning (BPP), Family Planning (FP) counselling on birth control methods and pregnancy spacing, and the distribution of misoprostol, a medication used to prevent and treat postpartum haemorrhage.

Over the last three years (2012-2015) of the SAMMAN project a total of 2,115 FCHVs have been trained:

- 467 have received training on the use of the Community-Based Newborn Care package: many of these have been trained as trainers who now in turn, facilitate more training and provide neonatal care services at their community health facilities
- 467 of the FCHVs in Dadeldhura have been trained on the use of misoprostol and its distribution requirements (the project also supported the distribution of 2,210 reporting forms on misoprostol to district health offices to collect necessary data and fill gaps in reporting)
- 438 have received training on FP/MNCH and HIV/AIDS, with FCHVs receiving new and refresher training to enhance their capacity to deal with maternal and neonatal health issues, conduct awareness raising and prevention activities on HIV/AIDS, and support FP efforts
- 605 have received FP training for micro-planning and the use of situation analyses that help to identify issues, gaps, weakness and strengths in the FP programme and develop context-specific response plans
- 2,382 (Kailali: 1,256; Doti: 665; Dadeldhura: 462) participated in various district and national health forums, received orientation on different tools (e.g. SATH and CHSB) and have received technical and financial support for exposure visits within and beyond their districts.

Peer Educators

Peer education is an approach to health promotion whereby individuals from a target group provide information, training or resources to their peers to influence knowledge, attitudes and beliefs or behaviours (Kerrigan, 1999). The approach has been adopted by 30 Village Development Committees (VDCs) in Kailali, Doti and Dadeldhura districts. All VDC wards now have one male and one female peer educator. Over the three years of the SAMMAN project, 593 PEs have been trained. While there has been some drop out as a result of the migration of some male PEs to India, there are still 546 PEs working (269 Male and 277 Female). Thirty-eight percent are from marginalised communities (Dalit and the local indigenous population of Janajati).

Many of the PEs in the SAMMAN project are unmarried young people who are still in formal education, who act as

role models and spread health messages through schools, youth organisations and informal community networks. Their main purpose is to improve knowledge on MNCH, help to prevent HIV and other sexually-transmitted infections (STIs) and to promote healthy practices and behaviour. Their major activities include:

- the formation of a ‘five friends’ circle, where they disseminate information on MNCH health and HIV to five friends
- the promotion of safe sexual activities among peers and the distribution of condoms
- referrals of their peers to health facilities for treatment or counselling
- the distribution of information and education and communication materials
- participation in knowledge fairs and street plays to increase awareness at the community level.

Five main categories of information PEs provide:

- HIV/STI prevention: mode of transmission, high-risk behaviour, availability of voluntary counselling and testing (VCT) and other health services
- family planning: methods and their availability in health facilities, plus referral to FP services
- neonatal and child health: danger signs, referral to health facilities
- safe motherhood: birth preparedness and antenatal care, institutional delivery (i.e. delivery at the health facility, such as birthing center), postnatal care and new born care, iron-albendazole (iron supplementation to prevent anaemia)
- hygiene and sanitation (e.g. hand washing) and referral services.

By the end of the third year of the project, PEs had reached a total of 191,078 beneficiaries across the three districts. The numbers increased in each consecutive year – almost doubling during the lifetime of the project – from 42,136 in year 1, to 68,401 in year 2, and 80,488 in year 3, with each PE reaching a monthly average of 12 people. The majority of beneficiaries were female (72%) and most (61%) were aged 15 to 45, according to data collected between March and October 2014. Some 14.7% of the beneficiaries were pregnant women, 9.8% were post-partum and 15.6% were indirect beneficiaries, such as relatives and other members of the community. The majority of beneficiaries (60.7%) were women and men of reproductive age (15 to 45). Of them 36% were Dalit, 21% were Janajati and members of other castes and ethnic groups accounted for 43%. Overall, PEs have made a positive contribution to the increase in contraceptive prevalence rates (CPR) (e.g. in Doti, the CPR increased from 24% to 34% in 2013-2014) and to the growing demand for ANC, PNC and other health services.

Box 1 describes how one woman’s awareness was raised by a PE, leading her to take action and visiting the hospital that helped her to address a health problem.

Box 1: The impact of a Peer Educator

Becoming the mother of five children has not been easy for me. I used to have vaginal discharge which I usually ignored and never shared with others. As a matter of fact, I limited my movements outside of my house. In the meantime, my sister-in-law started working as a peer educator and thanks to her information and support I decided to visit the health facility. After receiving treatment from Mahakali Zonal Hospital, I was able to address my problem, prevent future complications and improve my quality of life.

Source: Mother, Jogbuda-4, Dadedhura

Village Development Committees (VDCs) and Health Facility Operation Management Committees (HFOMCs)

A VDC is the lower administrative level of the Ministry of Federal Affairs and Local Development and is responsible for generating resources to meet local needs. Each VDC is a budget holder at the local level and can allocate budgets for health facilities where necessary. There are currently 3,625 VDCs in Nepal, with several in each district. A VDC is divided into wards, with the number of wards determined by the size of the population in the district.

