How do Community Health Committees Build Capacity for Community Health Systems Strengthening? A Realist Evaluation in Uganda

A thesis submitted for the degree of Doctor of Philosophy

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Declaration

I declare that this thesis has not been submitted as an exercise for a degree at any other university and is entirely my own work except where duly indicated and clearly acknowledged in the text.

I agree that Trinity College library may lend a copy of this thesis upon request.

Brynne Gilmore

Dedication

To Fiona, a woman beyond words, who is missed beyond belief.

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I have been extremely privileged throughout this process to be encouraged, supported and mentored by a wonderful group of people, all of whom I cannot thank enough.

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Abstract

Background: Community-based interventions are widely accepted as an integral component of decentralisation strategies aimed at reducing inequity in health and achieving 'Primary Health Care for All' within less resourced settings. Interventions with a health systems strengthening, and in particular community systems strengthening, focus are likely to have more impactful and sustainable effects. Community organisation strategies that aim to increase communities' capacity are particularly suited to contribute to community systems strengthening. One such intervention is the introduction of community health committees; however, little is known about how these committees work to achieve community systems strengthening, especially given the varied contextual conditions in which they are implemented. Using systems thinking perspectives, this thesis aims to address this gap by exploring generative causality which explains 'how, why and for whom' community health committees build capacity for community systems strengthening within a low-income context.

Methods: A mixed methods realist evaluation with two intra programme case studies in North Rukiga, Uganda was conducted. As a form of theory based evaluation, realist evaluations work to understand 'what works, for whom, and why' through the elicitation of context-mechanism-outcome configurations. Specifically suited to the study of complex health interventions, exploring the generative causality of programmes allows for contextually informed, transferable findings. Within this thesis three distinct phases of research occurred. Phase 1 involved the elicitation of the initial programme theories through a combination of literature and document reviews and key informant interviews. The findings from the initial programme theory informed the study design and data collection tools for phase 2. This phase consisted of the two case studies, which were conducted to refine the initial programme theories. The case studies were run within a Maternal and Child Health Programme in Uganda that utilised community health committees as a core implementation strategy. Methods within all case studies consisted of focus group discussions, semi-structured in-depth interviews, observations and surveys. Case studies were analysed using the 'context-mechanism-outcome configuration' as an analytical tool on an individual case basis. In phase 3 of this research the case study programme theories from phase 2 were synthesised to produce a middle range theory that addresses the study question.

Results: Results for how community health committees work best, for whom, and why can be defined within socio-ecological levels aligned to: individuals within the committee, the committee as an organisation, the committees and its interaction with communities and community stakeholders, and the committee within the wider social environment. Each level has a resulting theory that is of middle-range, which when taken together explain the operationalization of community health committees across the socio-ecological levels. Findings show that generative causation for how, why and for whom, the community health committees work relate to interacting contexts and mechanisms both within and across the socio-ecological levels. Specific findings highlight: CHCs' connectivity to the community and their resulting social identify, their motivating factors for involvement, and their cultural capital (*individual level*); CHCs' intragroup categorisation, their managerial processes, and their social capital and its resulting rewarded power (*organisational level*); their linkages and partnerships with other community stakeholders as a result of shared identity and common goals, and their community integration (community level); and the socio-political environments in which they work, the strength of their implementing partners, and the level of collaborative community support (*societal level*), all explain how CHCs work (or don't) for capacity building.

Discussion: Moving beyond traditional positivist studies that work to ascertain 'if' something works, to studies that aim to explore the generative causation of 'why' and 'how' something works is an important strategy within health promotion interventions to provide more contextually informed findings. The use of a realist evaluation within this thesis enabled the exploration of community health committees and the factors that influence their ability to contribute to capacity building across multiple socio-ecological levels. As such these contextually relevant findings can be tailored and transferred to other settings. This thesis also contributes to the methodological advancement of realist studies. As the use of realist evaluation within low-income countries is underexplored, considerations for its continued advancement and recommendations within this field are presented.

Word Count: 99,453

Acronyms and Abbreviations

ADP	Area Development Programme
AIM-Health	Access to Infant and Maternal Health
ANC	Antenatal Care
CCAT	Community Coalition Action Theory
CHC	Community Health Committee
CHW	Community Health Worker
COMM	Community Committee
CSAS	Coalition Self Assessment Survey
CSS	Community Systems Strengthening
CTCp	Close to Community Provider
DHMT	District Health Management Team
FGD	Focus Group Discussion
HC	Health Centre
HFC	Health Facility Committees
HIC	High Income Country
HRH	Human Resources for Health
HSS	Health Systems Strengthening
HUMC	Health Unit Management Committee
IDI	In-depth Interview
IPT	Initial Programme Theory
IYCF	Infant and Young Child Feeding
KII	Key Informant Interview
LC	Local Council
LIC	Low-income Country
LMIC	Low- and middle-income Country
MCH	Maternal and Child Health
MCHN	Maternal, Child Health and Nutrition
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
MNCH	Maternal, Newborn and Child Health
MoH	Ministry of Health
MRT	Middle Range Theory

NGO	Non Governmental Organization
PNC	Postnatal Care
PT	Programme Theory
RA	Research Assistant
RE	Realist Evaluation
SBA	Skilled Birth Attendant
SDGs	Sustainable Development Goals
SDH	Social Determinants of Health
SEM	Socio-ecological Model
SLT	Social Learning Theory
SSA	Sub-Saharan Africa
SSI	Semi-structured Interviews
ttC	Timed and Targeted Counselling
VHT	Village Health Team
UHC	Universal Health Coverage
U5M	Under-Five Mortality
U5MR	Under-Five Mortality Rate
WHO	World Health Organization
WVI	World Vision Ireland
WVU	World Vision Uganda

Glossary of Operational Definitions

This glossary contains operational definitions for specific terms used within this thesis. The terms listed here have multiple definitions within the literature, and while additionally defined within the body of the thesis their presentation here serves as an accessible reference for the reader.

Capacity Building	Increase in community groups' abilities to define, assess, analyse and act on health (or any other) concerns of importance to their members (Labonte and Laverack, 2001a, pg. 114)
Community	The social boundaries that define the individuals and households whose health outcomes matter as a health system goal, but also the social context for the relationships that underpin the success of many health systems interventions (George et al., 2016)
Community Committees/ Coalitions	A group of individuals representing diverse organizations, factions, or constituencies within the community who agree to work together to achieve a common goal (Feighery and Rogers, 1990).
Community Organising:	The process by which community groups are helped to identify common problems or goals, mobilise resources, and in other ways develop and implement strategies for reaching the goals they have collectively set (Minkler and Wallerstein, 2005)
Health Systems	All the activities whose primary purpose is to promote, restore, or maintain health (WHO, 2000).
Health Systems Strengthening	The process of identifying and implementing the changes in policy and practice in a country's health system, so that the country can respond better to its health and health system challenges or any array of initiatives and strategies that improves one or more of the functions of the health system and that leads to better health through improvements in access, coverage, quality, or efficiency (WHO, 2016a).
Systems Thinking	A discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots. (Senge, 2006)

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Chapter 1 Introduction

1.1 Introduction

Individuals living in less resourced settings, particularly those impoverished and living in rural areas, experience poorer health than their urbanised, educated, and higher-income earning counterparts. While a myriad of factors contribute to this inequity the consequences for those living in low-income countries are often detrimental, resulting in increased mortality and morbidity. This thesis is primarily concerned with one key contributor to health inequities, limited health system capacity; one main consequence, limited access to and/or utilisation of services at the community level; and one common strategy to address inequities in health, community systems strengthening through the introduction of community health committees. This introductory chapter presents key background information on the context and topic of study: community health committees within Uganda.

1.2 Health Inequities

Health inequities, defined by Whitehead (1992) as "differences in health that are not only unnecessary and avoidable, but, in addition, are considered unfair and unjust" (pg. 43), occur across numerous social stratifications including education, gender and wealth, and result in more vulnerable[1] persons experiencing worse health outcomes worldwide. Health inequities are prevalent across countries, with low-and middle-income (LMIC) countries having worse health outcomes on average than high-income countries (HIC) (Kassebaum et al., 2014, Liu et al., 2012, Rajaratnam et al., 2010). For instance, nearly 99% of all neonatal

1 For the purpose of this work, 'vulnerability' is conceived as a myriad of interrelated conditions, societal and cultural circumstances, and environmental and political influences which through interactions impact on one's ability to achieve the full potential of their lives, as expanded upon by Delor and Hubert (2000). Within this field vulnerable populations are often also referred to as 'marginalised' and/or 'poor'.

and maternal deaths worldwide occur in low-and middle-income countries (McKinnon et al., 2014, WHO & UNICEF, 2012) with sub-Saharan African (SSA) countries accounting for 66% of all maternal mortality worldwide (WHO et al., 2015). Lifetime risks of maternal and child death in a HIC (as measured by maternal mortality rates (MMRs) and under-five mortality rate (U5MR))[2] can near zero, rarely exceeding 10 per 100,000 and 7 per 1,000, respectively (World Bank Group, 2016a, World Bank Group, 2016b). Within LMICs however, MMR in 2015 was 216 and U5MR 43 (UNICEF, 2015). Liu and colleagues (2015) project that if current trends continue, there will be 4.4 million under-5 deaths per year by 2030, with 60% of these occurring in SSA alone. In addition to health inequities between groups (i.e. countries), it is widely established that health inequities also exist within groups (Kassebaum et al., 2014, Liu et al., 2012, Rajaratnam et al., 2010).

1.2.1 The Social Determinants of Health

Aligned to a socio-environmental view of health, social determinants of health (SDH) are defined as "the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life" (Commission on Social Determinants of Health, 2008). SDH is therefore useful concept through which to explore how and why inequities occur *between* individuals within a given group. Broadly falling under five categories (policy making, social factors, health services, individual behaviour, and biology/genetics), SDH recognise economic policy and systems, development agendas, social norms, policies and political systems, as well as individual characteristics such as gender, income, social status, employment, culture, social networks, housing and food security, health literacy and access to health care, as contributing factors towards an individual's health (Commission on Social Determinants of Health, 2008). Aligned to the SDH, Dahlgren and Whitehead's (1993) conceptualisation of the determinants of health depicts a three-

[2] Maternal mortality rate (MMR) is the annual number of deaths due to pregnancy or pregnancy related complications (during pregnancy or up to 42 days termination), per 100,000 live births. Under-5 Mortality Rate (U5MR) is the number of children under 5 years of age that die per 1,000.

layered system: The first layer is comprised of individual factors, followed by social and community networks, and the third layer is comprised of the socioeconomic, cultural and environmental conditions in which people live. SDHs influence health in a multifaceted fashion, whereby interactions occur between 'high level' determinants, such as socio-economic and political contexts; structural determinants, such as education and occupation; and more embedded intermediary determinants, including food availability, and an individual's psychosocial and biological factors (Solar and Irwin, 2007, Dahlgren and Whitehead, 2006). While all persons are impacted by social determinants of health, the impact of SDH are borne more negatively among vulnerable populations (Marmot, 2005).

1.2.2 Health Inequity in Low and Middle Income Countries

There is arguably no single context worldwide where disadvantaged populations experience more positive health than their privileged counterparts. These vulnerable groups, including, but not limited to, persons with disabilities, those in lower socio-economic brackets, those less educated, those living in more rural settings, and individuals lacking autonomy for various reasons such as gender, are often subject to what Hart (1971) termed the '*inverse care law*'. According to the inverse care law, health services and resources are paradoxically available inversely to need. In other words, those who require the highest amount of care are often the least likely to receive it.

1.2.3.1 Who bears the largest burden and why?

There are large discrepancies in the burden of poor-health between social and economic classes. The reasons behind this are often due to the interrelationships among the SDHs. In LMICS, routine data collected as part of the Millennium Development Goals

(MDGs)[3] offers important insight into these inequities, through examining progress in relation to inequality and health. Taken together, data suggests a global trend whereby the less educated, the poorest, and those living in rural areas experience disproportionately worse health outcomes.

In relation to maternal and child health (MCH), the extant literature suggests several interdependent factors that influence health care and service utilisation at both individual and societal levels. Specifically, women's education emerges as an important determinant, with more educated women being more likely to utilise health services and experience more positive health outcomes for themselves and their children (Bhutta et al., 2005, Ahmed et al., 2010, Thaddeus and Maine, 1994, Furuta and Salway, 2006). Children whose mothers have a secondary or higher level of education are three times more likely to survive past their 5th birthday, compared to children whose mothers have less education. Completion of primary school is associated with an almost five times greater likelihood of having a skilled birth attendant (SBA) present during birth, compared to women who did not attend or complete primary school (Ahmed et al., 2010).

Other determinants, and related to educational determinants, are socioeconomic status, whereby women with more available finances access more services (Ahmed et al., 2010, Ronsmans et al., 2006) and geographical location, where women and children living in rural areas have lower service utilisation (Thaddeus and Maine, 1994, Gabrysch and Campbell, 2009, Vallières et al., 2016). A study by Ahmed and colleagues (2010) analysed data from 31 Demographic Health Surveys (DHS) and found that the odds of having four our more

[3] The Millennium Development Goals (MDGs) were a set of eight goals and accompanying targets for the years 1990-2015 agreed by 189 United Nations (UN) member states in 2000. The eight goals were: 1) eradicate extreme poverty and hunger, 2) achieve universal primary education 3) promote gender quality and empower women 4) reduce child mortality 5) improve maternal health 6) combat HIV/AIDS, malaria and other diseases 7) ensure environmental sustainability and 8) promote global partnerships for development. At their end in 2015, targets of reducing under-5 mortality rate by two thirds, and reducing maternal mortality ratio by three-quarters, for goals 4 and 5 respectively, were not met in the majority of low-income countries. The Sustainable Development Goals (SDGs), launched in 2015 as a follow-up initiative from the MDGs, have set the global development agenda until their end in 2030. Unlike the MDGs, these goals and their associated targets, which where there are 17 and 169, respectively, are to be applied to all countries. Goal 3, which is to 'ensure healthy lives and promote well-being for all at all ages' is most specific to health, with many other goals encompassing some domains.

antenatal care (ANC) visits or a SBA during delivery for women in the lowest wealth quintiles were 84% and 94% lower, respectively, compared to women in the highest wealth quintile[4]. Similarly, children living in the lowest quintile[5] of households are twice as likely to be stunted than those from the highest quintiles (United Nations, 2015a) and a child dying before his or her fifth birthday is almost twice as likely if that child is among the lowest wealth quintile compared to the highest. Barros et al.'s (2012) systematic review on inequity in maternal and child health found that individuals within the lowest wealth quintile systematically had reduced coverage, and thus greater inequity, than their wealthier counterparts.

Trends among rural and urban areas in terms of women giving birth in the presence of a SBA mirror these findings, with women in the lowest and highest wealth quintiles reporting 56% and 87% SBA attended births, respectively (United Nations, 2015a). In terms of child health, children living in rural areas are at a 1.7 times higher risk of U5 mortality than their urban counterparts (United Nations, 2015a).

In addition to these educational, economical, and geographical factors, one's experiences or perceptions of services (Karkee et al., 2014), the number of previous pregnancies (Gabrysch and Campbell, 2009), one's cultural or religious beliefs (Gabrysch and Campbell, 2009, Kyomuhendo, 2003, Mrisho et al., 2007), marital status (Gabrysch and Campbell, 2009) and head of household's or husband's education (Vallières et al., 2013, Gabrysch and Campbell, 2009, Parkhurst et al., 2006) have also been identified as factors influencing maternal and child health within LMICs. More societal-level influences include out of pocket health costs (Muldoon et al., 2011, Parkhurst et al., 2006, Borghi et al., 2006, Gabrysch and Campbell, 2009), inadequate infrastructure and lack of transport for health access (Gage and Guirlène Calixte, 2006, Gabrysch and Campbell, 2009, Parkhurst et al., 2006), geographic location of health facilities (Vallières et al., 2016), and the number of available health workers

[4] Four ANC visits is the recommended minimum that all women should have during their pregnancy. SBA present during delivery is recognised as one of the most important strategy to reduce maternal and neonatal death. Doctors, midwives and nurses are typically classified as SBAs.
[5] Defined as lowest 20%.

(Muldoon et al., 2011, WHO, 2006), all of which disproportionately affect poor and rural residing individuals.

1.3 Addressing Health Inequities

Community implemented strategies have a large evidence-base for their ability to improve health for vulnerable populations noted in the previous section. One common intervention is the introduction of community health committees (CHCs), which serve to link communities to more formalised health services. Chapter 2 expands on important background information on community health committees, with their description and evidence-base for implementation in LMICs being presented within this section.

1.3.1 Community Health Committees

As set out in The Ottawa Charter for Health Promotion (WHO, 1986) strengthening community actions by enhancing and working towards the empowerment of communities to have ownership of and control over their own health is an essential part of health promotion and health systems strengthening. To this end, many governments and/or organisations have taken to introducing community groups, or community health committees (CHCs) to work together to address health issues facing their fellow community members. This organising strategy is often associated with concepts represented within community participation, capacity building and engagement, with committees consisting of community members acting as a bridge between primary health care facilities and the community (McCoy et al., 2011b). Moreover, CHCs are a common feature within the decentralisation strategies discussed in Chapter 2.2.3, offering important services for communities, especially those in less-resourced areas.

There are many noted potential benefits decentralising health activities to the community. By drawing on local knowledge, preferences and resources, services become

more acceptable to individuals through enhancing contextual (social and cultural) applicability (Ribot, 2002). Participation and involvement can result in increased ownership and autonomy, and subsequent sustainability whereby resources can be more efficiently and equitably used, assisting in increasing service delivery (Ribot, 2002).

1.3.2 Defining Community Health Committees

Although CHCs are frequently used across low-income contexts, few studies that include CHCs offer theoretical foundations that can be used to better inform their practices. There is however, a large body of evidence on "community coalitions" which has been largely generated from research taking place within high-income contexts, specifically North America. For ease, this thesis considers the term 'community health committee' (CHC) as synonymous with similar terms such as, but not limited to, community coalitions, village committees or community groups, unless clearly stated otherwise. Box 1 offers a list of alternative names for CHCs, most specific to LICs, but also used within HICs.

Box 1 Alternative Names for Community Health Committees

Alternatives of Community Health Committees	
Village Health Committee	Health Facility Operation and Management Committee
Community Health Management Committee	Health and Social Action Committee
Health Committee	Health Facility Committee
Local Committee (Health)	Municipal Health Council
Village Development Committee (Health)	Health Board (Community, Village)
Village Governance (Health)	Women's Groups
Facility Committee	Water and Sanitation Committees
Dispensary Committee	Communities of Care (HIV)
Health Planning Group	Safe Motherhood Committees
Facility Governing Committees	

Adapted from (George et al., 2015a)

1.3.3 CHCs within LMICs

Within LMICs, CHCs are most frequently formal structures, either initiated by government bodies, NGOs, or a combination of both, and are generally comprised of representatives from communities, health facilities, and local leadership. These committees are typically tasked

with managing the relationship between the community and health services (George et al., 2015b), while serving as a driving force of increasing community involvement in health activities, and assisting in the supervision and support of health centre and community level activities (Abimbola et al., 2015). The following section highlights the many variations of CHCs, in terms of focus and objectives, and offers further evidence for their use within low-income countries.

While there is a widespread prevalence of CHCs within LMICs, CHCs vary in terms of mandate, objectives, and committee functions. For example, in their systematic review of health facility committees (HFCs), McCoy and colleagues (2011b) noted that CHCs are largely heterogeneous entities, with differing roles and functions. They elicited seven types of groups, broadly categorised as: 1) governance 2) co-management 3) resource generator 4) community outreach 5) advocacy 6) intelligence and 7) social leveller. McCoy et al. also note that committees can either act 'inwardly', performing activities more focused at the facility, or 'outwardly', where committees' actions are more centred around the community.

While linking the community to more formalised health services is a common goal of CHCs, they can also vary in the following overlapping activities, functions and make-up, as noted in Table 1**.**

Table 1 Various activities, functions and make-up of CHCs

They can work as/to:	Through activities and main functions of:	Typically committee members:
• Monitoring and accountability mechanisms • Increase collaboration with community initiatives and members • Increase participation engagement of communities for health • Mobilise communities • Increase responsiveness of health services • Increase community cohesion an ownership • Increase communities capacity to respond to health	• Linking the community to the more formalised health system (often peripheral health centres) • Conducing education and awareness within communities • Create, execute and monitor community health plans • Conduct health assessments and regular monitoring of health • Monitoring health centre activities, including staff performance and attendance, finances, and drug availability • Supporting (and supervising) community based health workers • Advocacy and government lobbying	• Have representation from community members (specifically targeting vulnerable groups and ensuring gender representation), health workers and/or community health workers, and local government • Are trained, supervised and/or supported by implementing body (government or NGO) • Are accountable to (and often supervised by) communities

1.3.4 Scope of CHCs in LMICs

As evidenced from the roles of CHCs previously presented, CHCs are often relied upon to address a number of varied health issues, across programmes and contexts. For instance, some committees have a specific focus on family planning, such as ones implemented in Mozambique (Capurchande et al., 2015), or on safe motherhood, as found in Guinea (Brazier et al., 2014). Other examples include the use of CHCs for HIV programming in Tanzania (Mburu et al., 2013, Lunsford et al., 2015), water and sanitation in Zimbabwe (Waterkeyn and Cairncross, 2005), water and sanitation with antenatal care in Ethiopia (Lunsford et al., 2015), and water and sanitation and nutrition in India (Scott et al., 2016, Srivastava et al., 2016, IntraHealth International, 2008).

In addition to a disease/health specific objectives, other committees are designed for a larger scope of activities within the community, such as community monitoring in Uganda (Björkman and Svensson, 2007), community accountability (Molyneux et al., 2012) and health facility governing committees in Tanzania (Kessy, 2008). Others, too, have more broad objectives of supporting community health activities and are integrated into government health strategies, often for health accountability purposes, including from Nigeria (Abimbola et al., 2015), Kenya (Olayo et al., 2014), Tanzania (Mubyazi et al., 2007) and Uganda (Björkman and Svensson, 2007). Regardless of their specific function and scope, CHCs are noted as an essential part of decentralisation for health, and as such, often have formalised roles within policy and planning. The frequency with which they are used however, is not met with an equally robust evidence-base for their use.

1.3.5 Evidence for the use of CHCs in LMICs

Studies have shown that CHC models can be effective in: health promotion education, awareness raising, mobilisation, referrals and follow-up, diffusing workload among community health actors, community health workers being more supported, and strengthening relationships between CHWs and communities (Lunsford et al., 2015). Within the community development literature, committees can create more harmonisation of health initiatives, increase potential for community empowerment and facilitate the participation of community members in health initiatives with the goal to increase programme ownership and sustainability (Butterfoss et al., 2008, Butterfoss, 2007b).

While there is empirical evidence for their effectiveness (McCoy et al., 2011a), studies on community health committees have shown that they can positively contribute to improved health and health systems. For instance, in Tanzania, strengthening CHCs by identifying team leaders, training, supporting and increasing co-ordination with the MoH, saw an increase in service utilisation and individuals going for HIV testing, multi-sectorial collaboration, and strengthening of referral pathways (Lunsford et al., 2015). Increased

motivation in close to community (CTC) providers, health workers being more aware of community issues and feeling more supported were also documented (ibid). CHCs have also been shown to improve access and coverage, for instance by training additional health staff (Scott et al., 2016) and influencing behaviour change and service demand (Waterkeyn and Cairncross, 2005).

In Ethiopia, the training of village health committees who link with Health Extension Workers (HEWs) saw an increase in antenatal care (ANC) visits, number of women getting tested for HIV and receiving postnatal visits (Lunsford et al., 2015). In Guinea, a study on Village Safe Motherhood Committees, comprised of 6-7 males and females delivering education on safe motherhood with the aim of increasing community capacity to monitor and promote maternal health, found increased community capacity of community members (attributed to the committees) and subsequent improved maternal health seeking (Brazier et al., 2014). Women living in areas with these CHCs were more likely to: report attending 4 ANC visits (60% vs. 50%) and deliver in a health facility (50% vs. 40%) (ibid).

In Uganda, Björkman and Svensson (2007) conducted a randomised experiment of community-based health monitoring by facilitating village meetings and encouraging the formation of committees. They note that intervention communities were more engaged in monitoring activities and that there was a significant relationship between degree of community monitoring, health utilisation and health outcomes. Intervention communities had significant improvement in weight of infants, under-5 mortality, immunisations, waiting time and absenteeism in facilities. Additionally, treatment communities re-evaluated existing Health Unit Management Committees (HUMCs) that were noted as being inactive and instituted new reforms to encourage proper functioning (Björkman and Svensson, 2007).

Similar strategies to CHCs, such as the introduction of women's groups, are increasingly being used as organisational or mobilisation strategies predicated on participatory learning and action. A systematic review focusing on such groups in LICs found

they contributed to substantial reductions in neonatal and maternal mortality (Prost et al., 2013). One particular study of a women's group intervention run in three Asian countries, found improvements in neonatal mortality outcomes in India and Nepal (Tripathy et al., Manandhar et al., 2004); failure to produce significant results in Bangladesh were attributed to study size and quality and contextual factors (Azad et al., 2010). While often not classified as a CHC specifically, given the increasing evidence-base on women's groups, learning from this similar organisational intervention can provide important insight into community health committees.

The evidence-base on CHCs within LMICs appears to be growing, with most studies reporting positive findings across varied outcome levels for their implementation. Considering the frequency in which CHCs are used it is important to continue supporting evidence for such committees. This however, should move beyond effectiveness studies to better understand and explain factors that contribute to why these committees work, or do not. To this end, the remainder of this chapter will relate to a specific CHC intervention implemented by a non-governmental organisation (NGO) within Uganda.

1.4 Health Context in Uganda

1.4.1 Overview of the Ugandan Context

The Republic of Uganda is a landlocked country in East Africa bordering Kenya, Tanzania, Rwanda, Democratic Republic of the Congo and South Sudan (Figure 1). As of 2015, Uganda had an estimated population of over 40.1 million (Uganda Bureau of Statistics, 2017), 48% of whom were between the ages of 0-14 (United Nations Population Fund, 2017). With over 83.6% of people living in a rural area, Uganda boasts one of the highest proportions of rural inhabitants in sub-Saharan Africa (Uganda Bureau of Statistics, 2017). Uganda's economy is predominantly agro-based and over half (58%) of Uganda's land area is used for agricultural purposes (Uganda Bureau of Statistics, 2017). Most of Uganda's population practice subsistence farming (Uganda Bureau of Statistics and ICF, 2017). Despite its rising

middle class, many Ugandans still live below the poverty line (19.7% in 2015) with an estimated 22.8% of people in rural areas living poverty (Government of Uganda, 2015). Current fertility rate trends of 5.4 (Uganda Bureau of Statistics and ICF, 2017) suggest that Uganda's population will reach 83 million people by 2040 (United Nations, 2015b). In 2016, the life expectancy of men and women in Uganda were 59 and 63 years, respectively (United Nations Population Fund, 2017).

Figure 1 Map of Uganda Highlighting Kabale District



1.4.2 Uganda's Health System

Prior to independence, Uganda's government was mostly organised as a decentralised system of local governments. In practice however, the central commissioners ultimately retained most of the decision-making power. With Independence in 1962, Uganda officially shifted to a centralised system, largely in response to its colonial past (Brosio et al., 2006). This system resulted in marked differences in access to and standards of health services between urban and rural populations (Tumwesigye, 2015). While many other African nations were well into their decentralisation plans by the early 80s, Uganda was in the midst

of a civil war. The welcome end to this civil strife in 1986 ushered in political reform, and in 1987 the first sign of decentralisation occurred in the form of Local Councils[6] being initiated at village, parish, sub-county, and district levels (Brosio et al., 2006, Tumwesigye, 2015). Under these reforms power, functions, and responsibilities were once again devolved to local governments (Ministry of Health, 2016b).

Formalisation of this devolution style of decentralisation occurred in 1993 and has seen many shifts since its inception (Brosio et al., 2006). Despite the introduction of Structural Adjustment Programmes in 1994 (Anokbonggo et al., 2004), Uganda enacted the Local Government Statute within the 1995 Constitution, and the Local Government Act of 1997 (Brosio et al., 2006, Tumwesigye, 2015). In practice, these policies have resulted in the administrative division between districts, counties, sub-counties, parishes and villages. For instance, the local government in rural areas is structured across five different tiers: the Local Council (LC) 1 (village), LC2 (parish), LC3 (sub-county), LC4 (county) and LC5 (district) (Ministry of Health, 2016b). Within this, fiscal decentralisation occurred through a block grant system, such that almost all finances, with the exception of salaries, were distributed to the district level to be controlled and distributed aligned with their priorities (Bossert and Beauvais, 2002).

1.4.3 Uganda's Community Level Health System

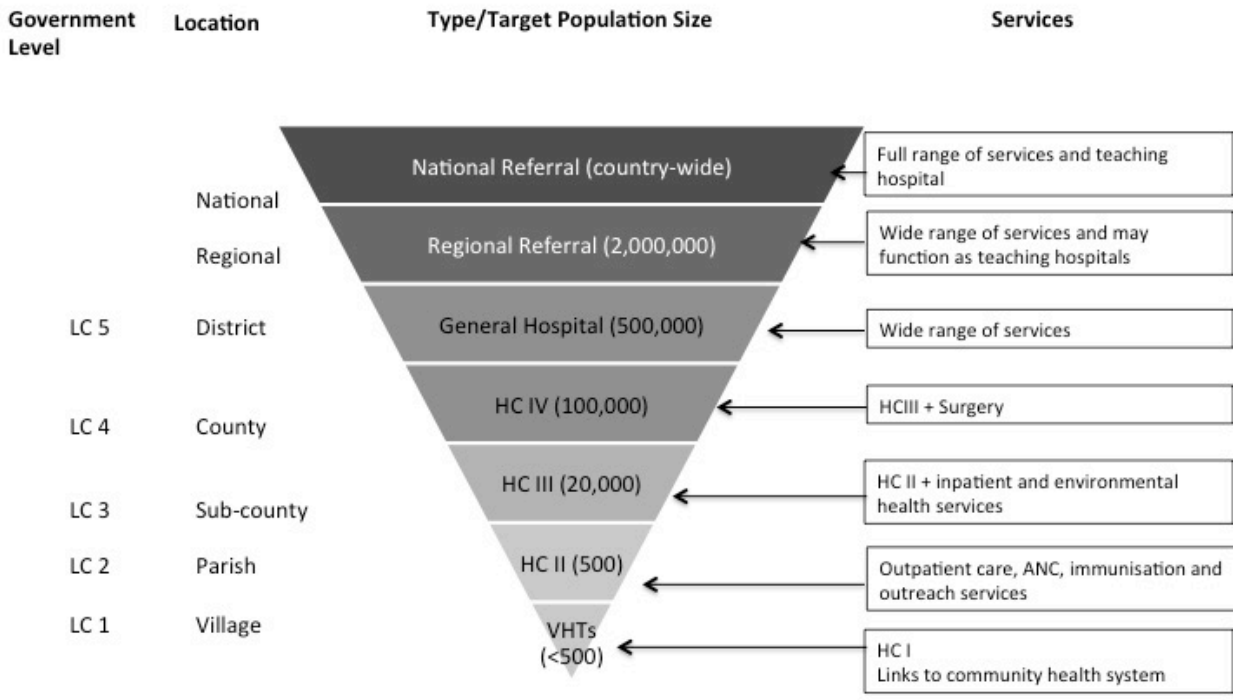
Consistent with the decentralisation strategy, recent policies and programmes in Uganda have resulted in the initiation of more community health initiatives. In 2003, the Village Health Team (VHTs)[7] Strategy was introduced, and as recently as May 2016 the Ministry of Health (MoH) released an updated Community Health Extension Strategy. Under these strategies districts are responsible for the planning and implementation of health services and national bodies retain the role of setting policies and guidelines, monitoring and

[6] Initially called "Resistance Councils".
[7] Village Health Teams are the name given to Uganda's 'Community Health Workers', and for all intensive purposes are synonymous with this task-shifting cadre of health worker.

evaluation, and resource mobilisation and coordination (Bhutta et al., 2010b). Uganda's Health Sector Strategic Plans I (2000/2005) and II (2005/2010) both focused on 'community empowerment and mobilisation for health' (CEMH) (ibid). Early indicators of community and home-based care for specific interventions offer supportive evidence for CEMH and thus support of scale-up and continuation of community-based services in subsequent health sector strategic plans (ibid). Given the many challenges to implementing health services and reducing inequities in health however, the question arises of how to best implement these strategies within a community context.

Comprised of individual volunteers selected by the community, VHTs within Uganda make-up a Level I Health Facility (HC I) and VHTs often work in collaboration with other community health initiatives. Figure 2 below provides an overview of Uganda's decentralised health system and corresponding level of government. Of particular relevance to this research are the first three tiers, HC I (VHTs) – HC III. In addition, facilities at all levels are advised to have Health Unit Management Committees (HUMCs). According to the Ministry of Health (2016c) HUMCs are composed of "various stakeholders from the health facility, local administration and community and are responsible for planning, monitoring and evaluation, reporting and playing an advisory role for quality health service delivery" (pg. 89). These governing bodies work to harmonise community services while also contributing to stewardship and management of facilities.

Figure 2 Decentralisation of Uganda's Health Sector



Adapted from: (Acup et al., 2017, Tumwesigye, 2015)

1.4.4 Challenges to Uganda's Health System

Evidence from Uganda's health decentralisation process suggests positive outcomes in terms of health service utilisation, but there are noted limitations in its ability to solve resource (i.e. drug, staff) shortages, and its negative influence on staff morale and workload (Anokbonggo et al., 2004). In addition to poorly understood and poorly implemented policy reforms, some have raised concerns about the lack of community involvement and participation within the Ugandan decentralised process (Francis and James, 2003), often attributed to a lack of community initiatives capacity for engagement (Okecho, 2009). As Frances and James (2003) note, "decentralisation structures and processes did not constitute a genuinely participatory system of local governance" (pg. 334). The inability for decentralisation to be properly actualised at the community level inevitably impacts on

community-based services. Moreover, and while Uganda's early implementation of the block grant financing system appeared to redistribute power, the heavy reliance on international donors to fund the health care system and programmes resulted in donors (intentionally or unintentionally) undermining local government autonomy (Bossert and Beauvais, 2002).

Despite its many policy reforms and successes over the last several decades, and like many other sub-Saharan African countries, Uganda's health system still faces immense challenges, largely attributed to the HIV and AIDS epidemic and severe human resources for health (HRH) shortages. While Uganda is seen as a success story and acknowledged as one of the first countries in Africa to drastically reduce new HIV infections in the 1990s (Slutkin et al., 2006, Okware et al., 2005), there is no doubt that HIV and AIDS continue to burden an already struggling health system. In addition, high rates of staff attrition, including those lost as a result of a 'brain drain' to higher income countries, and an insufficient number of trained professionals to address extant health needs, Uganda, like most sub-Saharan African countries, is in the midst of a HRH crisis. Most recent estimates of health workforce (doctors, nurses midwives) to population ratios stand at 1.55 to 1,000 persons, well below the recommended 2.28 per 1,000 (Ministry of Health, 2013). For separate occupations, Ministry of Health reports of 2013 data show ratios of 1:24,725, 1: 11,000 and 1:18,000, doctors, midwives and nurses, respectively (Ministry of Health, 2016c). Of even greater concern is the distribution of these health workers, where the HRH strategic plan encompassing years 2000-2005 notes that 71% of doctors and 41% of nurses and midwives work in urban areas, and are therefore accessible to only these inhabitants that comprise only 17% of the total population (Ministry of Health, 2007, Uganda Bureau of Statistics, 2017).

Further challenges facing Uganda's health system pertain to finance and accessibility. In the 2015/2016 financial year per capital public health expenditure was 11USD, with only 6.4% of total government expenditure going towards health, (Ministry of Health, 2016a), significantly less than the recommended 15% expenditure of government budget on health,

as outlined in the Abuja Declaration. The Ministry of Health (2013) reports that 72% of the population lives within five kilometres from a health facility; however, proximity does not necessary result in access, as the terrain can greatly influence travel times (Gilmore et al., 2014). And while Uganda abolished user fees in 2001 (Musango et al., 2013), data suggests that out-of-pocket expenditures still account for over 40% of the total spending on health (World Bank Group, 2017, Ministry of Health, 2016a), far off the WHO's maximum recommendation of 15%. The repercussions of these numerous challenges are reflected in Uganda's maternal and child health indicators.

1.4.5 Maternal and Child Health in Uganda

Unfortunately, Uganda continues to rank among the world's countries with the poorest maternal and child health indicators. While Uganda made progress on several of the MDGs, it failed to reach Goals 4 and 5 in terms of a reduction in U5MR and MMR, respectively. The recent 2016 Ugandan DHS reported a MMR of 336 per 100,000 live births and an U5MR of 64 per 1,000 live births, falling short of their 131/100,000 and 56/1000 targets, respectively (Uganda Bureau of Statistics and ICF, 2017, Government of Uganda, 2015). In addition, a third (33%) of Ugandan women of reproductive age report an unmet need for family planning (United Nations Population Fund, 2017). Between 2006-2015, a SBA was present during only 57% of births and DHS data shows only 60% of women completing the required 4 antenatal care visits, with only 54% receiving postnatal care within 2 days of birth (Uganda Bureau of Statistics and ICF, 2017). The biggest burden of under-5 mortality in Uganda is contributed to malaria, neonatal diseases, pneumonia and diarrhoea, comprising 25%, 23%, 19% and 17% of child deaths, respectively (Ministry of Health, 2009). With undernutrition being attributable to 1/3 of all child deaths worldwide, Uganda's average for under-5 stunting, 29%, remains cause for concern (Uganda Bureau of Statistics and ICF, 2017). Despite a neonatal mortality rate of 27 per 1,000 live births (ibid) in the 2011 DHS survey, only 2% and 9% of newborns received care within the recommended first hour after

birth and the first 24 hours, respectively (Uganda Bureau of Statistics and Inc., 2012). Infant and Young Child Feeding (IYCF) practices are also lacking, with only two thirds (66%) of children under 6 months of age exclusively breastfed (Uganda Bureau of Statistics and ICF, 2017). Investigating appropriate 6-23 month feeding, involving a combination of complementary feeding and breastfeeding, only 14% of children are noted as having an acceptable diet (ibid) and only 55% of children between 12–23 months are fully immunized (ibid).

The well-documented shortage of human resources for health, combined with the inverse care law (i.e. that individuals most requiring care have the least access to it), have resulted in a shift towards community-centred health services. Community-centred approaches often involve the initiation of community-based health activities, which aim to bring more contextually relevant services close to the community. One such approach is the introduction of community health committees (CHCs).

1.5 A Community-based Initiative: AIM-Health Programme

This section introduces the intervention of study, community health committees, implemented as a component of a larger maternal and child health programme run by the Non-Governmental Organisation (NGO) World Vision: the Access to Infant and Maternal Health (AIM-Health) programme. AIM-Health aims to improve health services at the community level through the introduction of task-shifting cadres, while also working to increase community knowledge, power and autonomy over health and health-related decisions.

AIM-Health is implemented by World Vision Ireland across 10 contexts in five sub-Saharan African countries: Uganda, Kenya, Tanzania, Sierra Leone and Mauritania. AIM-Health's objective is to reduce maternal and child mortality and morbidities by enhancing the

health knowledge of women and households, and by increasing capacity within communities to respond to its citizen's health needs. The primary component of AIM-Health is the 7-11 ttC (timed and targeted counselling) strategy, which involves delivering health messages to women and households at specific intervals during pregnancy and a child's first two years of life. These targeted messages, seven for women and 11 for children under-2, were developed from cost-effective, evidence-based interventions delivered in the community (Bhutta et al., 2008, Campbell et al., 2006, Jones et al., 2003).

In Uganda, AIM-Health is aligned with the government's 'community empowerment and mobilisation for health' (CEMH) strategy. Using a three-level multifaceted approach, 7-11 ttC works by targeting individuals, communities, and their environment. It reaches individuals by training and overseeing the activities of Community Health Workers (CHWs)[8] to promote educational messages through their 7-11 ttC strategy. It works in the community by supporting community health committees, which World Vision terms 'community committees' (COMMs), that act as health committees for all AIM-Health activities, and support the CHWs to implement the 7-11 ttC strategy. Lastly, it aims to influence the environmental context by organising Citizen Voice in Action (CVAs) groups, which function as accountability monitoring systems for government and other health actors, and advocate for their communities' rights to services.

1.5.1 The Intervention: Community (Health) Committees

The aim of COMMs, or CHCs, with the AIM-Health programme is to empower and strengthen community systems to contribute to positive health outcomes. To achieve this goal, COMMs are given three main outcome objectives, namely around Community Systems Strengthening (CSS), Health Systems Strengthening (HSS) and Community Health Worker

[8] Defined as "Community health workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily part of its organisation, and have shorter training than professional workers" (WHO, 1989)

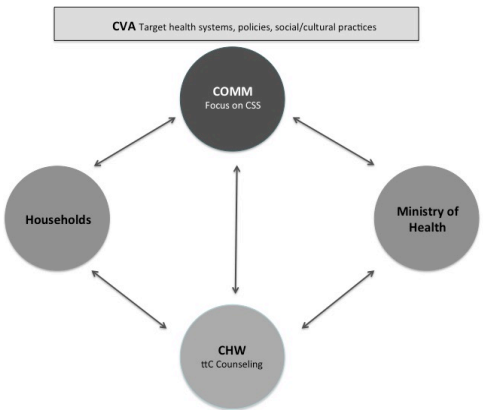
(CHW) support. Table 2 details outcome and output-level objectives for COMMs across all ten AIM-Health programming contexts.