The purpose of VDCs is to organise people at a local level and to create a partnership between the community and the public sector to improve the service delivery system. A VDC has the status of an autonomous institution and authority to interact with the more centralised government institutions in Nepal. While each VDC gets government funding for various areas, such as management, health, education and women’s empowerment, the VDC and its members decide how to distribute state funding. It is important, therefore, to ensure that VDC members are aware of available government resources and funding, their rights and responsibilities and how they should prioritise health as a budget line item.

The SAMMAN project has worked with 102 VDCs and 8 municipalities to strengthen their Health Facility Operations and Management Committees (HFOMCs), which manage local health facilities, local resource generation, pool resources between service providers and service users, and support the delivery of quality health services at community level. Every health facility has one HFOMC, which meets once a month under the leadership of the local VDC Chair and is made up of local members, teachers, social workers, and FCHVs. There are 14 HFOMCs in Kailali, 14 in Doti and 16 in Dadeldhura.

The ability of the HFOMCs to advocate for health resource allocation, in particular for MNCH, has been strengthened by the SAMMAN project. Capacity building has included support for the full inclusion of under-represented groups in the composition of the committees, and the regular monitoring of HFOMCs through meetings

and workshops, as well as citizen monitoring and feedback. There have also been capacity assessments and orientations in 44 health facilities with members of the HFOMCs on their roles and responsibilities.

One key mechanism to improve local health governance and accountability and to encourage greater responsibility for health services resourcing has been the use of Community Health Score Boards (CHSB) (see section 3.2). Through such innovative tools, CARE was able to mobilise VDC resources for health, such as the hiring of new health staff or the building of birthing centres, the provision of extra support to FCHVs and health facilities, and meeting some key health targets, such as the achievement of full immunisation rates by eight VDCs.

2.2 Health-system strengthening

This section first presents data on the capacity building of health workers and then outlines the support provided by the SAMMAN project to health infrastructure across the three districts.

Training of health workers

Several of the cadres of health workers (HWs) are discussed here: Community Health Workers (CHWs), Auxiliary Nurse Midwives (ANMs), Health Assistants (HAs) and Staff Nurses. All of these are formal employees of the health sector, working at the community level as frontline health workers. HWs are critical to the improvement of MNCH and to the reduction in disparities in access to quality health services.

A total of 1,443 HWs have been trained over the three-year life-time of SAMMAN. Table 1 outlines types of trainings they have received, by district.

Support to infrastructure and medicine supply

SAMMAN has provided some support to the strengthening of health infrastructure, particularly through the upgrading of local health facilities to serve as birthing centres and equipping them to provide skilled delivery services. It has also provided essential medicines and equipment to a number of health facilities. Over the three years of the project, it has:

- supported 84 of the 108 birthing centres across the three districts to upgrade their services through the provision of essential medical equipment
- constructed four birthing centres buildings and three placenta pits⁴ in collaboration with the DFID-funded Community Support Program (CSP)
- supported the Seti Zonal Hospital in Kailali district to renovate its neonatal intensive care unit and construct its training hall for skilled birth attendants (SAMMAN together with CSP)
- supported 94 health facilities in Doti and Kailali districts with infection prevention training and supplies
- supported the MoHP/Family Health Division at the central level in piloting the distribution of calcium to 35,000 pregnant women
- supported the MoHP/Family Health Division through the distribution of misoprostol for the prevention of post-partum haemorrhage to 33,300 pregnant women in Doti and Dadedlhura districts
- supported the MoHP/Child Health Division with the distribution of chlorhexidine to prevent infection among 7,000 newborns in Doti and Dadedlhura districts.

Table 1: trainings received by health workers

Training	Trained HWs	District			Sex	
		Kailali	Dadeldhura	Doti	Male	Female
Skilled Birth Attendant training	24	10	4	10	0	24
Community Based Newborn Care programme training	233	0	205	28	Mixed group	
Training on use of misoprostol	233	0	205	28	Mixed group	
Birth Preparedness Package refresher training	177	177	0	0	Mixed group	
Training on POSS process and linkage with Health Management Information System (HMIS)	149	0	0	149	Mixed group	
Neonatal Intensive Care Training	4	4	0	0	0	4
Implant training	4	0	0	4	Mixed group	
FP/MNCH and HIV/AIDS training	113	All districts			Mixed group	
FP training for micro-planning	281	0	0	281	Mixed group	
Infection prevention training	123	56	0	67	Mixed group	
Training on use of chlorohexidine	48	48	0	0	Mixed group	
Training of trainers on Community Health Score Board (CHSB)	32	All districts			Mixed group	
MNCH Technical Support Visits	22	22	0	0	0	22
Total	1,443					

⁴ Placentas are difficult to burn, so pits are the preferred disposal method. The waste degrades into compost over time.