Table 2 Strategic Objectives of COMMs

Outcome Objective 1: CSS - Improved and enabling community/civil society context for positive health outcomes	
1.1	Linkages and coordination among community health stakeholders strengthened
1.2	Root cause analysis of health issues assessed and community health status tracked
1.3	Community activities are implemented to address identified health issues
1.4	Community health status and activities regularly reported to all stakeholders
1.5	COMM demonstrates strong internal capacity
Outcome Objective 2: HSS - Improved policy and service environment for positive health outcomes	
2.1	Linkages and coordination with health facilities and providers are strengthened
2.2	Local level advocacy initiatives are supported and implemented
Outcome Objective 3: Strengthened CHW programs for household-level behaviour change communication	
3.1	COMM provides support, oversight and promotion of CHW programs
3.2	COMM supervises CHWs

Working towards these objectives, COMMs are intended to act as a link between the community and more formalised health services by coordinating and managing health activities and civil society strengthening. The relationship between COMMs, the community, the Ministry of Health (MoH) and other community-based health workers is depicted in Figure 3 which further highlights the COMMs' central position and linkages between the AIM-Health stakeholders.

Figure 3 AIM-Health Programme Model and Domains of Action



1.5.2 The Operationalisation of COMMs

According to the COMM model, committees are ideally initiated by the MoH in their respective countries, and subsequently trained on the 7-11 ttC strategy and other AIM-Health-related activities. The main duties of COMMs include: to provide a support system for CHWs and other community health volunteers; to assess and track the community health situation; mobilise the community for improved health; respond to barriers to health-related behaviour change at the community level; assist with communication between the health system and local administration; and advocate around issues leading to improved health systems (World Vision Global Center, 2014).

The establishment and operationalisation of COMMs are considered a pre-requisite for any 7-11 ttC implementation. While general guidelines exist for COMM implementation, each AIM-Health programme setting is encouraged to adapt the model to best fit their context, while maintaining a few specific minimum standards for their formation and operationalization. Specifically, COMMs are required to have:

- At least three women, 1 CHW representative, 1 representative of community leadership, and 1 representative from the MoH
- A leadership structure
- At least one leader is a woman
- Leaders elected by secret ballot, and new leader elections held periodically
- A set of written rules to guide its internal procedures
- Meetings on a regular basis (suggested minimum quarterly)
- At least 75% of members are present at meetings

When possible, the COMMs should work with existing MoH-linked community health groups (i.e. the Village Health Teams in Uganda) instead of forming new entities. Preferably, the COMMs will be integrated within the Ministry of Health, whereby MoH adopts a COMM curriculum, trains, and supervises the COMMs. As the ideal scenario consists of COMMs being integrated within existing MoH groups, pre-requisites on the operational/administrative level are not set by AIM-Health. However, ideally COMMs would cover a population between 1,000 – 10,000, as less than this would be difficult to bring to

scale, and more than this would pose a challenge in terms of achieving representation, interaction, and monitoring (World Vision Global Center, 2014).

1.5.3 Background to the Study Question

The Centre for Global Health and World Vision Ireland established an operations research partnership at the start of the AIM-Health Programme in 2010. In 2014, programme managers noted that they were experiencing different levels of 'success' with the COMMs, or CHCs[9], both across and within the programme sites. Reasons for the different functioning of COMMs across committees eluded programme implementers, as COMMs were asked to follow shared guidelines and managers had received identical joint training on how to implement the intervention. To this end, I was motivated to investigate 'why some CHCs work well, and others do not?'. In addition to addressing this question, the current thesis further aims to demonstrate how broad questions, when developed into a rigorous study, can contribute, both programmatically and theoretically to the understanding of CHCs and their functioning.

1.6 Chapter Summary

Vulnerable populations, particularly those in rural community-based settings, face large health inequities, predominantly due to weak health systems and adverse social determinants of health. In Uganda, the devolution style of decentralisation has seen the introduction of community-based services, including community health workers and community health committee initiatives. AIM-Health's Community Committee intervention aims strengthen community health systems by creating enabling environments and encouraging community participation. The implementation of this community organising initiative involves bringing together local stakeholders to link communities and the health

[9] For the purpose of this research these terms are often used interchangeably. 'COMMs' will be used when specifically relaying information on the intervention, whereas 'CHCs' is used at all other times.

systems and for community systems strengthening, health systems strengthening and community health worker support.

1.6.1 Statement of the Problem

A common community health strategy, the community health committee (CHC) is particularly well positioned to contribute towards reducing health inequities within less resourced settings. As such, CHCs are increasingly used and advocated for within community health programming. While recent reports suggest that CHCs can positively contribute to health outcomes in sub-Saharan Africa, there remains a dearth of evidence on *how* these committees work and what factors or characteristics contribute to their success (Underwood et al., 2012, Shrestha, 2014). Moreover, the theoretical contributions in this area have been largely generated from research conducted in high-income contexts. In other words, despite CHCs (or similar groups) being widely implemented throughout, often as a component of decentralisation, there is limited research that aims to understand their functioning (Abimbola et al., 2015, McCoy et al., 2011a). The discrepancy between frequent use of CHCs and a lack of understanding of *how* and *why* CHCs work to improve health in LICs (Molyneux et al., 2012) therefore represents an important gap in extant knowledge (Loewenson et al., 2014).

1.6.2 Purpose of the Research and Primary Research Question

There is a need to identify *what works, for whom, why, and under what circumstances* for community health committees. Addressing this knowledge gap will contribute more contextually relevant recommendations for programmes and policy, while also looking beyond traditional, reductionist, approaches of conceptualising 'effectiveness' and working towards a more comprehensive understanding of CHC functionality. Therefore, this study focuses on a community health committees initiated by an international non-governmental organisation as part of a maternal and child health community intervention designed to

address health inequities within a rural community in South-Western Uganda. The purpose of this study is to explore how CHCs work (or do not work) within the Ugandan setting. To achieve this, the following primary research question is put forward[10]:

1) What are the mechanisms and associated contexts through which community health committees work for maternal and child health?

1.6.4 Significance of the Research

Embedded within community coalition theories and aligned with systems thinking approaches, the significance of this research is twofold. First, it will provide programmatic recommendations for World Vision's AIM-Health programme (findings from Chapters 6-7), that could also be applied with towards other, similar, larger-scale COMM implementation programmes (findings from Chapter 8). Secondly, this study will contribute to the wider body of knowledge for CHC interventions. Specifically, and by examining case studies using a multi-method realist evaluation approach, contextually relevant theories around the implementation of the community organising strategy of community health committees will offer a richer understanding of the inner-workings of CHC programmes and how their specific features contribute to or inhibit their success.

1.6.6 Structure of the Thesis

This thesis is divided into 9 chapters that describe the study, research process, findings, and their implications for theory, policy and practice. In line with the chosen methodology, its presentation and tone aims to be reflective of both the pragmatism of realist evaluations for programme improvement, and the theoretical grounding which drives this process.

Chapter 1, the Introduction, has thus far provided important background on health inequities worldwide and the Ugandan health context. The NGO programme, AIM-Health,

[10] Consistent with realist methodology, this question will be refined and expanded upon throughout the study.

and the intervention of study COMMs were introduced as important strategies to work towards reducing maternal and child health inequities within communities. Against this background, the primary research problem, purpose, and research question are put forward.

Chapter 2 builds on the background and literature presented in Chapter 1 by providing relevant information pertaining to community interventions. In doing so it expands on concepts relating to community health by presenting a strong evidence base for the use of such initiatives. It then reviews health systems, and specifically community health systems, before delving into a deeper exploration of community health committees within LMICs. With this new information, key gaps in knowledge and extant research are further identified, a refined research question is presented, and questions are raised on how best to investigate such interventions.

Chapter 3 sets the methodological scene by acknowledging the challenges of studying complex health interventions and makes the case for the application of a systems thinking approach to the research. It then emphasises the applicability of theory driven evaluations for such studies, and details why a realist evaluation is an appropriate methodology to answer this study's research question. The chapter then explores the epistemology and ontology of realism and critically engages with other methodological approaches to studying complex health interventions. A detailed exploration of realist evaluation methodology is presented guided by the 'realist evaluation cycle'.

Aligned to the methodological approaches described in Chapter 3, Chapter 4 specifies the particular methods and tools used within this study. It begins by describing the general study design, which identifies three distinct phases of research: the elicitation of the IPT (Phase 1); the case studies (Phase 2); and the synthesis of the findings from each case study (Phase 3). Each phases' methods and tools are then enumerated sequentially.

Chapter 5 presents the findings from Phase 1 of the research, the elicitation of the initial programme theories (IPTs). These elicited initial programme theories are then used to

further refine the research question. Chapter 6 and Chapter 7 present Phase 2 of the study, the refinement of the IPTs through 2 case studies (one case study per chapter) conducted in South-Western Uganda. As the methods for the refinement are presented in Chapter 4, these chapters detail the data, analysis, and resulting in refined programme theories for each case study.

Chapter 8 details Phase 3, or the synthesis of the case study findings from the previous two chapters. It begins by triangulating the resulting programme theories from Phase 2 with additional Key Informant Interviews and extant literature. It concludes by presenting a policy relevant refined theory that is of middle range for '*how, why, for whom, and under what contexts'*, the CHCs build community capacity for community systems strengthening.

The final chapter of this thesis, Chapter 9, highlights the implications arising from this body of work and how they can be used to enhance the field both practically and theoretically by providing recommendations for practice and a discussion of future research directions. This chapter also details methodological reflections and implications for the advancement of realist evaluation within similar settings and the study limitations. It concludes by summarising the research and main findings, including the research's unique contribution to knowledge, theory, and practice.

Chapter 2: Background

"Contemporary public health is as much about facilitating a process whereby communities use their voice to define and make their health concern known as it is about providing prevention and treatment" (Wallack et al., 1993)

2.1 Introduction

Chapter 1 introduced the concept of 'community health committees' as a strategy to address health inequities by detailing the use of COMMs (CHCs) within an on-going maternal and child health programme (AIM-Health). This next chapter provides important background information related to community health interventions, and more specifically CHCs and their use within low-and middle-income countries. Namely, it presents a range of existing literature prevalent in the area of 'community' health, community interventions (CHCs), and community health for systems strengthening. It concludes by noting that CHCs, and other similar complex health interventions, require novel research approaches if we are to understand how, why, and for whom these work to improve health in LMICs.

2.2 Community Health: The Backdrop

This section provides contextual background for the popular notion of community health. In doing so, a review of Primary Health Care (PHC), an initiative that invigorated the community health movement in the late 1970s, and its alignment with the concept of decentralisation as a strategy for implementing community health is presented. First, however, it explores the meaning of 'community' and describes what community health in practice often entails.

2.1.1 What is a 'community'?

Communities are intrinsically heterogeneous, resulting in multiple classifications of community (Rodriguez-Garcia et al., 2013). One prominent definition is presented by Laverack (2004):

1. Communities can have a shared a spatial dimension (i.e. a place or location)
2. Communities also can have non-spatial dimensions (interests, issues, identities) that involve people who otherwise make up heterogeneous and disparate groups
3. Communities can have social interactions that are dynamic and bind people into relationships with each other
4. Communities can have identification of shared needs and concerns that can be achieved through a process of collective action.

In comparison to Laverack, Rodriguez-Garcia and colleagues' (2011) understanding of 'community' places cultural identity at the epicentre of community boundaries. While the aforementioned classifications are relevant to the study of communities from many disciplines, including health, the current study draws from George et al.'s (2016) recent definition of community because of its focus on community health within LMICs. According to George et al. (2016), communities are "the social boundaries that define the individuals and households whose health outcomes matter as a health system goal, but also the social context for the relationships that underpin the success of many health systems interventions" (pg. 48). This definition was preferred for the purpose of this thesis as it suggests that communities are context dependent, with no set boundaries or classifications relevant to all health interventions.

2.1.1.1 Defining Community Health

Despite its regular use within the field of global health defining the term 'community health', and all that it encompasses, remains a challenge. Several scholars have offered their own definitions of 'community health'. For example, Goodman, Bunnell and Posner (2014)

propose the following definition, drawn from an extensive review of predominantly high-income contexts:

> A multi-sectoral and multi-disciplinary collaborative enterprise that uses public health science, evidence-based strategies, and other approaches to engage and work with communities, in a culturally appropriate manner, to optimize the health and quality of life of all persons who live, work, or are otherwise active in a defined community or communities (pg. S60).

However, I argue these definitions fall short in terms of capturing all that is understood to be community health in practice within many low- and middle-income countries. In LMICs, the implementation of 'community health' often goes beyond the devolution of services to local governments and facilities and commonly involves the utilisation of non-formalised, community structures, as well as a reliance (or an over-reliance) on community resources. In this way, 'community health' within LMICs is often characterised by: task-shifting care practices to lower-level cadres; the frequent use of lay workers, including community members, for service delivery; the integration of existing community based initiatives; and the involvement of community members in the implementation and planning of health interventions. These practices are also reflected in Blackburn's (1983) work on community-based prevention programmes in the United States, which states that community health in this context should systematically involve community leaders, social networks, mass communication campaigns, and direct education of the general population.

Taken together, the above suggests that 'community health' cannot merely be defined in terms of where services are located, or how policies are enacted. And while it is recognised that community health can have several connotations depending on context, for the purpose of this thesis, and based on the aforementioned definitions and conceptualisations of community health, the current study understands community health as, 'an effort to improve health and reduce health inequities through systematically involving community stakeholders

in the administration of multi-sectoral health activities aimed at a community level, and through increasing community's participation and control over health'.

2.2.2 Focusing on Community Health: Primary Health Care For All

The recognition of health as a human right, and that a strong primary healthcare system is paramount to the health of societies, especially to reduce health inequities (Richard et al., 2016), stems from the 1978 International Conference on Primary Healthcare (PHC) at Alma Ata. The resulting 'Alma Ata' declaration sparked a monumental initiative that saw governments and activists supporting a goal to reach universal health coverage for all by the year 2000. Its significance not only lies in its recognition of health as more than the absence of disease, but as a combination of political, social and economic inequities, it also became a movement aligned to the core principles of: equity, social justice and health for all, community participation, health promotion, appropriate use of resources, and inter-sectorial action. In the immediate, Alma-Ata resulted in invigorated donors and scores of ministries in low-income countries pledging to 'put people at the centre of health care' by pushing towards increased coverage through the decentralisation of services and a greater investment in hard to reach populations (Green, 2007). Nearly four decades later, it is clear that we still have not achieved the goal set for 2000; however, the importance on, and ethos of, primary health care is echoed in many health policies and interventions still striving to increase access and reduce inequities in health.

In practice, there have been many challenges to increasing equity of access since the initiation of PHC (Richard et al., 2016). Common factors identified as contributing towards the failure of both Alma-Ata and the MDGs include: insufficient political will, poor governance, structural adjustment policies, vertical vs. horizontal programming, rapid population growth, emerging health epidemics such as HIV, limited research and assessment on primary health care, and weak health systems unable to meet imposed programmes (Walley et al., 2008). However, and despite Alma-Ata's failure to attain 'health for all' by

2000, there is still widespread support, based on strong evidence, for the continuation and renewed investment towards PHC, especially in LMICs (Van Lerberghe, 2008, Rohde et al., 2008). This interest has been further influenced through rising health inequities, inadequate progress towards reaching the health-related MDGs, and the human resource for health (HRH) crisis within many health systems (Lewin et al., 2008).

The full implementation of PHC is estimated to address 90% of all health care needs (Rao and Pilot, 2014, Doherty and Govender, 2004). However, there remain many struggles for PHC, some reminiscent of 1978 challenges, and others newly arising due to our more globalised world and emerging priorities, such as HIV and AIDS, mental health and chronic diseases (Lawn et al., 2008). As a result, many in support of the reinvigoration of PHC are calling for more investment in its actions by remembering its core principles, namely stronger community participation in health activities (Lawn et al., 2008, Walley et al., 2008, Richard et al., 2016).

2.2.2.1 Universal Health Coverage and Primary Health Care for All

Much of the more recent attention on health equity has come from the recent call to action for Universal Health Coverage (UHC). Launched in 2012 in response to the failure of many countries to meet the MDGs, UHC is noted as being a worldwide unifying health goal consistent with the recent Sustainable Development Goals (Vega, 2013). Characterised as 'universal access to health coverage without financial hardship in paying for them' (Vega, 2013), UHC aims to have equity in access to health services, adequate quality of health services, and protection for people from financial risk of ill-health. UHC therefore has important implications on a global scale given that health expenses are estimated to push over 100 million people into poverty every year (WHO, 2016b).

In the same way that countries and organisations were dedicated to achieving PHC, many current health programmes build upon PHC principles in their strategies towards achieving UHC. Community health initiatives in LMICs are a prime example of this, with their

focus on bringing services to the communities. However, while UHC is strongly rooted within the principles of PHC, these two movements could be seen as parallel calls to action. As clearly put by the Joint Learning Initiative (2017) "…PHC is not just a set of basic services or a model of care – it's a philosophy of care delivery. It's a complex and integrated approach to care that starts with individuals, families and communities and is the foundation of the health system". UHC is not in opposition to this, but the focus may be diluted due to its more global approach and less consideration on people-centred, participatory work. Therefore, and for the purpose of this thesis, UHC and PHC are seen as complementary actions and substantial consideration is given to their interconnectedness and integration. Specifically, I maintain that a UHC implementation model that fails to take stock of its compatibility with PHC is akin to 'throwing the baby out with the bath water'. PHC should be considered the foundation to strengthening UHC in many low-and middle-income countries, something without which UHC cannot be achieved.

As Ribot (2002) notes, "achieving many of the equity, efficiency, environment and development benefits of participation is predicated on devolving decision-making power and responsibilities to some individual or body representing or in the local community" (pg. 13). The following section therefore shifts towards popular national strategies that were employed to reduce health inequities and increase community involvement and participation. Namely, the decentralisation process, or the process of shifting power to less centralised services, which eventually became synonymous with the 'health for all' movement (Omar, 2002).

2.2.3 Formalising Community Health: Decentralisation

Focusing on community health can often be ascribed as part of decentralisation processes, whereby health services and their management are strategically placed within lower levels of implementation. Decentralisation involves the transfer of authority or dispersal of power in planning, management and decision-making from centralised, usually

national, levels to subnational levels (Mills, 1994). Categorically, four types of decentralisation can be distinguished. *Deconcentration* involves releasing some authority to local health administration with clearly defined duties, enabling a degree of discretionary power afforded to local bodies. *Devolution* describes the legal transfer of power to locally elected political bodies that are independent of the national level with respect to a defined set of functions (Mills et al., 1990). The devolution style is characterised by local bodies being largely independent of national governments within predefined terms, but rarely constitutes complete autonomy (ibid). As described in Chapter 1.4.2, Uganda follows a devolution style of decentralisation within its local government and health. *Delegation* decentralisation, according to Omar (2002) involves the "transfer of managerial responsibility for defined functions to the organisations that are outside the central government structure and only indirectly controlled by the Ministry of Health" (pg. 5). That is, power still lies centrally but locally dispersed bodies have discretion over predefined functions. Lastly, *privatization* involves the transfer of power to non-government bodies such as voluntary organisations or private for-profit groups (Omar, 2002). It should be noted however, that these terms are not mutually exclusive and rarely would one political system conform to one category in its entirety (Mills et al., 1990).

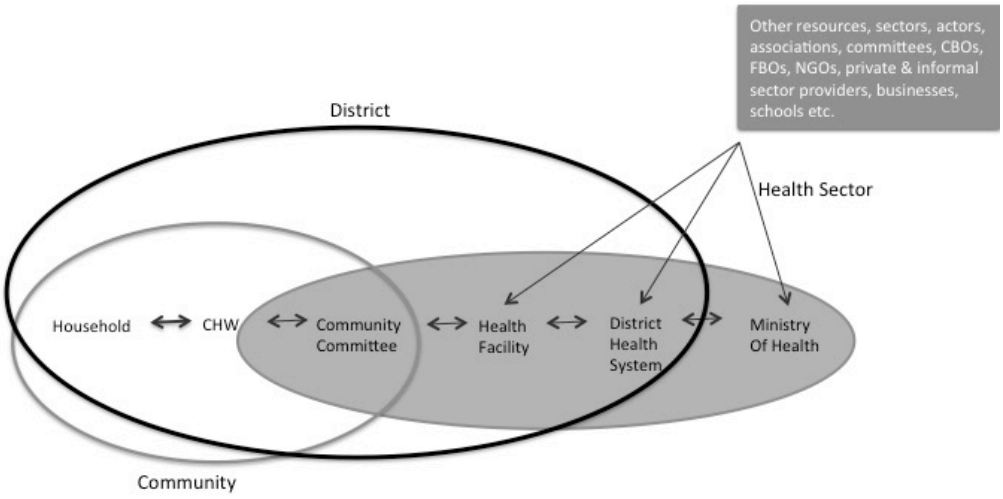
Decentralisation of health as a process for achieving PHC arguably aligns well with PHC's core principles of community participation, health promotion, appropriate use of resources, and inter-sectorial action. Potential benefits of decentralisation include: space for community participation, increased efficiency in service provision, greater inter-sectoral (and multi-sectorial) collaboration, more appropriate health promotion activities and equitable coverage, increased management flexibility and responsiveness, and the promotion of local autonomy through accountability (Green, 2007, Omar, 2002). Given their consistency with Alma-Ata's core themes, the expansion of decentralisation across many LMICs often paralleled the focus on PHC (Green, 2007). Today, decentralised services are still strongly

recognised as an effective means for communities to work towards health for all. This understanding contributes towards what we commonly call 'community health', whereby authority, management and implementation of health services are directed towards communities.

2.2.3.1 Decentralisation and the Community

A common assumption of decentralisation is that governments will be more accessible to communities, and therefore result in individuals having greater decision-making power on issues affecting their lives. As such, aspirations to increase participation and representation of vulnerable groups drove much of the focus for this redistribution of power (Blair, 2000). A simplified structure common among many current policies of decentralisation and its processes of connecting households to more formalised services is depicted in Figure 4. As shown, decentralisation of health to the community, in most instances, involves pathways of interconnected stakeholders and resources.

Figure 4 Organisation of Decentralisation and Community Health



Adapted from: (Hodgins et al., 2013)

While there is much political support for decentralisation, it is not without its issues. The success of decentralisation hinges on several aspects including: adequate resources, including human, infrastructure and supplies; appropriate referral pathways; and government investment (Collins and Green, 1994, Maluka et al., 2010). Additionally, adequate health service delivery requires consideration of the social context where programmes are being implemented, with this being especially pertinent to community initiatives so as to ensure appropriate and meaningful engagement and service utilisation. As a result, some have questioned the ability of decentralisation to reach and engage with vulnerable populations (Blair, 2000, Cheema and Rondinelli, 2007). In what seems counterproductive to PHC's aim of increasing inclusion for vulnerable populations, Gaventa notes that decentralisation also has the capability of empowering local elites, ultimately continuing the process of marginalisation and social exclusion for the more vulnerable (Gaventa, 2002). Where vulnerable groups lack the political backing and essential resources, meaningful participation within a decentralised system remains elusive.

Decentralisation processes, depending on how they are enacted, also have the ability to weaken institutional links, resulting in poor service delivery especially in contexts with low capacity (Brosio et al., 2006). Furthermore, they can undermine existing efforts to mainstream activities, such as human rights at national and international levels, when the interplay between national and local systems is not carefully considered (Gaventa, 2002). Indeed, and despite its widespread use, there is little empirical evidence to support the effectiveness of decentralisation to increase equity worldwide (Koivusalo et al., 2007, Sumah et al., 2016). At the most fundamental level of implementation, PHC, through decentralisation, or any other health strategy for that matter, relies on the strength of the overall health system (Mills, 2014). So while decentralisation aims to influence this, a chicken-and-egg scenario can be envisaged, whereby without existing capacity, such as lower level management capacity, decentralisation strategies will fail to promote primary health

care (Collins and Green, 1994). Taken together, the above suggests that when health systems are weak, community autonomy and the full benefits of decentralisation will be limited. Despite these challenges, there is still a resounding consensus within the global health community that decentralisation strategies, such as community health, are integral to addressing health inequities.

2.3 Community Health: The Reasoning

The following section presents the rationale for community health through an exploration of the benefits of bringing health services closer to the community.

2.3.1 Why do we need Community Health?

As noted in Chapter 1.2.2, a myriad of factors contribute to poor health worldwide. To this end, addressing health inequities requires multifaceted strategies that work to address these often interacting and/or interconnected influences and their affects. This often involves providing more holistic approaches that work to increase supply, within extremely limited resourced contexts, and also the demand for such services. Community health, with its emphasis on multi-disciplinary, collaborative approaches to engage and work with communities, is therefore relevant for reducing health inequity both within the health system and at the household and community levels.

Initiating community health strategies typically involves increasing services at community level and bringing services closer to the community. Within low- and middle- income contexts, a common strategy involves the initiation of close-to-community providers (CTCp)[11] and/or task-shifting to lesser trained cadres such as community health workers (CHWs)[12].

[11] Defined as "A health worker who carries out promotion, preventative, and/or curative health services and who is the first point of contact at community level. A close-to-community provider can be based in the community or in a basic primary facility. A close-to-community provider has at least a minimum level of training in the context of the intervention that they carry out and not more than two to three years para-professional training" (REACHOUT, 2016)

[12] Defined in Chapter 1.5

Evidence from systematic reviews on task-shifting within LMICs support such strategies (Lehmann et al., 2009, Lewin et al., 2008), with the evidence-base specific to MNCH being particularity robust (Haines et al., 2007, Gilmore and McAuliffe, 2013, Lewin et al., 2010, Christopher et al., 2011, Gogia and Sachdev, 2010, Lassi et al., 2016, Bhutta et al., 2010b). Other strategies that often work in conjunction with the aforementioned are the development of multi-purpose community groups, which engage in a wide range of activities including advocacy, health literacy, and governance. These strategies however, are not implemented independently of the formal health sector (or at least they should not be), as indicated in Figure 4. What these strategies have in common is that they tend to utilise existing community resources, mostly people, to increase participation with the formal health sector in order to ultimately improve health outcomes.

Community health strategies are assumed to work to reduce the barriers to health inequities in several ways. Specifically, they can work towards addressing issues of availability, accessibility, acceptability, and affordability of health services. Pragmatically, they increase the absolute number of health workers and/or programmes in contexts that have the greatest shortages, therefore increasing the availability of health services. Moreover, health workers are often recruited from the most remote and rural locations, addressing the accessibility component of barriers to reaching health equity. They also address issues of acceptability and quality as community-based initiatives are often predicated on providing culturally-relevant and accessible health services and information to communities. Finally, because these initiatives aim to link communities with already existing, formalised care services, the organisation of community health services, especially when they rely on lay-worker volunteering positions, can result in more affordable basic care for community members.

2.3.4 Challenges of Community Health

The extant evidence suggests that community care and community interventions are important tools to address health inequality (Barros et al., 2012, Gilson et al., 2007). However, in practice, community health faces many implementation challenges. Specifically, the retention of workers, influenced by interconnected influences across various individual, home, work and political environments, is a large challenge for many remote locations (Lehmann et al., 2008). Adding to this, lack of motivation and large opportunity-costs, often due to limited financial and non- financial incentives, sees high attrition rates within community health (lay trained health) programmes (Bhattacharyya, 2001). Poor supervision and a lack of training or refresher training can also result in low motivation and quality of care (ibid). Limited connectivity to the formal health system weighs heavily on aspects such as referrals and resource distribution. In addition, a lack of community capacity to further engage with, utilise, and take ownership of community health initiatives limits the sustainability and long-term impact of these programmes (Gilmore et al., 2014). And a lack of political and organisational will to fully incorporate the principles of Alma Ata, which aim to give power to the communities, also presents an important challenge for the implementation of community-health strategies. Ultimately, the contexts in which community health is initiated may fail to support its long-term implementation and thus fail to capitalise on the many benefits community health can bring. The above challenges imply that weak health systems often act as the biggest rate-limiting factor towards the successful implementation of community health initiatives.

A common technique prevalent within LMICs, and consistent with PHC and decentralisation, is the distribution of health responsibility towards more community-based services. However, as noted in the above sections, many health systems lack the capacity and resources to take on this responsibility. Strengthening health systems in conjunction with

their implementation is thus paramount to achieving sustainable improvements in health equity for communities.

2.4 Community Health: The Setting

This section examines the health setting in which community health is typically implemented within – that is, the overall health system. Reviews of decentralisation for health programmes suggest that progress towards primary health care for all is limited by weak health systems. The following section focuses on health systems and reviews what is required for sustained and meaningful impact on the health of individuals and communities in low-income contexts. For this, an in-depth analysis of health systems and health systems strengthening is presented, leading to the exploration of a more recent, but as will be argued, essential concept: community systems strengthening.

2.4.1 Introduction to Health Systems

All health activities, including community health, are situated within a 'health system'. Despite the fact that the majority of people in the world will interact with the health system in some way or another throughout their lifetime, there is no clear definition of a 'health system'. Most commonly used is the definition proposed by the World Health Organization (2000), which defines a health system as "*all the activities whose primary purpose is to promote, restore, or maintain health*". This WHO definition attempts to provide a definition based on outcome (performance) and measurements, deemed as missing from previous definitions (Hsiao, 2003). However they are defined, health systems can be understood as open systems (Atun, 2012) which, as described by Hsiao (2003), are a 'means to an end' as they "exist and evolve to service social needs" (pg.3). In other words, a health system is a form of gestalt, whereby its individual components interact and come together within a

specific context to form a system greater than the sum of its individual parts (Atun et al., 2007).

Understanding the aim of a health system is an important step when attempting to evaluate or assess it. Like the definition of a health system however, there is no universal understanding of the aim of a health system, and aims will vary depending on the context of the system (Kruk and Freedman, 2008). That said, the WHO puts forward the following three goals of a health system: (a) promote good health, (b) respond to the expectations of the population, and (c) ensure fairness of financial contribution (WHO, 2000). These, as stated by the WHO Report 2000, are dependent on how systems function in the areas of service provision, resource generation, financing and stewardship (WHO, 2000). These key principles were subsequently integrated into the WHO's 2007 seminal Framework for Action on Health Systems Strengthening, "Everybody's Business: Strengthening Health Systems to Improve Health Outcomes" (WHO, 2007). Within this report, the WHO outlines their health system framework, which includes six building blocks of a health system with newly articulated goals (

Figure 5). As with the definition and goal(s) of a health system universally, the framework's conceptualisation between different countries, and even within countries, can vary. For example, in countries with limited resources the goal of implementing comprehensive services may be shifted to ensure the delivery of essential and basic services (Kruk and Freedman, 2008). The monitoring and evaluation of health systems will also likely be depending on the context, with more constrained resources not allowing for comprehensive, more costly evaluations.

Figure 5 Health Systems Framework



Source: (WHO, 2007)

Questions have been raised on the ability of the building blocks to allow for continuity within health systems, across varying levels, and their ability to encompass important aspects of health such as different socio-economic, cultural and social domains. Moreover, there is no guidance on how to address the interconnectedness of the separate building blocks, though it is recognised that they interact and influence each other. Additionally, when translating these to more informal health systems, such as community health systems, their domains may not translate appropriately, or at least represent essential components within these lower levels. Despite these challenges, health improvements require that we understand the

complex systems that provide or support health services for populations (Leischow and Milstein, 2006).

Despite these challenges, there is general agreement that health systems are an essential component of and prerequisite for promoting health and implementing successful health programmes (Hafner and Shiffman, 2013, Sundewall et al., 2011, Travis et al., 2004). The importance of well-functioning health systems has experienced renewed interest in the last decade. Drawing on experience from the more vertical (i.e. disease specific) programming throughout the mid-1980s to mid-2000s, many policy makers and donors began to recognise the role of having strong health systems for programme implementation (Mutale et al., 2013, Freedman, 2005, Travis et al., 2004). Specifically, vertical programmes implemented by Global Health Initiatives (GHIs) have raised concerns over establishing parallel services, and diverting resources away from already strained systems to focus only on one particular disease (i.e. HIV) (Rao et al., 2014). These disease-specific interventions may also disproportionately affect community systems, which are already constrained by the human resources for health (HRH) crisis and poor infrastructure (Elzinga, 2005). Additionally, the failure to reach the health-related Millennium Development Goals has been attributed to weak health systems (Kruk and Freedman, 2008, Travis et al., 2004, Jha et al., 2002, Larsson et al., 2009, Chopra et al., 2009). A greater understanding of the importance of strong health systems to promote health has led to the emergence of Health Systems Strengthening (HSS) within the global health agenda (Hafner and Shiffman, 2013, Mutale et al., 2013).

2.4.2 Health Systems Strengthening

Despite the lack of a universal definition or agreed course of action, inconsistencies in practice (especially in relation to donor-led programming) (Swanson et al., 2012, Sundewall et al., 2011), and the concept of health system strengthening being noted as vague and

therefore limited to inform policies and programmes[13] (Hafner and Shiffman, 2013, Marchal et al., 2009), strengthening health systems is highly recognised within the health promotion literature as the most sustainable and effective way to achieve improved health outcomes (Swanson et al., 2010, Evans et al., Hafner and Shiffman, 2013, Richard et al., 2011, Travis et al., 2004). The most accepted guidelines for health systems strengthening (HSS) are proposed by the aforementioned WHO's Framework For Action (WHO, 2007). The Framework, consistent with the underlying ethos of HSS, was designed in line with the Alma Ata Declaration of Health for All (1978) and the subsequent principles of Primary Health Care and aims to improve (and protect) health and health equity, in ways that are responsive, financially fair, and make the best, or more efficient, use of available resources (WHO, 2000). The WHO defines HSS as "the process of identifying and implementing the changes in policy and practice in a country's health system, so that the country can respond better to its health and health system challenges" or " any array of initiatives and strategies that improves one or more of the functions of the health system and that leads to better health through improvements in access, coverage, quality, or efficiency" (WHO, 2016a).

A key criticism of the HSS Framework is that it fails to incorporate critical social aspects of health systems, such as participation, which are often integral to the implementation and sustainability of health services in less-resourced countries. In addition, while many organisations and governments recognise the need for HSS, questions on how it should be addressed often arise due to there being little evidence base for its conceptualisation (De Savigny and Adam, 2009, Travis et al., 2004, Swanson et al., 2010). For instance, while funding for HSS has increased dramatically in the last several years (De Savigny and Adam, 2009), there is a tendency for programmes claiming to contribute to, or have a focus on, HSS to be more vertical in nature, ultimately undermining the process of HSS

[13] While no universal principles have been adapted, some have been proposed. See for example: Swanson et al. (2010) who describe 10 Guiding Principles for HSS which are: Holism, context, social mobilisation, collaboration, capacity enhancement, efficiency, evidence-informed action, equity, financial protection and satisfaction.

(Marchal et al., 2009). Similarly, while many programmes recognise HSS, they have yet to translate such notions into action and policies as short-term programmes tend to be favoured to those that might have long-term capacity building capabilities (Swanson et al., 2015).

With regards to HIV and AIDS, several have noted that these programmes offer little evidence to support that they are contributing to HSS (Yu et al., 2008), especially at community, facility and district levels (Biesma et al., 2009). In light of these limitations, the Global Fund has recently developed a Community Systems Strengthening (CSS) Framework, derived from a systems approach to health care, which allows for more focused efforts and facilitation at the community level (The Global Fund, 2010). The CSS Framework is not meant to replace HSS, but rather to complement existing efforts by providing a specific focus on strengthening health systems at the community level.

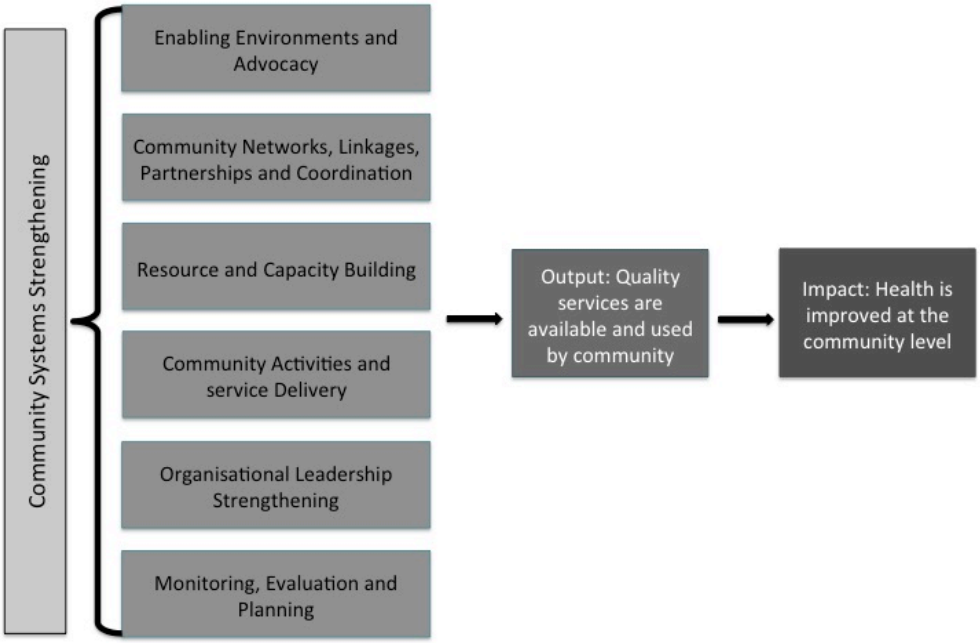
2.4.3 Community Systems Strengthening

The importance of community involvement in activities, combined with the need to directly target the most vulnerable populations at the community level for more effective and equitable services, has put a strong focus on strengthening activities at the community level in order to improve HSS. Though community health programmes cannot be separated from overall health systems, and should be framed within the wider health system agenda and HSS framework, they often require different considerations that are more reflective of their unique socio-ecological position within the community.

The Community Systems Strengthening (CSS) Framework identifies six core components necessary for strengthening communities for health, which together work to increase quality and equitability of services, increase coverage, and improve health outcomes. The six core components are depicted in Figure 6 and include: enabling environments and advocacy; community networks, linkages, partnerships and coordination; resources and capacity building; community activities and service delivery; organisational and

leadership strengthening; and monitoring and evaluation and planning (The Global Fund, 2010).

Figure 6 Community Systems Strengthening Framework



Source: (The Global Fund, 2010)

Proponents of the CSS Framework note that its integration into wider HSS initiatives is necessary to maximise the effects of community strategies for service delivery, such as community health worker programmes (Alamo et al., 2012). Aligned with the proposed CSS Framework, Mburu et al.'s (2013) study of community groups for HIV palliative care support in Uganda identified interrelated domains that were related to community group's ability to contribute to effective care, namely: community partnerships, involvement of groups in monitoring and evaluation, and policy frameworks that created enabling environments for engagement and service delivery, leadership and training (i.e. capacity building). Moreover, the authors note that barriers faced by community groups in their study could "be mitigated through a community systems strengthening approach…[to] increase the capacity of community groups and organisations in terms of their leadership, training, resources, and participation" (pg. 356), underscoring the need to embed community initiatives within a

community systems strengthening framework. With an emphasis on non-technical aspects of community-based health programmes (i.e. partnerships, advocacy), the CSS Framework can assist in identifying important influences that may otherwise be overlooked. For example, in Ethiopia, Bradley et al. (2012) examined the impact of a HSS intervention on rural primary health care units, or at community level. Several prominent themes which influenced success were identified, most of which are consistent with the CSS Framework, namely: community engagement for mobilisation, relationships between implementers, problem solving capacity and management (Bradley et al., 2012). The authors specifically note "evidence from this study suggests that health systems strengthening efforts should devote substantial resources to not only the technical aspects of improving services, but also to the more subtle prerequisites for community change" (pg.6).

Finally, the CSS Framework serves as a useful guide to determine a community's current capacity to support the initiation of planned programmes. So far many difficulties in implementing community programmes have been identified (Chapters 1.4.4 & 2.3.4). Using the CCSF to evaluate a community's capacity to implementation strategies, and then subsequently adjusting programmes based on findings, might therefore impact on its effectiveness (Alamo et al., 2012).

2.5 Community Health: The Implementation

This section introduces essential information on community-based interventions. It begins by trying to understand what types of community interventions exist. Following this an exploration of 'coalitions' and 'committees' is conducted.

2.5.1 Background to Community Health Interventions

Community-based interventions are widely accepted as an integral strategy to achieve PHC and to guarantee meaningful decentralisation within less resourced settings.

Acknowledging that interventions can vary substantially, Laverack (2007b) defines community interventions as, "all forms of social and organisational mobilisation that seeks to address inequalities in the lives and health of community members" (pg. 19). As Rosato (2014) argues, considering the wide scope such intervention can take it can be problematic to consider all community interventions as a homogenous group. To provide more clarity to classifications of community interventions, Rosato (2014) recently conducted an extensive review of forms of social and organisational mobilisation that seek to address inequalities in the lives and health of community members and dissected their meanings to develop an integrated framework.

2.5.1.1 Differentiating Community Interventions

In developing this framework Rosato incorporated: The *Models of community organisation practice framework* (Rothman, 1968, Rothman and Tropman, 1970); The *Community-based and community development programming framework* (Labonte, 1992, Labonte, 1994b); May et al.'s 2002 *Community-based programme design framework*; Rifkin and Pridmore's 2001 *Community participation framework*; McLeroy and colleagues' 2003 *Typology of community-based intervention*; and Laverack's (2007a) *Ladder of Community-based interaction framework*.

While the above frameworks vary in their classification of community interventions, they all share the notion that community interventions can be placed along a spectrum of 'embeddedness' within communities and their approach to working with/for communities. As such, the various frameworks emphasise that not all interventions approach health and the involvement of communities in the same way. Whereas some interventions view health issues from a socio-ecological model, and strive for complete community-driven decision-making, others view health from a more biomedical perspective and use external agents as decision-makers.