3 Innovative tools and processes

A number of innovative tools and processes were developed during the SAMMAN project or adapted from existing tools that were already being used by CARE elsewhere. Here we highlight key aspects of each tool, describing its purpose, application and key results.

3.1 Self Applied Technique for Quality Health (SATH)

The Self Applied Technique for Quality Health (SATH) is a community mapping tool that was developed by the

SAMMAN project team. Its primary purpose is to promote social inclusion through bottom-up participation. It aims, therefore, to improve the access of poor, vulnerable and socially excluded women to primary health care, increase community mobilisation and ownership around health and improve the use of available health care services.

Box 2: Colour coding of key indicators on maternal and neonatal child health



- House with pregnant woman (red tika)
- First ANC visits completed (brown triangular tika)
- Four ANC visits completed (brown square tika)
- Iron consumption (brown round tika)
- Non-consumption of iron (black round tika)
- Home delivery (green round tika)
- Institutional delivery (double green round tika)

SATH and Mothers Groups (MGs)

The SATH is implemented through Mothers Groups (MGs) led by FCHVs, which are informal self-help groups promoted by the Government: each ward in a VDC is supposed to form MGs that are composed of women of reproductive age⁵ and that represent women from marginalised communities. Their primary focus is on child care, primary health care, nutrition, sanitation, family planning, social justice and women's rights. Their ultimate goal is to promote/improve family health and serve as an informal platform for community discussion and dialogue on wider community development issues. Among their various roles and responsibilities, MGs select their FCHVs through general consensus, conduct monthly group meetings, receive health information from FCHVs and share other information that is relevant to their communities. MGs invite female representatives of the local government, teachers and representatives of NGOs to their meetings. They also evaluate the work of FCHVs and report to the local health institution each year.

The SATH process

MGs from areas with the poorest maternal and child health outcomes, as identified in consultation with District Health Offices, receive a blank SATH chart on which they map and track the maternal and child health status in their community. Facilitated by the FCHV, and based on core health indicators (such as the recommended number of ANC visits and the percentage of institutional deliveries⁶), members of the MGs identify houses with pregnant women, post-partum women and women of reproductive age, as well as the location of the nearest birthing centre and any other health facilities in their communities. Coloured stickers or *tika*⁷ are placed against each indicator on the map so that MG members can monitor the progress of particular women and discuss their needs during their monthly meetings (see Box 2 for the colour coding). Once SATH has been initiated, project staff follow up with the group on a regular basis to provide further support and address any emerging issues. At the same time, a quality assurance tool is also filled out to evaluate SATH activities and to ensure its proper implementation.

By using this visual approach to set standards for desired health behaviours and outcomes for themselves, women are not only applying peer pressure to improve health-seeking behaviour, but also actively identifying gaps that contribute to poor health outcomes, such as low levels of knowledge on maternal/child health or low rates of service use, and seeking ways to address

them. For example, in order to create a supportive and enabling environment for these women to claim their rights to healthcare and improve their health-seeking behaviour, their family members and decision-makers (such as husbands, in-laws and community leaders) are invited to group meetings and receive on-site coaching on maternal health issues from FCHVs. MGs have also been collecting voluntary contributions and, with support from CARE, setting up Emergency Funds to ease the financial burdens of seeking emergency healthcare. This process has also strengthened the capacity of FCHVs, who lead and facilitate discussions, and has empowered MGs to adopt and sustain healthy practices for better maternal and neonatal health.

Achievements of the SATH process

A total of 177 SATH processes were set up by MGs between 2012 and 2015. The achievements of these processes can be divided into three broad areas:

- promoting inclusion of community members in SATH processes (including marginalised groups)
- enhancing effectiveness in terms of the frequency of meetings and the quality of discussions on health, and
- improving health-seeking behaviour and the use of health services.

Of the 177 MGs using the SATH tool, we focus on 77⁸ MGs for this analysis: 29 in Doti, 22 in Dadeldhura and 26 in Kailali.

Promoting inclusion of community members: two measures of inclusion were explored.

- Coverage by SATH processes: of the 77 MGs reviewed that use SATH, 41 (53%) were able to include all of the households in their catchment area. Those in Kailali were particularly successful, with 22 of its 26 SATH-implementing MGs including all households in SATH meetings and discussions, while Dadeldhura was less successful with only 3 of the 22 MGs reviewed managing to include all households in SATH processes.
- Representation of marginalised groups in MGs: 24% of the members of MGs that used SATH were from the Dalit community, 17.2% were from the Janajati population of indigenous people and the remaining 58.7% were from upper caste groups. Overall, 41.2% of the total MGs members covered by SATH came from marginalised groups. Table 2 shows the numbers of

5 The suggested group size for MGs is 11 women in the mountainous regions and 15 in the hilly regions .

6 The government recommends 4 visits and rewards women NRS 400 per ANC check and NRS 1,000 for an institutional delivery, with the health worker receiving NRS 200 for delivery

7 A bright dot applied in the centre of the forehead close to the eyebrows, usually made of felt or thin metal and adhesive on the other side

8 Data from only 77 SATH groups were collected using the quality assurance tool

Table 2: Members of caste/ethnic groups within SATH-implementing Mothers' Groups

District	Total member of SATH MG			Presence at the most recent SATH MG meeting		
	Dalit	Janajati	Others	Dalit	Janajati	Others
Doti	204	95	612	146	72	428
Dadeldhura	289	29	694	140	21	372
Kailali	146	333	250	124	320	215
Total	639	457	1556	410	413	1015

MG members by district, ethnic group/caste and their presence at the most recent SATH MG meeting.

Enhancing effectiveness in terms of the frequency of meetings and the quality of discussions on health: various measures of effectiveness were explored, including the following.

- The regularity and scheduling (ideally monthly) of meetings: overall, 86% of MGs meetings were held on a regular basis and on the scheduled date (in Kailali it was 100%). More than half (52%) of the meetings lasted more than two hours and covered a wide range of maternal and neonatal health topics.
- The extent to which SATH meetings were facilitated effectively by FCHVs and attended by staff from local health facilities: around 90% of the SATH meetings were facilitated by FCHVs and 39% were attended by staff from local health facilities. In 70% of meetings, FCHVs were using supporting behaviour change communication and informational materials for more effective health education and awareness raising.
- The multiple choice survey revealed that 86% of the discussions at MG meetings were focused around maternal health, followed by neonatal health (54%) and family planning (49%).

Improving health seeking behaviour and the use of health services. Again, various measures were explored, including the following.

- A set of safe motherhood indicators (which include the numbers of ANC and PNC visits as well as levels of immunisation monitored by the MGs): these show positive trends, though the findings are difficult to interpret because there is no comparable baseline.
- Financial self-sufficiency, particularly the extent to which MGs have a savings/credit fund⁹ or an Emergency Fund (see Section 3.3) and are able to mobilise it: of the 77 MGs, 74 have created a saving/credit fund that they manage themselves. By November 2014, the value of the funding across all 74 MGs was NRS 2,018,701 (approx.

\$20,000), with MGs in Kailali accounting for almost half of the total. A total of 52 MGs (64% of those managing saving/credit funds) were able to mobilise funds to support 127 mothers in need.

3.2 Community Health Score Board (CHSB)

One of the most innovative approaches used in the SAMMAN project was the Community Health Score Board (CHSB), which is based on the community score card model and developed by CARE International in 2002, and used as an accountability and governance tool in other countries. CHSB was adopted by the SAMMAN project to improve the local capacity and ownership of VDCs, improve resource generation and allocation, and improve the decision-making and management role of HFOMCs.

Facilitated by HFOMCs, the CHSB tool brings together beneficiaries (the demand side) and service providers (the supply side) at the local health facility to jointly analyse priority concerns and barriers in service delivery, find shared ways to address them and monitor progress in services/performance using a community grading system. Through its open discussions among service users and providers, community leaders and decision-makers, members of MGs and FCHVs, the CHSB is used to solicit user perceptions on access, use and quality of facilities. It encourages accountability, promotes transparency and monitors the performance of service providers in order to pinpoint and address service delivery issues. The CHSB also reveals the knowledge gaps of community members, making it possible to find strategies to fill these gaps.

'CHSB is like a mirror where we can see our progress in a tangible way' (Nurse, Kailali)

The CHSB process

The CHSB process consists of five main steps.

Step one: planning and preparing with the District Health Office

⁹ Members of the MG can borrow funds from the savings/credit fund for any purpose at minimum interest. It is not the same as the Emergency Fund outlined in section 3.3.

- A meeting is held with the District Public Health Officer, the Statistics officer and other district-level supervisors to discuss potential sites for CHSB implementation and indicators, based on the context and data on health facilities' performance. This identifies low-performing health facilities that are selected for the CHSB process to help improve the performance and quality of their services.
- Introducing the tool to members of Health Facility Operations and Management Committee (HFOMC), chaired by VDC chairperson, community leaders and health workers and explaining thoroughly the need, purpose and objectives of the exercise.

Step two: discussions with community groups (the demand side)

- HFOMCs and other community members identify and select CHSB indicators to measure the quality and the level of satisfaction with services provided by the health facility, using a scoring system whereby 1-10 is very poor, 11-20 is poor, 21-30 is fair, 31-40 is good and 41-50 is very good. Any issues are identified on the basis of community members' perceptions about the quality of services offered including: the behaviour of health workers, the availability of staff and medicines at the health facilities and the general condition of health facilities. The indicators can vary from one health facility to another, but may include:
 - ANC visits/institutional delivery experience
 - the status of VDC budget allocations for health
 - child vaccination rates
 - child/maternal mortality rates
 - the extent of gender-based violence and gender discrimination
 - the use of family planning services.