Rosato's synthesised framework, presented in Table 3 below, acknowledges five forms (I-V) of community interventions. From the table, it can be seen that all five forms are linked to practice variables within interventions, which Rosato has also associated with the various aforementioned frameworks' classifications of interventions. These 9 practice variables (conceptualisation of health, goals, target group, existing strengths and weaknesses, participation, role of external agent, role of community, tools and methods, resources) and how interventions approach them, link to each of the five forms. One can therefore look at their intervention across these variables, and find where their intervention fits best within the descriptions (i.e. does it view health as the biomedical, behavioural or socio-ecological model).

The five forms of community interventions are reflective of the holistic, equitable and integrated aspects of the intervention, whereby the higher the form, the more community-driven, integrated and participatory the intervention. It can therefore be argued that interventions and programmes truly working to empower and promote community systems strengthening should strive for a Form V intervention. In order to classify the community intervention by form, within this integrated framework, one must first reference nine corresponding practice variables and their descriptions relative to each form. The result is that those working with community interventions can see where along the spectrum their interventions lie, as well as use the framework as a planning tool to potentially incorporate additional components to the intervention that would push their intervention closer into the Form V category.

Table 3 Integrated Framework Differentiate Community Intervention Forms in Global Health

Reviewed Frameworks:	Forms of Community Interventions				
	I	II	III	IV	V
Rothman, 1970, 1987	Social Planning		Locality Development	Social Action	
Labonte 1992, 1993	Community Based		Community Development		
May, Miller and Wallerstein, 1993	Top Down/ Expert Driven		Community Driven		
Rifkin and Pridemore 2001	Information Sharing	Consultation- Tokenistic	Consultation – Real	Collaboration	Empowerment
McLeroy et al. 2003	Setting	Target	Resource	Agent	
Laverack 2007	Participation		Action		Empowerment
Practice variables to differentiate between community interventions					
Conceptualisation of Health	Medical Model	Behavioural Model	Behavioural Model	Socio-environmental Model	Socio-environmental Model
Goals	Eradication of health problem	Changes in health knowledge and behaviour	Changes in health knowledge and behaviour	Increases in community capacities to change political system	Increases in community capacities to change political system
Target Group	Entire community	Entire community	Entire community and some marginalised subparts	Specific marginalised subparts	Specific marginalised subparts
Existing Strengths and Weaknesses	Community lacks capacity	Community lacks capacity	Community lacks some skills but other capacities exist	Community has required capacities	Community has required capacities
Participation	Community informed	Community consulted tokenistically	Community consulted and views taken into account	Joint decision-making	Community-driven decision-making
Role of External Agents	Addresses issues on behalf of community	Addresses issues on behalf of community	Supports community to marshal existing capacities and bring them to bear on issues	Acts as resource to strengthening already existing capacities	Acts as resource to strengthening already existing capacities
Role of Community	The passive setting of the intervention	The passive target of the intervention	The active source of solutions for the intervention	Active agent of change of the intervention	The active agent of change of the intervention
Tools and Methods	Clinical methods	Behaviour change methods	Behaviour change methods	Social capacity-building methods	Social capacity-building methods
Resources	Mobilised by external agent	Mobilised by external agent	Mobilised equally by the external agent and the community	Resources mobilised by the community	Resources mobilised by the community

Adapted form: (Rosato, 2014)

2.5.1.2 Naming Community Interventions

Numerous attempts to classify community interventions, as well as the accepted heterogeneous nature of interventions themselves, have resulted in the emergence of several different terms to describe community interventions. These commonly include community mobilisation, organisation or participation. Often these terms are used interchangeably, and the sheer number of terms, combined with their misuse caused by poor understanding of their definition and/or authors using the most popular term at the time of the intervention, has resulted in blurred conceptions and a lack of differentiation in the community intervention literature. For example, approaches that ultimately aim to organise members for action may be referenced as participatory, and while there inevitably involves some degree of participation, classifying them as such may be misleading.

In light of this conflicting nomenclature, the current study relies on the 'community organising' literature to classify community health committees. While recognising that numerous other concepts - specifically mobilisation and participation – are suited to CHCs, I argue that CHCs are best situated within community organising due to their focus on groups as an organisational tool. Community organising as a concept was first used within the field of social work in the late nineteenth century, garnering attention during the civil rights and women's suffrage movements of the 1950s and 60s (Minkler and Wallerstein, 2005). Within the health field, community organising emerged more prominently after the WHO's inauguration of Alma Ata, with its emphasis on autonomy and the importance of social determinants for health. Community organising is defined by Minkler and Wallerstein (2005) as "the process by which community groups are helped to identify common problems or goals, mobilise resources, and in other ways develop and implement strategies for reaching the goals they have collectively set". That is, people organising around non-individualistic matters or problems which are of concern to the wider social agenda (Labonte, 1994a).

Community organising strategies should take a community-led approach. In doing so, they are fundamentally different from the simple provision of health services, which tend to view the community as a setting for practice. With community organising strategies, the communities themselves are the focus of change. Specific characteristics of community organising strategies include (Minkler et al., 2008, Minkler, 2005, Butterfoss, 2007b):

- Communities identifying their own needs and setting their own agendas
- Community focus as opposed to individual
- Inclusive approach, ensuring most disadvantaged are targeted
- Importance of community involvement in the process
- Partnership approach as opposed to non-participatory

2.5.2.2 Coalitions and Committees

Fieghery and Rogers (cited by (Butterfoss, 2007b)) define community coalitions as "…a group of individuals representing diverse organizations, factions, or constituencies within the community who agree to work together to achieve a common goal" (pg. 38). And while there is no widely accepted definition of CHCs with LMICs, largely due to their heterogeneous nature, this definition, I argue, fits well with the definition of community organising and the description of COMMs within this study (Chapter 1.5) in that the COMMs are instructed to be made up of members from the community, MoH, and other community groups, with gender balance (diverse organisations), and they volunteer as a member to collaborate towards meeting COMM and AIM-Health objectives (common goals). The remainder of this chapter further highlights the consistencies between coalitions and the COMMs (or all CHCs).

Comprised of not-for-profit agencies, local leaders, government officials, and interested community members, community 'coalitions' respond to identified problems by employing a shared socio-ecologic lens which addresses the multiple determinants of community health and well-being (Zakocs and Edwards, 2006b). Three types of committees, categorised

depending on membership and function, exist within the extant literature: grassroots, professional (agency-based) and community-based (Butterfoss, 2007a). Those community coalitions comprised of both professionals and grassroots, are considered to have a more sustainable influence on community health and wellbeing (Butterfoss, 2007a). Within this study's interventions, the COMMs would be classified as community-based, given that they are instructed to include professional (MoH) members. Coalitions form in one of two ways: either 'organically' in a response to threat or issue, or they are 'created' in response to funding opportunities or for advocacy purposes (Butterfoss et al., 1993). The COMMs would be categorised as the later.

The main assumptions of community coalitions are threefold. First, the multifaceted domains chosen to promote community health fit within a socio-ecologic perspective. This is consistent with both the COMM intervention and evidence from other CHC groups (Chapter 1.3), in that they frequently involve targeting communities across multiple systems levels to address imbedded inequities. Second, that contextual factors play an important role in the functioning and outcomes of coalitions, which this thesis will argue (Chapter 3.2) is particularly important for CHCs. Lastly, that local leaders are important members of coalitions due to their ability to influence the social ecology of communities (Wandersman et al., 1996). While not explicit in CHC literature, COMM documentation notes the importance of having leaders as members, and many other CHC interventions apply these shared principles.

The collaborative nature of coalitions offers effective alternatives in resource scarce contexts by distributing responsibility among its members and thus increasing available resources (Butterfoss and Kegler, 2002b) – similar to community based approaches in LMICs. Such groups not only support other community-based initiatives, such as community interventions and lay community health workers, but work together to achieve specific goals (Butterfoss and Kegler, 2002b). For these two reasons they are predicted to achieve better results than any entity could achieve individually (ibid). Taken together, and given their similar

definitions, emphasis on stakeholder involvement (community members, leadership, NGOs), membership and function (professional and grassroots), their collaborative nature, reliance on multifaceted approaches to community problems, and the recognition that context influence functioning are similar across both 'community coalitions' and 'community health committees', I argue that community-based coalitions are strongly comparable to community health committees. Especially as the literature on CHCs within LMICs is limited beyond effectiveness studies, the literature on community coalitions can be useful to inform the understanding of CHCs for the purposes of the current study.

2.6 Chapter Summary

The initiation of community-based interventions, such as community health committees, is largely supported by Alma Ata's 1978 call and the subsequent focus on decentralising health activities. While there is a large body of evidence in support of community interventions, notably from the field of MNCH, there are many challenges to their implementation – largely owing to weak health systems. To this end, strengthening health systems, and in particular community systems strengthening are important steps in ensuring the actualisation of community-based activities and reaching the aspirations of PHC. To work within, and support the strengthening of, such systems involve the implementation of multifaceted (and thus complex) interventions, which can work across these systems. Community health committees are one such intervention that works across socio-ecological layers and are influenced by the contextual conditions in which they operate. While CHCs have a growing body of literature supporting their use within LMICs, theoretical knowledge on their operationalisation is lacking.

2.7 Gaps in the Literature and Research Question

This chapter has shown that health activities, when focused at the community level and when involving complex and dynamic systems, need multifaceted and holistic approaches that consider context. And while the importance of contexts within health interventions has not been lost on many scholars, contextual considerations are often not reflected in the planning, practice and evaluation stages of health promotion programmes (Dooris et al., 2007, Tilford, 2000). Moreover, while community organising strategies are abundant throughout health programming in LMICs, there is little evidence to demonstrate how community health committee strategies work, who they work for and why, with many studies being limited to effectiveness studies that negate the role of context (Abimbola et al., 2015).

Several scholars have noted the need for contextualised applications and evaluations of committees (Brazier et al., 2014, Lunsford et al., 2015), while also recognising that interventions are connected to the socio-ecological context which influences its implementation and effectiveness (Zakus and Lysack, 1998, McCoy et al., 2011a). As Kazi (2003) notes, researchers often know what is working and what is not working in programming, which reduces the need for more effectiveness studies. What is required are evaluations that work to optimise programmes by understanding why and how CHC programmes work. This in itself can be understood as the essence of a programme evaluation where, as stated by Robson and McCartan (2016), an "evaluation is often concerned not only with assessing worth or value but also seeking to assist in the improvement of whatever is being evaluated" (pg. 190).

To my knowledge, there are limited evaluation studies of community health committees, which have tried to understand how context influences possible mechanisms for how committees work to achieve their outcomes, in either HICs or LMICs. This research

therefore aims to offer an original contribution to knowledge, in order address this void by asking '*what works, for whom, and why, for community health committees*'. More specifically, the current study asks the refined research question of: What are the mechanisms and associated contexts through which community health committees work for community systems strengthening?

Chapter 3: Setting the Methodological Scene

"Many of the local and global challenges facing us today are embedded in interconnected systems. Addressing these challenges means moving beyond the limitations of the perspectives, methods and tools of traditional reductionistic science." (Standing, 2010)

3.1 Introduction

The previous two chapters introduced the topic of research and provided a rationale and justification for its further study. From the description of community-based interventions given in Chapters 2.3 and 2.5, it is clear that community-based interventions involve multiple stakeholders and operate across many systems, as opposed to involving vertical and/or discrete services (i.e. immunisation campaigns). As such, these interventions and their outcomes are typically more complex in nature and could therefore be categorised as 'complex health interventions' (CHIs). The following sections present evidence for how to best evaluate and investigate complex health interventions. As such, the purpose of this chapter is to outline and justify my proposed research approach, first by discussing the importance of 'systems thinking' informed by theory for CHIs, and then by highlighting the value of the theory-driven evaluations within a systems-thinking approach. This chapter further presents the methodology of 'realist evaluation', as the chosen methodology to answer the study's research question and compares it with other prominent paradigms. Using scientific realism as its epistemological basis, this chapter then presents a detailed description of how realist evaluation is used for the study of complex health interventions, including community-based approaches.

3.2 Studying Complex Health Interventions

3.2.1 What are Complex Health Interventions?

Health care (and thus health services) are thought to operate within 'open complex adaptive systems', and must (or at least should) work with the understanding that behaviours are inextricable from the context and environment in which they are implemented (Butterfoss, 2007b). Plsek and Greenhalgh (2001b) offer basic concepts and key characteristics of a complex adaptive health system. According to them, complex adaptive health systems have fuzzy boundaries, as opposed to strict and rigid ones; the agents within systems have internalised (implicit or explicit) non-fixed rules that drive action; the agents within the system are adaptive and often changing; the systems are embedded and co-evolve with (influence and influenced by) other systems; and they are non-linear and unpredictable, despite it being possible to discern inherent patterns of behaviour of the systems (Plsek and Greenhalgh, 2001b). Within the field of public health, complex systems are considered not controlled, but rather self-organising, typically by agents following locally applied rules (Trochim et al., 2006, Cabrera, 2002).

Given that they work within complex adaptive health systems (and their socio-ecological approaches), community-based interventions, or community health committees in the context of the current study, are often categorised as Complex Health Interventions (CHIs). What makes an intervention 'complex' has been described in various ways, with a common description compiled by the Medical Research Council (Craig et al., 2008). The MRC's description states that in order for an intervention to be considered complex, it should have:

- A number of interactional components [within the experimental and control interventions][14]
- Number and difficulty of behaviours required by those delivering or receiving the intervention
- Number of groups or organisational levels targeted by the intervention
- Number and variability of outcomes
- Degree of flexibility or tailoring of the intervention permitted

Others have mirrored this description, adding that typically CHIs can be identified by those that are "non-pharmaceutical and participative…[and]…more focused on the whole of the person as opposed to a specific disease or point in time" (Paterson et al., 2009). Here, the emphasis is that the patient or beneficiary of the intervention is involved in the implementation and process itself. In addition, CHIs work with the understanding that they are composed of a collection of individual agents or components that are connected, but that also act in unpredictable ways, thereby impacting on the other components (Plsek and Greenhalgh, 2001a). These self-organising systems are constantly changing, are inextricable from the context in which they operate, work at the interface of the social and individual, and with many dimensions and influences, continuously interact and assert their effects (Kazi, 2003). Therefore, to best understand CHIs, models need to be flexible to the unpredictability of complex systems, and incorporate complex thinking into their designs. As complexity in community health systems is inevitable, failing to account for such complexity can have negative implications on research, design and implementation of programmes.

Given the variety and number of stakeholders involved (including, but not limited to, potential patients, actual patients, the health workforce, suppliers, educators, insurers) and their varying objectives and strategies, Plsek and Greenhalgh (2001) emphasise that linear models for the study and understanding of health should be applied with caution. Questions

[14] For the purpose of this research, this statement has been adapted to just include 'A number of interactional components', to fit within the intervention of study and methodology.

therefore arise of how to best study CHIs, given that their defining characteristics inherently oppose traditional methodologies used within health studies (i.e. positivist and post-positivist studies). The following section therefore reviews these traditional methodologies and presents the current literature on how to best study CHIs.

3.2.1.1 Positivism in the study of CHIs

Research within the field of health sciences has traditionally taken positivist reductionist approaches using experimental design methodologies. These methodologies seek to find causation through successionist techniques that assume one can control for environmental and social conditions (contexts) and that any observed changes can therefore be attributed to the intervention. These study types, such as randomised controlled trials and quasi-experimental designs, have historically been deemed as 'the gold standard' for academics, practitioners, and policy makers within health.

While experimental methods can at times be useful for the study of complex health interventions, it is equally as important to understand their limitations. Within open and complex systems there are many components or agents that work on a programme; therefore, in such systems it will be difficult - if not impossible – to control for external factors. As Mingers (2006) states, the reason for this is that "predicted effects may or may not occur depending on a multitude of factors" (pg. 25). This 'multi-causality' means that in complex/open systems, outcomes are often the result of many interacting components. Consequently, choosing traditional positivist approaches may imply the wilful neglect of additional factors that contribute to the multi-causality of an intervention by only providing evidence on the narrowly pre-defined variables of interest, which can result in incomplete or inappropriate patterns of meaning, reducing observed experiences to consequences of programme inputs (Paterson et al., 2009). Positivist approaches not only limit the understanding of unanticipated outcomes, or 'knock-on-effects' (which may be just as

important or even more so than the anticipated outcomes), but these approaches are sometimes used to infer causality, which may not tell the whole story.

Another limitation of positivism lies with its disregard for the importance of the context and the people who interact with the intervention. Social programmes do not work in isolation - people, their relationships and experience, the environment and its history, can, and do, influence the outcomes of an intervention. Failing to recognise these contextual factors, or attempting to minimise their affects, is contrary to a holistic approach.

Adding further scrutiny, reductionist approaches are noted as providing insufficient explanation of programmes and their functioning. Scholars note that if studies in this field are to be useful, they must incorporate implementation and contextual information (Waters et al., 2011). This is consistent with Kazi's (2003) point that often we already know *if* something 'works', which mutes the value of more effectiveness studies. What is required are evaluations that work to optimise programmes by understanding *why* and *how* they work (Kazi, 2003). This in itself can be understood as the essence of a programme evaluation. As stated by Robson and McCartan (2016) "evaluation is often concerned not only with assessing worth or value but also seeking to assist in the improvement of whatever is being evaluated" (pg. 190).

3.2.1.2 Complex Health Interventions require complex evaluations

For evaluations of CHIs to be beneficial for programme implementation it is important to understand how the intervention works through investigation of the active components and their effects (Michie and Abraham, 2004). Evaluations should not attempt to control for this complexity (an impossible task), but instead work to understand its influence within interventions. To this end, studies focusing on programme theory which understands change as a process resulting from interactions between context and mechanisms, have been proposed as alternative models to evaluating CHIs (Paterson et al., 2009). In addition to showing the interactions between programme, process, and context, using programme

theories allows for the addition of independent and dependent outcomes, not otherwise considered by intervention designers or implementers, to emerge. Specific to the study of committees, these approaches recognise that behaviours are inextricably linked to the environment and wider socio-ecological context (assumption 1 in Chapter 2.5.2.2) In other words, these programmes do not exist in a vacuum, and as such, their evaluations need to consider their contexts and the multiple mediated pathways through which they drive change (McCoy et al., 2011a).

3.2.2 Complex Health Interventions and Systems Thinking

In contrast to more positivist approaches, systems-thinking emphasises a holistic approach that attempts to understand the whole systems and interactions within it, as opposed to focusing on specific, individual components (De Savigny and Adam, 2009, Trochim et al., 2006). Broadly speaking, 'systems thinking' is, as noted by Senge (2006) is "a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots" (pg. 68). Application of this logic is then used to identify problems (leverage points) and then solve them (Cabrera, 2002, Checkland, 1981, Adam and de Savigny, 2012). This conceptual orientation sees various components of the system as interconnected and related, interacting with each other to form a unified whole (Anderson and Johnson, 1997, Trochim et al., 2006). A key feature of the systems-thinking approach is the consideration of the influence of stakeholders, both within and between various levels of the health system (Sterman, 2006). Thus, systems-thinking is a perspective that considers these connections/interactions, and emphasises that a holistic understanding can only emerge from engagement with system stakeholders (Leischow and Milstein, 2006). With its emphasis on stakeholder engagement, systems thinking offers an important contribution to better understand CHIs, or CHCs, in the case of the current study (Trochim et al., 2006). Opposing traditional methods of reductionism, which focus on isolating cause and effect within health programmes, systems thinking favours a shift to more dynamic and

holistic approaches to a more classical, linear, perspective (Kroelinger et al., 2014, Adam and de Savigny, 2012, Sheikh et al., 2014), as summarised in Table 4.

Table 4 Classical Approach vs. Systems Thinking Approach

Classical Approach	Systems Thinking Approach
Static thinking Focusing on particular events	**Dynamic thinking** Framing a problem in term of a pattern of behaviour over time
Systems-as-effect thinking Viewing behaviour generated by a system as driven by external forces	**System-as-cause thinking** Placing responsibility for a behaviour on internal actors who manage the policies and 'plumbing' of the systems
Tree-by-tree thinking Believing that really knowing something means focusing on the details	**Forest thinking** Believing that to know something requires understanding the contexts of relationships
Factors thinking Listing factors that influence or correlate with something	**Operational thinking** Concentrating on causality and understanding how behaviour is generated
Staring-Line thinking Viewing causality as running in one direction, ignoring (either deliberately or not) the interdependence and interaction between and among the causes	L**oop thinking** Viewing causality as an on-going process, not a one-time event, with effect feeding back to influence the causes and the cases affecting each other

Source: Adam and de Savigny (2012) who cited Richmond (2000).

While this holistic view of understanding complex phenomena is not new, and exists across many other disciplines, including ecology, engineering and business (Begun et al., 2003), the need for systems thinking has only recently emerged in health research, largely due to the growing recognition of the inter-connectedness between individual health system components (Dooris et al., 2007, Stokols, 1996, Best and Holmes, 2010, Best, 2011). Proponents of a systems-thinking approach for health highlight its potential to identify influential areas within CHIs and therefore see its value for the design and evaluation of such interventions (McPake et al., 2006, Checkland, 1981, Swanson et al., 2012).

Dooris et al. (2007) drawing from the works of systems scholars such as Galea, Powis and Tamplin (2000) and Poland, Green and Rootman (2000), compiled a list of reasons why taking a systems perspective in the health field is particularly important:

- Health issues do not respect boundaries and an issue that manifests in one setting may have its roots in a different setting
- People's lives cross different settings, concurrently and consecutively

- There are micro-environments within each setting that offer different experiences to different people, on different days
- Settings function at multiple levels, with shared and separate domains, and as "elemental" or "contextual" settings may be located within the context of another, consisting of nested settings within interconnected spatial and temporal layers

Trochim et al. (2006) notes using systems thinking is considered most applicable for public health systems as, "they [public health] consist of many interacting stakeholders with often different and competing interests" (pg. 539) and are self-organising. In this, each stakeholder (or agent) within the system has a specific role and an implicit (or sometimes explicit) set of rules to follow. The roles of stakeholders are interconnected and link together, to help form the overall system. For example, in the case of a community health committee, actors within the CHC will have internalised roles and rules that they follow, interacting with other members to form a whole group. It may be assumed, for example, that the eldest man will be the chairman of the group, and be responsible for the agenda, or communication, with community leaders outside the CHC. Similarly, all other members will implicitly know that the community health worker (CHW) member of the CHC will coordinate activities within the wider CHW network, without this role ever officially being ascribed. Similarly, the CHC itself can be seen as an actor, with a specific role to play within the wider community health system. How the CHC links with the health facility, community health workers, community members, politicians (who themselves have specific roles and rules within this system) contributes towards the health system.

3.2.3 Examples of Systems Thinking in Health in LMICs

A recent systematic review on systems science and systems thinking conducted by Carey and colleagues (2015) found strong support for its use within public health echoing many others in their support for systems thinking (Plsek and Greenhalgh, 2001a, Trochim et al.,

2006, Swanson et al., 2012). Unfortunately, few studies in the field of public health have, to date, been conducted utilising a systems-thinking approach. Of those studies that were identified as using systems thinking, these can largely be classified into four categories: 1) position papers, or those supporting its use within public health; 2) analytical lens papers, which used systems concepts to guide the research; 3) best practice/benchmarking papers, which used elements of systems science to evaluate programmes; and 4) modelling articles, those which used advanced systems methodologies for modelling public health programmes, including obesity, non-communicable and communicable diseases, leadership, task-shifting, tobacco, health research, substance abuse, health policies, oral health, mental health and environmental health (Carey et al., 2015).

In support of systems-thinking approaches the WHO-Based Alliance for Health Policy and Systems Research (HPSR) published their 'Systems Thinking for Health Systems Strengthening' in 2009. Noting the lack of applications of systems thinking within LMICs, the authors focus mainly on systems thinking within these contexts by providing concrete recommendations for how to use systems thinking within LMICs, largely drawing from theories or examples from HICs (De Savigny and Adam, 2009). The report further identifies the following barriers for utilisation of systems thinking in research: policy and priority alignment among stakeholders, management of system stakeholders' expectations, and priorities and a lack of capacity required to apply systems thinking perceptive (De Savigny and Adam, 2009). The latter includes poor quality or limited data, lack of experience in such research methods and technical skills, and poor partnership management and collaboration (ibid).

Despite the aforementioned challenges, there are examples applying systems thinking approaches for understanding community health interventions (De Savigny and Adam, 2009, Adam and de Savigny, 2012, Shiell et al., 2008, Adam et al., 2012). Bocoum and colleagues (2013), in their study of task-shifting for HIV, applied systems thinking in Burkina Faso, noting the importance of such an approach to uncover systems issues (both positive and negative) in

the design and implementation of programmes. Specifically, using the WHO's Health Systems Strengthening Framework the authors were able to identify 20 possible effects of task-shifting on the system as a whole including: staff insecurity and tension between staff (governance and HRH); inefficiencies and cost implications (Financing and HRH); patient satisfaction and better services (service delivery) (Bocoum et al., 2013). In South Africa, systems thinking was used to explore leadership and sense-making of policies by health teams and managers, providing important insights into working environments, personal values, relationships, management practices and power relations (Gilson et al., 2014).

Iwelunmor et al. (2014) conducted a review of hypertension control in West Africa and recommended more systems thinking approaches for programming based on their findings for social and structural determinants for hypertension. Within this study, the authors were able to understand casual linkages between various levels (environmental, social, individual) to gain a more holistic understanding of determinants of hypertension, and how each determinant influences (positively or negatively) on others (Iwelunmor et al., 2014). For example, in their resulting diagram on the multiple factors influencing hypertension one can trace the relationship between individual determinants (i.e. exercise, diet, stress, their socio-economic status) and more structural determinants (i.e. access to health clinic, cost of drugs), which ultimately can be used to inform interventions and target the determinants of hypertension in a systems-thinking (holistic) manner.

Mutale et al.'s (2013) paper on health systems in Zambia, found strong links between Community Systems Strengthening building blocks and health worker characteristics. They note the interconnectedness and interactions between the HSS building blocks, specifically how challenges in service delivery were linked to all other building blocks. Their study also emphasised the importance of community perceptions of health workers for service delivery, noting that community perceptions were a stronger determinant of access to services than limited HRH. Taken together, the above studies underscore the importance of understanding

how both community systems and the overarching health system influence each other, and overall health outcomes. The authors conclude that it is "…essential to apply systems wide approaches when evaluating health systems due to close linkages that exist between sub-systems. It was clear that the success or failure reported in one building block accounted for success or failure report in other building blocks" (Mutale et al., 2013).

The need for more holistic approaches to the study of maternal and child health has also been documented (Freedman et al., 2005, Kerber et al., 2007, Pasha et al., 2010) and is seen as an important tool through which to better understand the context of health programmes and to better inform evidence-based programming (Kroelinger et al., 2014). Findings from the Philippines (Huntington et al., 2012) demonstrated positive outcomes while applying systems thinking to the design of a large-scale programme Through using systems thinking to identify problematic issues within the health system, maternal health programme designers were able to orient activities towards system deficiencies (like HRH management), which overall was attributed to positive synergistic effects between the HSS building blocks and thus improvement in maternal health (ibid).

Despite systems thinking increasingly recognised as a powerful tool to understand the multifaceted relationships and complexities inherent within health systems (De Savigny and Adam, 2009), to date, the application of systems thinking has been largely under-utilised within the field of health systems within LMICs (WHO, 2009, Carey et al., 2015). While there is support for adopting systems thinking approaches to study community based interventions and initiatives (Jerome and Ivers, 2010, Mburu et al., 2013), there are few studies that explicitly document this process.

3.2.4 Methodologies for Systems Thinking

The 'type' of evidence needed when considering the majority of health systems strengthening interventions using a systems thinking approach has been introduced. Specifically, studies need to take a socio-ecological approach to identify context, work to

understand relationships between stakeholders, and aim to understand multi-causality. However, challenges remain in identifying the best methodologies for systems-thinking for complex health interventions.

Systems-thinking is an analytical approach that can incorporate multiple theories or models to better understand and contextualise the study. In doing so, systems-thinking studies aim to identify weak points within the system that require intervention (Williams and Hummelbrunner, 2010). Methodologies for studying systems-thinking should be reflective of the chosen theory or theories and classifications of 'hard' or 'soft' systems thinking methodologies are sometimes made (Carey et al., 2015). Hard methodologies consist of more quantitatively focused modelling methods, whereas 'soft' systems methodologies are typically qualitative and action-based (ibid). The most common methods used within the extant literature for systems-thinking include the 'hard' methods of: systems dynamic modelling, network analysis, or structured conceptualisation (Best and Bethesda, 2007). Many of these methodologies are traditionally rooted in the fields of economics or business disciplines. When it comes to public health research however, Best and Homes (2010) and Carey (2015) argue these traditional 'hard methodologies' are likely to fall short. As such, Carey (2015) notes that soft systems methodologies are better aligned with public health approaches.

Best and Holmes (2010) further suggest that systems-thinking for public health should embrace complexity; consider local contexts; apply community-based participatory and action research methods; study organisational networks and the ways they collaborate to impact on health; and support leaders who strengthen the link between research and practice. Unfortunately, and unlike 'hard' systems-thinking methodologies, there is little by way of methodological recommendations for 'soft' approaches.

The following summarises several guiding principles for selected methodologies to use while taking a soft systems thinking approach informed by the previously discussed literature:

1. As systems thinking is aligned to ecological models frequently used within global health and understands that activities have multifaceted socio ecological layers that are inextricable from context, systems thinking methodologies must not aim to control for context to negate its influence, but work to incorporate and understand contextual implications
2. As system thinking methodologies should enable researchers to examine and understand dynamic relationships across multiple levels within society they should adopt non-linear approaches by including:
    2a. A range of stakeholders that are able to provide different perspectives
    2b. Target multiple levels within society and the health systems
3. Methodologies should include, in most cases, multiple methods of data collection and a range of information from different sources, which will provide different insights into the issue
4. As systems-thinking asserts that systems and settings are dynamic, complex and changing, its study demands that methodologies be flexible (to a reasonable degree) to allow for the 'unknown and unanticipated'.

If systems-thinking is about complex and real world settings, then we need complementary methodologies that allow us to understand the nuances of programmes, including what enables them to work, and that recognise the importance of context, as opposed to trying to control for it. The application of such methodologies should yield transferable findings that offer insight into *how* things work and not just *if* they work. The following section argues that realist evaluations are compatible with these criteria and are therefore an appropriate methodology for 'soft' systems-thinking.

3.2.5 Summary of Researching Complex Health Interventions

Thus far, I have argued that the introduction of Community Health Committees acts as a type of complex health intervention (CHI). As a CHI, the study of CHCs therefore requires methodologies that move away from traditional, more positivist approaches, towards more systems-thinking, and more specifically 'soft' systems-thinking, approaches. Unfortunately, the extant literature offers little by way of elucidating which methods are most appropriate to apply to 'soft' systems-thinking studies. The following section introduces the concept of 'realist evaluations', a form of theory-driven evaluations, as one such possible methodology and argues that it is the most appropriate method to answer the current study's research question. But first it is important to introduce research paradigms to better situate the remainder of this chapter.

3.3 Research Paradigms

3.3.1 Introduction to traditional paradigms

Paradigms, detailed by Kuhn in the debated book "*The Structure of Scientific Revolutions*" (1962), is a term generally used to describe "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed" (Kuhn, 1970). These 'mental models' are made up of ontology, epistemology and methodology (Wainwright, 1997). The most prominent paradigms within health are positivism and interpretivism.

Positivism, which until recently stood as the dominant discourse within health sciences, states that there is an objective reality that can be understood through the laws that govern it (reality). Within positivism, 'truth' and/or 'knowledge' are what can be verified through empirical scientific discourse, mostly using experimental, deductionist methodologies. On the other hand, interpretivism, states that the world is constructed through human

interpretation, and that it is the making sense of one's own reality that is knowledge. It is concerned with understanding a person's worldview using mostly inductive qualitative methodologies, which cannot be observed from an external reality.

Table 5 provides more details on the differences between these paradigms, with ontology meaning 'the nature of existence' and epistemology as 'what is possible to know about the world and how it can be known' (Corbin and Strauss, 2008).

3.3.2 The “Third Way”: Realism

The paradigm of realism is often noted as being the 'third way', or school of thought (Bergin et al., 2008). Generally placed between positivism and interpretivism, realism as an ontology acknowledges that there exists an objectively, knowable, mind-independent reality, whilst acknowledging the roles of perception and cognition (Rycroft-Malone et al., 2010). Realist ontology states that ‘there is a real world that exists independently of our perceptions and theories’, whereas its epistemology is ‘our understanding of this world is inevitably a construction from our own perspective’ (Bhaskar, 1975). Thus, this paradigm acknowledges an objective reality while also accepting the importance of knowledge construction and cognition.

The central tenet of realism is to understand casual explanations by gaining knowledge on 'mechanisms of causation' (Byng, 2005). Termed *generative* mechanisms, these are non-observable structures, powers, and relations that explain how things work and under what conditions and contexts (McEvoy and Richards, 2003). That social change is generated, as opposed to being caused by an intervention, is the presiding philosophical concept behind realism (Pawson and Tilley, 1997).

Epistemologically, two variants can be made within realism. Critical Realism, attributed to Bhaskar (1975) and largely influenced by Archer (1998) and Sayer (1997, 2000), and Scientific

Realism, pioneered by Pawson and Tilley (1997).[15] The main difference between these two schools of thought is concerning whether or not 'closed systems' (i.e. impenetrable by outside factors) can be created within investigations (Dalkin et al., 2015). Bhaskar would object to this ability, noting that human capacity and agency are omnipresent and unceasing in their capacity to alter their environment. To work within such a system, critical realists therefore propose using reasoning and a moral lens to evaluate and understand human action (ibid). For scientific realism however, Pawson brings a pragmatic approach concerning systems, noting that the attainment of a closed system is not a necessity for understanding and investigating within social and physical science.

Since Bhaskar's introduction of critical realism in 1975, there have been many proponents for use of realist paradigms within health disciplines, most notably within nursing (McEvoy and Richards, 2003, Wainwright, 1997, Angus and Clark, 2012, Clark et al., 2008). More recently scientific realism as proposed by Pawson and Tilley has gained traction within health science disciplines, specifically for examining complex health interventions and providing actionable findings (Marchal et al., 2012c). To this end, realist synthesis, a methodology for secondary analysis of exiting literature, and realist evaluation, the methodology for understanding how interventions work, for whom, and in what contexts, are rapidly emerging. As such, the remainder of this chapter will focus on 'scientific realism', by first exploring its roots within Theory Driven Evaluation, and then by presenting realist evaluation methodology.

[15] Many consider realist evaluation to be a methodology under critical realism. While critical realism contributes to the theoretical basis for realist evaluation I understand them both as variants of realism, which have many similar properties but vary in certain epistemological tenants as outlined in text.

Table 5 A Comparison of Research Paradigms

	Ontology	Epistemology	The role of social science	Human behaviour	Common Methodology and methods	Analysis
Positivism	The world exists and is knowable as it really is. This is separate to the observer (researcher).	Knowledge is about discovering universal casual laws.	Discovering universal laws of human behaviour and of society.	Researcher is an observer of social reality. Respondents are objects, informants or producers of data.	Experimental or quasi-experimental validation of theory; quantitative methods, control groups	Findings are causal and concerned with validity, reliability, and replicability.
Realism	Reality exists independent of social actors and observers. Ones understanding of the world changes independent of actual change. Ontology is stratified and the world is characterised by emergence.	Knowledge is related to theory development of potential underlying generative forces. Reality is a complex layered pattern of activities or mechanisms (reasoning and resources) on which a range of theories can be established and tested.	Eliciting theories to explain the real world and refining/testing these theories by rational criteria.	Observable human behaviour is characterised by underlying intention and choice. Understanding this is part of the research process.	Explanation is concerned with how mechanisms produced events and in what circumstances; mixed methods to suit research purpose and theory, and to test/refine these theories.	Findings have generative element through retroduction; findings should be articulated in context-mechanism-outcome configurations; teaching and learning process enables accumulation of knowledge of 'what works, for whom, and why'.
Interpretivism	There is no objective reality. Reality is socially constructed and meaning is attached to the social world by the individual who interacts with it.	Knowledge is constructed and appreciated the relativist nature of what is studied.	Discovering how different people interpret the world in which they live.	Importance of viewing meaning of experience and behaviour in its full complexity.	Open to interpretation; qualitative methods.	Findings are not explanatory, nor are they generalisable. Two people studying the same thing at the same time will have different findings, both of which are true.

Sources, adapted from: (Cohen et al., 2007, Robson and McCartan, 2016, Pawson and Tilley, 1997)

3.4 Theory Driven Evaluations

There is growing support and evidence for the use of theory within the study of health promotion to assist in improving programme implementation (Glanz et al., 2008, Nutbeam et al., 2010, Rimer and Glanz, 2005). Theories in health promotion are important for several reasons. Firstly, theories can help to understand *why or how* individuals engage with health activities and health related behaviours. Secondly, and consequently, they can provide guidance for programme designers, managers and implementers on factors to consider and strategies to use for effectiveness (Rimer and Glanz, 2005). Thirdly, theories can help to explain in a systematic fashion *why or how* health promotion will work by examining the situation and predicting outcomes (Raingruber, 2014). Lastly, having a theoretical basis can guide researchers and evaluators in their methodology, ensuring appropriate tools are used and questions answered, and to help explain 'why, how and for whom' programmes work (Rimer and Glanz, 2005). In light of these recognitions, Theory Driven Evaluations (TDEs) have emerged which provide an alternative to more positivist evaluation methodologies.

Theory driven evaluations were initially proposed by Chen and Rossi (1980, 1983) in response to the limits of successionist methodologies. Such evaluations can address a vital epistemological failure, namely that open complex systems cannot have predictive theories (Bhaskar, 2013, Mingers, 2000) by instead providing explanatory theories. Within TDEs, Blamey and Mackenzie (2007) state that "programmes are not monoliths, people are not passive recipients or opportunities to improve their health, wealth and social standing, and context is key to understanding the interplay between programmes and effects" (pg. 440). Thus, theories, as stated by Nutbeam (2013) are "at [their] most useful here in providing guidance on how and when change might be achieved in the target population, organisation or policy" (pg. 67). TDEs align well to the study of complex health interventions as, and in contrast to more traditional evaluation approaches, theory-based evaluations within health

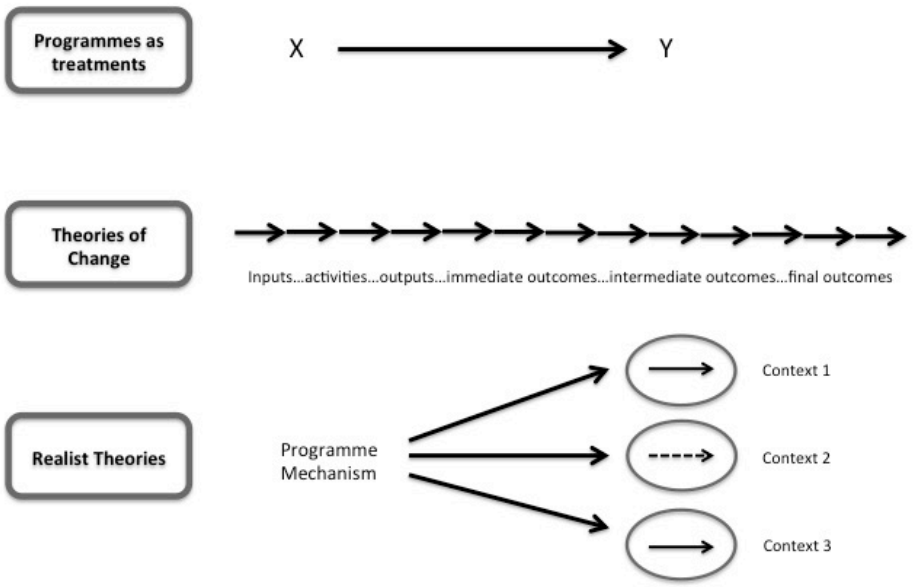
promotion have shown that cause and effect is not a clear linear process, as assumed by reductionist approaches (Paterson et al., 2009). It is suggested that using a theory-based model instead can incorporate intervention process and individual meaning, allowing for a variety of outcomes, relationships and meaning to emerge (ibid). Evaluation techniques also recognise that the context in which the intervention is implemented does, and will, inevitably influence the programme.

Context in TDE operates at a multifaceted level, including political, social, organisational and individual domains (Blamey and Mackenzie, 2007). Instead of the experimentalist approach of controlling for context, TDEs include context within their evaluations, and sees context as a key factor that can either promote or detract from the programme's objectives. There are various forms of TDEs, for example contribution analysis, elicitation method, prospective evaluation synthesis or strategic assessment approach. One of the most commonly used approaches is the Theory of Change. The origins of Theory of Change (ToC) are largely attributed to Weiss (1995b) and her hypothesis of why complex programmes are difficult to evaluate: namely lack of understanding and articulation of a programme's underlying assumptions. This ambiguity around the assumed processes and pathways for how a larger change is produced translates into evaluations that do not consider the whole picture of a programme. To address these limitations, ToC was developed to assist in describing programme assumptions that explain the process of events and activities leading to short and long-term outcomes (Weiss, 1995b).

Another prominent TDE methodology is the realist evaluation, which builds on similar principles of ToC. A main difference between these two methodologies, as argued by Blamey and Mackenzie (2007) is that ToC has a stronger focus on 'implementation theories' (that is a theory which aims to link intervention activities and outcomes), whereas realist evaluations focus on 'programme theories' (that is the hypothesised links between mechanisms triggered by an intervention and their contexts). For a realist evaluation, the elicitation of programme

theories and its emphasis on the interaction between mechanisms and context, is the main focus (Breuer et al., 2016). The two methodologies also differ in their relationship with stakeholders, where ToC uses a more participatory involvement of stakeholders throughout the research process compared to realist evaluations (ibid), and realist theories are often at a higher level of abstraction than their ToC counterpart (Marchal et al., 2012a, Breuer et al., 2016). Figure 7 describes the these two TDEs and their understanding of change in relation to each other compared to more positivist studies, specifically highlighting the difference between 'implementation theories' and 'programme theories' for the two TDEs.

Figure 7 Understanding Change: A Comparison of Ideas



Source: (Pawson and Tilley, 1997)

3.4.1 Rationale for a Realist Evaluation of CHCs

The evidence presented thus far suggests that CHCs in all their multiple forms vary in roles and functions and in the multifaceted factors that influence them. To this point, McCoy (2011a) notes that there is no single approach that can be used for their evaluation and researchers within this field echo this thought by either specifically stating, or alluding to, the

importance of contextual considerations within the study of community committees (Scott et al., 2016, Abimbola et al., 2015, Campbell et al., 2014, Lunsford et al., 2015, Olayo et al., 2014, Lodenstein et al., 2016, Molyneux et al., 2012, Capurchande et al., 2015, George et al., 2015b).

Several scholars within this field have utilised realist approaches for the study of CHCs or other, similar, community-based groups. For instance, Campbell and colleagues (2014) used realist approaches to identify three contextually specific factors that lead to a less-than-satisfactory peer education programme for HIV in Zimbabwe. The authors were able to note that poor programme outcomes were likely a result of a) difficulties in implementing whole programme components, b) programme staff using 'moralistic approaches' with sex workers, and c) failure to engage with social realities facing community members (ibid). Using realist principles allowed the authors to contextualise findings for programme failure, and note issues across the whole implementation system.

In Nigeria, Abimbola and colleagues (2015) examined CHC meeting minutes using realist analysis to understand how CHCs function within existing socio-cultural and economic structures, and to propose mechanisms for five action channels of CHC groups. Through this analysis they were able to identify the actual actions of the CHCs, as opposed to their mandates. Namely, they found that CHCs function through: community meetings, community outreach, lobbying government, supporting governments, or taking control of health in the community (ibid). They concluded that future research should include theory-driven approaches to evaluating CHCs in LMICs.

Lodenstein and colleagues' (2016) realist review provided important insight health provider responsiveness to community demands. Within this the authors were able to identify contextual conditions that increased health provider receptivity to community accountability actions, largely focusing on the health provider - committee relationships (Lodenstein et al., 2016). This work was supported by a cross-case comparison of Health

Facility Committees in West Africa which highlighted provider responsiveness as mediating factors for HFC outcomes (Lodenstein et al., 2017).

While not specifically a realist study, George et al. (2015b) review of CHCs aimed to highlight the importance of contextual factors, in line with realist methodology. This study found four layers of context (community, health facility, health administration, society) with different factors across each level that influences CHC functioning. Using these identified contextual conditions, (Scott et al., 2016, Scott et al., 2017) conducted a study on committees in India, which elaborated on these contextual factors, and assisted in understanding linkages between contexts. To add to this, McCoy (2011), based on a systematic review of health facility committees, noted the need for studies that understand the implementation process and strive to understand how and why committees work (Pg. 460).

Reflecting on the proposed methodological guidelines for systems thinking (Chapter 3.2.4) and Table 4 (Chapter 3.2.2) I argue that realist evaluation is a methodology consistent with systems thinking. Specifically, realist evaluations are aligned to systems-thinking's emphasis on 'forest thinking', to understand context and relationships; 'operational thinking', to explore causality and how behaviour is generated; and 'dynamic thinking', which understands the issue as patterns over time influenced by internal actors in that realist evaluations: (1) aim to understand contextual implications; (2) work to understand dynamic relationship through non-linear research methods, working across multiple levels within society; (3) employ mixed methods approaches; and (4) involve iteration within its design, thereby proposing flexibility on methods and tools within the study.

To the best of my knowledge, to date there has only been one realist study that used a systems thinking approach within LMICs: Prashanth et al.'s (2014) realist evaluation of a capacity building programme for health managers within India. Within this the authors argued for their synergy and note realist's ability to understand system-wide change, and linkages between individual change to systems change. Another realist evaluation

incorporated systems-thinking as a ‘mechanism’ which facilitated manager’s decision-making abilities within Ghana, but did not incorporate a ‘systems-thinking approach’ within the study design (Kwamie et al., 2014).

While still in early phases of development, realist evaluations are increasingly being employed across a number of studies. However, there is little precedent for its use within low-income contexts, with few realist evaluations having been conducted in LMICs (Maluka et al., 2011, Marchal et al., 2010b, Goicolea et al., 2012, Van Belle et al., 2010, Prashanth et al., 2014). However, currently there are numerous realist evaluation protocols published for studies within LMICs, indicating a potential increase of realist evaluation methodology within these contexts (Vareilles et al., 2015b, Mukumbang et al., 2016a, Gilmore et al., 2016a, Ebenso et al., 2017, Bergeron et al., 2017, Mirzoev et al., 2016). The current study therefore contributes towards the further development of this emerging methodology and further aims to contribute new knowledge of how to conduct realist evaluations within low-resourced contexts.

In sum, a realist evaluation was chosen for the purpose of this study due to its suitability for studying complex health interventions, its alignment with systems-thinking, and its focus on understanding mechanisms for programme change and theories. The following section introduces the methodological background to realist evaluations, starting with investigating the realist research paradigm.

3.5 Realist Evaluation

3.5.1 What is a Realist Evaluation?

As a methodology, Pawson and Tilley first proposed realist evaluations in their seminal work "Realistic Evaluation" (1997). A form of theory driven evaluation, with principles aligning to a systems thinking approach, realist evaluations (RE) acknowledge that interventions and their outcomes are subject to contextual influence. As such a realist evaluators’ duty is to

understand ‘how, why, for whom, and under which conditions’ interventions work (Pawson and Tilley, 1997). As a function of the methodology the incorporation of theory is inevitable, however realist evaluations also aim to be programmatic by producing policy relevant findings at a level of abstraction that can be transferred across settings (Salter and Kothari, 2014, Fletcher et al., 2016). Herein lies a pragmatic advantage of REs over other TDE, whereby TDE’s findings may not offer transferability within and across programmes.

To do this, REs identify Context-Mechanism-Outcome Configurations (CMOCs) (Pawson and Tilley, 1997) (see Box 2 for definitions and descriptions of these important concepts). By exploring these mechanisms of change, realist evaluations aim to understand how a programme is expected to work within specific contexts, and what conditions may hinder successful outcomes (Pawson, 2006b, Jagosh et al., 2011).

Box 2 Realist Evaluation Definitions

Context
Describes the pre-existing conditions within which the intervention is implemented. Four main contextual areas are 1) capabilities of actors, 2) interpersonal relationships within the intervention 3) institutional settings and 4) the wider contexts, such as national policies, social and cultural norms etc. Contexts within realist studies identify what conditions are needed to trigger a mechanism to produce a particular pattern of outcomes.

Mechanism
Element of reasoning of the actor facing an intervention (beliefs, values, desires, and cognitive processes). A mechanism is 1) generally hidden, 2) is sensitive to context variations and 3) produces outcomes. Mechanisms describe the aspect of the system that enable it to produce change, by detailing the choices and capabilities of individuals in the programme that lead to patterns of behaviour.

Outcomes
The intended or unintended effects produced by a mechanism being triggered in a particular context.

(CMOCs)
Conceptual tool to link the elements of context, mechanism and outcomes of an intervention.

(Initial) Programme Theory
Set of hypotheses that explain how and why the intervention is expected to produce outcomes. It can be broken down in the form of one or more CMOCs

Middle Range Theory (MRT)
Level of theoretical abstraction that provides an explanation of semi-regularities in the CMO interactions of a set of interventions. Commonly defined as the "theory that lies between the minor but necessary working hypotheses…and the all-inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behaviour, social organization and social change." (Merton, 1978, pg. 39)

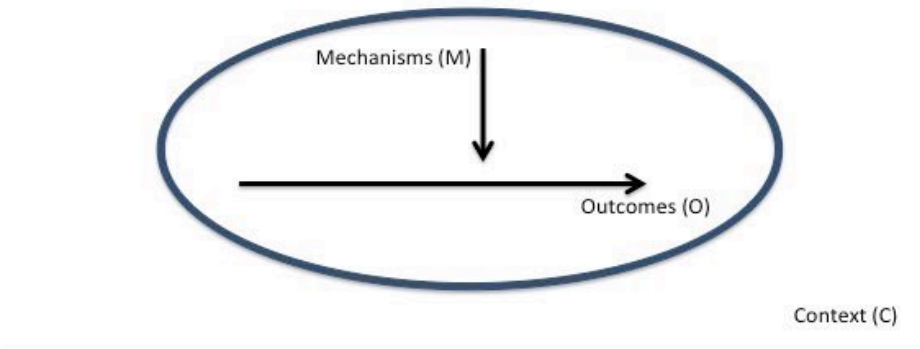
Demi-regularity
A semi-predictable pattern or pathway of programme functioning

Level of Abstraction
As complex health interventions work across multiple system layers, outcomes at one level can represent a process in another. Therefore, specifying level of abstraction - for example examining higher levels of the system-, will depend on the task at hand and the intervention of study.

Adapted from: (Vareilles et al., 2017, Pawson and Tilley, 1997, Pawson, 2006b, Merton, 1968, Marchal et al., 2010b, Dalkin et al., 2015, Westhorp, 2012, Jagosh et al., 2015)

These configurations describe how specific contextual factors (C) work to produce particular mechanisms (M), and how this combination generates outcomes (O) in programmes (Figure 8) with the understanding of generative causality, that is mechanisms are triggered within specific conducive contexts and conditions.

Figure 8 Generative Causation within Realist Evaluation



Adapted from: (Pawson and Tilley, 1997)

Realist evaluation therefore aims to understand this generative causation within the social world by exploring the particular patterns of C and M interactions through eliciting and refining based on contextually specific case studies (the CMOCs) using the following formula[16] proposed by Pawson and Tilley (1997):

Mechanism + Context = Outcome

For example, in Rycroft-Malone and colleagues' (2016a) recent realist evaluation, they identified CMOCs within the Collaboration for Leadership in Applied Health Research Care (CLAHR) to understand collaboration. Highlighting one CMOC finding and pointing out the specific components highlights how the formula is used: "Stakeholder agendas and competing drivers (C) prompted different motivation to engage (M) resulting in a variety of understandings about CLAHRC goals and outcomes (O)" (Rycroft-Malone et al., pg. 6).

These CMOCs aim to identify how a programme works, who is works best for, and why, with an end product being a theory that is of Middle Range (or, a Middle Range Theory (MRT)). As such realist evaluation's objective is to uncover these theories (implicit and underlying) that describe the explanatory pathway of how change occurs. Dubbed a programme theory, these theories are subsequently refined through mixed-methods case

[16] Adaptations and alterations to the C+M=O configuration occur. Notably, many (including this research) include "resources" as a form of contexts. Others situate resources at the mechanism level and include 'reasoning' (Dalkin et al., 2015)

studies which work to understand the mechanisms, unpacking the 'black box' between intervention and outcome (Van Belle et al., 2010). While theories and CMOCs can be developed across many levels of programme specification (or abstraction), they can be more useful if they are developed at a middle level of abstraction (ranging from 'specific', being concerned with particular individuals within a specific programme, and 'very abstract', involving looking across different programmes) (Marchal et al., 2017) to account for complexities within contexts (Pawson and Tilley, 2004). Thus, with a realist evaluation the goal is to produce a refined middle range theory (MRT) of how the programme works by identifying regular patterns within reality.

The MRT, defined by Merton (1968) as the "theory that lies between the minor but necessary working hypotheses…and the all-inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behaviour, social organization and social change" (pg. 39), is therefore a result of programme specification. MRTs develop through the accumulation of evidence from studies which allow for refinement and further specification (Pawson and Tilley, 2004). As such, using a multiple-case study approach and having iteration within your study design is an important feature of realist evaluation when the aim is to elicit a middle range theory.

3.6 Realist Evaluation Cycle

The inquiry cycle, which the current study closely follows, was first articulated by Marchal and colleagues[17] (2012a) and is based on the work of Pawson and Tilley (1997). The beginning to any research project is the need to have a question(s) to answer or to explore a topic. For a realist evaluation however, the specific question(s) may not be defined until later on in the realist evaluation cycle, and are permitted to change throughout the course of the study as a result of newly emerging results and literature (Pawson and Tilley, 2004). Therefore, within

[17] Visually presented in the citied article, but was developed during the research by Van Belle et al., (2010).

realist evaluations the general design of a study can be developed once a topic of study has been identified. The general design is meant to encompass the study boundaries, including study site or sites, number of case studies, and any specific approaches taken during the study. Additionally, the general design may identify and include other methods or approaches to be used in conjunction with a realist evaluation. For example, and in the case of the current study, employing a 'systems-thinking-approach'. Once these broad parameters of the study have been designed, the next step involves eliciting an initial programme theory (IPT)[18]. Throughout this IPT phase, researchers attempt to elicit and select the most appropriate hidden programme theories that underpin the programme design and implementation through literature and document reviews and interviews with key informants (Mukumbang et al., 2016b, Pawson and Tilley, 1997, Pawson and Tilley, 2004).

Articulating the IPT sets the scene for the remainder of the study, including designing the field study, which works to contextually refine the elicited IPTs. The data collection and analysis stages occur next, which work to refine or generate context-mechanism-outcome-configurations (CMOCs) (Marchal et al., 2012b). During (or following) the analysis, the CMOC findings are synthesised back into the initial programme theory and/or programme theories[19], which work for refinement (ibid)

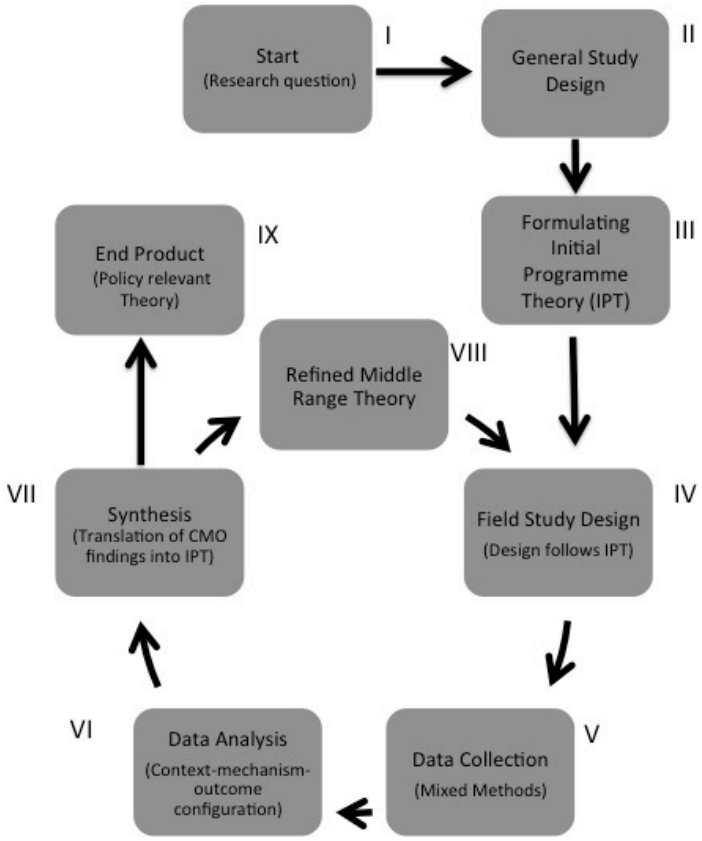
As indicated in Figure 9**,** the whole process of a realist evaluation is iterative and could, theoretically, continue indefinitely, as it is not possible to create one theory that is relevant to all contexts without having studied *all contexts.* In practice however, researchers must choose to end the study at some point, and present their findings to date. The end product is thus a product of the initial programme theory, a middle-range-theory (or theory that is of middle range), which has been refined through a series of case studies, resulting in a contextually

[18] In the original Realist Inquiry Cycle the IPT is referred to as the Middle Range Theory (MRT). These, descriptions are frequently used interchangeably within realist studies, yet there are discernible differences. For the purpose of this study, IPT is used at the beginning stages of the research (Phase 1, before field data collection and refinement of the theory has occurred), programme theories (PTs) are labelled as such after refinement has occurred (Phase 2), and MRTs are the end theory product (Phase 3)

[19] Due to the iterative nature of realist evaluation, however not fully represented in Figure 9, is that the refinement of IPTs/PTs throughout the analysis is an ongoing process as well.

specific and relevant policy theory. In light of this realist evaluation cycle, the following sections further detail the stages of a realist evaluation and their methodological considerations, as they pertain to the current study.

Figure 9 Realist Inquiry Cycle



Source:(Marchal et al., 2010a)

3.6.1 General Study Design

In line with above description, the first stage, or setting the research aim and questions, are presented in (Chapter 2.7). The second stage is therefore to describe the general study design. Whereas realist evaluation designs can vary and should depend on the initial programme theory that is developed, there are guiding principles that all RE studies should follow in terms of general study design. Firstly, the study should be designed so as to empirically improve or refine the IPT (Marchal et al., 2012b). Secondly, this refinement should

take a mixed-methods approach, gathering data using multiple techniques (Westhorp, 2008). And lastly, it should be designed to address the theory (or theories) at different levels in society, using non-linear approaches and/or multiple sources (Pawson and Tilley, 1997). To achieve this, realist evaluations frequently use case studies within their study design, with each case representing an opportunity to test and refine the programme theories.

3.6.1.1 Case Studies and Realist Evaluation

Creswell (2013) describes case study research as an approach in which "the investigator explores a real-life, contemporary bounded system (or case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information…. and reports a case description and case themes" (pg. 97). This 'contemporary context of setting' design, or exploring real life as it occurs, is especially appropriate when the research aims to explore current circumstances surrounding a social phenomenon (Yin, 2009). According to Yin (2009), they are the preferred methodology when questions of 'how' and 'why' are being proposed, and/or when an in-depth description is warranted, and/or when studies are operating in open systems resulting in little to no control by researchers over events.

Case studies require the use of multiple sources of information for an in-depth analysis and triangulation, which will be shown in the following sections to be consistent with Realist Evaluation methodology. Documents, archival records, interviews, direct observations, participant observation, audiovisual material and physical artefacts are all suggested methods and tools that can be used within case study approaches (Yin, 2009, Creswell, 2013). Though not all studies will allow for use of all suggested sources, using multiple sources is essential due to the numerous factors and points of interests within the social phenomenon.

3.6.2 Initial Programme Theories

Common to all theory-driven evaluations is the eliciting and conceptualisation of programme theories at the beginning of the study (Van Belle et al., 2010), and represents Stage III of the realist inquiry cycle. These theories are typically a collection of ideas that are logically associated to the programme. Once the programme theories have been elicited, they are to be expressed in a manner that can be tested or refined through empirical research using a case study approach (Pawson and Tilley, 1997). Since realist evaluations are as much an evaluation of the programme as they are of the develop(ing) theory around the programme, data collection is structured around the researchers' theory of how the programme works (ibid). In less researched programmes, the first stage of data collection is therefore to develop and outline such theories (i.e. the creation of the IPT).

For realist evaluations, these theories are the articulation of programme architects' and implementers' assumptions of the intervention and how it works to achieve the desired goals (Pawson and Tilley, 1997). As Leeuw (2003) notes, "…policies and programmes are developed and implemented by organisations, the 'mental models' or 'cognitive maps' of members of these organisations are important for understanding the anticipated impact of these policies or programs" (pg. 14). The aim of elicitation is thus to uncover and understand these underlying implicit 'theories' (mental maps) the intervention was designed around, which Pawson and Tilley (1997) call 'folk theories'.

As will be presented in Chapter 5 there are a number of theories[20] that could pertain to the investigation of CHC programmes in LMICs. The duty of the researcher is therefore to identify the most appropriate theory, or theories, for the situation. As described by McGuire (1983) and elaborated upon by Glanz et al. (2008) the suitability of a theory towards a given situation can be assessed by four criteria within research: 1) its internal consistency or logic

[20] Nutbeam (2010) makes an important ascertain within health promotion studies that many 'theories' in this field are not highly developed or rigorously tested in the same way many traditional theories or definitions of theories would imply. Instead, often theories within health promotion work act more as 'models'. Nonetheless, these models/theories are important for providing guidance on the occurrence of change across programmes.

fit with the situation does not produce any contradictions, 2) that it is broadly relevant yet has a manageable number of items that terms it parsimonious, 3) its fit with other theories in the field, or its plausibility and 4) how it can be observed or tested, its ecological validity.

3.6.2.1 Methods for Eliciting Initial Programme Theories

For realist evaluations, where programmes are recognised as theories incarnate, the extraction of these theories is best done by engaging in two activities (Pawson and Tilley, 1997). First, the researcher should extensively review and analyse documentation on the programme and accompanying literature. These documents may be programme regulations, descriptions, guidelines, whereas the literature should be of relevance to the intervention and aim to provide a theoretical basis for its understanding (Mukumbang et al., 2016b). Second, the researcher should interview programme designers, managers and practitioners to ascertain how they believe the intervention works or generates change, with an aim to further refine or contextualise findings from the document/literature review (Pawson and Sridharan, 2010, Pawson and Tilley, 1997). Methods used for the elicitation of the IPT (data collection and analysis) should conform to realist evaluation principles, which are partially described above and which will be further expanded upon in Chapter 4.3. The elicited IPT then informs the field study design. Stage four, or the field study, should then be designed to best test and/or refine the initial theory(ies), taking (as previously stated) a mixed methods approach using case studies.

3.6.4 Data Collection in Realist Evaluation

Following the field study, stage five marks the first round of data collection. As noted, realism is a model of scientific explanation that allows for flexibility between paradigms depending on the situation (meaning it is methods neutral). The methods used can move across research paradigms depending on the situation, as the purpose of data collection within an RE is to develop and refine programme theories (Pawson and Tilley, 1997). As such,

realist evaluations take a position of pluralism, choosing the most appropriate methods for theory refinement (Gregory, 2000). There are however, several features during the data collection process that are unique to a realist evaluation.

Firstly, such evaluations require a multi-method evidence base (Westhorp, 2008, Pawson and Tilley, 1997). This typically requires qualitative techniques, which work to highlight process change, quantitative methods that can examine outputs and outcomes, and methods such as observations to gather contextual knowledge (Pawson and Sridharan, 2010, Pawson, 2006a). As stated by Pawson and Sridharan (2010), "testing any programme theory requires the conjunction or triangulation of all three [qualitative, quantitative and comparative observation and measuring]"(pg. 52). As addressed in Chapter 3.2.1.1, most positivists evaluation studies exclude qualitative components, however, many theory-driven evaluation scholars argue the importance of including such methods to highlight processes and change, and capture potentially unexpected details (Weiss, 1995a, Granger, 1998). Most realist evaluations will also involve multiple stakeholder groups, each representing different levels of the system, in order to address the different levels of theory and programming. As argued by Pawson and Tilley (1997) each group will bring a different perspective and will "be far more sensitised to the mechanisms (M) in operation within a programme than… its contextual constraints (C) and outcome patterns" (pg. 160), largely as a result of each group member's unique experiences and roles. Taken together, whereas the researcher brings experience in terms of inter-programme and theory knowledge, participants have an in-depth knowledge (whether cognisant or not) of the inner workings of the programme.

In addition, the role of the researcher is to bring the theory and specific knowledge set to the evaluation. The purpose of data collection within this Phase is therefore to refine the initial theories through stakeholder input (Astbury and Leeuw, 2010, Dalkin et al., 2015). Termed the 'engaged realist' (Pawson and Tilley, 1997) researchers are understood to have either explicit or nuanced understandings of the intervention (and its theories), which should

be harnessed throughout the study. In addition to using multiple categories of stakeholders, data collection within realist evaluations is unique in its attempts to collaboratively refine theories with participants - often through the realist interview technique.

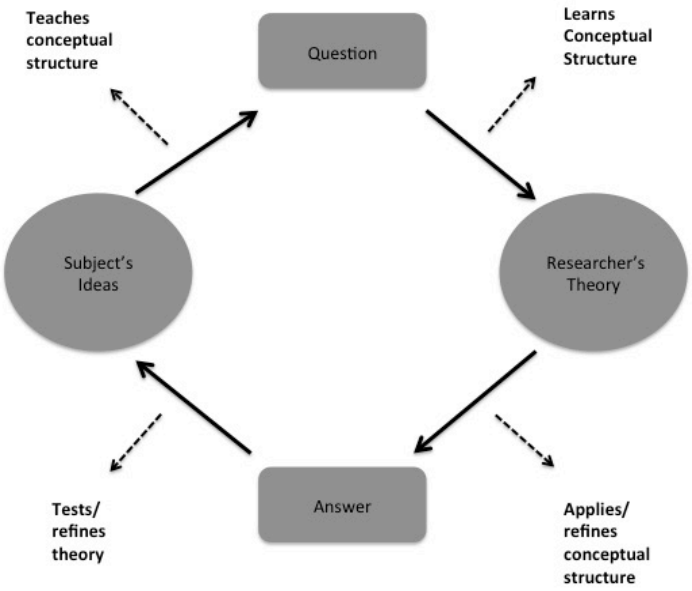
3.6.4.1 Realist interview - Teacher-Learner technique

The realist interview (teacher-learning interview technique[21]) works to elicit theories from the participants' perspectives. Different from more standardised qualitative interviewing techniques which work through a series of topics or themes to be addressed, it involves the researcher teaching on the interview style (realist), and then 'teaching' the theory under investigation, where the participant 'learns' it. After such, the participant then 'teaches' their conceptualisation of the proposed theory back to the researcher, where collaborative theory refinement can then occur. This process is depicted in Figure 10**.** The objective of this technique is for participants to 'confirm, refute or refine the proposed theory (Pawson and Sridharan, 2010, Pawson and Tilley, 1997, Manzano, 2016a).

Throughout the realist interview, the participants' feedback is digested by the researcher, and then fed back to participants to ensure correct understanding, and for further 'conceptual refinement' (Manzano, 2016b). This also works to prompt for more detail, and further refine the theoretical understanding. Qualitative data techniques (interviews and focus groups) throughout this research were conducted using this realistic interview technique, unless stated otherwise.

[21] Frequently also titled "Theory Informed Interviewing"

Figure 10 Realist Interview Technique and Structure



Source: (Pawson and Tilley, 1997)

3.6.5 Data Analysis and Synthesis in Realist Evaluation

A requirement for realist evaluation research is that data analysis takes a 'retroductive' approach. This form of reasoning, in contrast to the more common reasoning techniques of induction or deduction, refers to "the identification of hidden casual forces that lie behind identified patterns or changes in those patterns" (RAMESES, 2017). In doing so retroduction uses both inductive and deductive reasoning, and includes researcher insights to understand generative causation. For retroduction to occur it is important to have multiple data sources, and incorporate one's common sense to test and refine programme theories (ibid). Retroduction within realist evaluation is therefore an essential tool to formulate CMOCs and elicit theories on programmes.

The analysis technique, Stage VI, follows Pawson and Tilley's (1997) method of using the "context-mechanism-outcome configuration" (CMOC) as an analytical tool. Using 'CMOC' as an analytical tool is widely recognised as fundamental to realist evaluation analysis as it allows for one to explore generative causation (Figure 8) (Pawson and Tilley, 1997). This

involves detailing the individual components of the Cs, Ms, and Os and their interactions to construct the configurations. This process is often presented as 'equations' within a table to show individual components and their relationships (Priest, 2006).

However, while most realist studies would consider the CMOC as the analytical tool, the techniques for how one goes about findings the 'CMOCs' can vary. As highlighted by several authors (Byng, 2005, Marchal et al., 2012b, Westhorp, 2008, Salter and Kothari, 2014) there is little guidance on the specific analysis approach to use within a realist evaluation. While some propose analytical induction (Byng, 2005), or thematic analysis (Moore et al., 2012), others such as Westhorp (2008) and Kazi (2003) have developed specific analysis techniques including 'realist qualitative analysis' and the study of 'enabling, disabling and generating mechanisms', respectively. To synthesise CMOCs, demi-regularities (semi-predictable patterns occurring in the data) are identified and collated (Jagosh et al., 2012). Finding patterns of generative causation within the data provides support for theory refinement.

While the use of CMOC as an analytical tool was consistent throughout the study, my analytical techniques varied slightly across the three phases, and are detailed in the following chapter on methods and tools used within this study.

3.6.6 Iteration in Realist Evaluation

Lastly, when possible, data should be collected in an iterative and on-going manner as the "process of theory-testing is unpredictable, unstable and uncertain" (Manzano, 2016b). Using an iterative process, for example by re-interviewing participants at later stages of implementation, allows one's understanding of the programme and process to be further refined as the researcher further develops theories and becomes more knowledgeable on the programme over time (Manzano, 2016b). This may occur at different times within the realist evaluation cycle, throughout stages V-VII if still working within one case study.

Iteration of the study itself can also occur after stage VII. Findings from the MRT work can inform a revised field study design, with the aim of refining the current MRT. The realist cycle then repeats itself. While realist evaluations do not claim generalisability, the more iteration within a research project the more confidently contextual findings can be transferred to other settings.

3.7 Chapter Summary

Realist evaluation, as a form of theory driven evaluation, aims to uncover explanatory theories for 'how, why and form whom', programmes work through the elicitation of context-mechanism-outcome configuration patterns. As such, realist evaluations are an appropriate method to address the study question: What are the mechanisms and associated contexts through which community health committees work for community systems strengthening? To address this question, this study design proposed by Pawson and Tilley (1997), while also applying a systems-thinking approach as a strategy of inquiry. These two complementary fields of study (realist evaluation and systems thinking) were primarily chosen as a means to overcome the limitations of traditional positivist approaches to evaluate complex health interventions. Specifically, realist and systems thinking approaches were chosen given that they ascribe importance to context, human behaviour, and ecological models. Moreover, the emphasis is placed on generating evidence for whole systems strengthening that explains, rather than attempts to predict, change. Whereas this chapter provides a detailed examination of the methodological foundations of a realist evaluation, as well as a general overview of the realist evaluation cycle and its accompanying methodological components, Chapter 4 further details how these methods were applied within the context of the current study with CHCs in Uganda.

Chapter 4: Methods and Tools

4.1 Introduction

Aligned with the realist evaluation methods outlined in Chapter 3, the following chapter details the methods and tools used within this study. Chapter 4.2 introduces three distinct phases of the study, with the remaining sections of this chapter detailing the different methods and tools used in each phase. Ethical and quality considerations for this research are also described.

4.2 This Study's General Design

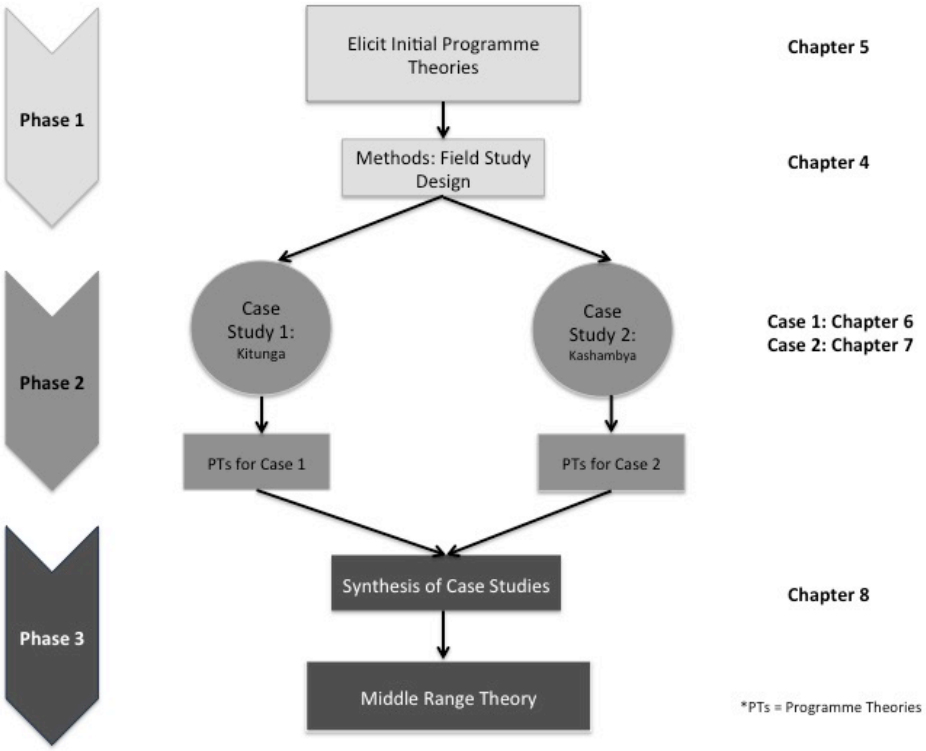
Consistent with Stage II of the realist inquiry cycle, the general design of this study followed the development of the research question (Chapter 2.7) in consultation with World Vision. As previously mentioned, the research aims were established based on concerns with the functioning of the Community (Health) Committees across several AIM-Health contexts, and the desire to understand how or why these committees work in practice. As described in Chapter 3.2.2, the general study design adopted a 'systems-thinking' approach, given the nature of CHC interventions as a complex health intervention. A multi-site intra-programme case study approach was ultimately proposed as the general design. Specifically, this study employs a mixed-method realist evaluation using two intra-programme case studies in rural communities in South-Western Uganda.

Consistent with the realist evaluation cycle of inquiry presented in Chapter 3.6 the current evaluation is divided into three distinct phases: Phase I involves the elicitation of the initial programme theories (Stage III) for how community health committees work. These findings informed the 'field study design' of the realist cycle (Stage IV) for Phase 2. This phase

corresponds to the case studies conducted in Uganda to refine the initial programme theories from the preceding phase, and involves the data collection and data analysis phases of the realist cycle (Stages V and VI). Phase 3 involves the synthesis of the findings (Stage VII) from the two case studies into theories of middle range (Stage VIII) to answer the research question.

Figure 11 below depicts the phases of the study, the main actions taken, and the corresponding chapters.

Figure 11 General Study Design



4.3 Phase 1: Methods and Tools

This section details the methods used for Phase 1, detailing the process and tools for the elicitation of the initial programme theory and how it was subsequently used to inform the field study design. A realist evaluation protocol as a result of Phase 1 findings was published in early 2016 (Gilmore et al., 2016b). Phase 1 of this study occurred between October 2014

and May 2015[22], and used an exploratory qualitative research design to elicit the initial programme theories. Following realist evaluation methods put forward by Pawson and Tilley (1997), and outlined in Chapter 3.5 and 3.6, the following two steps were used. First, a literature and document review of community health committees and other related topics was conducted. Findings from this review were then used to inform questions and topics for semi-structured interviews with key informants.

4.3.1 Data Collection

4.3.1.1 Literature and Document Review

The literature review focused on three main topics: community health committee[s] and/or community coalitions, community health volunteers and/or close to community providers, and community health activities within LMICs. A document review of key NGO texts[23] was also conducted. This included reviewing programme and intervention documentation (Chapters 1.3 and 1.5), and supplementing with literature in order to better understand why such interventions are necessary, (Chapters 1.2 and 2.3), as well as how they fit within a wider health agenda (Chapters 1.4 and 2.2).

Initial key concepts were identified to take forward in the literature review and these were based on my existing knowledge of community health programmes (specifically, community volunteer literature), and the programme itself (community health committees). Throughout the course of the review additional topics were added based on what emerged from the literature. For example, the community health committee literature was widened to include 'community coalitions' as a similar health initiative with a better-developed theoretical foundation (Chapter 2.5.2.2). The broad topic of 'community health' was also added to gain an understanding of how change within community initiatives is proposed to

[22] These dates are important to note in relation to more recently published literature on CHCs, which will be introduced in the following chapter. Specifically, there are several relevant studies published recently (after IPT was elicited). These will be discussed in Chapter 9 instead.
[23] Specific to the partner NGO's programme of interest.

occur, specifically as a product of community organising activities (Chapters 2.4 and 2.5). From this, the concept of capacity building as a potential outcome of community organising strategies was introduced (upcoming in Chapter 5.3). The topic of 'complex health interventions', which requires 'systems thinking' was extensively explored (Chapter 3.2); and while specific theories did not arise from these, their foundations were used to help understand, organise, and link the arising data.

4.3.1.2 Key Informant Interviews

The preliminary theories or concepts regarding the CHCs elicited through the previous method informed the semi-structured interviews with key informants in the following two ways: 1) interview guides were developed based on the key concepts allowing for further exploration and/or contextualisation, and 2) preliminary theories were presented to the respondents for input and refinement. Four purposefully selected key informant interviews were conducted with: an international programme architect and trainer of the COMM model; AIM-Health programme managers (n=2), 1 from Uganda and 1 from Tanzania[24]; and a Ugandan Maternal and Child Health National Programme Advisor. Three of the four interviewers were conducted via Skype and were recorded. One interview was conducted in person and was not recorded[25]. Extensive interview notes were taken during the interviews. Aligned with the realist interview teacher-learner technique described in Chapter 3.6.4.1, and a sample of the interview guide can be found in Appendix 12. Participants were presented with the preliminary theories for how the programme may work and asked to comment and

[24] A second case study location in Mundemu Tanzania was originally proposed as part of this doctoral thesis. As such, a KII from this site was selected. The decision to focus on two case studies from the same location meant the exclusion of Tanzania; however, at this point in time it was not possible to exclude the Tanzanian KII's input into the IPT. And while they did provide contextually informed input, much of this was consistent with the Ugandan KII to the point where I do not think it influenced the IPT findings relevant to Uganda. Of most importance though, is that the IPT was meant to explore how programme implementers believe CHCs to work for community systems strengthening, which is what this participant did. The case studies would then ensure contextually relevant findings.

[25] This interview occurred ad-hoc ahead of the previous scheduled interview when the participant and myself met on for a discussion of an unrelated manner. At their request the interview was conducted immediately after this meeting. Consent forms were printed on site and signed, but a recorder was not available.

refine these theories based on their own understanding (Appendix 13). All participants provided voluntary informed consent as per Chapter 4.9.3.

4.3.1.3 External Input

There were several other instrumental stakeholders who helped inform IPTs and my understanding of them during informal discussions. The majority of these stakeholders were involved as either facilitators of the research through World Vision, or were thesis supervisors. While they did not specifically participate in any interviews, the initial theories developed throughout this process were fed back to these stakeholders who provided their insight throughout. The additional stakeholders consulted include:

- The AIM-Health Project Manager and Project Assistant[26]
- World Vision International's Health Team Capacity Building Manager (co-designer of the COMM Model)
- Two thesis supervisors who specialise in Human Resources for Health (HRH) management and community health
- One thesis co-supervisor based in Uganda
- Staff and students at the Centre for Global Health, representing a range of health disciplines

4.3.2 Data Analysis

A qualitative exploratory analysis using the analytic approach of identifying context-mechanism-outcome configurations was used during Phase 1. While analytical approaches within realist evaluation are often noted as being underdeveloped or non-specific, this process has been used in other IPT development studies (Mukumbang et al., 2016b). Notes were taken from the literature and document reviews detailing potential theories, explanations, processes or descriptions of programmes and their functioning. Based on the review, my interpretation or understanding of the programme and how it works best, for

[26] Both are located in Ireland and responsible for the AIM-Health programme within 5 implementation countries and 10 sites.

whom, and why, was developed by using the CMOC equation technique documented within a table.

The interviews, which incorporated participants' feedback into the proposed initial theories, were then analysed and CMOCs were further expanded upon or added to support the arising theories from the literature. This too was done by using the CMOC equation technique as an analytical framework, with audio recordings or notes from stakeholders as the data source. The resulting elicited CMOCs were then synthesised into initial programme theories thought to be most relevant to the programme and question of inquiry. My interpretation and understanding of the programme and the data was subsequently used to help supplement and contextualise the emerging findings.

4.4 Phase 2: Field Study Design

Based on the findings from the elicitation of the IPT, the field study design was developed (stage IV). Two case studies, conducted in succession between November 2015 and March 2016, took place within World Vision's community systems strengthening programme (AIM-Health) being implemented in North Rukiga, Uganda. Details on the AIM-Health intervention are described in Chapter 1.5. Consistent with realist evaluation approaches, the case studies were selected to test and refine the initial programme theories elicited. To this end, each case examined a different CHC group and were chosen in collaboration with World Vision based on two main considerations: (1) Functioning, whereby programme implementers understood (and documented) the perceived functioning of the CHCs as either strong or weak; and (2) CHCs implementation, whereby CHCs were chosen based on their affiliation with different levels of health facilities to underscore contextual influence (Chapter 1.4 and Figure 2).

4.4.1 Research Site – North Rukiga

The current study took place in the North Rukiga county ADP in the district of Kabale in South-Western Uganda (see Figure 1)**,** comprised of two sub-counties, Kashambya and Rwamucucu, and totaling 13 parishes (Figure 17). North Rukiga became a World Vision ADP in 1995 due to its high rates of malnourishment and disease, low literacy rates and lack of safe drinking water (World Vision Ireland, 2017). North Rukiga, as opposed to another AIM-Health programme site, was chosen as the site of this work for several reasons: first, I had past experience working within North Rukiga which was useful in understanding some of the programme and contextual nuances; second, the programme staff had the capacity to support this research project; and lastly, World Vision noted that both anecdotal evidence and programme documentation indicated that overall the CHCs within North Rukiga were quite successful in their implementation and effect. This last point was of importance as studying well-performing CHCs could likely provide more insight on 'how they work best'.

Within North Rukiga, the CHCs of study were working in different parishes, and each associated with a different level of health centre. Case Study 1 took place in the Parish of Kitunga, with a Level Two health centre (Kitunga HCII). Case Study 2 took place in the Parish Kashambya, which hosts the sub-county Level Three health centre (Kashambya HCIII). Figure 2 in Chapter 1.4 provides details on the health system and the specific levels within Uganda.