- Priority issues are discussed in community clusters. Focus group discussions are also held with members of hard-to-reach communities, who may not all be able to attend the interface meeting (Step four), and their opinions and suggestions are documented to ensure that their voices are heard.
- The feedback and suggestions from the focus group discussions are consolidated and presented at the interface meeting.

Step three: discussions with health workers (the supply side)

- Information on health services is collected from health-service providers to assess the quality and availability of both services and staff.
- Indicators and issues related to the quality of health service provision are finalised, approved and consolidated. A final score is generated for each

identified indicator (e.g. service coverage, health facility budget, number of health workers), which is then validated in the presence of HFOMC members and other community representatives at the interface meeting (the next step).

Step four: interface meeting and action planning

- An interface meeting (often moderated/facilitated by a third/independent party) is held between the community (the demand side) and health-service providers (the supply side) to ensure that the feedback from the community is well noted and that both parties have a shared understanding of the issues to be addressed.
- The interface meeting is attended by HFOMC members, VDC/HFOMC chairperson, FCHVs, local teachers, traditional healers, local representatives of political parties, health workers, members of civil society, mothers, adolescent girls and boys and other service users.
- The lists of CHSB indicators from the community and health providers are merged and finalised, and a final score is provided for each agreed indicator, taking into account suggestions provided in the focus groups.
- The feedback from the interface meeting and focus groups forms the basis for the preparation of an action plan for each indicator, with measurable targets, timelines and clear roles and responsibilities.

Step five: action plan implementation, monitoring and review

- Further interface meetings are held between service users and providers every six months to score CHSB indicators and review progress. If progress is lagging, the CHSB process enables the identification of barriers and challenges, as well as who is responsible for the necessary action and resources needed to make it happen. As soon as the agreed targets are met, HFOMC and community members identify new indicators and set new targets.
- The progress of CHSB is shared at district level with key district stakeholders and representatives from the various communities on an annual basis to ensure continuous feedback and improvement.

Achievements of CHSB process

The CHSB is being implemented in 53 health facilities – 17 in Kailali and 18 in Dadeldhura and Doti– in close coordination with the respective district public health authorities. All CHSBs have been reviewed at least once since their establishment.

In terms of indicators for good governance, *participation* is seen as key, as one of the aims of the CHSB is to promote social inclusion and, through its guidelines, to formalise the fair representation of various marginalised ethnic and caste groups in the HFOMCs. Across the three districts, women account for one third (97 female vs. 171

Table 3: Changes in the perceived scores of the Community Health Scoreboard (initial scores vs. latest review score)

Indicators	Doti		Dadeldhura		Kailali	
	Initial review	Latest review	Initial review	Latest review	Initial review	Latest review
Status of regularity of HFOMC meeting	28.1	33.9	26.9	38.2	33.5	37.8
Status of regularity of FCHV meeting and participation	36.9	43.8	35.6	44.6	36.1	39.3
Status of regularity of MG-H meeting and participation	30.9	38.4	29.9	37.1	29.8	36.5
Status of institutional delivery and distribution of safe delivery incentives	29.6	37.9	27.9	36.6	29.3	34.4
Status of four ANC visits and incentives received by mothers	28.9	37.9	24.1	31.6	18.6	24.1
Status of budget provisioned in maternal and child health sector by VDC	33.1	37.9	32.1	37.8	33.1	37.8
Regularity of Primary Health Care/ Outreach clinic	30.7	37.5	35.1	36.7	29.4	34.1
Status of maternal and neonatal death in VDC	35.1	39.3	32.9	37.1	14.2	22.4

male) of HFOMC membership, while 81 representatives from Dalit and Janajati castes (vs. 183 from other groups) are represented in the HFOMC, which manages the CHSB process. In addition to HFOMC members, other members of the community (e.g. MG members and social workers) are also invited to participate in CHSB discussions.

Accountability, another key indicator of good governance, was assessed on the basis of a number of indicators, with positive results on:

- the regularity of HFOMC meetings – the first review of 28 HFOMCs with CHSBs demonstrated that 16 hold monthly meetings, 2 hold meetings every two months and 10 hold them when necessary
- the clear display of medicines in stock – 25 health facilities reported displaying a list of the medicines and drugs provided free of charge
- the timely payment of governmental incentives – 24 out of 28 HFOMCs paid mothers governmental incentives immediately after delivery (NRS 1,000 for institutional delivery and NRS 400 for four ANC visits)
- access and availability of health services – all health facilities covered by 28 HFOMCs are open from 10am until 5pm for outpatient services
- social audit – 21 HFOMCs performed a social audit, a mandatory annual governmental strategy used to identify disadvantaged groups and hold health facilities accountable to communities.

Transparency was also seen to indicate good governance. In 26 out of the 28 facilities participating, the CHSB was openly displayed and community members could easily refer to it for information. Sixteen facilities held regular financial audits to track their financial income and spending.