Figure 12 Map of Kabale District and North Rukiga

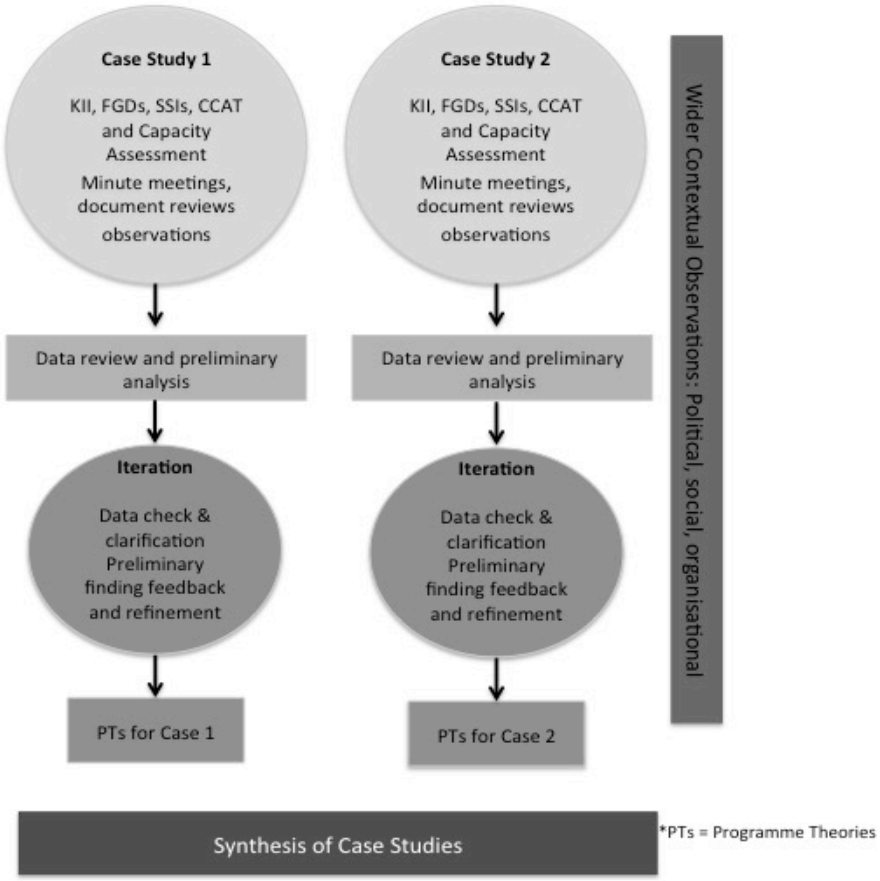


County North Rukiga outlined, with the two sub-counties distinguished.

For logistical reasons, data was collected (stage IV) from the case studies during the same collection period such that no refinement of theories occurred between cases. Iteration of initial data impressions back to potential participants, which also worked to clarify data and ensure appropriate interpretation, occurred at one time-point for each case study. All data was then analysed (stage VI) to refine programme theories specific to each case study. Specific details on each case study are presented in the appropriate results chapters (Chapter 6 and Chapter 7 for details of Case Study I and Case Study II, respectively), given that these contextual details are relevant to each case.

The overall field study design and data collection process for both cases are further described in Figure 13**.** Further details on the methods and tools used within each case are presented in the Chapter 4.5.1: Phase 2: Data Collection and Chapter 4.5.2: Phase 2: Data Analysis.

Figure 13 Phase 2 - Field Study Design



4.5 Phase 2: Methods and Tools

Phase 2 of this research involves two intra-programme case studies using mixed methods. The specific methods and tools were informed by the findings from Phase 1. The presentation of the methods and tools therefore entails some information relevant to the elicited IPTs (Phase 1 findings), which are presented in following chapter (Chapter 5). While it is recognised that the reader may be missing some context for the methods (i.e. according to realist evaluation methods, methodological decisions taken as part of Phases 2 and 3 should be driven by the results obtained as part of Phase I), I chose to present all methods and tools

together as part of a single chapter, in order to reduce the amount of duplication and provide a specific section for methodological approaches within the thesis.

4.5.1 Data Collection Activities in Phase 2

Data collection for this study was designed to best test and refine the IPTs. As Chapter 5 will detail, four initial programme theories emerged from Phase 1 of the research. Testing and refining each of these four IPTs requires methods and tools specific to that theory, which are summarised in Table 6 and further expanded upon below. For instance, IPT2 is strongly affiliated with Community Coalition Action Theory, which works to understand how health committees function as a unit. As such, methods and tools for this IPT were focused around understanding this theory and related CHCs functions. In contrast, IPT 1 relates to *individual* members within CHCs and therefore requires methods and tools that enable an understanding of the members at an individual level. IPT3 relates to how CHCs work within communities, and therefore incorporate methods that aim to further explore this phenomenon at the community level (i.e. in the form of community interviews).

Table 6 Methods and Tools Used in Phase 2

Programme Theory/Concept	Main Methods*	Source
Context: Intervention Inputs/Processes	Document Analysis	MoH & NGO Records
	Key Informant Interviews	Programme managers, MoH manager
	Observations	Field Notes
IPT1 -Individuals	In-depth interviews	CHC members
	Observation	Coalition meetings, Health Facilities,
IPT2 - Committee	Observation	Community meetings
	In-depth interviews	CHC members
	Coalition self assessment survey	CHC members
IPT3 – Community	Focus Group Discussions	Male community members
	Focus Group Discussions	Female community members
	Focus Group Discussions	Community Health Workers
IPT4 – Systems	Key Informant Interviews	Local Councils, Health Staff
	Key Informant Interviews	Programme managers, MoH manager
Outcomes: Capacity Building and Community Systems Strengthening	Domains of Capacity Survey	Administered to all participants
	Document Review	MoH, WV and CHC documentation
	Observations	Fieldnotes
Data and Interpretation Check	Iteration back to participants through community meeting	Fieldnotes, photos of theory check and revision

* All methods and tools worked to inform all IPTs. Methods are only indicated here based on their main purpose for theory refinement. Observations, document reviews, minute meetings and KII specifically worked

to inform the entirety to the refinement process.

Unless otherwise stated, all qualitative interviews utilized the teacher-learner approach as described in Section 3.6.4.1. In practice, the interviews consisted of first using the interview guides for semi-structured questions, and then using teacher-learner for the IPT theory refinement. This approach consisted of showing the participants a printed out (and translated when appropriate) copy of the IPT, and having the researcher describe the components for our understanding of 'how, why and for whom' the CHCs work (researchers teaching, participants learning). Participants were asked if they had any questions, and were then asked to tell us their theories for how the CHCs worked (participants teaching, researchers learning). This exercise usually required additional encouragement from the researchers, including asking questions such as 'what is right?', 'what is wrong?', 'what is missing?' and asking the participants to explain back to us the theory that was presented, with the researchers further probing for refinement, especially when the participants explained a variation of the presented IPT. This process was recorded, and also refinements made were marked on the paper copy of the theory to use within the data analysis.

4.5.1.1 Description of Methods and Tools

In addition to the general methods for the testing/refinement as presented above, the following sections provide specific details on the procedures and data collection tools used.

Questionnaire Development

While the sample size of the community coalitions may not be large enough to detect significant effects (i.e. insufficient power), surveys can still provide insight and highlight potential trends for further exploration. The use of quantitative data collection to explore and describe outcomes is considered appropriate within Realist Evaluation Methodology. Therefore, a community capacity survey, based on Laverak's 9 domains (Appendix 10), and

the Coalition Self Assessment Survey (CSAS), developed to understand the components of the Community Coalition Action Theory, were used to provide important information on capacity building outcomes and potential explanatory understandings of internal CHC functioning, respectively.

Several studies and assessments of coalitions have used The Coalition Self-Assessment Survey (CSAS) (Sofaer, 2000). Aligned with Community Coalition Action Theory (Chapter 5.5.1.1), the CSAS aims to explore the experiences and perceptions of coalition members in order to capture issues and provide feedback for improved and strengthened groups. This research employed a version of the CSAS, modified in consultation with coalition members and other stakeholders, to capture the most relevant and important aspects of a coalition, as a measure of perceived coalition effectiveness. This CSAS is included in Appendix 11.

A number of prominent domains have been put forward to assess community capacity (Chapter 5.2). Within these, various authors cite four (Chaskin et al., 2001), five (Easterling et al., 1998) seven (Bopp et al., 2000), eight (Gibbon, 1999), nine (Laverack, 1999) and even ten (Goodman et al., 1998) different dimensions of community capacity. For the purpose of this research, and based on the IPT development, Laverack's nine domains of capacity building were used (expanded upon in Chapter 5.5.1.1). All participants were asked to rate how well the CHCs[27] contribute to the domains on a scale from 0-4, with 0 being 'not at all' and 4 being 'very well'. Nine questions, each corresponding to a separate domain of capacity building (participation, leadership, organisational structures, problem assessment, resource mobilisation, 'asking why', links with others, roles of outside agents, programme management (Laverack, 1999)), were proposed.

[27] Except for the case for KIIs used to inform the synthesis, who were asked to complete the survey for the CHCs in North Rukiga as a whole. These worked to provide more evidence on this synthesis, as indicated in Chapter 4.6

Key Informant Interview (KII)

Key informants are individuals who have a particular, specialist, knowledge and often have access to information that the researcher would have difficulty obtaining through other means (Gilchrist and Williams, 1999). They are described as individuals who bring specific information to a research question or project, due to their relationship or expertise with the topic. KIIs are rarely used as the only method to inform a research question, with this method typically being combined with other qualitative or quantitative techniques (ibid).

Key informant interviews for this study were chosen for use with three primary populations: community KIIs, such as local politicians and health staff; Ministry of Health staff; and World Vision staff. Key informant interviews were chosen for these groups as specific information is required from these participants, and due to their relationship with the CHCs and the overall AIM-Health programme, only these groups were deemed as able to provide insight.

Semi-structured, In-depth Interviews (IDIs)

IDIs are used in health and social research to provide a description and interpretations of people's views and social world (Yeo et al., 2014). They are used when the researcher wants to discuss a smaller amount of issues in great detail, with questions not following a structured script but based on what the participant says (Britten, 1995). In-depth interviews often work to explore and explain previously identified findings or patterns. Key characteristics of IDIs are that they are: interactive, achieve depth of exploration and explanation, generative where new thoughts or knowledge will arise, and focus on meanings of expression and language (Yeo et al., 2014).

IDIs were chosen for use with the community committee members for several reasons. Firstly, the purpose of the interviews was to further explore the themes emerging from the questionnaire. IDIs permitted the research team to gain a deeper insight into the CHCs, and clarify any issues found in the survey. Second, the use of IDIs allowed for an

understanding of how the CHC groups are working internally, from the perspective of the members themselves. Lastly, as opposed to FGDs, IDIs occur one-on-one, which was deemed necessary to counteract any existing power imbalances within the groups.

Focus Group Discussions (FGD)

Focus Group Discussions involve bringing a group together that meet a specific profile or characteristics (Sofaer, 1999). They are preferred over one-to-one style interviewing in cases where interactions amongst participants might reveal interaction factors and provide insight into the research topic (Morgan and Spanish, 1984). FGDs are often typically used to explore something more specific (Sofaer, 1999) and within health research, usually consist of 6-8 participants.

FGDs were chosen for use with the Community Health Workers (titled VHTs within Uganda) and other programme beneficiaries. FGDs were chosen for several reasons. Firstly, both CHWs and beneficiaries share similar characteristics, which make including them in a group discussion possible. Secondly, discussing in a group may provide more explanatory findings depending on comfort level and also a group discussion. Lastly, FGDs can highlight respondent priorities and understanding (Kitzinger, 1995), which are of essential interest within this evaluation for the refinement of theories.

Document Review

In addition to the document review conducted as part of Phase I, additional document reviews specific to the case studies were conducted in Phase 2 in order to provide further contextual information on the CHC implementation, and to triangulate findings from qualitative and quantitative data sources. While not always possible, the following sources of documents were sought: CHC meeting minutes[28], health facility reports that have information relating to CHCs, World Vision monitoring and activity reports, NGO evaluation reports and Ministry of Health Reports.

[28] Minutes, when available, were collected dating back to the first CHC training by the NGO implementer.

4.5.1.2 Interview Guide and Theory Refinement

All interviews were conducted using a pre-prepared interview guide. Topics covered included questions that were specific to the stakeholders' ability to contribute to the initial programme theories' refinement. Interviews therefore sought to explore the underlying generative mechanisms for 'why, how and for whom' the CHCs worked. A sample interview guide specific to community members can be found in Appendix 14. In addition to the semi-structured interview component, all participants were asked to contribute to collaborative theory refinement through the realist interview technique, as outlined in Chapter 3.6.4.1. For this, a visual articulation of the initial programme theories (translated in Rukigan and available in English) was prepared and presented to respondents to assist in understanding and representation as seen in Appendix 15 (Pawson and Sridharan, 2010).

4.5.1.3 Participants in Phase 2

Five main participant groups were included in this phase of the study: Community members (men and women), community health workers (village health team), CHC members, community key informants, and organisational key informants (Ministry of Health and World Vision). As noted, these participant groups were specifically chosen to best refine the elicited IPTs, based on their assumed knowledge and experience of the intervention. Inclusion and exclusion criteria, as well as recruitment process, for each stakeholder is presented in Table 7 below.

Table 7 Participant Inclusion, Exclusion, and Recruitment

Stakeholder	Inclusion/Exclusion	Recruitment Process
Community members	Over 18 years of age Provided informed consent Potential beneficiary of AIM-Health: pregnant and/or lactating women, men with pregnant and/or lactating woman, men and women with children under 2 CHC group of study must be their representatives Must not be CHC members	A CHW member was identified by World Vision to assist with the recruitment process. They were given the recruitment documents, the inclusion/exclusion criteria and asked to purposefully select 8-10 women and 8-10 men. Asked to recruit from geographically different places.

Community Health Workers (CHWs)	Over 18 years of age Provide informed consent Trained on AIM-Health CHC group of study must be their representatives Must not be CHC member	Identified CHW was asked to recruit 8-10 other CHWs that fit inclusion criteria. Asked to recruit both males and females, from different geographic areas, and with different experiences and/or length of time as CHW.
Community Health Committee (CHC) members	Over 18 years of age Provide informed consent Member of the CHC group of study	In-charge at CHC Aligned Health Centre (who also was identified as acting as CHC secretary) asked to assist in recruitment of CHC members. All CHC members from group of study were recruited.
Community Key Informants	Over 18 years of age Provide informed consent In a position in the community to have insight on the CHCs and/or capacity building (for instance, health worker or Local Council) Must not be a CHC member	World Vision helped to identify potential groups of key informants in the community, which would be helpful in this study. During the data collection, the research team approached potential participants with the recruitment information.
Organisational Key Informants	Mover 18 years of age Provide informed consent In a position at an organisational level (World Vision and Ministry of Health) to provide insight into the CHC Programme. Must not be a CHC member	World Vision and Ministry of Health helped to identify potential participants. The Research team also identified potential participants as the research developed. The research team then approached any participants and provided them with recruitment information.

4.5.1.4 Sampling and Recruitment

Sampling was conducted at the level of each case study, (i.e. each case study sampled and recruited participants separately). The AIM-Health Programme Manager introduced the research team to the community health worker (CHW) Coordinator within each study parish. I then liaised with the CHW Coordinator who assisted in recruitment of all participants, with the exception of key informants.

All CHCs within the case study site were sampled. Community member participants and CHWs were purposefully sampled. The gatekeeper (CHW coordinator) was requested to inform and distribute participant information leaflets to 10-12 women and 10-12 men, from different regions and socio-economic backgrounds within the parish, who were either pregnant and/or had a child under-2. CHWs were also purposefully sampled to achieve a range of gender and age experience.

4.5.1.5 Research Assistant Involvement

Two female research assistants were employed to assist in data collection during this study. Both are social science researchers who had previous experience conducting research with the partner NGO; however, they had not previously worked in North Rukiga. I was present at all interviews and focus groups, and conducted all English interviews. The research assistants individually conducted the IDIs. Both research assistants conducted the focus groups, with one leading the discussion while the other took notes.

Training of Research Assistants

The limited use of realist evaluation methodology within LMICs, including Uganda, meant it was not possible to find available researchers with expertise in this methodology. Therefore, the training of the assistants on the study and the use of realist evaluation and the realist interview method involved an intensive period with ongoing 'methodology checks' throughout the course of data collection.

The initial training took place over the course of 1 week and involved 1) an introduction to the CHC intervention 2) introducing the overall study including aims, objectives, research questions and methods and tools, and 3) training on realist evaluations including: underlying assumptions of realist studies, rationale behind using realist studies, realist evaluation cycle, and data collection in realist evaluation and specifically the realist interview technique. The latter required intense practice and training, using interview guides and theory visuals. In addition, and especially during the early stages of data collection, the research team reviewed the collected data, discussed challenges and the research assistants' perception of how the process was progressing, and collaboratively devised solutions to any arising issues.

Research Assistants and the Findings

Given the language barriers between many participants and myself, the RAs in this study were essential to data collection and thus, aligned with realist work, inevitably brought with them their own understanding the research question. Follow-up questions that were posed by RAs, the way they 'taught' the theory and then interpreted participants' feedback, and even in translation, meant the RAs also brought their own understandings and interpretations. Further to this point, and following the conclusion of the first stage of data collection, the RAs and myself refined our own theories based on the aforementioned processes. This took the form of detailed discussions on their perceptions of CHCs and how they work to 'fill-in-any-blanks' within the data. These processes helped to further inform my understanding and thus ultimately influenced the data analysis.

4.5.2 Data Analysis for Phase 2

4.5.2.1 Data Management

To identify the best process for the current study I reviewed a number of published realist evaluations. However, I found little information on how data had been analysed. This lack of guidance on how data should be analysed is consistent with the call made by Wong et al., (2013, 2016) and others for more transparency within realist evaluation methodology, and specifically analysis. Of those studies that did include information, this often took the form of expanding upon the CMOC analytical framework, noting that they conducted a form of thematic analysis to identify these components. Based on previous work from the IPT elicitation, and the amount of data collected within the case studies, I strived to devise a more transparent and rigorous process for analysis within Phase 2. Namely, and after coming across a blog post written by Dalkin and Foster (2015) on using NVivo software for realist analysis, I modified their steps for data analysis. Dalkin and Foster highlight storing data as sources, using memos for important notes and coding to nodes. However, they did not detail

using a node for each initial theory, using child nodes to track progress of that theory's refinement, and they did not state that the refinement occurred within the memo linked to the original source. All data management, qualitative data analysis and synthesis was conducted using NVivo for Mac Version 11.4.0. The analysis for Phase 2 consisted of the following actions, done separately for each case study:

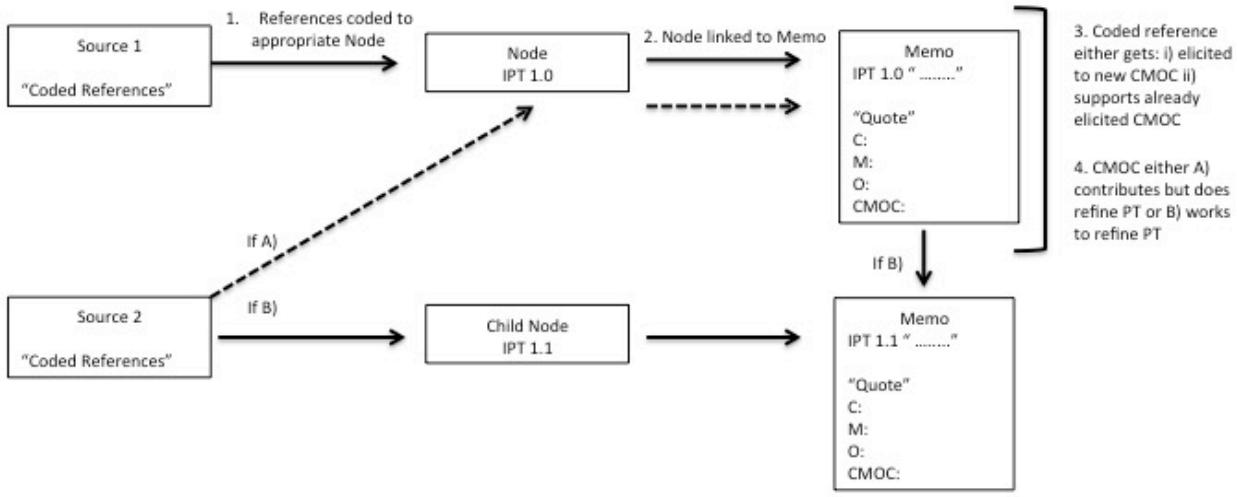
- Data stored as individual 'sources'[29]
- Creating a 'node' for each initial programme theory. Nodes allow you to gather relevant data under a common theme.
    - Creating a 'child node' under each case node after every instance of IPT/PT revision
- Linking a 'memo' to each IPT case node (and new child nodes) to record decision making processes regarding refinement of theories
- All case studies also included a 'node' for context/outcomes to ensure that any contextual information participants were discussing, even if not directly linked with the CHCs or any CMOCs, were captured.

Data management techniques were aligned to other analysis tools for realist studies, by using an 'evaluative framework'. Rycroft-Malone et al. (2016b) recent realist synthesis explains how they used their initial theories to construct such a framework, with each theory being a specific domain. The framework is then populated with evidence specific to each theory, which can then be used to more transparently and organise and refine the theories (ibid). Quantitative data was analysed in Excel (Version 14.7.1). Once completed, quantitative results were imported into NVivo.

[29] **Sources** refer to the research material. Within this study, each source contained a separate interview or FGD. Minute meetings, documents, photos and fieldnotes were also stored as separate sources**.**
Nodes allow one to gather relevant data under a common theme. These may also be understood as 'codes'. When a data source contains an important piece of information, researchers 'code' this information to a relevant existing node, or create a new node depending on the data. After which, this data segment is stored within the 'node' along with any other data coded to that node.
Child nodes arise when a new node is created within an existing node, creating a hierarchy. The creation of child nodes within this study was particularly important for transparency of refinement throughout the analysis as the 'adult node' can contain all aggregates from child nodes.
Memos are blank documents that can be linked to data and nodes. This allows users to document processes/ideas/thoughts on the analysis.

For the coding within the data, the same 'C-M-O-C' analysis application, as described in Chapter 4.3.2, was used – with CMOs (coded references) needing to be extractable as a unit within the data. Once coding occurred, it was linked to the appropriate 'memo', which enabled the evidence for testing to be recorded specific to each decision-making process. For this, the 'memo' consisted of a template to complete using the following headings: context/resources, mechanism, outcome, potential CMOC, supports/refutes/refines, how/why/decision making processes, links to other IPTs, and additional notes. Figure 14 below provides an example of the process described in this section.

Figure 14 Phase 2 Data Management within NVivo



NB: NVivo does not allow for coding directly to Memos. Nodes act at the medium between data (Sources) and Memos (where elicitation and refinement occurs). Child nodes can be aggregated to parent nodes, so one can track coded references across PT refinement.

4.5.2.2 Data Analysis Process

Data analysis was retroductive in that it sought to identify patterns of causal forces for change. As such it required using both inductive and deductive reasoning applied to multiple data sources, while incorporating my own understanding and logic. To this end, multiple data sources were used throughout the analysis to identify the generative mechanisms as described below.

All transcripts and additional data sources were read before coding to gain a better contextual understanding of the interview. Field notes related to the specific data source were also read prior to coding to assist in the CMOC elicitation and theory refinement processes. Each data source (i.e. one interview transcript) was read and subsequently coded in its entirety. Coding occurred at the level of "context-mechanism-outcome", such that these elements must have occurred as an observable configuration within the source. After data sources were coded, all data contained within the 'nodes' (or 'child nodes') were reviewed. It was at this point that several (approximately one third of the codes) were removed on the basis that they did not contain an extractable CMOC.

The remaining coded material was subjected to an in-depth exploration, one 'code' at a time. This included re-reviewing the data source to further understand the codes' context and relevance, and adding to the 'memo' for the linked IPT/PT. The 'memo note' was therefore where the majority of the realist analysis took place.

The IPT refinement process occurred continuously throughout the data analysis, so that multiple programme theories (PTs) were refined during this process. This occurred when there was enough data to contribute to a refinement for a theory, and therefore refinement took place at difference phases/times for different IPTs/PTs. If a refinement of an IPT/PT occurred, a new 'child code' was created for that refined theory to best track the refinement processes throughout the analysis. For instance, if two extracted 'coded references' (CMOCs) worked to refine IPT1 after one interview was analysed, the 'Code' for this (IPT 1.1) was split into a new 'Child Code' (IPT 1.2). Thus, any new relevant 'coded references' in the subsequent interviews were coded directly to IPT 1.2.

As analysis progressed, CMOs coded from the data sources that were similar to already refined CMOCs were combined, and if appropriate, further refinement occurred. For example, if the CMOC "D+B=L" was coded and refined from an interview with CHC1, and the same (or similar) CMO was present during an interview with CHC4, the 'coded reference'

from CHC4 was added to the CMOC from CHC1. This resulted in only 1 CMOC with data derived from two sources. Quantitative data was analysed in Excel for descriptors, specifically mean, median, and frequencies.

4.5.2.3 How data sources were used

A variety of data sources were collected to assist in the testing and refinement of the initial programme theories. The data however had different roles within this refinement. Qualitative interviews with participants were featured most heavily and were the main sources for CMO coding and thus theory testing and refinement, as they were the only data source to really contain any extractable 'CMOCs' in their entirety.

Observations as fieldnotes were used to assist in decision-making processes of refinement resulting from the qualitative interview sources. The Community Coalition Action Survey was used to triangulate and inform the testing and revision of the theory and proved very helpful in understanding components of IPT2 and for guiding the conceptual theory refinement. Other documentation, including the capacity survey, meeting minutes, and reports were used to triangulate findings arising from the aforementioned sources, and to identify relevant outcomes related to the CHCs. Excerpts of the researcher's field notes, can be found in Appendix 16.

4.6 Phase 3: Methods and Tools

Three methods were used to assist in the synthesis of the programme theories, with each method building from the product of the last. First, an analysis for demi-regularities across the case study findings was conducted. Second, Key informant interviews with stakeholders providing an 'overall' view of the CHCs in North Rukiga were reviewed and analysed. Lastly, the theories at this stage were reviewed in relation to existing relevant literature. As with the IPT generation phase, there is little methodological precedent for

synthesising findings across case studies within realist evaluation. To ensure methodological rigour for this phase of the work, I consulted the RAMESES[30] email group for validation of my synthesis technique.

4.6.1 Looking for demi-regularities

As noted in Chapter 4.4, case studies were run simultaneously as opposed to consecutively for logistical reasons (financial and time). As such, the process of refining of a middle range theory through the iterative cycles between each case study, as described in the realist inquiry cycle, was not conducted. However, synthesising the findings from case studies can also lead to increasing the understanding casual processes and thus, the transferability of the findings. To achieve this, I searched for demi-regularities occurring across the case study findings. This process involved several steps of analysis:

- Findings for each case study (programme theories and their supporting CMOCs) were separated on different coloured paper (green for Case Study 1, Blue for Case Study 2)
- PTs/CMOCs from both cases for each socio-ecological level were combined
- Commonalities within the combined PTs and CMOCs were searched for and grouped onto a single piece of paper
- Demi-regularities within the grouped PTs/CMOCs were highlighted
- When PT demi-regularities were identified, all CMOCs (outside the specific socio-ecological level) were reviewed to see if any additional elicited CMOCs offered explanatory information

This process is shown in Appendix 18, which includes the demi-regularity search and grouping. Once this was complete, the documents were reviewed and resulting demi-regularities were synthesised to inform the proposed theories of middle range.

[30] The RAMESES Projects consist of two research projects that aim to provide quality and publication standards and training materials for realist research approaches. As part of this project, a mailing list was established for those interested in sharing information on realist research.

4.6.2 Confirming/Refuting with Key Informants

Four key informants were included during Phase 3. These key informants were not specific to one case study, but had knowledge on the overall workings of the intervention within North Rukiga. As such, their interviews were focused on operations at this level. This was done to support and refine the current theories, but not to refute those that had arisen from Phase 2. Data was also used to help manage any discrepancies between the case study findings, and were specifically useful in understanding generative causality between the different layers, as the KIIs could offer a more holistic 'systems thinking' perspective on the intervention.

Once the synthesis of the case studies occurred (above step), the KII interviews were incorporated as follows:

- Interview recordings were inputted into NVivo
- Four 'nodes' were created representing each socio-ecological level (individual, organisational, community and societal)
- Four memos were created and linked with each node, with the current theories for the first three levels being written at the top of each memo note
- Interviews were played, and any relevant data was coded to the appropriate node
- Once coding had occurred, the nodes were reviewed for suitably to contribute (support or refine) to the theories. At this time, any codes that were not relevant were discarded
- Remaining codes were then transferred to the 'memo' and used to unpack or expand upon contexts, mechanisms and outcomes

This process also worked to conjecture theories at the 'societal' level, as the KIIs had knowledge of functioning within this socio-ecological domain.

4.6.2.1 Phase 3 Participants

All participants provided informed consent. All interviews were recorded and entered into NVivo Version 11.4.0 for analysis. Participants were programme stakeholders and implementers who had knowledge of the overall intervention, and not just one specific case

study. Participants include: the Citizen Voice in Action Programme Manager; the AIM-Health North Rukiga Project Manager; the Health Education Specialist for Kabale, Ministry of Health; and the Health Inspector of North Rukiga, Ministry of Health.

4.6.3 Reviewing the Literature

The theories of middle range were then compared with existing literature, namely any relevant formal theories. The aim was to identify any such theories that report on related causal chains or moderating factors as a type of 'plausibility check' (Marchal et al., 2010b). This also worked to expand the explanatory mechanisms and situate this study's theories within existing formal theories.

4.7 Data Storage and Procedures

4.7.1 Data Storage and Protection

Data was stored in accordance with Trinity College Dublin's Data Protection regulations. All hard copies of data were kept in a locked drawer during the data collection. Any identifying documents (i.e. consent documents) were kept separate from other documents such as surveys and demographics. Since my return to Ireland all hard copy data and consent forms have been stored in the Centre for Global Health's locked data storage cabinet, and will remain there for a minimum period of 5 years, after which it they will be destroyed. All electronic data was encrypted and stored on a password-protected computer. Data was backed-up on an encrypted external hard drive, which was also password protected.

4.7.2 Additional Research Procedures

To ensure methodological consistency and rigour, I employed several 'methodology checks' throughout this research project. For this I utilised active and engaging realist networks and resources. These include:

- RAMESES Mailing List, consisting of frequent communication, questions, and 'trouble-shooting' of projects to a wide range of realist researchers. Following this mailing list allowed me to gain a more in-depth understanding of realist research, and contributed to the clarification of several methodological concerns I had throughout the work.
- Direct consultation with several researchers using realist methodologies throughout the project, which acted as a 'sounding board' to run ideas past, and check for methodological consistency.
- Frequent feedback, and check-ins with supervisors, specifically on interpretation and elicitation of CMOCs.
- Presentations to and feedback from to the 'Dublin Realist Research Support Group', seeking advice on specific issues arising throughout the research.

With little precedent to follow on conducting a realist evaluation and specifically undertaking one for a doctoral thesis, the opportunity to confer with others, many of whom were also facing similar obstacles to myself, proved to be extremely valuable to the research process and the presentation of this thesis.

4.8 Quality in Realist Evaluation

Guidance to ensure the quality of this work was based around two main drivers: (1) the RAMESES II Project standards for realist evaluation and (2) principles of reflexivity. As realist evaluation methodology is still a developing field, other than the RAMESES project, there are yet no established 'gold standard' procedures on how to approach quality. Some researchers adhere to quality standards found in other paradigms, such as 'validity', 'objectivity', and 'reliability'. However, these do not always fit with the goals of realist studies. Instead, quality within realist evaluation is often ascribed to the explanatory power and

strength of the study's contribution to existing theory or literature. As noted by Kernick and Mannion (2005) "statistical significance is related by 'likely to be of importance" (pg. 909). As such, I adhered to the two aforementioned drivers as the most appropriate path to ensure the current study's quality.

4.8.1 RAMESES Project

The RAMESES II Project's goals are to develop quality and reporting standards and resources for realist evaluation. Two main resources in relation to quality have been disseminated: reporting standards (Wong et al., 2016) and quality standards (Greenhalgh et al., 2016). The reporting standards aim to increase transparency, consistency and rigour within realist evaluation, consisting of 20 items to report[31]. Largely targeted for publication dissemination, I have attempted to incorporate all of their reporting standards within this thesis.

The quality guidelines focus around 8 main components: the *evaluation* purpose with realist methodology being appropriate; principle of *generative causation* is applied throughout the study; there is construction and *refinement of programme theories*; the *evaluation design* is justified and appropriate ethical guidance is followed; *data collection methods* are suitable for the evaluation; the *participants are appropriate* to provide sufficient data; the *data analysis approach is retroductive* and all consistent with principles of generative causation to develop and refine theory; and lastly *that reporting is clear* and in line with realist assumptions (Greenhalgh et al., 2016). These 8 components have all been applied throughout the study for quality assurance.

[31] Broken down into the components of a journal publication: title, abstract, introduction, methods, results and discussion with 1, 1,4, 7, 2, 5 items respectively. These consist of: title identifies document as a realist evaluation; abstract includes details on programme, setting, purpose, questions, strategy, data collection, analysis, key findings and conclusion; rationale for evaluation; programme theory; evaluation questions; ethical approval; rationale for realist evaluation; environment surrounding the evaluation; description of programme; description and justification of design; data collection methods; recruitment process; data analysis; details of participants; main findings; summary of findings; strengths, limitations and future directions; comparison with existing literature; conclusion and recommendations; funding and conflict of interest.

4.8.2 Reflexivity

Reflexivity, or that "the researcher should constantly take stock of their actions and their role in the research process and subject these to the same critical scrutiny as the rest of their 'data'" (Mason, 2002), is also an important quality measure within a realist evaluation. This embedded, on-going, process tasks the researcher with reflecting upon how knowledge throughout research was constructed and how this has influenced the many stages of work (Guillemin and Gillam, 2004). Realist evaluations acknowledge that researchers are embedded within the work, and that the researcher's understanding of the world inevitably shapes the study. Thus, reflexivity is not introduced to help limit bias, but more so to further understand the process and findings of the study. For instance, within the results chapters my decision making processes for elicitation of CMOCs is documented for transparency. However, these decisions can be largely based on my own understanding of programme functioning and the context. Being reflexive of this can help clarify study components for increased trustworthiness of the research. As well as incorporating reflexivity into analysis and findings, being reflexive of the process of the evaluation is also an important form of 'methodology checking' which can help identify issues and work to advance rigour within the study.

4.9 Ethical Considerations

4.9.1 Ethical considerations in global health

There have been, and continue to be, many critiques of the ethical standards upheld by researchers and organisations conducting studies in low-income contexts (Benatar and Fleischer, 2007, Bhutta, 2002). A predicament can unfold where global health research, in its attempts to improve health and reduce inequity, may in fact benefit from and even exploit these same inequities. Benatar and Fleischer (2007) describe this exploitation of research participants as 1) taking advantage of power differences to meet the research goal (i.e.

coercion and disregard for informed consent procedures), 2) using research participants as a means to achieve only the research goal (i.e. not disseminating findings back to participants), 3) conducting studies with minimum potential benefits for the research participants, and 4) denying participants access to the intervention upon completion of the study (in the case of control studies). In addition, there are concerns around the issue of power imbalances between the researcher and the participant(s) and the researcher's limited understanding of context (ibid). Any research can have large opportunity costs for participants, and as global health research often involves poor individuals, these costs may be particularly pertinent. Such costs, the potential for exploitation (whether intended or not), power imbalances, and limited contextual knowledge require that global health researchers continually reflect upon and subsequently address these ethical dilemmas.

Though these issues may be impossible to extinguish in their entirety, I employed the following mitigating recommendations, as recommended by Bhutta et al. (2002): focusing on research that aims to contribute to the promotion of equality, by focusing on systems strengthening for improving health; involving communities throughout the research stages, through integrating an iterative feedback component and co-refinement of research theories; and having clearly identified participant benefits, which were detailed in the recruitment documents (Bhutta, 2002). Research should be seen as a way to strengthen local systems with a social value for the research context (IJsselmuiden et al., 2010), which is consistent with realist evaluation principles and systems thinking approaches.

In addition, I made sure to adhere to The Declaration of Helsinki's ethical principles and closely followed the WHO's Standards and Operational Guidance for Ethics Review of Health-Related Research with Human Participants (WHO, 2011), as well as the International Ethical Guidelines for Biomedical Research Involving Human Subjects (2002). Namely, I was sure to obtain in-country ethical approval and strictly followed protocols; had a co-supervisor from an academic institution within Uganda; made clear my motivation for conducting the

research and took steps to ensure a transparent process for research participations through informed consent and data collection; worked with the programme implementing NGO at all stages of research to ensure matched objectives and to maximise potential for action; and developed a plan for the dissemination of research findings to stakeholders.

4.9.2 Ethical considerations in evaluations

There are no specific guidelines on ethics for realist evaluations and it was anticipated that the realistic interview approach would not introduce additional ethical concerns, over and above those present for traditional semi-structured interviews. Indeed, there is a possibly that the transparent, participative and contextually informed techniques employed for realistic interviews may assist in addressing some of the aforementioned issues, and suggested strategies for workings towards ethical global health research.

In the broader sense of evaluation research, Mark et al. (1999) have provided ethical guidelines for data collection and analysis, which were adhered to throughout the research. This includes: only conducting research when the benefit of an evaluation outweigh the costs; minimising risk to participants; obtaining informed consent; upholding the principles of respect, privacy, decency, and non-coercion of participants; preservation of confidentiality; avoidance of fraud (or deception); and following technical requirements (Mark et al., 1999).

4.9.3 Ethics process of this Study

4.9.3.1 Ethical Approval

Ethical approval was granted by (Trinity College Dublin), as well as appropriate bodies within the research country. Institutional Review Board (IRB) approval was granted from the Health Policy and Management/Centre for Global Health Research Ethics Committee (HPM/CGH REC) on March 3rd, 2015. For phase 2 of the work, IRB approval from Makerere University School of Public Health's (MakSPH) was granted on September 18th, 2015 and the Uganda National Council for Science and Technology (UNSCT) granted national ethics

approval on November 4th, 2015. Additionally I completed a module titled "Protecting Human Subject Research Participants" delivered by the National Institute of Health (NIH) in the United States on November 11, 2014. All clearance certificates and documentation can be found in Appendices 1-4.

4.9.3.2 Recruitment procedures for Phase 2 and Phase 3

Recruitment for the study involved the delivery of a study introduction letter and a participant information sheet supplied to potential participants by the CHW co-ordinator and/or case study gatekeeper as further detailed in Chapter 4.5.1.4 (except in the case of KIIs for Phase 3 who were purposefully recruited by myself). These documents detailed the study procedure, ethical considerations, and consent process tailored to their stakeholder grouping. During the delivery of these documents, the recruiter informed potential participants of the scheduled interview/focus group meeting date, time and location, which were set for a minimum of seven days after distribution for each stakeholder group. Potential participants were informed that if they were interested in participating or wanted more information, they could join on a specific day, but that this did not mean that they were obligated to continue with the interview.

4.9.3.3 Informed Consent Procedures for Phase 2 and Phase 3

Individuals who had received recruitment documents and came to the meeting location at a predetermined time and date were asked by the research team if they would like to participate, and if so, the research assistant proceeded with the consent process. The consent process involved ensuring all questions had been answered to the participants' satisfaction and that they were aware of their rights within the study, including right to discontinue and right to confidentiality. Those who voluntarily agreed to participate were then required to provide their consent prior to data collection. All participants in Phase 2 and 3 provided written consent (with a signature or a thumbprint for those with low levels of

literacy). The informed consent process involved detailing the below criteria and ensuring that participants understood that:

- Participation is optional, and the decision not to participate will hold no negative implications
- Potential risks of participation
    - Including that they decision to participate (or not to) would in no way impact on their involvement with the COMMs and the AIM-Health programme
- Potential benefits of participation to individuals, communities and the AIM-Health programme
- Confidentiality of identity
- Data storage procedures as highlighted in Chapter 4.7
- They maintained the right to withdraw from the study at any time
- Possibility of publication
- The data and their (de-identified) information may be used in future research

All documents were translated into the appropriate local language Rukigan. They were also available in English for any participant. A sample of the recruitment and consent documents Introduction Letter, Participant Information Leaflet, and Consent Form, for community member stakeholders the can be found (in English) in Appendix 5, 6 and 7, respectively. Research assistants were also asked to complete a non-disclosure form as to ensure they too would keep participant confidentiality and uphold informed consent process (Appendix 8).

4.9.3.4 Informed consent and Illiteracy

It was not possible to tell prior to the commencement of the study the literacy level of potential participants. As such, consent procedures and consent documents (introduction letter, information leaflet and consent form) for the participant groups of community members, community health workers and community health committee members were undertaken with the assumption that there may be some illiterate individuals. To this end, documents were kept in simple language, and utilised pictures to accompany text. The recruiters were instructed to assist any individuals with reading documents, and were also

asked to tell individuals to seek additional consultation from friends or family (if they so choose) to assist in understanding the documentation.

Prior to data collection within these groups the consent document was also read aloud by the research assistants and any questions were answered. After which illiterate individuals who voluntary chose to participate were then asked to provide their thumbprint instead of their signature.