Finally, the *responsiveness* of VDCs was tracked and, as part of the effort to meet the demands of their communities emerging from the CHSB process, 22 VDCs across the three project districts allocated necessary resources and recruited 60 midwives for local birthing centres. In addition, as a result of CHSB community discussions, 25 health facilities arranged a separate room for maternal health services and VDCs or District Health Offices allocated funding for these, while CARE Nepal provided the necessary equipment and supplies.

Table 3 provides an overview of the improvements in the scores between the first CHSB scores since the beginning of the project in 2012 and the latest review (November 2014) on a number of indicators, including some relating to governance.

3.3 Emergency Fund

With a lack of funds and available transportation in most remote communities, accessing emergency health care is a challenge. To support improved access and service use, CARE provided NRS 3,000 (\$30) of seed money to each MG that uses the SATH tool to set up an Emergency Fund. This revolving fund aims to support group members during pregnancy, delivery and post-partum and newborn care by allowing them timely access to emergency health services. It also aims to motivate members of the MGs to pool community resources to better cope with the financial costs of healthcare. As a result of access to this Emergency Fund, positive trends are being reported by members of the MGs, including improved access to health facilities and timely health interventions.

Table 4: Access and use of Emergency Funds by district

District	Number of mothers with access to the Emergency Fund	Number of beneficiaries to date of the Emergency Fund	% of members using the Emergency Fund
Doti	986	177	17.96
Dadeldhura	1,012	41	4.05
Kailali	1,623	131	8.07
Total	3,621	349	9.64

The process of Emergency Fund mobilisation

HFOMCs, health authorities and community health workers identify MGs with poor health-seeking behaviours and low rates of health-service use

- Using the SATH tool, an analysis of barriers to health care services – especially maternal, neonatal and child health – is carried out
- Members of the MGs agree on the norms for Emergency Fund pooling and use
- The Emergency Fund is then established in the MGs
- There are monthly financial reviews and updates of the Fund's status (e.g. total amount, use, etc.), facilitated by MG chairs or treasurers.

Achievements of the Emergency Funds

CARE has helped to set up Emergency Funds in 167 MGs and a total of 3,612 mothers have access to them. The members of these 167 MGs have pooled over NRS 412,000 (\$4,130) with an average of NRS 2,467 (\$24.7)¹⁰ per group. A total of 349 mothers in 95 MGs have used the funds for emergency maternal and child health services, with the usage rates highest in Doti (17.9%) and lowest in Kailali (8%). The funds allowed mothers from the poorest and most marginalised groups to access necessary health services: of the 349 mothers who made use of the funds, the majority (202) were from the lowest Dalit and Janajati (121) castes (see Table 4 for the numbers of women using the fund and Box 3 for an account of the impact of the Emergency Fund).

In some MGs, members' contributions to the Emergency Fund have grown over time from NRS 5 to NRS 50 per person; this has led, in turn, to an increase in the total funds available from NRS 10,000 to NRS 30,000. For MG members it is more convenient to use the Emergency Fund than borrow funds from elsewhere, and all of those who have borrowed money have repaid it.

Emergency Funds have also had an unintended positive effect on livelihood opportunities for the members of MGs. Half of the Emergency Fund of NRS 28,000 in one MG in Geta VDC, for example, is used for the needs of MG

members, while half is invested in the local cooperative, which offers new livelihoods and other training opportunities to socially and economically marginalised women.

Investments are made in a variety of income-generating activities, such as buying fertilisers and farm animals.

3.4 Pregnancy Outcome Surveillance System (POSS) and Verbal Autopsy (VA)

The Pregnancy Outcome Surveillance System (POSS) is a process that involves the community in collecting and analysing data on maternal and neonatal death and its causes through Verbal Autopsy (VA). The aim is to identify the possible reasons for each maternal or neonatal death and discuss ways to prevent similar deaths in the future. This information can be used by HFOMCs and other community groups to encourage discussion and to support the development of actions plans to prevent maternal and neonatal mortality.

The POSS/VA process

The POSS is integrated into the government Health Management Information System (HMIS) for reporting mortality and allows for further investigation into the causes of mortality. The process consists of a trained

Box 3: The impact of the Emergency Fund

Three days after delivery my baby was getting fever and didn't recover, even after support from health staff. I was advised to take him immediately to the District Hospital which is far from the village. Given that I had no money I spent the night thinking I will lose my first child soon. But in the early morning I was visited by FCHVs and a member of my Mothers Group who provided me with money from the Emergency Fund and advised me to make my way quickly to hospital. After receiving treatment, my baby recovered and I still feel that was the most cherishing moment of my life.

Source: Member of MG, Geta, Kailali

¹⁰ Previously, the SAMMAN project provided NRS 2,000 (\$20) of seed funding to initial MGs (89), but later increased the amount to NRS 3,000 (\$30) to the new groups

health worker visiting the family of the deceased and conducting an in-depth interview on the cause of death. The information is then shared and discussed in various community fora, such as MGs, HFMOCs and VDCs, with health workers helping communities to identify gaps in current service provision (on the supply side) and educating them about available services and their health rights (to reinforce the demand side). These discussions also serve as an opportunity to educate community members on how changing some of negative behaviours and practices (such as home deliveries) could improve health outcomes and encourage the use of services provided by skilled health providers.