4.9.3.5 Phase 1 Ethical Procedures and Consent

Participants in Phase 1 were all programme managers or implementers. As such, they were not considered a vulnerable group. Nonetheless, I adhered to strict ethical guidelines for their inclusion. Ethics for this phase of the research was granted by Health Policy and Management/Centre for Global Health Research Ethics Committee (HPM/CGH REC) on March 3rd, 2015. Potential participants were all involved in the COMM intervention, and were identified by World Vision Ireland. Participants were emailed appropriate versions of the aforementioned recruitment letters and study information leaflets a minimum 7 days prior to participation. The following consent procedures were conducted with informed consent being verbally recorded via Skype.

4.9.4 Dissemination

An integral criterion for conducting ethical research is the dissemination of findings back to research participants and stakeholders. Specifically, for the field of global health, many issues with dissemination to stakeholders may arise, often, but not exclusively, attributed to the contexts in which the research takes place. To this point, careful consideration prior to data collection was given as to how best to feedback findings to all research participants, with stakeholders located in communities given particular attention. Community health committees in these contexts would typically provide this service inline

with their responsibilities, however, as they are the unit of focus of this research, it was deemed inappropriate for this task to be theirs alone.

Working in collaboration with World Vision and the Ministry of Health a number of strategies were planned and carried out after the study was complete. These included the production of research policy briefs for each site, distributed to the local health centre to which the CHC group is ascribed, made available in both English and Rukigan (see Appendix 9 for an example). The research briefs also included broad recommendations for committee functioning and contact details for further information. In addition, the research was presented to the CHC groups during one of their quarterly meetings with the NGO implementing partner and the District Health Management Team (DHMT). Prior to the finalisation of in-country research, the researcher met with the District Health Officer to discuss preliminary findings. A more detailed report was provided to the NGO partner, which included findings specific to each case study as well as overall findings. It was requested that this be made available to the DHMT at each site. All parties will also be provided with an executive summary of this thesis upon its completion. I also participated in two dissemination activities while in Dublin organised through World Vision Ireland. First, I fed back the research through a WebEx held on August 22nd, 2017 to World Vision's Community of Practice. Over 25 participants from across the globe working with the AIM-Health programme or similar interventions attended. Second, on September 12th, 2017, I presented findings from the work and reflections on the research partnership to other NGOs and the AIM-Health funder, Irish Aid, at a peer learning event titled "Sharing knowledge and lessons learned from Irish Aid funded Maternal and Child Health Programmes".

4.10 Chapter Summary

This study is mixed-method realist evaluation using two intra-programme case studies in rural communities in South-Western Uganda. The study took place over three distinct phases. Phase 1 involves the elicitation of the IPTs, which informs the field study design. Phase 2 consists of the two case studies of CHCs within a maternal and child health programme in Uganda, and Phase 3 involves the synthesis of each case study's findings into Middle Range Theories. The current chapter presented the specific methods and tools for each Phase, as well as ethical and quality considerations for this research.

Chapter 5: Phase 1 –Initial Programme Theories

5.1 Introduction

The previous two chapters detailed the methodology of a realist evaluation, introducing initial programme theories and the process of their refinement throughout the realist inquiry cycle in order to produce a Middle Range Theory. Aligned to this inquiry cycle, Chapter 4 then detailed the specific methods used throughout the course of the study. The current chapter presents the elicitation of the initial programme theories (IPTs)[32] that serve as the hypotheses for *how, why and for whom* the intervention 'works'.

As detailed in Chapter 4.3 three main actions were conducted to elicit the IPTs: a literature review, document review and key informant interviews. The literature and document reviews were conducted first, with KIIs being guided by these initial findings. Appendix 13 includes a visual representation of initial ideas/theory that were sent to all KIIs prior to their interview. These were based on the literature and document reviews and served to ensure collaborative refinement through the realist interview technique (outlined in Chapter 3.6.4.1). The current chapter presents the findings from these combined steps and is organised around each elicited IPT, of which four emerged. Prior to IPT elicitation however, this chapter presents further literature on CHCs, their potential outcomes, the contexts in which they work, and presents the framework used to help understand context and the potential outcomes of community health committees.

32 Describing these theories as "IPTs" is not universal nomenclature within realist evaluation methodology. Often they are simply referred to as programme theories, original theories or in the early stages candidate theories; however, for the purpose of this work I chose to use the term IPT to clearly distinguish the first theories developed prior to the field study refinement phase of the research to ensure clarity in distinguishing between the phases of work.

5.2 Identifying outcomes: What is meant by "work"?

An important objective of IPT(s) elicitation is to gain better understanding of the potential outcomes of an intervention. While more specific outcomes are presented as part of the CMOCs to elicit the final IPTs, the early stages of Phase 1 suggested that further clarification was necessary in terms of defining what 'works', or, in other words, defining what are the desirable outcomes of the CHC programme. To address this issue, the literature was further consulted to identify potential outcomes.

5.2.1 'Capacity Building' as an Outcome

The literature suggests that CHCs can be considered a type of 'community organising strategy', which involves conducting activities that place an emphasis on societies and their contextual circumstances as a whole (Wallack et al., 1993). Key concepts of community organising, or noted outcomes and/or processes of CHC interventions, include: empowerment, participation, capacity building, social capital and critical consciousness (Minkler et al., 2008, Rimer and Glanz, 2005). Of these, capacity building in particular, is noted as a key outcome within community organising strategies (Gibbon et al., 2002). Within the current study, definitions of capacity building are drawn from Labonte and Laverack (2001), who describe capacity building as an "increase in community groups' abilities to define, assess, analyse and act on health (or any other) concerns of importance to their members" (pg. 114). Recently, there has been a renewed commitment to capacity building approaches that empower communities to take action to improve their own health and well-being (Brazier et al., 2014, MacLellan-Wright et al., 2007). In addition, there is increased recognition of the need for integrated community and facility level interventions to achieve these desired outcomes (Rosato et al., 2008, Lawn et al., 2008, Brazier et al., 2014).

Community capacity is not a new concept within the study of health promotion and has been differentiated from other similar ideas such as community empowerment, social

capital, community development, community readiness and community competence (Gibbon et al., 2002, Goodman et al., 1998). Advocates for community capacity as both a process and outcome measure argue that it is a more comprehensive term compared to other community organising concepts, with its defined dimensions often incorporating several other popular concepts such as empowerment and participation (Trickett et al., 2011). Goodman et al. (1998), Gibbon (1999) and Laverack (1999) propose possible dimensions, or domains, of community capacity, while also recognising that defining a prescriptive set of domains relevant to all contexts and communities is impossible (Labonte and Laverack, 2001). A compiled list of these domains is summarised in the following Box 3**.**

Box 3 Proposed Domains of Community Capacity

Goodman et al. 1998	**Gibbon 1999**	**Laverack 1999**
• Participation and Leadership • Skills • Resources • Social and Interorganisational networks • Sense of community • Understanding of community history • Community power • Community values • Critical reflection	• Leadership • Organisation • Representation • Needs assessment • Resource availability • Implementation • Linkages • Management	• Participation • Leadership • Organisational structures • Evaluation • Resource mobilisation • 'Asking why' • Links with others • Control • Relationships

Laverack's nine domains were chosen to take forward in this research for several reasons. First, there is a wider body of knowledge using Laverack's domains. Second, Laverack's domains appear to align better with the COMM guidelines, specifically around as they have domains for 'asking why', 'role of outside agents', which the other's do not.

5.3.1.1 'Capacity Building' within the Documents

In addition to the literature presented in Chapter 1.5, the document review revealed a detailed description of *how* the CHC programme was expected to work from World Vision's

perspective. Specifically, capacity building was listed as an objective of the AIM-Health programme (see

Table 2 Strategic Objectives of COMMs). According to the document review, COMMs are responsible for the following activities:

- Creating enabling environments by leading/supporting advocacy activities
- Networking, and creating collaborations, partnerships and linkages with organisations, groups and individuals within their community
- Providing support and supervision to other AIM-Health actors (Community Health Workers), and health centre staff
- Supporting the implementation of AIM-Health outreach activities and contributing to service delivery of health programmes
- Providing organisational and leadership strengthening to the health centre and other actors engaged in health promotion activities
- The monitoring, evaluation and planning of health activities, both within the community and health centre

Additionally, the CHC (i.e. COMM) intervention's overall design was intentionally aligned to the Community Systems Strengthening Framework. One will recall from Chapter 2.4.3 that capacity building is one of the six pillars of the CSS Framework. Thus, the document review further supported the use of capacity building as a key outcome of interest for this study.

5.3.1.2 'Capacity Building' within the KIIs

Capacity building as an outcome of CHCs was also supported and further refined throughout the KIIs. Excerpts from interviews below show *how* the intervention works towards community systems strengthening *through* capacity building such as participation, organisational structures, linkages and 'asking why'.

> *(CHCs) becomes the recipient [of the intervention], so to speak, like when we strengthen them or develop them, they get those services, they become part of the community, they become active members, so its really like, you know, even not necessarily intentionally but as an effect we actually strengthen communities, we help build community structures and we strengthen them. And the second of all, because of that strengthened community structure their (CHC)*

participation is increased, their knowledge is increased, and they are able to advocate better on behalf of their communities. (KII 1).

By strengthening or developing the committees, not only is World Vision contributing towards strengthening community systems, because a CHC is really a conduit, an element, of a community. So if you think of it that way, it is a community structure, a community element… meant to advocate for health issues. (KII 3)

5.3. A Framework for Understanding Context

5.3.1 The Socio-Ecological Model

As discussed in Chapter 3.2, advancements in community programming have resulted in a paradigm shift towards more systems-thinking models, recognising that interventions and programmes influence context and individuals, and vice versa. Given the diversity of health programmes, there is a plethora of theories that aim to understand health and health programming, one of the most notable being *ecological systems theory* (1979) pioneered by Bronfenbrenner (1977), (1979). Further refined for the health promotion field by scholars such as McLeroy and colleagues (1988) and Stokols (1992), the inherently interdisciplinary *social ecological theory* emphasises the interdependence between environment, situational and personal factors and well-being, positioning individuals within a larger social system (Golden and Earp, 2012). Social ecological theory focuses and gives greater priority to the cultural and environmental relations of people and their environment, looking at not only strategies for individuals, but for collective well-being (Stokols, 1996).

Bronfenbrenner's (1977) theory divides one's environment into four interacting domains (systems) - the microsystem, mesosystem, exosystem, and macrosystem. The microsystem involves one's interaction with their immediate environment; the mesosystem represents relationships between microsystems; the exosystem involves a setting which does not directly involve an individual, but influences it; and the macrosystem involves the wider social and cultural context in which people live. Using this to understand interactions between different levels has emerged as an important tool to gain a more holistic,

contextually relevant, understanding of individuals and their health. For instance, the prominent UNICEF Nutrition Framework encapsulates this notion by identifying immediate (micro), underlying (meso, exo), and basic (macro) contributors to malnutrition.

Within health, an adaptation of Brofenbrenner's original model, which more clearly identifies relevant layers, is termed the Socio-ecological Model (SEM). Corresponding to the previous system levels, the Socio-ecological Model re-categorises the four interacting domains into dimensions of: individual, interpersonal/organisational, community, and policy/social, respectively (McLeroy et al., 1988). Similar to *ecological systems theory,* I argue that using this model to understand influences of health across dimensions provides practitioners, researchers, and policy makers with more contextually relevant and informed information, in line with systems thinking approaches.

SEM, as a framework to organise this study's elicited theories, was chosen for several reasons. Firstly, SEM aligns to a systems-thinking perspective by viewing systems as a whole and their interconnected interactions (and thus is appropriate for studying CHIs). Second, SEM is consistent with the socio-ecological view of health and social determinants of health (Chapter 1.2.1), which evidence suggests community interventions are particularity positioned to address (Chapter 2.3.1). Third, consistent with SEM, theory driven evaluations (i.e. realist evaluation) recognise that context operates at multifaceted levels, including political, social, organisational and individual domains (Blamey and Mackenzie, 2007). Finally, the COMM intervention within the AIM-Health programme implements activities across various contextual levels within a community (Chapter 1.5.1) and therefore requires an understanding at each of these levels, as well as how they interact to comprehensively undertake evaluations. For these reasons, SEM was deemed an appropriate framework to assist in organising and understanding the literature related to CHCs.

5.4 Individual Level: Committee Members

This section focuses on the individual members within a committee and the potential influences (enablers or disablers) on their functioning within a CHC working towards capacity building. In doing so, it examines literature related to volunteer community health workers and factors that relate to their perceived performance, sustainability, and effectiveness.

5.4.1 Literature for Eliciting IPTs at the Individual Level

As noted, the evidence-base beyond effectiveness studies behind CHCs within LMICs is minimal. Where reviews do exist, they often focus on more abstract levels of operationalisation and provide little insight into the specific members within groups. In contrast, other task-shifting and 'community volunteer' initiatives, such as Community Health Worker (CHW) programmes, have robust studies detailing factors associated with their implementation at the level of the individual. As such, parts of the following section borrow from this relevant literature to draw parallels with CHCs. Drawing parallels between the two was considered appropriate given the operational definition of CHCs, which, similar to CHWs definitions, involves the volunteering of mostly lay community individuals for the promotion of health activities within communities.

While there is robust support for task-shifting interventions within LMICs (Bhutta et al., 2010a, Brenner et al., 2011, Christopher et al., 2011, Gilmore and McAuliffe, 2013, Braun et al., 2013, Lewin et al., 2010) studies have drawn attention to the challenges in implementing such programmes. From these studies, we can identify potential factors that influence on individual CHC members including: regular and supportive supervision (Roberton et al., 2015); the importance of sustaining CHW motivation (Banek et al., 2014); and maintaining high levels of performance (Naimoli et al., 2014, Kok, 2015, Gilmore et al., 2016a). When present, these factors are likely necessary to reduce high attrition rates within CHW

programming (Vareilles et al., 2015a, Marchal and De Brouwere, 2004, Chen et al.) and to ensure well-performing CHW programmes (Strachan et al., 2012).

Kok et al.'s (2014, 2015) in-depth exploration into the performance of CHWs in LMICs, with a focus on contextual factors of influence, notes that influencers can be divided into what Sheikh et al. (2011) calls 'software' (such as relationships, power, ideas and norms) and 'hardware' (including supervision, training and supplies). Both categories impact the performance of workers at the individual level (Kok et al., 2016). Software issues are a pertinent example to demonstrate how certain factors can cross multiple levels of CHC implementation to influence CHC functioning at individual, group, community and societal domains. For instance, feeling appreciated and having respect and recognition from community members is an important motivator for CHWs (i.e. individual level) (Kok et al., 2016, Bhattacharyya, 2001) so too is being embedded within the community (i.e. community level) (Raven et al., 2015).

Hardware factors for community workers often relate to more job specific, tangible aspects of work. For instance, motivation and performance are linked and appear to be determined by a number of interrelated factors (Kok et al., 2014a) including: access to resources, on-going training, and manageable workloads (Raven et al., 2015). Motivation and interventions that improve motivation and job satisfaction are considered likely determinants of CHW performance (Chen et al., 2004, Rowe et al., 2005). Similarly, ineffective performance has been attributed to a lack of incentives, poor supervision, demotivation, and the absence of on-going training (Haines et al., 2007, Bhattacharyya, 2001).

Taken together, the literature pertaining to the individual members who volunteer for community health initiatives indicate that members need specific supports (*resources/contexts*), which can be divided into 'software' (relationships, power, personal ideals) and 'hardware' (training, resources, supportive supervision). These supports then

trigger individual levels of motivation and job satisfaction (*mechanisms*), ultimately leading to their performance and retention (*outcome*).

5.4.2 Document and KII support for eliciting IPTs at the individual level

This section takes the CMOs that were identified through the above literature review and supports/refines them based on information from programme documents and the KIIs.

The KIIs further expanded on the personal characteristics that CHC members should have to effectively work as CHCs. The education of members was noted by KIIs as being important, as noted *"…. so those (education of CHC member, training of CHC groups and continued engagement of exposing them to best practices) are key to ensuring that they bring out the best of their work." (KII 3)*

Some of the 'software' was also expanded upon by KIIs, such as the requirement for CHCs to be respected and well known within their community to best influence community change. As one key informant described:

> *In our communities, a village chairman is like a president to them. So they (community members) listen, they have to listen to them. There is that behaviour that they know, this is our chairman, because I've been told that this committee will be doing 1,2,3…. And so it is positive. (KII 2)*

COMM programme guidance documents also cite the need for educated and respected members. Whereas CHWs within the AIM-Health programme were not restricted based on level of education and/or literacy, it was recommended that all COMMs be literate to assist in their routine functions (i.e. minute taking, community needs assessments, health facility monitoring). It was also noted that CHCs be selected by community members.

Taken together, these sources further highlight contextual factors such as personal attributes (both software and hardware) that are deemed necessary for CHC programmes to achieve successful outcomes, specifically levels of education/literacy and the respect by communities, both of which are needed to influence change.

5.4.3 Eliciting IPT at the Individual Level

Taken together, evidence from the literature review, KIIs, and document review support the elicitation of IPT1 by identifying Cs, Ms, and Os that describe influences on individuals within the CHC while influence their effective functioning. Table 8 below highlights this process and concludes with the elicited IPT.

Table 8 Elicitation of IPT 1

Level	Contexts /Resources +	Mechanisms =	Outcomes
Individuals in committee	Attributes: age, gender, time and availability for group, experience and education in health Previous experience with community Incentives (financial and non-financial) Supervision/Support Training Selection (by communities)	'Volunteerism" Respected individuals Motivation (intrinsic and extrinsic)	Retention/commitment Performance Community recognition/support Potential for career advancement Increased collaboration between committee members (sharing of resources)
	Potential explanatory CMOCs/IPT Individuals within the CHC are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' specific attributes (such as availability of time and knowledge), previous experience and incentives, training and supervision provided to them. These factors together result in increased collaboration within the committee, increased respect by community members and an overall committed committee better able to initiate activities and work towards building community capacity.		

5.5 Organisational Level: Committees as a Unit

The following section mainly focuses on the committee as a unit, discussing considerations for internal group operationalisation and functioning. It examines components including the relationships between committee members, the group make-up, and group mandate and actions.

5.5.1 Literature for Elicitation of IPTs at the Organisational Level

From a logistical standpoint, CHCs encounter a number of barriers to successful implementation. These include geographical barriers (Abimbola et al., 2015) and limited meeting frequency (Mubyazi et al., 2007, Srivastava et al., 2016). Evidence from the CHC

literature suggests that consideration should also be paid to the individual make-up of the group, recognising that members can have different cultures and personalities, aspirations, or motivation for participation (Capurchande et al., 2015). Furthermore, the make-up of groups should be informed by the programme's purpose and context. For instance, a systematic review of women's group interventions for MCH found that the proportion of pregnant women participating in groups increased its success (Prost et al., 2013).

While context-dependent, committees as a unit should generally contain broad representation across gender, socioeconomic status and background (McCoy et al., 2011b, Loewenson et al., 2014) and take steps to address power issues or hierarchies within and between groups (Abimbola et al., 2015, Scott et al., 2016). In addition, CHCs need strong internal and external leadership (Kessy, 2008) with appropriate support and training from partner organisations (Srivastava et al., 2016, Lunsford et al., 2015, Mkoka et al., 2014). In line with the example from Prost et al. (2013) given above of the women's group in India, having one woman who was identified by the community, and trained appropriately, to facilitate the groups assisted in implementation (Tripathy et al., 2010). The selection of committee members also acts to influence individuals (Molyneux et al., 2012) with evidence from other community health initiatives further supporting the importance of selection for community ownership to work towards sustainability and success of programming (Bhattacharyya, 2001, Lehmann and Sanders, 2007), and likely influence community control over activities (an important aspect of capacity building).

In support of CHC literature from LMICs, activities of similar groups (i.e. community coalitions) were also reviewed to further explore how committees function as a unit (i.e. at an organisational level). For instance, a review by Zakocs et al. (2006) conducted on community coalitions in the United States provides evidence of the coalition-building factors most positively associated with CHC effectiveness. They found evidence for six strong factors (greater than 5 studies reporting), moderate evidence for 15 factors (2-4 reported studies)

and 35 factors that had some evidence (one study). The six most prominent organisational factors were: formalisation/rules, leadership style, active member participation, diverse membership, member agency collaboration, and group cohesion (Zakocs and Edwards, 2006b). Factors with moderate evidence included: open/frequent communication, intensity/scope of actions implemented, task/goal-focused climate, staff time devoted to tasks, conflict management, agency member types, participatory decision making, member experience/expertise, member benefits, training/technical assistance, sectors (agencies) represented, member ownership/commitment, effective administration, efficient use of resources, and target small geographic areas (ibid)[33].

While the varied contexts are likely to influence CHC functioning, the above suggests that there are several similarities between LIC and HIC settings. The importance of *contexts and resources* such as committee leadership, broad/diverse representation and membership, formalised rules and processes and appropriate support and training were identified as important within this socio-ecological level. These contexts may influence important *mechanisms* such as committee cohesion, community ownership and relatability between members, which assist in developing relationships increasing committee control over health, and producing organisational structures (*outcome*).

5.5.1.1 Formal Theories on CHC Functioning

While the conceptual and theoretical foundations of committees (coalitions) are well defined in HICs, these theories are rarely, if ever, tested in low-income contexts, despite their widespread use for community systems strengthening (Butterfoss and Kegler, 2002a). Moreover, while there are some reviews on CHCs, and other studies that work to understand

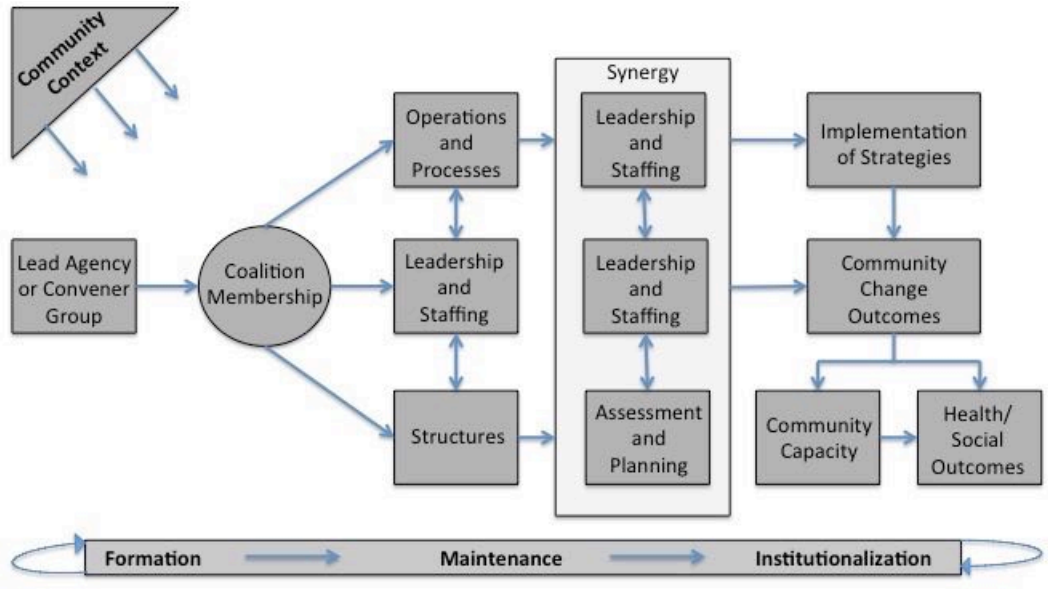
[33] Factors with minimal evidence were: coalition readiness, collaboration before coalition, comprehensive vision, supportive organizational climate, trust, recognize life cycles, establish priorities, innovation, researcher driven, written assessment/implement plan, data-driven planning, gained political support, prevention focused, used media to promote coalition, used environmental strategies, dedicated project director, lead agency known entity, lead agency nocompetitor, lead agency director supportive, length of time members involved, membership size, member-perceived fairness, member satisfaction, member empowerment, member sense of community, member perceived community problems, member anger/aggression, member self-discover, member independence, member knowledge of other agencies, staff relationships with members, staff expertise/experience, paid coordinator, and personal barriers.

their functioning within LMICs, there are no formal theories that work to explain their functioning in these contexts. The result is a clear gap in knowledge about how these theories translate, if at all, to LMICs. This gap is particularly important to address given the emphasis placed on context as a determinant of successful CHC programming. To this end, the following section examines extant CHC-relevant theories, specifically Community Coalition Action Theory, which works to understand committee functioning (i.e. at the organisational level), to assist in the elicitation of the IPT at this level.

Community Coalition Action Theory's theoretical basis has its roots in many relevant theories or models including, but not exclusively: Community Organization and Development Model, Framework for Partnerships and Community Development, Framework of Organizational Viability, Community Coalition Model (Butterfoss et al., 1993) and The Collaboration Framework (Butterfoss, 2007a). The underlying premise of the CCAT is that how a coalition functions, together with its strategies, will contribute towards capacity building and community health outcomes. CCAT highlights the stages of formation and function for community coalitions, while also providing the factors and dimensions that can impact on the coalition's success. While continually appreciating community context, CCAT categorises three stages of a coalition. The first, the *formation* stage, concerns itself with the building of the collaboration including the membership, operation and process, leadership and staffing, and the structures or procedures governing the coalition's activities. Once a coalition has developed synergy from the formation stage, the *maintenance* stage begins through pooled resources, member engagement, and activity planning. From this stage, the *institutionalisation* stage occurs with the implementation of strategies and community change outcomes. The three stages of CCAT are summarised in Figure 15**.** According to CCAT, community change outcomes are categorised as community capacity and health and social outcomes (Butterfoss and Kegler, 2002b, Butterfoss, 2007a, Center, 2010). Though the succession through the stages is described as a linear progression, in practice these occur and

interact in a more cyclical process, allowing for the return to a previous stage. Within these stages there are 14 major constructs with an accompanying 23 propositions that align with their related constructs, developed though the academic evidence-base and the experience of Butterfoss and Kegler (2002). These 14 constructs and 23 propositions are summarised in Table 9.

Figure 15 Community Coalition Action Theory Framework



Source: (Butterfoss and Kegler, 2002a)

Table 9 Community Coalition Action Theory Constructs and Propositions

Constructs	Propositions
Stages of Development	1. Coalitions develop in specific stages and recycle through these stages as new members are recruited, plans are renewed and new issues are added. 2. At each stage, specific factors enhance coalition function and progression to the next step.
Community Context	3. Coalitions are heavily influenced by the contextual factors in the community throughout all stages of coalition development.
Lead Agency	4. Coalitions form when a lead agency or convening group responds to an opportunity, threat or mandate. 5. Coalition formation is more likely when the convening group provides technical assistance, financial or material support, credibility, and valuable networks and contacts. 6. Coalition formation is more likely to be successful when the convener group enlists community gatekeepers who thoroughly understand the community to help develop credibility and trust with others in the community.
Coalition Membership	7. Coalition formation usually begins by recruitment of a core group of people who are committed to resolve the health or social issues. 8. More effective coalitions result when the core group expands to include a broader consistency of participants who represent diverse interest groups, agencies, organisations

	and institutions.
Operation and Processes	9. Open and frequent communication among staff and members help create a positive climate, ensures that benefits outweighs costs, and makes collaborative synergy more likely. 10. Shared and formalised decision making processes helps create a positive climate, ensures that benefits outweighs costs, and makes collaborative synergy more likely. 11. Conflict management helps create a positive climate, ensures that benefits outweighs costs, and makes collaborative synergy more likely. 12. The benefits of participation must outweigh the costs to make collaborative synergy more likely. 13. Positive relationships among members are likely to create a positive coalition climate.
Leadership and Staffing	14. Strong leadership improves coalition functioning and makes collaborative synergy more likely. 15. Paid staff who have the interpersonal and organisational skills to facilitate the collaborative process improve coalition functioning and make collaborative synergy more likely.
Structure	16. Formalised rules, roles, structures, and procedures make collaborative synergy more likely.
Pooled Member and External Resources	17. The synergistic pooling of member and community resources prompts effective assessment, planning, and implementation of strategies.
Member Engagement	18. Satisfied and committed members will participate more fully in the work of the coalitions.
Assessment/ Planning	19. Successful implementation of strategies is more likely when comprehensive assessment and planning occur.
Implementation	20. Coalitions are more likely to create change in community policies, practices and environments when they direct interventions at multiple levels.
Community Change Outcomes	21. Coalitions that are able to change community policies, practices and environments are more likely to increase capacity and improve health and social outcomes.
Health/Social Outcomes	22. The ultimate indicator of coalition effectiveness is the improvement in health and social outcomes.
Community Capacity	23. As a result of participating in successful coalitions, community members and organisations develop capacity and build social capacity that can be applied to other health and social issues.

Notably, propositions 1-3 and 20 emphasise the contextually dependent and socially integrated nature of CHCs. CCAT's outcome constructs (propositions 20-23) provide domains for short and long-term results through addressing overall health outcomes[34] with the recognition that building community capacity (proposition 23), as a goal of coalitions, enables long term change that can transcend the intended outcomes of the initial CHC intervention.

Constructs most related to implementation factors include propositions 4-19, many of which are supported by the literature on CHCs in LMICs, as discussed in Chapter 1.3.3-1.3.5.

[34] An assessment of community health outcomes for this study was a) non feasible and b) not necessary to answer the research question. Thus, only outcome constructs 21 and 23 were considered.

The importance of member engagement and meeting processes are noted by Mubyazi et al. (2007) and Srivastava et al. (2016) in Tanzania and India, respectively, (*Operations and Processes*), with Kessy's (2008) study on health councils in Tanzania underscoring CHC's need for strong '*Leadership and Staffing'*. Studies from Lunsford et al. (2015), Mkoka et al. (2014) and Srivastava et al. (2016) in Ethiopia, Tanzania and India, also highlight the importance of support from the partner organisation and is comparable to the '*Lead Agency'* within CCAT. The importance of '*Committee/coalition Membership'* and specifically the need for members to be selected by the communities (Molyneux et al., 2012) and to consist of a broad/diverse make up (Capurchande et al., 2015, McCoy et al., 2011b) is also supported within CHC literature from LMICs. The above highlights complementary and harmonious findings from LMIC CHC studies with CCAT, providing support for CCAT's potential contribution to understanding CHCs in LMICs.

While there are limited studies using CCAT, with the majority of the literature predominantly focused on theory development (Zakocs and Edwards, 2006a, Kegler et al., 2010), those studies that have successfully utilised the theory have examined the contextual factors that contribute to the implementation stage (Kegler et al., 2010), the effectiveness of coalitions (Kluhsman et al., 2006), and member characteristics and their impact on outcomes (Kegler and Swan, 2011).

CCAT as a formal theory to contribute to the elicitation of the IPTs within this study was thought appropriate for the Ugandan context for several reasons. First, CCAT places a large importance on understanding context, and emphasises that the process of the coalitions/committees implementation is happening within a specific context. This aligns to both the realist evaluation methodology and the systems thinking approaches taken within this study. Second, it works within the socio-ecological lens, which as outlined in Chapter 5.3 is also aligned to systems thinking. Third, it lists community capacity as one of its objectives, an important outcome of CHC interventions, as identified through the elicitation process.

Lastly, Dr. Butterfoss, via email correspondence, acknowledged the suitability of CCAT for use within a Ugandan CHC intervention (Butterfoss and Gilmore, 2015).

5.5.2 Document and KII support for eliciting IPTs at the Organisational Level

This section explores how evidence from the KIIs and document review supports the IPT elicitation thus far, and namely the use of CCAT as a theory to understand committee functioning at the organisational level. Information from the KIIs specifically empahsises the importance of having strong policies and procedures in place for the CHCs, with appropriate support provided to them, as evidenced in the following quotes:

> *What I think is we need to work on the resource, the materials. I think the CHC materials needs to be readily available, and the members of the CHCs need to understand them very well. (KII 3)*

> *To ensure at the end of the day there is a harmonised way to have these minimum standards and policies (between CHCs and MoH) to be working hand in hand without conflict (KII 2).*

> *There are some issues of conducting the meeting, some may not be around. And others, they think maybe because WV is supporting the meeting maybe they need some allowance or whatever… some issues of reluctance (from CHC members). So we have to go and try to strengthen, inform them of what they are supposed to do. (KII 4).*

AIM-Health and COMM document reviews further emphasised the need for diverse membership make-up and appropriate training on health for committees.

5.5.3 Eliciting the IPT at the Organisational Level

Evidence from the literature, specifically on CCAT, the document review and KIIs provided important insight into the organisational level for 'how, why and for whom' CHCs can work to build capacity. Table 10 below highlights this process and the resulting IPT2.

Table 10 Elicitation of IPT2

Level	Contexts /Resources +	Mechanisms =	Outcomes
Organisational	Membership make-up, operation and processes, leadership Relationship to other stakeholders Sustained committee support: resources, training and supervision	Buy-in from relevant stakeholders (NGO and MoH) Respect of community members Harmonisation of activities between initiatives Shared resources and knowledge for programme Communication and trustworthiness between members and stakeholders	Service delivery: increasing services for population; initiation of new activities for MCH Group synergy Implementation of activities are multiple levels of society Strong programme management
	Potential explanatory CMOCs/IPT Committees that have broad membership make-up, have strong operations and processes in place, have strong leadership, with consistent training and supervision and work to build relationships with other community stakeholders are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities for more harmonised services, share resources and knowledge, and have strong communication and trust between members. This collaboration works to increase service delivery, with implementation addressing multiple levels of society, and also works to provide committee synergy and a strengthening of programme management – all of which are assumed to contribute capacity building for MCH (*Community Coalition Action Theory*).		

5.6 Community Level: Committees within Communities

CHCs' role within communities and their ability to function effectively, or not, is further dependent on community level factors. Despite the recognised importance of community-level factors, few studies within the extant literature have explored this specific relationship. The current study therefore explores these connections as important determinants of how and why CHCs work to build capacity in LMICs. Three key factors were identified throughout the literature review as important to community-level considerations: relationships, knowledge, participation, and acceptability; community ownership and trust; and linkages and partnerships.

5.6.1 Literature for Elicitation of IPTs at the Community Level

Relationships, knowledge, participation and acceptability

The relationship between community health workers and intervention beneficiaries serve to impact satisfaction of service and subsequent utilisation of services (Wild et al.,

2010). Trust, expectations, and the level of interaction between the communities and health workers can influence provider and client relationships in LMIC community settings (Kok et al., 2015). Specifically, research suggests that these relationships are stronger when workers are selected from the very communities they serve (Kok et al., 2014b), further highlighting the importance of community selection noted in IPT1 and IPT2.

Knowledge includes community members' perception of how knowledgeable their health workers are, and/or community member's knowledge of the intervention itself. In the former, perceiving your health worker as knowledgeable can increase satisfaction and utilisation of a service (Wild et al., 2010). Specifically in Uganda, a service user's perception of their health worker and their level of training have been shown to increase acceptance and use of service (Kiwanuka et al., 2008, Nabbuye-Sekandi et al., 2011, Kiguli et al., 2009). As such, efforts should be made to ensure confidence in committees by community members (Mubyazi et al., 2007).

It is important that the roles and responsibilities (as detailed in Chapter 1.5.2), especially in comparison to other community committees and the health centre, is clear to all stakeholders (Kessy, 2008, Mkoka et al., 2014, Molyneux et al., 2012, Abimbola et al., 2015, Srivastava et al., 2016). Communities in particular need to be made aware of the role of the CHC and their mandate (Srivastava et al., 2016, Mubyazi et al., 2007).

Ensuring that communities are knowledgeable of CHCs and their functions can occur through participation of community members throughout the programme's implementation. Incorporating individuals from the community is critical to gain community support for CHCs and is considered imperative for successful programming. Specifically, community participation is important to enhance the self-determination, empowerment, and community ownership of CHC programmes. Consistent with the results of a systematic review of skilled birth attendants (SBAs) for maternal and child health (MCH), community involvement was identified as a key determinant of a successful intervention, specifically in areas with high

poverty and high gender inequality (Lassi et al., 2016). Thus, and aligned to PHC principles, participation of communities in health programmes is integral to health promotion, to generate support and community ownership, and subsequently for the success of community health interventions (Merzel and D'Afflitti, 2003, Minkler, 2005).

Taken together, viewing your CHC as knowledgeable, having positive relationships with the committee member, having clearly identified roles of CHCs, and ensuring the participation of community members in CHCs are likely *contexts and resources* that can trigger *mechanisms* of trust, support for, and confidence in CHCs. Together these may generate *outcomes* of satisfaction with CHCs, acceptance of CHCs and community support for CHC activities.

Community ownership

Community ownership of health programmes is widely recognised as an indispensable element to ensure their success and sustainability (Lehmann and Sanders, 2007). Despite this, a common issue with close-to-community programmes is the lack of engagement from communities (MacLachlan et al., 2010, Gilmore et al., 2014). Even with inherently community-centric programmes, there is a danger of interventions being directed by 'top-down' processes, which act to reposition ownership and accountability away from the intended communities (Easterly, 2006).

Interventions embedded within communities have been shown to influence trust, recognition and respect, leading to increased motivation and performance of community workers (Lunsford et al., 2015). Alternatively, those with limited embededness and ownership have noted negative influences on motivation and performance (Kok et al., 2015). Other studies support these findings, also noting the importance of community ownership for success and sustainability (Gilmore et al., 2014, Merzel and D'Afflitti, 2003, Minkler, 2005) and to influence equitable access to services by community members (Gilmore et al., 2017). Within community health programmes ownership and accountability to communities has

also been found to attenuate attrition and improve motivation of health workers though increased support and accountability (Lehmann and Sanders, 2007, Bhattacharyya, 2001). In sum, community ownership and subsequent accountability (*mechanisms*) may be triggered in *contexts* when there is participation and when programmes are embedded within communities. This relationship may generate *outcomes* of motivation, recognition and respect for workers and sustainability of programmes.

Linkages and partnerships within communities

As seen in Chapter 3.2.1, CHCs meet the criteria of a complex health intervention (and are thus influenced by, and linked with, the wider system and other actors). Links and relationships between community workers and facility and government staff are identified as important influencers on CHC implementation functioning (Mkoka et al., 2014, Srivastava et al., 2016). This is supported by Naimoli et al.'s (2015) review of CHW relationships, which found community health committees to be an important advisory and management tool to support and complement CHW programming.

Relationships with other community organisations are also important for CHC support and activity harmonisation (Brazier et al., 2014, Kapiriri et al., 2003). These links can work towards ensuring cooperation and collaboration between committees, health centres, and other groups (Mubyazi et al., 2007, Kessy, 2008, Mkoka et al., 2014) In Ethiopia, linking health committees with Health Extension Workers (HEWs) saw improved maternal health behaviours and positively influenced support for HEWs and their connections to communities (Lunsford et al., 2015). Supporting co-ordination between CHCs and the MoH in Tanzania was also found to increase multi-sector collaboration and improved referral pathways (Lunsford et al., 2015).

In sum, relationships, connections and linkages (*contexts and resources)* with other health initiatives within the community can generate more collaboration and coordination

(*mechanisms*) between services, which may influence health service pathways and harmonisation of activities (*outcomes*).

5.6.2 Document and KII support for eliciting IPTs at the Community Level

Developed mostly from the key informants' input is the notion of stakeholder acceptability, satisfaction and responsiveness to the CHCs. The wider stakeholder group, encompassing community members, other community groups, health workers, programme implementers, and the Ministry of Health, must want to engage and have buy-in with the CHC in order for them influence change. For example, if community members do not trust or respond well to the CHCs (potentially influenced by individual relationships, as noted in the previous section), then regardless of their internal strength, lack of buy-in may influence their ability to function.

The document review showed the importance of linkages with the Ministry of Health and other community groups. Specifically, the CHWs and Citizen Voice in Action (CVA) enacted as part of the AIM-Health programme together with the CHCs target women and children in an integrated fashion across multiple social domains (Chapter 1.5).

5.6.3 Elicitation of IPT 3

Evidence from the literature, document review and KIIs provided important insight 'how, why and for whom' CHCs can work within the community level. Table 11 below highlights this process and the resulting IPT3.

Table 11 Elicitation of IPT3

Level	Contexts /Resources +	Mechanisms =	Outcomes
Community	Partnerships/Participation/Perceptions: past experience with committees and other initiatives Embeddedness/Linkages: Availability and strength of health services and system for MCH	Collaboration - Organisation/Mobilisation Community member's ability to participate - Accountability/ownership - Increasing advocacy skills for MCH; Community critical awareness Trust, Support and Confidence	Support - Development of local leadership for health Harmonisation - Increase in health services for MCH; Increase in health system responsiveness Satisfaction/Acceptance

	Potential explanatory CMOCs/IPT CHCs that operate in communities that have had positive past experiences with similar initiatives, that have strong existing MCH health services and strong systems to support their implementation, and policies that favour their implementation, are assumed to lead to increased community organisation, mobilisation and participation for maternal and child health. They are also assumed to increase community members' ability to participate in health activities, have critical awareness of their rights, and advocate for their health needs. This is assumed to result in creating local leadership (champions) for MCH, increase evaluation and needs assessment, increase health services and health responsiveness, and decrease the workload for health staff and volunteers.

5.7 Societal: Committees and the System

5.7.1 Literature support for eliciting IPTs at the Community Level

Societal domains capture findings concerned with the wider context, specifically environmental, political and cultural contexts that may influence the CHCs. There have been several other reviews on CHCs (or similar groups) within LMICs that can shed light on these factors. For instance, Molyneux et al. (2012) describe three inter-related factors cutting across various social domains impacting on health committees: 1) selection, compensation and functioning of committees; 2) relationships between committee members, health workers and health managers; 3) and elements of the wider context (Molyneux et al., 2012). Whereas domains 1) and 2) have been integrated into individual and committee-level considerations, respectively, the third factor encompassing the broader societal domain can assist in the next IPT elicitation at the societal-level. Here, Molyneux et al. (2012) identify two main areas: government context and socio-cultural norms and priorities. In relation to government context they found that the strength of CHCs and primary heath centres mutually reinforced one another. Additionally, they both require adequate resources and decision-make power so as to not hinder CHC achievements (ibid). In terms of socio-cultural norms and priorities, the authors note that clashes can occur between the intervention design and cultural context that serve to limit intervention effectiveness (Molyneux et al., 2012). For instance, in contexts where socio-cultural norms create hierarchies and power imbalances, there is a possibility for participation in accountability activities to be

manipulated and counter-productive (ibid). This emphasises that intervention design and implementation should be informed by the context's social and cultural practices.

In their review on health facility committees McCoy and colleagues (2011) identified factors that influence the performance and effectiveness of health facility committees. They found that within the health systems, factors that determine performance and effectiveness include the receptivity of health staff to the committees, authority of the committee and their mandate (if there is one), and the harmonisation of the committee with the wider health system (McCoy et al., 2011a). As part of this review, the authors also developed a conceptual model of inhibitors and/or facilitators to the performance of CHCs. This framework identified contextual factors within the health system and society, including the features of the health facility, the health facility committee, and of the community, that work with process factors such as community mobilisation in support of enabling performance (committee level). Within the wider societal context, the authors found that the political, cultural, and economic contexts of communities all had an influence on health facility committee performance (societal level). For instance, the authors note findings from Nepal where cultural beliefs around health influenced interactions between communities and health facility committees (ibid).

Together, these two reviews emphasise an important aspect of CHCs: they cannot and do not operate in isolation. They are part of the wider health system, and therefore their efficacy and performance are dependent on other functioning and effective components of the health system. Within weak health systems struggling with capacity, it is therefore recommended that incremental changes be made that include community-level activities implemented in conjunction with other societal, and health system programmes (Ekman et al., Gogia and Sachdev, 2010). These include complementary community mobilisation (Gogia and Sachdev, 2010) and context-specific health systems strengthening activities (Prost et al., 2013). For example, a large implementation experiment conducted in Ghana found that

community service provision, combined with community involvement and mobilisation, was necessary to reduce fertility rates – with any one intervention on its own insufficient to notice an effect (Phillips et al., 2006). Other contextual factors such as gender and power norms are also considered inextricable from the health system (Morgan et al., 2016) and how these influence member interaction at committee-, community- and societal-levels should also be considered. Other health system factors for consideration include the resources, policies, procedures and processes of local and national systems for health and other associated ministries (Chapter 2.4).

In sum, within the wider societal domain, the importance of socio-cultural norms, economic and political policies and priorities, health system support and infrastructure, and integration with other activities (*contexts*) may influence CHC's ability to implement activism and be effective (*outcomes*). Outcomes are postulated to occur through *mechanisms* of harmonisation, support and acceptability, however there is little support for mechanisms within the extant literature.

5.7.2 Document and KII support for eliciting IPTs at the Societal Level

There was little information supplied from these two sources to support further elicitation of the IPT at this level. Emphasis on the strength of the health system within the community was noted by several KIIs, and the importance of CHC linkages with the health system and its policies is evidenced in COMM Guidelines.

5.7.3 Eliciting IPT 4

The IPT at this level was elicited from the identified conditions presented above. Additionally, it was noted that given the SEM model used to support Phase 1, and that CHCs are a complex health intervention, this IPT also aimed to highlight interconnectedness of the IPTs and their systems.

Table 12 Elicitation of IPT4

Level	Contexts /Resources +	Mechanisms =	Outcomes
Societal	CHCs consistent with socio-cultural norms Strength/prioritisation of economic and political policies Strength of health system support and infrastructure	Acceptability (stakeholders) Harmonisation Support (reducing	Strength of implementation Effectiveness
	Potential explanatory CMOCs/IPT Committees that operate in contexts with strong health systems, supportive economic and political policies, and that are reflective of socio-cultural norms are more likely to have increased acceptability, support and harmonisation of activities, leading to more effective CHCs. Committees that are able to strengthen the three aforementioned levels of functioning (individual, committee and community) in-line with pre-existing socio-ecological contextual factors are assumed to promote capacity building for maternal and child health.		

5.8 Reflections on IPT Elicitation

Prior to entering Phase 1, I knew that my experience in the programme and within the broader field of community health would influence the research; however, I was unaware of the extent of this until its completion. As programmes can theoretically have an infinite number of CMOCs, identification and selection within this study is very much dependent on my views and interpretations or internal understanding of 'why, how and for whom' the intervention worked. Ultimately, and while careful measures were taken to adhere to a systematic and transparent method of eliciting the IPTs as part of Phase I, I acknowledge that the elicitation of the theories is ultimately subjective. Notably, data informing the elicitation is not a straight-forward extraction process and the process through which elicitation occurs is recognised as difficult to document. Moreover, exiting guidance on IPT development within the literature, as discussed in Chapter 3.6.2, is vague and largely consists of recognising patterns and relationships within experiences, outcomes and the nuances of programmes. Not only is this difficult to do (expanded upon on Chapter 9.6), but it is also difficult to document.

5.8.1 The Researcher's Experience

Also important to reflect upon is my personal experience with this programme and other similar volunteer health programmes. These personal experiences, which are recognised an integral to realist ontological underpinnings, inevitably influenced the elicitation of the IPTs. Prior to conducting this study I had several years' experience conducting research and monitoring and evaluation (M&E) within the programme of study and I had previously conducted operations research in North Rukiga. I have also worked on several other community health projects as either a researcher or as an advisor. Therefore, while my experiences are different from those of programme managers, I had a preconceived understanding of how such interventions might work to build CHC capacity.

5.9 Refined Study Aim, Questions and Objectives

Based on the findings of the IPTs, and aligned with the realist methods outlined in Chapter 3.6, the study aim, questions and objectives were refined prior to the commencement of Phases II and III. Notably, these now include capacity building as a key outcome of successful CHC interventions. These are presented below, with iterative components underlined, and new objectives based on the research design presented.

5.9.1 Refined Aim

> The aim of this study is to identify key context features and underlying mechanisms through which community health committees contribute <u>to capacity building</u> for community systems strengthening within a maternal and child health intervention.

5.9.2 Refined Question

> What are the generative mechanisms and associated contexts through which community health committees for maternal and child health contribute to <u>capacity building</u> as a component of community systems strengthening, and why?

5.9.3 Refined Objectives

1. Test and refine the initial programme theories through case studies to develop programme theories for each case study on how community health committees build community capacity for maternal and child health.

2. Synthesise the findings from each case study to develop a theory/theories that is of middle range for how community health committees build community capacity as a component of community systems strengthening for maternal and child health.

5.10 Chapter Summary

This chapter presented the results of Phase 1 of this research, which used the analytical tool of context-mechanism-outcome configuration to elicit initial programme theories across individual-, committee-, community-, and societal- levels, as per the socio-ecological Model (SEM). Here, SEM served as a framework to organise findings in accordance with systems thinking. Literature and documents as well as evidence from key informant interviews are presented in support of the CMOCs at each level to help explain, how, why and for whom CHCs work to build community capacity. A key stage within the realist inquiry cycle, elicitation of the initial programme theories serves as an important first step in conducting a realist evaluation (Mukumbang et al., 2016b, Pawson and Tilley, 1997, Marchal et al., 2012b). The findings from Phase I are now taken forward to inform the mixed-methods used as part of the case studies (Phase 2) and their subsequent synthesis (Phase 3). The elicited IPTs presented in this chapter are further referred to during the process of refinement presented throughout the following chapters. Of note, the methods and results from this chapter, and these were used to informed Phase 2 data collection were published as a research protocol in a peer-reviewed journal (Gilmore et al., 2016b).

Chapter 6: Results Case Study 1

Chapter 6.1 Introduction

This chapter details the results of Case Study 1, which took place in Kitunga. It reports on data sources, participants, contexts and outcomes, the CMOCs and refined programme theories specific to this case. The Kitunga case study centres around a Community Health Committee with six members who are affiliated with a Health Centre II (see Chapter 1.4.3 for details on Health Centres). To ease readability, the results of both case studies are presented in a similar format. In the interest of avoiding repetition however, reflections for Phase 2 will be presented in Chapter 9.

6.2 Data and Participants

6.2 1. Data Sources

To best refine the IPTs, multiple forms of data were collected for Case Study 1. Table 13 below indicates data sources, the number of participants or documents involved and a brief description of the data source.

Table 13 Case 1 Data Sources and Quantity

	Source of Data	Description and No. of Sources
1	Observations and Field Notes	Notes from primary researcher and two research assistants over 7 weeks
2	CHC Monitoring Documents	11 Community Health Committee Meeting Minutes
		3 Meeting Minutes with CHCs and other community groups
		3 Communications by CHC to DHO and World Vision
		4 Reports prepared by DHO
		3 World Vision and MoH quarterly reports
3	Semi-structured Interviews	6 with CHC members
4	Key Informant Interviews	1 with Local Chairperson
		1 with Health Worker
5	Focus Group Discussions	1 Community Health Worker group, 10 participants
		1 Female community member group, 10 participants
		1 Male community member group, 8 participants
6	Community Capacity Assessment	36 completed by all participants
7	Coalition Self Assessment Survey	6 completed by CHC members
8	Iterative Feedback Meeting	10 stakeholders

6.2.2 Participants

Case Study 1 had 36 individual participants, not including those present at the iterative feedback meeting. The participants are categorised into the following stakeholder groups: Community Health Workers (CHWs), community members (men and women), Community Health Committee (CHCs) members, and Key Informants (Health staff and Local Council). Table 14 below summarises the data collection methods used for each stakeholder group and the number of respondents for that group. Table 15 and Table 16 summarise the demographics of each stakeholder group. For more information on the make-up of the CHC group please see Table 18.

Table 14 Case 1 Number of Participants

Method	Participants	Number
Focus Group Discussions (FGDs)	Community Health Workers	10
	Women in community	10
	Men in Community	8
		28
Semi-structured Interviews (SSIs)	CHC members	6
		6
Key Informant Interviews (KII)	Health Staff	1
	Local Council	1
		2
Coalition Self Assessment Survey	CHC Members	6
Community Capacity Assessment	All participants	36
		Total: 36*

*Total number derived from adding FGDs, KIIs, and CSAS methods. Participants that completed both CSAS and a CHC SSI were not counted twice.

Table 15 Case Study 1 Community Health Committee and Community Health Worker Demographics

Demographic	CHCs (n=6)	CHWs (n=10)
Age (mean)	52	44.7
No. Females	3	8
No. Males	3	2
Married	6	10
Education		
None	0	1
Some primary	0	0
Completed Primary	2	5
Some Secondary	0	4
Completed Secondary	1	0
Diploma	3	0
Degree	0	0
Additional job (yes)	5	0
Additional job (no)	1	10
Distance to Facility* (mean in min)	21	52
Distance to Facility (range)	0-90	1-120
Months in position (mean)	52.6	96
Months in position (range)	12-96	96
Additional Responsibilities in Community (Yes)	5	6
Additional Responsibilities in Community (No)	1	4

* All respondents travelled to health facility by foot

Table 16 Case Study 1 Community Member Demographics

Demographic	Female (n=10)	Male (n=8)
Age (mean)	29.7	32
Married	10	8
Education		
None	0	0
Some primary	2	0
Completed Primary	5	2
Some Secondary	1	3
Completed Secondary	2	2
Job (yes)	0	1
Job (no)*	10	7
Distance to Facility** (mean in min)	42.2	37
Distance to Facility (range)	2-120	1-90
Enrolled in AIM-Health (yes)	10	8
Member of other community groups (yes)	6	5
Attend village meetings (ever)	9	3

* All respondents identified as being subsistence farmers

**All respondents travelled to health facility by foot

6.3 Case Study 1 Identified Context and Outcomes

6.3.1 Contextual conditions for North Rukiga

Used for both Case Study 1 and Case Study 2 (but only presented here), the following table details wider contextual conditions identified during the study that operate at across the system. These contextual considerations, while not always explicitly included within CMOC elicitation and theory refinement, were omnipresent in their influence over programme understanding and decision-making.

Table 17 Contextual Factors in North Rukiga

Identified Context
Environmental
Landscape consists of many hills which makes travel more difficult Rural environment, with poor road conditions and few main roads Consists of mostly farmers for subsistence and small cash crops Good growing conditions year-round for multiple types of crops; however, N. Rukiga largely grows potatoes, root vegetables, bananas and produces wood, tobacco and tea. N. Rukiga area is relatively small, with each county (total 13) comprising of non-sparsely spaced houses
Social, Cultural
Respect of individuals is highly important. Individuals are respected based on several factors, but notably age and/or education and/or work and/or previous experience and interactions with community. This respect then translates into community members listening to these individuals. Questioning of authority (or those respected) appears to be infrequent, especially between divisions of groups (i.e. uneducated and rural compared to educated health workers) Many community networks already engaged in these communities (savings groups, women's groups, Church groups etc.) Majority of North Rukiga practice Christianity. Small percentage (approximately 10% identify as Muslim) Lower levels of education in community but majority have had some primary education. Very few finished secondary Gender inequities prominent within society: • Gender relations and predefined roles are prominent, with women often having fewer opportunities than men • Head of Households/Decision-making abilities largely held with men • Women identify needing normally needed husbands' input for health activities, and decisions on family planning largely held by men • Local leadership all men • Women do the majority of the farm work, housework and raise the children
Political - Health System

National
Multiple policies specific to MCH in Uganda with strong focus on nutrition of children
Government supports and recognises VHTs (CHWs) as a Health Centre I
Government supports a decentralised health system with leadership as far down as sub-county level in North Rukiga. This consists of the District Health Office (Kabale), with a Community Health Officer (Kabale) who supervises and supports the implementation of VHTs and HUMCs and an Environmental Health Officer working in each N. Rukiga sub-county who works with CHO to support programme implementation.
Local
Heath centres for the most part adhere to MoH guidelines on number and location (enough health centres). Each county (total 13) have their own health centre, the majority of which are HC II. Each sub-county then has a HC III, and there is one HC VI in N. Rukiga. Of the Health Centres included in this study all adhere to MoH staffing regulations.
Connections to MoH and government through village, county and sub-county (LCII, LCIII and LCVI) representatives throughout N. Rukiga
Time of study occurred 3-4 months prior to 2016 Presidential Vote, with campaigning very prominent and visible during study time
NGO often provides MoH staff with stipend for work in relation to CHC programme and the larger project
Selection of CHCs however seems politically driven
In-charge as secretary and reporting to Community Health Office
Health Unit Management Committees (HUMCs)
HUMCs as part of Community Health Extension Strategy (CHES) (Chapter 1.4.3).
HUMCs act as governing and management bodies of health facilities, while harmonizing with community services.
Historically, consisting of health centre representatives, local leaders, and selected community members.
HUMCs within N. Rukiga were initiated more than 8 years ago, however they had reports of being inactive
Organisational
MoH strong support and collaboration on intervention with World Vision, results in AIM-Health and the CHC programme appear to be “jointly run”
Used pre-existing committees (Health Unit Management Committee/HUMC) that were initiated by MoH, and modified/training in NGO model
NGO well known in area for work over last (15) years. Signage of initiatives with identifying logo ensures people are aware of NGO’s work
NGO has implemented large-scale CHW programme for MCH in this area for several years
Sponsorship programme which many community members are either knowledgeable of or have benefited from
Individual members from MoH and NGO involved in programme had good working relationship, which were very friendly, cooperative and respectful.
Individuals from MoH and NGO involved in programme all appeared very committed to efforts
Citizen Voice in Action (CVA) groups run through North Rukiga support the implementation of the CHCs
Community Health Workers run throughout North Rukiga which support the implementation of the CHCs

*Contexts identified through observation, document review and discussions. Contexts categorized until socio-ecological classifications under which they best fit, with the socio-political domain being further broken down (political, environmental, social) for clarity.

6.3.2 Identified contexts for Case Study 1

Table 17 details contextual conditions identified during the study that are relevant to both case studies. In addition, specific contexts for Case Study 1 were identified. These can be organised into several categories: societal, community, and organisational. This section also reports on the perceptions of CHC responsibility, to understand what stakeholders think the committee's function and roles are.

Societal

- The CHC's relationships to both other health workers (health centre staff and CHWs) and community members was reported and observed to be very positive
- The community health workers and their work are very well regarded, with close connections to community members apparent
- Recent investment in health centre from both MoH and WV in terms of infrastructure and supplies has expanded services (as reported in following section, much of this is at least partially attributed to CHCs by respondents)

Community

- Many community respondents had strong knowledge on MCH, this is consistent with demographic information on AIM-Health enrollment
- Many community respondents had strong knowledge on health centre functioning and community health system
- Issues persist around financing transport during deliveries
- 'Closeness' of community was very evident. Observing interactions of community members, health staff, CHCs and CHWs showed strong relationships and comradery between these groups. This is echoed by interview data. For instance, community members reported the health centre charging their phone on their solar power when out, and using the water tank for the centre when needed. They also frequently advocated for health workers to have suitable accommodation at the centre
- Strong 'sense of community' support in Kitunga. In addition to the previous point, this sense of community was really prevalent during time spent in the study location
- Large involvement in other community activities – such as savings groups and religious networks

Perceptions of CHCs' responsibilities

Respondents were asked about the CHCs' responsibility in order to understand how the committees are being implemented within each site. Results from Case Study 1 show that

for the most part, the CHCs are perceived as being responsible for activities taking place mainly at the health centre. A focus on wider community actions, such as the ones in the COMM Guidelines (Chapter 1.5) was not very prevalent.

When discussing responsibilities, one respondent noted, "*the [CHCs] are there to make sure that there is medicine at the hospital and see if the health workers are working and if they have accommodation"* (FGD Women 9). Another replied, "*the committee is there to make sure that health workers are doing their work as expected to" (FGD Men 2).*

In line with linking the community with health services, the Local Council key informant noted that they are a resource person for community members when they are having difficulty with the health centre:

> *If you find that someone is angry at the health worker, instead of telling her they go straight to the management committee [CHC] and report it so the committee comes in and they meet us and help us to solve the misunderstanding by reconciling to one another*. (KII Health)

Table 18 below details contextual conditions specific to Case Study 1's Community Health Committee. These factors were used to help inform CMOC extrapolation and theory refinement.

Table 18 Additional Contextual Conditions for CHCs in Case Study 1

	Category	Case Study 1: CHC Members n=6
*	**Gender/Age**	Equal representation of men and women. Women (in-charge) as secretary, community man as CHC Chairman. Average age >50
Organisational Level	**Make-up**	1 In-charge; 1 CHW (coordinator); 4 community members - 2 of whom are teachers
	History of formation	CHCs were old/current Health Unit Management Committee's (HUMC) that were trained on NGO intervention, to be COMMs (i.e. CHCs). As such, CH mainly run out of Health Centre II. Policies of current committee seem to be straddling both HUMC and CHC guidelines. However concerns that as a result, neither are fully enacted. In-charge and CHW coordinator are more recent members due to recent posting and new policies on inclusion of coordinator, respectively.
	Selection	In-charge and CHW by appointment; other members selected by Local Council (LC) during initiation of Health Unit Management Committee. HUMC initiated +10 years ago (Source: MoH documents, interviews)
	Leadership	Chairman appears very active and driven. Leads group and well respected. Difficulties around his proximity to health centre. In-charge very active role in implementing activities in Health Centre. In-charge lives at Health Centre, and is from neighbouring parish. All other members reported as being very respected in area.
	Activity Level	Very active individuals. Almost all attend meetings and take on initiatives (source: minute meetings). Very few reports of inactive members (source: interviews, CCAT). Last several years met quarterly, or even more than quarterly. Initiated meetings with other groups such as Local Council and CHW (Source: Meeting Minutes). Running a specific initiative of collecting money from community to build staff houses (Source: Interviews, Meeting Minutes).
	CCAT Alignment	Survey indicates that the group is functioning very well in all CCAT domains. Qualitative evidence supports this for the most part; however, issues around areas of 'knowledge' and 'community membership' were raised by members and processes (notably transparency) raised by community members. Importance of strong members apparent, however issues with logistics due to housing location.
	Health Knowledge	Two members with specific health knowledge. Others participated in CHC training and feel confident to pass health messages, though request more training (source: MoH and WV documents on meetings, interviews).
Community Level	**Community centeredness**	Very community centered. Due to Level II situation, all members well connected to CHC implementation area. Results in very approachable CHCs with activities directly benefiting community members around them (source: observational). 'Power' differences between CHCs and health staff, and CHCs and community members appear minimal.
	Other group involvement	Well connected to CHWs after training by WV and MoH, reports of good working relationship and supportive activities (Source: Interviews, supportin reports, observations). Well connected with Local Councils, and regularly call them to meetings or Chairman meets to discuss events (Source: meeting minutes, Interviews). Most committee members are members of other community groups in addition to being a CHC (Source: CCAT). CHCs networking and conducting outreach through established links (I.e. Church groups). Indication of school outreach through teacher involvement.

*Individual Level

6.3.2 Identified outcomes of CHC group

Specific outcomes that were attributed (either partially or fully) to the implementation of CHC programme from Case Study 1 through interviews, documentation or observation include:

<u>Health Centre Level:</u>

- Four new health staff members, including 2 midwives that rotate, totalling 5 members
- Health facility now does RMCH services (including full ANC, PNC and deliveries), which were not available in the years prior to CHC implementation
- Increase in MCH supplies, specifically delivery beds
- First month after supplies added went from 0 to 6 deliveries, now around 13 deliveries per month
- Restoration of old toilet facilities
- Completion of new toilet at the health centre (total 2 blocks of 2 toilets)

> *You no longer come to the health centre and fail to find any health worker to attend to you as it was before the [CHCs].* (FGD Women 8)

> *We would go to Kisizi for deliveries but now we have a midwife here at our hospital so we can give birth from here.* (FGD Women 5)

> *…because I see the things they [CHCs] have done. For example, for the centre they have talked to the government and they have provided more delivery beds for the health centre especially for delivery. So we see the hospital is developing. They have built latrines for the hospital [and] now the hospital has new latrines which is also great work done by the CHCs. Women now deliver from here because there are services*. (KII LC)

- CHCs requested and secured solar power to address the lack of electricity at the health centre
- Through requests by CHCs, the health centre received a fridge to keep medicines and immunisations
- Refurbished kitchen for health workers
- Planning and organising, including the collection of donations from community members, for new staff accommodation

> *The committee plans for what is needed then if the community is to be involved they also inform the community. For example, when they planned for construction of health workers houses, they informed the community and each house hold in the community was expected to pay five thousand shillings as contribution (FGD Women 6).*

- CHCs monitor and ensure medicines are stocked at the health centre

- CHCs developed and enforce rules for health workers
- Replacement of staff member who was not acceptable to community and CHC

> *The CHCs plan for the health centre in terms of infrastructure, medical staff and general sanitation of the health centre. The medical workers used to abuse patients but since the CHCs started working, the health staffs are well behaved. When you come they welcome you and give you the services you need. (FGD CHW 7)*
>
> *There have been a lot of changes because before you would come to the hospital like at 10:00am and find that the health centre is still closed, there are no health workers. But now even if you come at midnight there is always a health worker to attend to you. We had only two health workers before but as I talk now we have five. The only challenge is that they do not have accommodation at the health centre so they stay away from the centre which somehow is not safe for them to move at night to the centre of from the centre (FGD Men 6).*

Capacity Building Outcomes

- Several educational outreach events or opportunities taken, specifically around immunisations

> *The CHCs work with health workers to deliver services to the community especially for those who cannot be able to reach the health centre. For example, they put out reaches like, for immunisation in the villages and encourage people to bring their children for immunisation. (FGD Men 2)*

- Partnership building/enforcing between community and health system
- Linkages with other non-health groups (for instance school and church)
- Needs assessment (evaluation) and reporting limited. CHCs had 2x 'facility request lists' prepared for HC to MoH and/or World Vision; however, very facility focused and lacks a community needs assessment

6.3.2.1 Coalition Self Assessment Survey, findings and reflections

All six CHC members completed the Coalition Self Assessment Survey, findings of which are summarised below. The survey sought to explore components of 'Community Coalition Action Theory' but given the limited number of respondents, the responses from the survey work to provide additional contextual and outcome-level information for the CHC. The responses also influenced the elicitation of CMOCs, and the refinement of programme theories.

All members reported being involved in at least 1 other organisation or committee within their community. Four of the six said there are enough representation from other

groups to accomplish objectives. The others indicated representation from youth, faith and community leadership were missing. Members reported there is enough initial training to be effective. Decision-making was noted as being equal within the committee, with members feeling they have a lot of influence on decisions, which are made by majority-rule. Members all note that there are clear and fair rules and policies for decision-making, and they felt that the committee makes good decisions.

Members reported very little conflict, which when it does arise, is usually the result of different opinions on strategies to achieve goals. The committee chair was unanimously reported as being the most significant source of leadership, more so than World Vision and the Health Centre. Members all either agreed or strongly agreed that the leadership of the committee is respected, clear, and collaborative. Moreover, members felt the committee is well managed, however there was disagreement about the awareness of the role World Vision plays within the committee.

Committees ranked their three highest functions as: a) networking with other groups; b) recommending or making decisions on how to allocate resources; and c) raising funds to sustain long-term committee activities. Most committee members (bar one) noted that they are comfortable sharing with the group. Members strongly agreed that the committee strategies and plans are clear and respected. And all members reported being very involved in activities over the last year, with their main focus described as “working on implementing activities or events supported by the committee (other than committee meetings)”. All members reporting feeling having a ‘voice’ within the committees, having a strong loyalty to the committee, and being satisfied with how the committee operates. Five of the six members said the benefits outweigh the opportunity costs involved with participating and volunteering on the CHC. They all reported having enough knowledge to function effectively, and also that they gained knowledge on MCH through their participation on the CHCs.

All members noted that the CHC was responsible for actions and progress that would not have occurred without them, and that the committee has brought benefit to their community. When asked what the committee should be paying more attention to, all respondents reported activities at the health centre (staff supervision, staff accommodation). One member also reported 'community trust'. Critical events attributed to the committee's success were: increases in health workers (midwife), the removal of one health worker, additional community training, and increased knowledge of health services.

CHC members said they were most proud of:

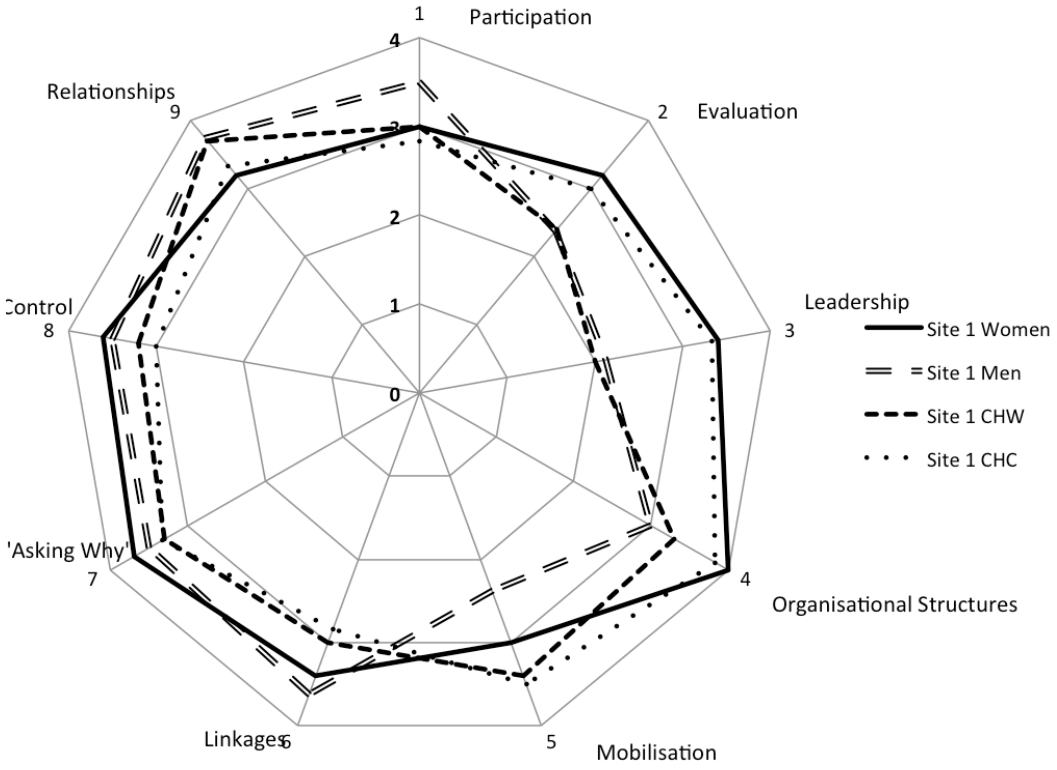
- Trainings concentrating on MCH
- That they are unified with the CHWs to improve services. One noted pride in being a member, specifically they said: "when I am called to attend meetings I feel proud. Sometimes I learn new things from the meetings" (CHC3)
- The implementation of building staff houses, and the contribution made by the community
- That they have made new friends in the CHC
- That they got a new staff member
- That there is a better interaction between the health workers and committee members
- That they have improved their knowledge and friendships with people outside the committee

6.3.2.1 Capacity Building Scores

All participants completed the capacity survey to ascertain the extent to which CHCs are perceived as contributing to the capacity building domains. As detailed in Chapter 4.5.1.1, the capacity building survey had five response options for each capacity domain, where 0= 'not at all' and 4 = 'very well'. Overall CHCs were rated as doing 'well' and 'very well' on the majority of the nine domains, as detailed in Chapter 5.2.1 (participation, organisational structures, linkages, 'asking why', control and relationships). While still rated between 'ok' and 'well', the lowest ranked domains were evaluation, leadership, and mobilisation.

The below figure, in the form of a spiderweb graph, represents the survey responses and depicts how the CHCs score within each capacity domain, compared to the others.

Figure 16 Site 1 Capacity Spiderweb



These results suggest that the CHCs and female community members in Kitunga rated the CHCs similarly. Likewise, the men and CHWs had similar ratings, which rated them more negatively than the women and CHCs. The weakest domains, as reported by the CHCs and women, is ‘participation’. For the men and CHWs, ‘evaluation’, and ‘leadership’ were seen as the most problematic areas.

The findings from the survey for the most part are consistent with other data sources. For instance, CHCs partnerships were also noted as being quite strong during KIIs and needs assessment (evaluation) abilities were noted as lacking based on programme document reviews.

6.4 CMOC extraction and findings

6.4.1 Analysis and refinement process for Case Study 1

Data for Case Study 1 was analysed using the methods outlined in Chapter 4.5.2. The community FGDs were analysed first, followed by the CHW FGD, the CHC SSI, and the KIIs. Taken together, there were 191 coded references, 128 of which were directly used to elicit, or support already elicited, CMOCs specific to each (initial) programme theory. These 'coded references' were CMOCs found as an extractable unit within the data source. Each coded reference therefore contributed to CMOC elicitation. A breakdown of the number of codes per participant group and across the different theories is summarised in Table 19.

Table 19 Coding Breakdown for Case Study 1

Source	Number of codes IPT 1	Number of codes IPT 2	Number of codes IPT 3	Context and Outcomes	Total Codes per group
Women	3	1	6	27	37
Men	1	8	10	10	29
CHW	0	2	4	8	14
CHC 1	18	9	11	5	45
CHC 2	2	3	3	3	11
CHC 3	2	5	1	2	10
CHC 4	8	5	2	1	16
CHC 5	4	3	1	0	8
CHC 6	2	1	2	0	5
KII LC	0	0	8	3	11
KII Health	0	0	5	2	7
Total Codes	40	39	53	61	**191**

*Changes to PTs during the Data Review phase not reflected in numbers

After the interview transcripts were analysed, the current CMOCs and refined PTs were reviewed with the other data including the surveys, observations/fieldnotes, programme documentation, CHC meeting minutes and the Iterative Feedback Meeting. While these data sources continuously inform the CMOC elicitation and PT refinement throughout the whole analysis, this final stage worked to validate and triangulate the PTs in a

more integrative manner, as opposed to looking at one individual PT. This allowed for an understanding of how the PTs interact and work together within the system.

6.4.2 CMOC results for Case Study 1

A total of 23 CMOCs were extracted and contributed to the refinement of the programme theories for Case Study 1. The majority of CMOCs had multiple data sources that contributed to their extraction, with anywhere from 1 to 19 coded references supporting the elicitation of a single CMOC.

Table 20- Table 29 details each resulting CMOC for Case Study 1. These include the identified Contexts, Mechanisms, Outcomes, and resulting CMOCs, evidence-sources supporting the CMOC, one coded reference quote, and a description of my decision-making process for the CMOC elicitation. The CMOCs are organised into tables according to their relevant refined programme theory, which are highlighted at the end of each table and discussed further in the following section.

Table 20 Case Study 1: Programme Theory 1.1 Supporting CMOCs and Development

CMOC: Extrinsic Motivation			
Contexts / Resources C1: When CHC members have limited finances R1: CHCs receive support (stipend, travel reimbursement etc.) for work	**Mechanisms** M1: Motivation – prospect of financial reimbursement/stipend or reward M2: Rationalisation for volunteering	**Outcomes** O1: CHCs engage in activities	**Resulting CMOC:** In less-resourced contexts, when CHCs receive financial support for work, this acts as a source of extrinsic motivation leading to engagement with activities.
Thought-Process: Aligned to individuals' motivation for participation. There is prospect for financial compensation. In contexts where money is difficult to come by, knowing that they receive 5,000UGX/quarter (approximately $3), and reimbursement when they attend any MoH/WV called meetings, can act as a motivator. At the very least, it helps to ensure that participation is not a deterrent, even if they might not make any more (just offsetting their costs).	**Sources of Supporting Evidence:** Men FGD, CHC1, CHC 5 DHMT reports confirm payment for participation in training activities; meeting minutes confirm quarterly payment (though given yearly in Kitunga) for CHC involvement. This CMOC heavily supported by observations/fieldnotes, and IPT literature Chapter 5.4)	**Supporting Quote:** *"The COMMs know that at the end of it there is some money given to them. For example when they come for meetings, they are always given some money as their transport. They know they get some support from World Vision and Ministry of Health because without support they would not be coming to waste their time because they cannot put in their own money to support the hospital." (FGD Men 7)*	
CMOC: Intrinsic Motivation - Positive Reinforcement			
Contexts / Resources C1. Visible positive changes to health/behaviour	**Mechanisms** M1: Positive reinforcement M1.2: Motivation M1.3 Sense of satisfaction and/or pride with work	**Outcomes** O1: Sustainability O2: Commitment to CHC purpose and objectives	**Resulting CMOC:** When CHC members' notice the contributions they made to their communities it acts as positive reinforcement, or a sourc of motivation or satisfaction, which encourages continued wor and commitment to their duties.

Thought-Process: Places more emphasis on the individual members internal motivation for working, highlighting the need to see/be informed (get feedback on) their work and how it is impacting on the community. CHC1 specifically talked about wanting to 'leave a legacy' as being a strong CHC group. Several potential mechanisms for this. Interesting that from a community member, it is the service users that recognise their positive work, which is also an important mechanism and/or context. As limited interview contribution, this CMOC was discussed in the feedback meeting and 'confirmed' by CHC members.	**Sources of Supporting Evidence:** Women, CHC1 Meeting minutes (x2) and observations support CHCs wanting to conduct 'visible' (i.e. building) tasks. Feedback meeting.	**Supporting Quote:** *"The programmes and the members continue because the see that there are some changes because of what they do, for example women come now come to the hospital for delivery." (FGD Women 5)*

CMOC: Intrinsic Motivation – Recognition

Contexts / Resources	**Mechanisms**	**Outcomes**	**Resulting CMOC:**
C1: Respect for CHCs hard work R1: Limited health system capacity resulting in need for community services	M1: Added-value of CHCs for community health and wellbeing is recognised	O1. Communities support CHCs	When CHC's work is recognised by community members and they feel respected in their work, this can act intrinsic motivation and as positive reinforcement, which may result in CHC pride, commitment and sustainability of activities.

Thought-Process: Community members recognise the importance of providing incentives for CHC members, so that they are able to continue their work. With this interview (quoted) also called for better/more/sustained incentives. Difficult to decide how to code, but ended up being more about the community perceptions and their want for CHCs to have recognition and motivation. Considered C and Ms around 'support motivates CHCs' but this was not a CHC speaking, so decided to consider it more from an 'appreciation/respect/acknowledgement of work' angle. Interviews were quite positive about CHCs, so had in mind while reviewing that the CHCs were well received and their work was supported.	**Evidence:** CHC1, CHC2, CHC4, CHC5 Heavily informed by observations and capacity surveys, indicating CHCs are perceived well, and many advocate for their continued (and increased) support.	**Supporting Quote:** *"I liked it because people's lives where changed for example I had seen people's lives were getting in danger but later when we got the health workers, they were able to attend to all the patients and now people's lives and health has been improved. So I loved it so much." (CHC 4)*

Refined Programme Theory 1.1

Individuals within CHCs are likely to be committed and have continued and active engagement with responsibilities if they are motivated by both intrinsic and extrinsic factors. These may consist of financial compensation and/or reimbursement (extrinsic) and positive reinforcement (intrinsic) such as feeling respected, which can increase pride in ones' work. Community recognition of their services is a likely condition in order for this to occur.

Table 21 Case Study 1: Programme Theory 1.2 Supporting CMOCs and Development

<table>
<tr><td colspan="4">CMOC: Responsibility and Altruism</td></tr>
<tr><td>Contexts / Resources
C1: Fragile health systems
C2: Closeness of CHCs to community
R1: Motivated members</td><td>Mechanisms
M1: Sense of responsibility to communities
M2: Altruism towards those in community</td><td>Outcomes
O1: Invested and hard working CHCs
O2: Commitment to ensuring access and improving lives</td><td>Resulting CMOC:
In contexts with precarious health systems and motivated CHCs who are closely linked to the community, members can develop a sense of responsibility and altruism towards community members, resulting in invested CHCs committed to improving health.</td></tr>
<tr><td colspan="2">Thought-Process:
Supports "volunteering for their community" and also "committed to committee objectives", but goes further to refine the importance of 'community service' and improving individuals' health in their community through ensuring access.
About individual members' pressure to serve their community and ensure that they have appropriate services. This CMOC again emphasises the importance of the degree to which a CHC is 'community-centred'.
Background of CHC members also supports this, where majority were involved in other community improvement activities, indicating their sense of responsibility and altruistic personalities.</td><td colspan="1">Sources of Supporting Evidence:
Women FGD, CHC 5, CHC2
Observations and previous experiencing with community volunteers, also background of CHC members where majority were involved in other community improvement activities, indicating their sense of responsibility and altruistic personalities.
Demographics.</td><td>Supporting Quote:
(Why do you do this work?) “For better health. For example my first-born was born in 1986 whereby I would walk on foot to Kisizi [hospital in neighbouring county] for antenatal then walk back reaching home like at 10pm. But since we got this hospital, it’s been easy for us. When a woman gets pregnant she easily comes here for antenatal. (CHC 5)"</td></tr>
<tr><td colspan="4">CMOC: Community-Centered</td></tr>
<tr><td>Contexts / Resources
C1: Connection to community members (via proximity or commonalities)
C1.2: Relationships between CHCs and community members</td><td>Mechanisms
M1: Sense of responsibility
M2: Personal motivations</td><td>Outcomes
O1: Committed CHC members</td><td>Resulting CMOC:
CHC members who are close to the community members that they serve will have personal motivation and a sense of responsibility due to 'relatedness/closeness' and formed relationships, to improve community health and thus be committed members.</td></tr>
</table>

Thought-Process: Supports 'volunteering for their community' and also 'committed to committee objectives', but goes further to refine the importance of 'community service' and improving individuals' health in their community. Is somewhat separate from PT1.1 (motivation), though 'sense of community' is itself a motivating factor. However, seen as own CMOC because it goes beyond 'motivation' as is also related to investment and relationships. This 'sense of community' is very important part of ensuring CHC activities and mandates are 'community-centric' and connected and that CHC connection to community members is an important aspect for volunteering and commitment.	**Sources of Supporting Evidence:** Women FGD, CHC4, CHC6, CHC3 Observations of CHCs in Kitunga note that members had many (what appeared to be positive) relationships with community members. Very little 'power' discrepancies between groups, and majority of community stakeholders spoke highly of members' work and at times their relationships.	**Supporting Quote:** *"I do it for the good of our community so that we are responsible about government's activities, improving sanitation in our homes and fighting ignorance in our village Kitunga. To see that we are also like others in terms of health education because in the past mothers used to give birth from their home which was dangerous so since I got an opportunity to be part of the committee, I want the community to develop and move forward not backward. I do it for the good of my community with the help of other committee members and also working with the community because without the community willing we cannot do any work effectively. Secondly, I was trusted and elected by the community so I have to serve them so that is why we were mobilising funds to build staff quarters. (CHC 6)"*
Refined Programme Theory 1.2 When CHCs are closely connected to these communities, a strong sense of community is able to develop, which can then lead to CHCs' experiencing altruism in the form of volunteering. This may result in CHCs being motivated and committed, ensuring the health of their peers, especially in contexts with precarious health systems. A condition for this is likely the level of 'community-centredness' and the scope of CHC work.		