The key steps in the POSS process include (see also Figure 3):

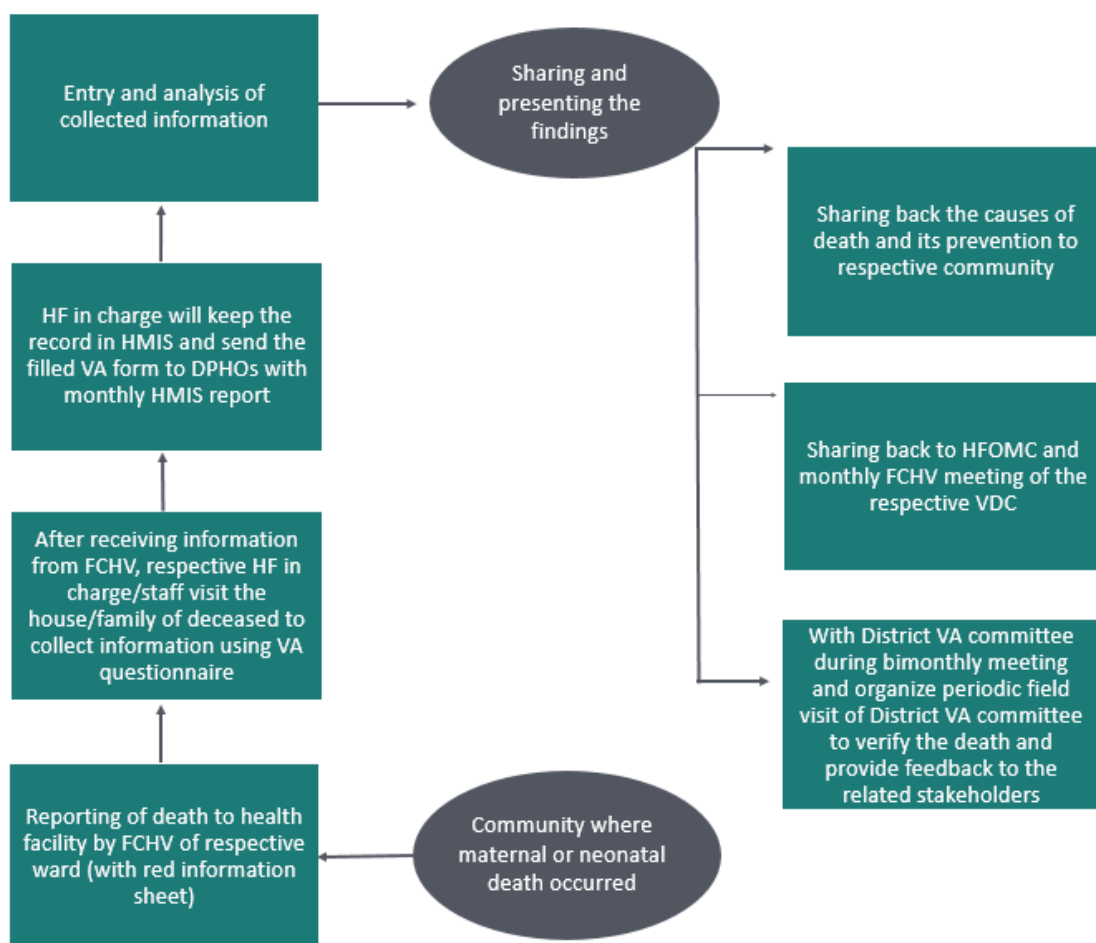
- The gathering of various members of the community, including the deceased’s relatives, MG members, community leaders and decision-makers and health service providers, for a ‘sharing back’ meeting to discuss the current maternal/neonatal health situation and explore the reasons for recent deaths.
- The identification of the decision-maker in the household and what prevented the mother from seeking health

services in health facility. If the delivery took place at the health facility, the aim is to establish the cause of death.

- The discussion on the use and effectiveness of available health services (e.g. access, affordability, health workers capacity), as well as any structural, socio-economic and cultural factors that may be preventing community members from accessing these services; a discussion on the performance and attitudes of health workers is also part of this stage.
- Discussion on the capacity and strengths/weaknesses of existing community health groups, such as MGs, to meet maternal and neonatal health needs in the community.
- Drawing on these discussions and resources available, an action plan is developed for adoption by health workers and community members to prevent future mortality.
- Health workers inform and remind communities about the services that are available in health facilities and the benefits of using them.

The POSS does not only allow for the diagnosis of causes of death, but it also unveils and addresses critical issues of health service quality, access and availability. It does so through a process of dialogue between providers

Figure 3: Process of the Pregnancy Outcome Surveillance System



and users, which helps to identify solutions and options for practical interventions, while promoting the accountability of health providers and the responsibility of community members to address health problems

The achievements of POSS/VA

During the reporting period of July to December 2014, the overall trend showed a reduction in maternal/neonatal deaths, with only 2 maternal and 43 neonatal deaths reported, compared to 18 maternal and 358 neonatal deaths reported through POSS in 2013. This shows

the positive impact of a range of project interventions, including the MG discussions (23) and the HFOMC meetings (27) where the causes of maternal and neonatal mortality and measures to address and prevent them were discussed. The POSS has also revealed that a large number of maternal or neonatal deaths were previously unreported, largely as a result of socio-cultural factors. But now, with a vertical intensive POSS reporting system in place, as well as community awareness efforts, maternal and neonatal deaths are more likely to be reported.

Conclusion and considerations for the future

Overall, the SAMMAN project has been a huge success in both mobilising and strengthening community-based processes and institutions, as well as in supporting the strengthening of broader health systems. This success has been visible in many of the positive health outcomes for women and children in far west Nepal, as described above. None of this would have been possible without partnership and support from both government institutions, as well as community-based organisations.

The engagement of political and social leaders in community governance processes, such as CHSB, has been shown to be effective for generating resources to improve local health facilities (e.g. the recruitment of health staff or building health facilities), as well as for enhancing community ownership and accountability among service providers and service seekers. The use of the SATH tool by MGs has also been shown to empower marginalised and socially excluded women and promote their health seeking behaviour and use of health services.

As the project moves into its second phase, a number of factors need to be considered.

- Staff turnover is inevitable and trained HWs can/will be transferred out of the districts covered by the project and replaced by untrained staff. The continued training of HWs has implications for resources, including time and cost. In the future, methods to allow for the continuity of trained HWs may include: training a larger/broader cadre of staff to carry out HW activities; training larger groups of HWs beyond the immediate project districts; and, a longer-term approach that encourages

key components and emerging good practice from the SAMMAN project to be included in the broader HW training syllabus and governmental policies.

- The Government's delay in providing approvals (e.g. skilled birth attendants' training and implant training) and finalising training manuals (e.g. Community Based-Integrated Management of Neonatal and Childhood Illness) has affected project achievements. Continuing to work closely with the Government is, therefore, critical, as is liaising with higher level stakeholders in the health system to take on board lessons learned and replicate successful models and approaches from the SAMMAN project.
- The conflicting interests and priorities of community leaders and HFOMC members regarding community development are likely to persist. It is critical, therefore, to continue to bridge this gap, ensuring that there is transparency and ultimately allowing space for negotiation, mediation and finding the middle ground. The use of community governance tools such as the CHSB should continue and should be expanded to make further improvements in line with community discussions and priorities for community health.
- Harmful socio-cultural practices that have a negative impact on maternal and neonatal health still prevail, such as chhaupadi, Gotha Jane (keeping post-partum women in isolation for 11 days after giving birth) and untouchability during menstruation and the post-partum period. There is a need, therefore, not only to continue to provide information on these issues, but also to think creatively about how to engage the community in

reflective dialogue or other activities that will challenge norms, so that they can develop their own solutions.

To address these issues and to build on the knowledge and lessons learned over the past four years, there are plans to scale up SAMMAN to 31 new VDCs in Doti, Kailali and Dadeldhura, and add two new districts of Central Nepal where the maternal and neonatal child health needs are great. In 2015-2018, the project will continue to focus on increasing the capacity of communities and institutions by training and building the capacity of more CHWs and FCHVs, establishing five training sites to provide comprehensive training on various maternal and newborn health topics, and improving the infrastructure of district health facilities. In addition, the CHSB process will be scaled up as a regular health monitoring tool in new communities across five districts to ensure good governance in health service delivery. The SATH tool will also be scaled up in both new and existing districts to strengthen the knowledge and decision-making capacity

of MGs. The project will also support MGs in the establishment of Emergency Funds to access emergency health care, enhancing their financial management skills and promoting linkages with local cooperatives and other financial institutes to improve women's financial well-being and create new earning opportunities.

Finally, to improve health-seeking behaviour further and promote changes in health behaviour among women and their families, CARE has also identified existing behaviours and practices that are harmful for maternal and child health, and plans to develop information, education and behavioural change communication materials to raise awareness and for the selection of community role models to promote healthy practices. Importantly, community gatekeepers and decision-makers (such as parents-law and traditional healers) will also be involved to promote health-seeking behaviour and address issues of stigma and cultural misconceptions.

Key documents and resources

CHSB: <http://www.carenepal.org/publicationdetail.php?id=47>

POSS: <http://www.carenepal.org/publicationdetail.php?id=48>

SATH: <http://www.carenepal.org/publicationdetail.php?id=49>

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Cover image: Community healthcare meeting, Nepal, © CARE/Kate Holt, 2010
Inside image, page 6: Health care worker in Nepal, © CARE International, 2015
Inside image, page 13: Colour coding of key indicators on maternal and neonatal child health, © CARE International, 2015