Table 22 Case Study 1: Programme Theory 1.3 Supporting CMOCs and Development

<table>
<tr><td colspan="5">CMOC: Attributes Education</td></tr>
<tr><td>Contexts / Resources
C1: Low levels of education
R1: Educated CHC member</td><td>Mechanisms
M1: Communities perceive CHCs to be knowledgeable and responsible</td><td colspan="2">Outcomes
O1: CHC members gain respect within communities and support for membership
O2: Communities and stakeholders trust CHCs</td><td>Resulting CMOC:
In contexts with low levels of education, CHCs who are educated will be perceived as knowledgeable and responsible, leading to being respected and trusted by community members, which increases their support for membership.</td></tr>
<tr><td colspan="3">Thought-Process:
Supports that individual characteristics of members is important, and makes more specific what some of these characteristics might be: education. This is linked with the following CMOC (social capital) in that education is a way to gain social capital, but due to the importance placed on education within this case study, two CMOCs were elicited. 2 CHCs stopped education after completing primary (the CHW coordinator and 1 respected ‘elder’ community member). One other completed secondary, and 3 of the 6 had completed some kind of diploma course (2x teaching, 1 nurse/midwife). This level of education is higher that most community members.</td><td>Sources of Supporting Evidence:
CHC 5, CHC 6
Demographics Documentation (COMM Guidelines)</td><td colspan="2">Supporting Quote:
"I think I cooperate with people in the community, and due to the fact that I went to school, they believed in me that I will present them well at the committee.
Secondly, I am trusted and I do not belong to any side and I think I am open enough, if there is an issue that is arising, I will advise accordingly on how it should be handled, so the community people trust me and they hoped that I would easily report to them about what is happening at the health center. (CHC 6)"</td></tr>
<tr><td colspan="5">CMOC: Attributes and Social Capital</td></tr>
<tr><td>Contexts / Resources
C1: Perceived misuse of power by many, especially politicians
C2: Social capital important determinant for support/respect
R1: CHC has attributes of decision-making, leadership skills and well-thought of in community
R2: CHC no visible political affiliation</td><td>Mechanisms
M1: CHC members gain social capital
M2: CHC members and motivations are respected and trusted</td><td>Outcomes
O1: Communities believe members will represent their interests fairly and with transparency.
O2: Support for CHC members from communities and stakeholders</td><td colspan="2">Resulting CMOC:
When CHCs have perceived positive attributes, including decision-making abilities, leadership skills, are apolitical, and are socially responsible, this increases their social capital, which in turn, influences the level of respect and trust given by community members, ultimately influencing support for their work.</td></tr>
<tr><td>Thought-Process:
This is a lot to do why and how a member becomes respected. How this respect is gained is by being an example within the community in terms of socially-well thought of, being a leader and having decision-</td><td>Sources of Supporting Evidence:
CHC 1, CHC2, CHC6.
CHCs highly regarded in this site; many positive things towards their persons described in the community</td><td colspan="3">Supporting Quote(s):
“Even if you are socially stable but people will know that you are extra quite, you can’t decide, you can’t bring up any decision, they don’t choose you. If you can be able to reason and decide for other people, on behalf of other people. They see you are ever quiet, no decision, you never talk in people. They see that this one is dormant, he can’t help you so they don’t choose you. You must be active in decision-making. So that’s why the community members also are there when they are choosing. Because people look at them, they are really, people look at them, they are examples." (CHC1)</td></tr>
</table>

making skills. This is especially important in contexts where there is a lot of political apathy and/or perceived biased influence.	interviews, and visible through observations. All CHC members appeared to have strong social standing (observational).	*"Secondly, I am trusted and I do not belong to any side and I think I am open enough, if there is an issue that is arising, I will advise accordingly on how it should be handled, so the community people trust me and they hoped that I would easily report to them about what is happening at the health center." (CHC 6)*

CMOC: Positive Experience

Contexts / Resources	**Mechanisms**	**Outcomes**	**Resulting CMOC:**
C1: Large amount of community work and/or change is implemented by volunteer groups R1: CHC had previous positive experience with community responsibility (a groups, including specific responsibility of finance)	M1: Perceived capability and willingness ('volunteerism') of CHC member M2: Respect for CHC member and their position within community	O1: Community supports CHC member's selection and their actions	When community work is largely implemented by members and volunteers, CHCs who have/have had positive experience in community engagement responsibilities will be perceived as capable and thus respected within their communities, leading to greater community support and selection to the committee and their actions as a member.

Thought-Process:	**Sources of Supporting Evidence:**	**Supporting Quote:**
Supports that individual characteristics of members is important: previous experience. Refines that this becomes about attaining respect. Though only clearly noted by 1 participant I believe that this is quite engrained within CHCs, especially for support for selection (people that have previous experience demonstrated willingness to participant and capacity). Respect and 'positionality' is very important (IPT 2) and this is how it starts to form at the individual level.	CHC 5 CSAS results clear that most members of CHC Kitunga also had previous experience (or current) with other community programmes. Whether it be women's group, savings group, farming council, or being teacher.	*"They saw that I was able to do the work they would give me and I would do it and because they see that I work in the community for example I am the secretary of the saving group and I am the one who keeps the books so they trust me with money." (CHC 5)*

Refined Programme Theory 1.3:

Individual attributes of CHC members, such as their level of education, previous experience within community activities, perceived stability, leadership skills and decision-making abilities, and if they are deemed socially responsible, influence their social capital. Their social capital affects positionality within communities, and can influence the level of trust and respect given to them by others. It may be important for CHCs to either be seen as apolitical, or to not have a reputation of having their political affiliations influence public good decisions.

Table 23 Case Study 1: Programme Theory 2.1 Supporting CMOCs and Development

<table>
<tr><td colspan="4">CMOC: Power and Hierarchies</td></tr>
<tr><td>Contexts / Resources
C1: In contexts with social hierarchies and
C2: These hierarchies can act as determinants for social influence
R: CHC members are respected</td><td>Mechanisms
M1: CHCs are awarded positions of power</td><td>Outcomes
O: They have influence over stakeholders</td><td>Resulting CMOC:
In contexts with social hierarchies, which can determine one’s influence, CHC members that have the respect of communities and other stakeholders may develop positions of power, increasing the influence they have within community health and over stakeholders.</td></tr>
<tr><td>Thought-Process:
Focus here is on how CHCs get ‘power’ (they must be respected first), and that power is an important consideration for being able to influence community members and make change
Linked to IPT 1.3 - they have to be respected in order to have power.</td><td colspan="2">Sources of Supporting Evidence:
CHC1, CHC 4, CHC6
Observations strongly support that power is a very important commodity to make change, and that hierarchies within society based on personal attributes (and hence level of respect) are affiliated with having power.</td><td>Supporting Quote:
“They [community members] were telling the CHCs, all CHCs, those days, all those were complaining ‘community members are coming to us saying, the new midwife is not there”. So immediately, the CHCs called her and talk to her.”
B. “And it worked?”
CHC1. “Umm, it worked.”
B. “Why do you think it worked?”
CHC1. “It worked, because she [midwife], she starts to respect the CHCs”. (CHC1)</td></tr>
<tr><td colspan="4">CMOC: Respect and Oversight</td></tr>
<tr><td colspan="2">Contexts / Resources
C1: Little formalised capacity for health facility support, especially supervision and/or accountability structures
C2: CHCs perceived or designated to fulfil role of oversight body
C3: Clear social hierarchies of importance
R1: CHCs and their roles are respected</td><td>Mechanisms
M1: Health staff perceive, or have, supervision
M2 Health staff feel accountable to someone</td><td>Outcomes
O: Health staff are motivated/incentivised to fulfil work obligations</td><td>Resulting CMOC:
In contexts with clear hierarchies, the role of CHCs are respected, and there is little formalised health system capacity to support the health facility, CHCs can fulfil a role of oversight and monitoring where health workers become motivated/ incentivised to fulfil their job description.</td></tr>
<tr><td>Thought-Process:
CHCs as oversight body for improved health facility capacity. The mechanisms for this were not clearly outlined, but knowing the context I believe that health workers are responding to the oversight from the CHCs because they are now (likely for the first time in a while) directly responsible to someone for their actions. As well, in this context, there is a form of 'threat' as the CHCs have previously shown that they were able to enact change (change health staff).
CHC's, themselves and their activities/responsibilities, need to be respected in order for this to occur.</td><td colspan="2">Sources of Supporting Evidence:
CHW 1, CHW 2, CHW 3
Meeting minutes (showing CHC work focused mainly a health facility)
Fieldnotes and observations (around the history of CHC in these contexts, originally implemented as HUMC (Table 17).
Literature review on importance of supervision for health workers (Chapter 5.4)</td><td colspan="2">Supporting Quote:
"The [CHCs] plan for the health centre in terms of infrastructure, medical staff and general sanitation of the health centre. The medical workers used to abuse patients but since the [CHCs] started working, the health staff are well behaved, when you come they welcome you and give you the services you need (CHW 1). The [CHCs] make research about what is happening in the health centre and once they find that the medical staff does not work, they call them in the meeting and talk to them. They also normally report to us about some activities that are going to take place in our villages (CHW 2). In addition to the theory [CHCs] have made sure that the health center gets what it needs in time like making sure that it gets enough staff so that services that are not offered here community members can begin to receive them (CHW 3)"</td></tr>
</table>

Refined Programme Theory 2.1: In contexts with strong social hierarchies, CHC who are respected attain positions of power, which impacts on their ability to have influence within the community, the health facility and other stakeholders.		

Table 24 Case Study 1: Programme Theory 2.2 Supporting CMOCs and Development

CMOC: Value-Benefit			
Contexts / Resources C1: When CHC members had little knowledge of topics related to health and CHC membership R1: And undergo training	**Mechanisms** M1: CHCs feel they have received personal benefit from participating M2: Offsetting of cost-benefit relationship	**Outcomes** O: Continued support and activity	**Resulting CMOC:** When CHC's level of knowledge on health topics and member processes is increased as a direct result of participation in CHC programmes, they perceive their role as bringing personal benefit, assisting in adding value to their experience and likely assisting in sustainability of activities.

Thought-Process:	**Sources of Supporting Evidence:**	**Supporting Quote:**
Supports that there needs to be cost/benefit relationship for CHCs (Chapter 5.5.1.1 – CCAT), and gets more specific that a benefit can be their individual growth. This interview context was around why they were happy to participate, and the positives of being a CHC. I interpret it as they themselves also get reward/benefit for participation, aside from PT 1.1 and 1.2. They receive knowledge, an important commodity, which they might not have received previously. This is also consistent with CHW/volunteer health worker literature, which highlights the importance of training (and refresher) training (Chapter 5.4).	CHC 4, CHC2 CCAT Literature review Feedback meeting where importance of additional training emphasised by CHCs.	"*What I like about the COMMs is that we have been able to go outside and get to know some of the things that we did not know. Especially sometimes they call as to go to Kashambya [sub-county] as the whole parish as COMMs to go to the parish we meet there they teach us and some of the things we did not know we get to know them from there. …We even get a chance to move out. They can call us to go to Kabale town, have a workshop for like two days and we get to interact with people outside." (CHC 2)*

CMOC: Visibility of Work			
Contexts / Resources C1: Visible positive changes to health/behaviour within community	**Mechanisms** M1: Positive reinforcement cues M2: Committee confidence and encouragement	**Outcomes** O1: Motivation O2: Sustainability and commitment	**Resulting CMOC:** When CHCs can recognise positive contributions their committee made to their communities, it acts as positive reinforce and source of encouragement/confidence within the group, which can result in motivation for, sustainability and commitment to, the group and its' activities.

Thought-Process:	**Sources of Supporting Evidence:**	**Supporting Quote:**
Places more emphasis on how the outcomes of the group can act to		CHC1: *"Even when we are in meetings he [chairman] tries to tell them what? ' you have to work hard so when we come out of the COMMs [CHCs], people will know that these COMMs regimes are the ones that left these things in place. So the*

reinforce further activity. Progress and action is not a linear process, but cyclical as 'feedback' further encourages more action. Several potential mechanisms for this. Shows the importance of having 'visual cues' that you are making change. Potential links to several as somewhat 'feedback' CMOC. Linked to IPT 1.1, intrinsic motivation.	Women FGD, CHC1, CHC 4 Minute meetings	*chairman, ever ever ever, motivating them 'what will you leave behind? You have to build staff houses so that people will say 'these houses, these houses were build in the regime of this one this one this one* Interviewer: *So you need to have a lasting impact maybe. Your aim, one of your motivations to work hard, you want to make and see the change yourself?* CHC1: *Yes yes we have to make the change. Other COMMs have not changed many things, but we want to put the change, so that the people know that 'this change was put in place by this group of COMMs.* *Interviewer: Ya, these 6 COMMs did this?* CHC1*: Ya ya. That's why even when other COMMs, before were not thinking of driving the community, but for us, we want to see.* *Interviewer: Why is that important?* CHC1: *It is very important because people will know that their problems of staff houses was solved by this group of COMMs, who brought that decision in the community.* Interviewer*: And that makes you feel good to know?* CHC1*: Ya ya ya. That makes me feel very good because… (interviewer says and Proud, CHC1 agrees)…People know that 'ah this [*respondent said their title, left out for confidentiality*] is the one who motivated the COMMs…"*

CMOC: Cost-Benefit Reimbursement

Contexts / Resources	Mechanisms	Outcomes	Resulting CMOC:
C: CHCs receive support (stipend, travel reimbursement etc.) for work	M1: Rationalisation for time commitment	O1: CHCs engage in activities and attending meetings	In interventions with CHC members' expenses are reimbursed or offset, they can rationalise that the benefits of their participation outweigh the costs, which leads continued involvement and active participation.

Thought-Process:	Sources of Supporting Evidence:	Supporting Quote:
Similar to CMOC from PT 1.1 (external motivation). Also included here however because related to CCAT (Chapter 5.5) around need for cost-benefit. Financial gains can be a source of motivation through incentivisation (PT 1.1) at the same time can off-set any costs of group participation. Financial reimbursement is just one component of how cost-benefit can be offset. CCAT relies heavily on the notion that CHCs much feel that the benefits of their involvement outweigh the costs of it.	FGD Men IPT elicitation (Chapter 5.4) Meeting minutes requesting 5,000UGX/quarter stipend.	*"The COMMs know that at the end of it there is some money given to them. For example when they come for meetings, they are always given some money as their transport. They know they get some support from World Vision and Ministry of Health because without support they would not be coming to waste their time because they cannot put in their own money to support the hospital." (FGD Men 7)*

Refined Programme Theory 2.2:
CHC sustainability and engagement is influenced by cost-benefit of being involved. This cost-benefit relationship can be influenced by benefits members receive as a result of their involvement, such as expanding knowledge, encouragement and satisfaction, and also through more tangible benefits such as reimbursements. One's individual motivation (PT 1.1) and sense of community altruism (PT 1.2) are likely influential conditions for the perceived cost-benefit relationship.

Table 25 Case Study 1: Programme Theory 2.3 Supporting CMOCs and Development

<table>
<tr><th colspan="5">CMOC: Transparency of Actions</th></tr>
<tr><td>Contexts / Resources
C1: In contexts where issues of misappropriation of funds, and poor work activity are prevalent
R1: Where CHCs have and follow clear processes for feedback, transparency and accountability to communities</td><td>Mechanisms
M1.1: Recognition of CHC activity
M2: Community integration into health advocacy and health decision - investment in own health</td><td>Outcomes
O1. Increased community knowledge and involvement in health activities and functioning
O2: Increased trust of CHCs by community
O3: Community understanding of CHC role</td><td colspan="2">Resulting CMOC:
When CHCs have, and follow, clear processes of transparency and feedback to community members and relevant stakeholders, communities can become more invested and integrated into their own health actions and recognise CHC activity. This can lead to increased community knowledge of health activities, increased understanding of role of CHC and increased trust of CHCs by communities. These are also important to make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. Procedures and processes should include: selection and membership regulations (i.e. relating to length of service, location of members) regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution).</td></tr>
<tr><td colspan="2">Thought-Process:
Related to the procedures to CHCs and how the community perceives their work. If the CHC functioning (specifically in relation to finances) is transparent and clear for community members, they will have increased trust in the integrity of their work, and also their perceived functioning. Feedback session worked to refine the mechanisms for this and provide more understanding of its importance.</td><td>Sources of Supporting Evidence:
FGD Men, FGD CHW, CHC3
Feedback session highlighted this fact strongly and worked to further expand its importance.</td><td colspan="2">Supporting Quote:
"We had a meeting and collected money from people after that we brought here sand and bricks but ever since the construction has not yet started yet some people ask us where the money went because construction has not started (CHW 1). For me I think that there is some money we are supposed to share together so I do not know whether I am right or wrong. Secondly our staff kitchen is in bad shape and when we had a meeting we discussed about it but no action has taken place (CHW 2)"

"Community members criticize us that we are not doing our roles and also the way we work is not good and people think that we get salaries yet we do not get salaries so more sensitisation needs to be done so that the community is able to understand our roles and also become aware that we volunteered to do this kind of job. (CHC 3)"</td></tr>
<tr><td colspan="5">Refined Programme Theory 2.3:
Support and trust for CHC work by community and health sector stakeholders is prefaced upon them having clear and transparent rules and processes for their operationalisation. It may be especially important that feedback occurs to community members, who may increase their integration and knowledge on health activities, and that when CHCs act as links to the health centre, they focus on relationship building.</td></tr>
</table>

Table 26 Case Study 1: Programme Theory 2.4 Supporting CMOCs and Development

<table>
<tr><th colspan="5">CMOC: Policies and Procedures</th></tr>
<tr><td>Contexts / Resources
C1: CHCs are volunteers
C2: Some oversight for CHC functioning, but committees mainly self-governing
R1: CHCs have clear processes and procedures for functioning</td><td>Mechanisms
M1: Awareness of responsibilities leading to level of 'authority' awarded to group to enforce members following rules</td><td>Outcomes
O1: Sustainability and engagement of members</td><td colspan="2">Resulting CMOC:
Where CHCs are volunteers, and are mainly self-governing, to work towards sustainability and active engagement of CHC members, they require clear processes and procedures for their operationalisation and functioning which work to make commitments clear and allow members to have a frame of reference for inactivity and reprimand. Rules and regulations including: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution). They require support to assist in ensuring such procedures are followed.</td></tr>
<tr><td colspan="2">Thought-Process:
Strongly supported by interviews from CHCs and stakeholders. Works to make more specific some of the required dimensions of rules and regulations, which were from the IPT.
Evidence does not many clearly describe how and why rules work. My understanding is that it is from giving the groups the authority to reprimand, and enforce, member actions, therefore give weight to any concerns arising from members. Interesting to note, is that several of these important regulation were not being followed (length of service) but were still overall encouraged to follow.</td><td colspan="2">Sources of Supporting Evidence:
CHCs 1, CHC2, CHC3, CHC4, CHC5, KII LC Observational evidence (photo documentation) on CHC following ‘guidelines’ within health facility, including publically listing: members and contacts, meeting minutes and health facility reports. Ministry of Health (HUMC) Guidelines, World Vision Guidelines (COMM), which all CHCs were taught on (DHMT Report).</td><td>Supporting Quote:
"I don’t have anything else to add on those ones [collaborative theory refinement] because that’s exactly how the COMMs work. But it’s due to their dedication to work and following the rules that help them work so hard.” (CHC 4)"</td></tr>
<tr><td colspan="5">Refined Programme Theory 2.4:
To work towards sustainability and active engagement of CHC members, committees need clear procedures and processes, including: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution) are essential make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. They require support to assist in ensuring such procedures are followed.</td></tr>
</table>

Table 27 Case Study 1: Programme Theory 3.1 Supporting CMOCs and Development

<table>
<tr><td colspan="4">CMOC: Community Participation and Feedback</td></tr>
<tr><td>Contexts / Resources
C1: CHC have connection with communities (PT 1.2 ‘closeness’)</td><td>Mechanisms
M1 Relatedness and relationships between CHCs and communities
M2: Communities comfortable to express health concerns to CHCs and/or in-charge (CHC member)</td><td>Outcomes
O1: Communities have a source for feedback, that circumvents the health facility
O1.2: Needs of communities expressed to the health facility</td><td>Resulting CMOC:
Where CHCs are connected to communities, they have stronger relatedness and relationships, which can assist in communities feeling comfortable to express health concerns which results in the needs of communities being represented to the health facility and increased participation by communities by giving them a source to get more informed.</td></tr>
<tr><td colspan="2">Thought-Process:
In Kitunga, the CHCs are very close the community themselves, and strong relationships appear present. I believe that community members are comfortable expressing any issues they would have to a CHC member. This can ensure that the community needs are represented at the facility level. Possibly linked to having the CVAs, people are aware that they 'have a right' to participate. Could also be linked to CHCs themselves, as they are supposed to be a space for participation.</td><td>Sources of Supporting Evidence:
Men FGD, CHC1, KII Hth.
Observational, Capacity survey showed strong ‘participation’ results</td><td colspan="2">Supporting Quotes:
"Some of the times rumours come around from the community saying that the health workers at the hospital are not working. When the COMMs get this information they try to find out why and sometimes they are always know what is happening at the hospital so they try to defend the health workers by explaining to the community why something is happening the way they see it." (KII Hth)

"We have a right to talk about what is happening at the hospital so if you see something that is not going on well or you want to know something at the hospital you can talk to the in-charge and then when the CHCs have a meeting, the in-charge raises the issues to the CHCs and it is solved. So you find that your idea has been of great importance. (Men Participant 1). What I know is that they sit every month and talk about what the community is saying about the health workers because some of us may not complain to the health workers direct so we talk to the CHCs and they are the ones to sit with the health workers and tell them what is coming from the community and then advise them accordingly” (FGD Men 2)</td></tr>
<tr><td colspan="4">CMOC: Responsiveness and Relationships</td></tr>
<tr><td>Contexts / Resources
C1: CHCs visit community members and advice on health (in combination with CHWs)
C1.2: Positive outcomes of observing advice noticed by communities</td><td>Mechanisms
M1: Relationships between CHCs and community members can form
M1.2: Communities trust CHCs and their knowledge</td><td>Outcomes
O1: Communities are responsive to health advice from CHCs
O2: Positive health behaviours are increased and health outcomes improve</td><td>Resulting CMOC:
In contexts where CHCs meet with community members to discuss and advice on health issues, community members gain trust in them and their knowledge, leading to more responsive communities and potentially improved health outcomes through positive health behaviours.</td></tr>
<tr><td colspan="2">Thought-Process:
Important for communities to trust CHCs, but also that part of that comes from positive experience and face-to-face interactions with them. My understanding is that this comes from trust and relationship building. This site, specifically the women, spoke highly of the CHCs and other community</td><td colspan="2">Sources of Supporting Evidence:
Women FGD, CHC1
Observations indicating communities attributing positive health improvements.
Health facility monitoring documents and</td><td>Supporting Quote:
"The reason we love them [CHCs} it is because the VHTs and health workers give us knowledge on how we should take care of ourselves while pregnant and when we follow what they tell us it</td></tr>
</table>

health initiatives, and supported their continuation. Community members and health staff) reporting positive health gains over last several years, specifically reduction in MMR and U5M, increased in facility births (specifically Kitunga began to delivery the year previously).	World Vision evaluations (endline for all N. Rukiga) showing improved health.	*helps us and our children grow up in good health without getting sick all the time." (FGD Women 7)*

CMOC: Community Support for Sustainability			
Contexts / Resources C1: Community recognition of work load C2: Community acknowledgment of importance/value of CHCs	**Mechanisms** M1: Respect for CHCs M2: Desire to ensure CHC functioning and sustainability	**Outcomes** O1: Community support for sustainability mechanisms for CHC (such as financial incentives)	**Resulting CMOC:** When communities recognise the workload of CHCs and/or the value of CHCs within the health system is recognised then they have increased respect for CHCs and a desire to ensure their sustainability and functioning.

Thought-Process: Community members recognise the important role that CHCs play and the need for them to be sustainable / continue working. Chose to code this here and consider it important because it shows how community members value CHCs, and support their sustained work. Similar to PT 1.2 but from the perspective of the community. While not many extractable CMOCs were present for this, the majority of interviews indicated that respondents feel CHCs are doing well in their work (often tied to examples of progress/changes that have been made such as buildings or increase in beds, Chapter 6.3.2). This was at times accompanied by calls for continued support, such as training or reimbursements for CHCs.	**Sources of Supporting Evidence:** Women, KII LC Observations	**Supporting Quote:** *"We put that issue to the COMM meeting so they talked about it then forwarded it to ministry of health where they told them how women face difficulties while going to far hospitals for deliveries others would get accidents on the way so they provided the services to see that women can deliver from this hospital. They have given us beds, we have the midwife who can attend to the pregnant women and mothers no longer die because of pregnancy. They give reports of what is missing at the hospital to Ministry of Health and then they are the ones to respond. For example they are the ones to give us the beds." (LC KII)*

Refined Programme Theory 3.1:
Frequent engagement between CHCs, stakeholders and community services, can lead to mutual respect, recognition of each other's contributions and the valuing of work. These can impact on the relationships between these groups leading to trust, intervention responsiveness and support for CHC implementation. This can also assist in having a strong community and stakeholder voice and feedback mechanisms, as individuals feel more comfortable to participate in health within their community.

Table 28 Case Study 1: Programme Theory 3.2 Supporting CMOCs and Development

<table>
<tr><td colspan="4">CMOC: Ownership and Support</td></tr>
<tr><td>Contexts / Resources
C1: Visibility of CHC work in community and by stakeholders
C2: CHC initiation of non-required activities</td><td>Mechanisms
M1: Stakeholders have trust in CHCs to produce positive change
M2: CHCs perceived as taking ownership for actions a</td><td>Outcomes
O1: Leadership of CHCs (specifically chairman) seen as strong
O2: Improved support (resource, financial etc.) for CHCs</td><td>Resulting CMOC:
When CHCs take initiative and ownership of activities and it is transparent, stakeholders including communities, the Ministry of Health and NGOs, will have confidence in their functioning and ability to produce positive change, and will therefore continue and/or increase support for the CHCs.</td></tr>
<tr><td colspan="2">Thought-Process:
Aware that the 'non-required' activities are referring to some of the building projects Kitunga is initiating. In this instance, they began to fundraise, and when they had some money they asked WV if they would help support part of it. WV was eager that the CHCs took ownership and initiative of this project, and therefore said that they would provide some finance towards the building. Contexts are related to capacity building of CHCs anyway, and support – as may require capacity to be able to achieve this CMOC.</td><td>Sources of Supporting Evidence:
CHC1, CHC6
Observations: MoH and NGO very supportive of activities in Kitunga, and provide a lot of attention to this site. Many attribute this to CHC's efforts to raise funds for staff housing, showing stakeholders they are active and responsible, while increasing ownership.
Feedback Session</td><td>Supporting Quote:
"The [CHCs] are strong, then they can be able to do very many things, even which are recommended by the ministry of health, and can do, because the [CHCs] come up to build, that's when the other cadres are also coming. …..When they see that the [CHCs] are working hard with the community, they also then they are coming because they told us initially with the Ministry says that you are, when they say that you are not minding, you are not asking help, you are not putting in effort, they also wont. Even World Vision told us that. (CHC 1)"</td></tr>
<tr><td colspan="4">CMOC: Accountability and Functioning</td></tr>
<tr><td>Contexts / Resources
C1: Where there is history of ineffective functioning
C2: And lack of trust with health facilities/MoH to problem solve
R1: When health issues are seen as being addressed (i.e. buy the supply of medicines, or the building of infrastructure)</td><td>Mechanisms
M1: CHCs as 'keepers' of the health facility - oversight
M2: Perceived effectiveness of CHCs</td><td>Outcomes
O1: CHCs increasing accountability of Health System towards communities
O2 Health facility improved functioning and management
O3: Communities support and value CHCs</td><td>Resulting CMOC:
When the health facility is seen as being managed well and effectively, the community considers CHCs to be appropriate 'keepers' of the facility and views them as effective, which works to increase community support, value and buy-in of CHCs and has the CHCs increasing accountability of health systems to the community.</td></tr>
<tr><td colspan="2">Thought-Process:
Making more specific some of the necessities required for community buy-in, focusing largely on health facility effectiveness and management. My experience is often the MoH and health staff is viewed as needing to be 'watched'. This falls to community members to ensure people are doing their job. This then is an important contextual consideration, which,</td><td>Sources of Supporting Evidence:
FGD Women, FGD Men
"Perceptions of CHC Roles" (Chapter 6.3.1) as health facility focused. Many interviews noted</td><td>Supporting Quote:
"The COMMs are there to make sure that there is medicine at the hospital and see if the health workers are working and if they have accommodation. When they do not have then the COMMs plan on how the health workers can have accommodation near the hospital. When they come to the hospital and find that something is not right, they are the ones who look for the way out. For example if the health workers are not working, they talk to them and find out where the</td></tr>
</table>

when the facilities are working well, get attributed to the CHCs for their oversight and management for accountability. Context specific due to historical legacy of CHCs, which has previous (concurrent) role of HUMCs.	the importance of building accommodation and maintaining medical supplies at the facility.	*problem is. We never come here at the hospital and find that there is medicine that's the sign that these COMMs are doing a good job because before we would come at times and find that there is no medicine."(FGD Women 2)*

CMOC: Feedback Participation

Contexts / Resources	**Mechanisms**	**Outcomes**	**Resulting CMOC:**
C1: Where misuse of funds is prevalent C2: Limited ability for communities to engage in health discussion R1: CHCs have and follow clear processes for feedback, transparency and accountability to communities and networking organisations, which also allow for community participation when followed	M1: Community and partner trust in action M2: Communities feel their concerns are important and empowered to participate in health	O: Support CHC activities O2: Community voice represented in health	When communities know CHC's roles, processes and procedures, and when CHCs are transparent and accountable to communities and other stakeholders (partners) (especially if any donations are involved), trust in activities is increased leading to (continued) support and sustainability of activities.

Thought-Process:	**Sources of Supporting Evidence:**	**Supporting Quote:**
Related to the procedures to CHCs and how the community perceives their work (PT 2.3-2.4). If the CHC functioning (specifically in relation to finances) is transparent and clear for community members, they will have increased trust in the integrity of their work, and their perceived functioning. Also having clear guidelines allows for communities to themselves to participate in health activities when followed properly.	FGD Men, FGD CHW, CHC3. World Vision guidelines have procedures for ensuring community participation/feedback with CHC activities. Observations of health facility, which follows CHC guidelines on posting information for communities, allows increasing participation.	*"They do not invite us to read for us the budget, tell us about the expenditure and the income of the things we contribute (Ment8). The COMMs should give accountability to the community members about the money they contribute towards the hospital and tell us more of what is happening on the hospital (Men 7). The COMMs do everything alone if they can call the other people and tell us of what is still needed for example on the construction so we know other than for us to keep seeing the bricks there and the construction is not being done. (Men 2) This hospital has 19 cells so if they can get a representative from each cell to meet with the COMMs in their meetings so that they can be the ones to take back what has been said in the meeting to the people in the community because some people in the community do not know what the COMMs do (Men 3). What the COMMs do not do is that they do not write a report like for the community so that we can also know what they talk about in the meetings. At least they should be putting that report on the notice board at the hospital so that whoever comes to the hospital can get access to that information (FGD Men 2)."*

Refined Programme Theory 3.2:
In contexts where actions and outcomes of the CHCs are transparent and there is visible value for their operationalisation to community members and partners, trust and buy-in for the CHCs can be gained. Conditions for this likely include having clear roles and processes of CHCs, specifically the parameters of their duties, which are understood by vested stakeholders.

Table 29 Case Study 1: Programme Theory 3.3 Supporting CMOCs and Development

<table>
<tr><td colspan="4">CMOC: Advocacy Support</td></tr>
<tr><td>Contexts / Resources
R1: Where community advocacy and empowerment initiatives are running</td><td>Mechanisms
M: Empowerment of community members on health related issues</td><td>Outcomes
O1: Community participation in health (supporting CHC capacity building)</td><td>Resulting CMOC:
When advocacy activities are present and run in conjunction with CHCs, community members can become empowered and encouraged, leading to more community participation in health.</td></tr>
<tr><td colspan="2">Thought-Process:
CMOC linked to other PT (3.2) and several other quotes where community members express dissatisfaction with services at facility to CHCs. This CMOC explains that likely, part of the reason community members were empowered to speak to CHCs was that they had CVA support. Consistent with COMM documentation, where CHCs are not necessarily meant to address ‘advocacy’ issues – which is CVA responsibility – but they are to be equipped to deal with arising issues at health facility.
Potentially indicating that CHCs alone cannot increase community participation without having strong support for raising community advocacy.</td><td>Sources of Supporting Evidence:
FGD Men
Observations – CVA interaction and programme meeting (Chapter 1.5)
COMM Documentation</td><td>Supporting Quote:
"We can complain in case of anything but not regularly. There is an organisation of community voice that came to Kitunga and they encourage us to give out our views according to your hospital to say what is not good or what should be done and if there are some problems with the health workers. So when we talk they listen to us and the try to solve the problems that have been identified."
(FGD Men 7)</td></tr>
<tr><td colspan="4">CMOC: Relatedness and Collaboration/Partnerships</td></tr>
<tr><td>Contexts / Resources
C1: Existing community resources for partnerships
C1: Members respect other stakeholders (potential partners) work</td><td>Mechanisms
M1: ‘bond-making’ through sharing of experiences
M2: Relatedness through shared goals</td><td>Outcomes
O1: Partnerships between stakeholders can form
O2: Harmonisation of health activities
O3: Increased community reach</td><td>Resulting CMOC:
Where several community activities exist, and when stakeholders respect each other and their work, 'bond-making experience' occurs or when members, individuals become related through common goals, this can lead to increased collaboration, harmonisation and community reach.</td></tr>
<tr><td colspan="2">Thought-Process:
Largely linked to capacity building domains of participation and linkages/partnerships. Emphasised in programme documents and through MoH/WV facilitated meetings. Strongly influenced by several participant notes where previously CHWs and CHCs were not collaborative, however NGO/MoH facilitated a workshop focusing on their partnerships, with reports that this has since increased collaboration.</td><td>Sources of Supporting Evidence: CHC1, CHC2, CHC4, CHC5, CHC6, FGD CHW
Observations – Programme meetings
Meeting minutes
COMM programme documentation – linkages and partnerships</td><td>Supporting Quote:
“We do work with them [the CHWs]. Madam when World Vision introduced the COMM system, they trained us to work with VHTs [CHWs] so when there is sensitisation about sanitation issues, we inform the VHTs and the VHTS informs the villages about the meeting so we cooperate. It has opened my mind that for any activity to be successful it needs combined efforts from team members and that is when it will yield some results. Secondly as COMMS we cannot manage alone unless we cooperate with stakeholders in the MOH, World Vision and other organisations in community.” (CHC 6)</td></tr>
</table>

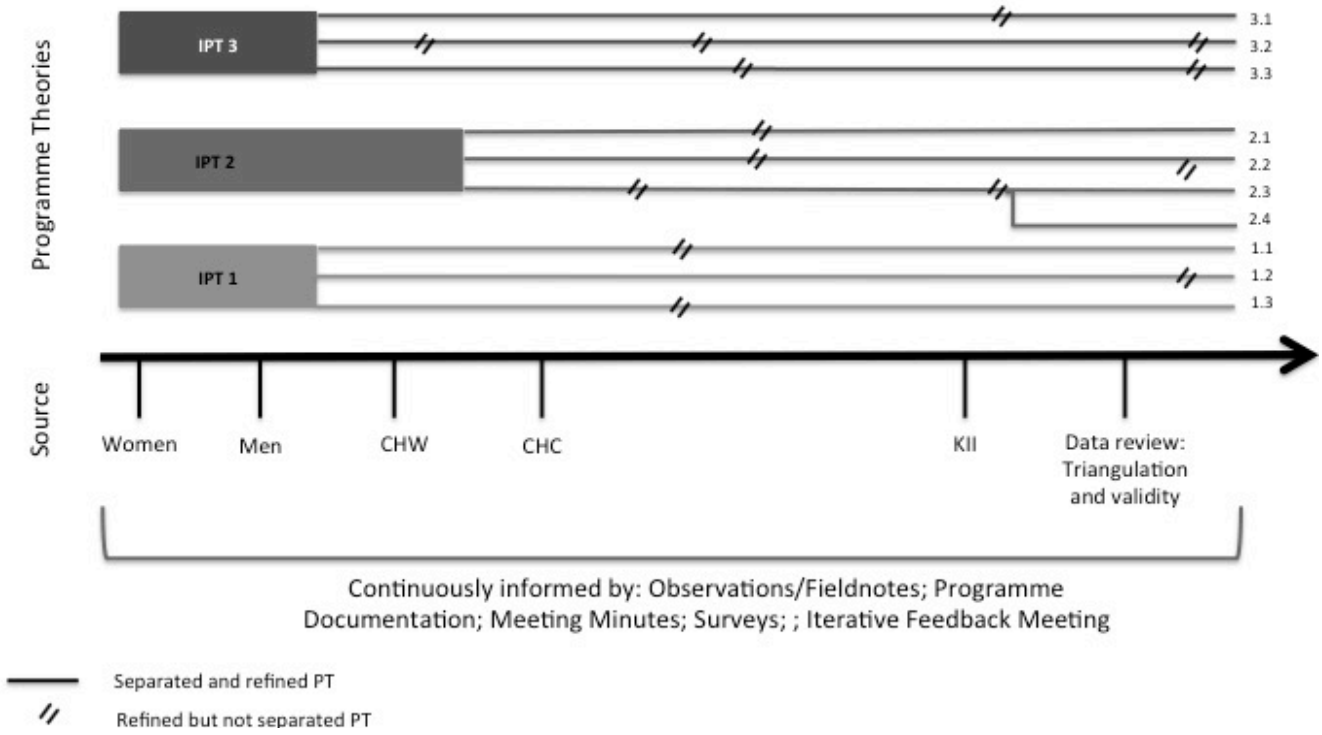
Refined Programme Theory 3.3: In contexts where other community activities are prevalent and strong, the sharing of resources and skills by committees members can influence important capacity building for health domains such as participation and empowerment. Where several of these community activities exist, 'bond-making experiences' can occur when activities are done in collaboration as individuals become related through shared common goals. This may lead to increased collaboration and linkages & partnerships, harmonisation and community reach. Conditions for this likely relate to collaborative relationships (PT 3.1) and the strength of implementing partners/actors.		

6.4.1.1 CMOCs for programme theory refinement

The extraction of the CMOCs worked to refine the PTs throughout the course of analysis. This occurred when the extracted CMOCs were thought to have plausible patterns (demi-regularities) that could contribute to refinement. Within realist studies, importance to the theory does not depend on quantity and most patterns were considered plausible based on the amount of evidence supporting them. As can be seen in the following Figure 17 in the early stages of analysis major refinement occurred as the IPTs were divided into more specific PTs. This process was data driven, in that the CMOCs which facilitated this indicated the need separate IPT components for a more thorough and clear presentation of theories.

Multiple CMOCs worked to refine the majority of programme theories. Specifically: PT 1.1 has 3 CMOCs; PT 1.2 has 2 CMOCs; PT 1.3 has 3; PT 2.1 has 2 CMOCs; PT 2.2 has 3 CMOC; PT 2.3 has 2 CMOC; PT 2.4 has no original CMOCs, as it was a split from PT 2.3 after the refinement of 2 CMOCs; PT 3.1 has 3 CMOCs; PT 3.2 has 3 CMOCs; and PT 3.3 has 2. These do not include CMOCs that were refined throughout the process, only the absolute number of CMOCs. Figure 17 below details the stages of analysis and when programme theory refinement occurred.

Figure 17 Stages of Programme Theory Refinement During Data Analysis: Case Study 1



6.5. Refined Programme Theories for Case Study 1

6.5.1 Process of refinement

Refining the initial programme theories into the resulting programme theories occurred during the process of analysis**.** Table 30 Table 31 Table 32 show how the CMOCs from the above tables were used for IPTs 1, 2 and 3, respectively. Refinements to IPTs are indicated by being underlined.

6.5.1.1 A Note for IPT 4

One might have noticed that IPT 4 is missing from the results thus far. While it was originally included as a 'node' within the analysis, no data was coded to it. That is not to say that IPT4 is not relevant to this case; instead, I believe the reason for this is that I initially extracted IPT 4 at a very high level of abstraction, which the qualitative data for one case study was too specific to suitably refine. Having conducted the first round data collection and

analysis, I now understand the CHCs better, and recognise that IPT 4 is more of a 'summary of theories', rather than a theory itself. As such, IPT 4 did not get refined and is thus not featured in this chapter and is instead considered again during the synthesis (Phase 3), in Chapter 8.

Table 30 Case Study 1: Refinement Process for IPT 1

Initial Programme Theory 1			
Individuals within the CHC are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' specific attributes (such as availability of time and knowledge), previous experience and incentives, training and supervision provided to them. These factors together result in increased collaboration within the committee, increased respect by community members and an overall committed committee better able to initiate activities and work towards building community capacity.			
CMOCs Elicited after Woman FGD			
When CHC members' notice contributions they made to communities it acts as positive reinforcement, or be a source of motivation or satisfaction, which encourages continued work and commitment to their duties.	When CHC's work is recognised by community members and support for their incentivisation exists, they may become motivated ensuring sustainability of activities.	CHC members who are close to the community members that they serve will have personal motivation and a sense of responsibility due to 'relatedness/closeness' and formed relationships, to improve community health and thus be committed members.	In contexts with precarious health systems and motivated CHCs who are closely linked to the community, members can develop a sense of responsibility and altruism towards community members, resulting in invested CHCs committed to improving health.
Refined Programme Theories N/A			
Additional CMOC Men In less- resourced contexts, when CHCs receive financial support for work, this acts as a source of extrinsic motivation leading to engagement with activities.			
1.1 Refined PT Individuals within CHCs are likely to have continued and active engagement with responsibilities if there are intrinsic and extrinsic motivational factors, such as financial compensation and/or reimbursement and positive reinforcement cues resulting from their work, and community recognition of their services.	**1.2 Refined PT** In contexts where there is strong community-centeredness of the CHCs, a strong sense of community is able to develop which can lead CHCs to be more motivated and committed for volunteering to ensuring the health of their peers, especially in contexts with precarious health systems.	**1.3 Refined PT** Member specific attributes (such as availability of time and knowledge), previous experience and incentives provided to them. This can result in a decreased work-load for the committee, due to increased collaboration, increased respect by community members and an overall committed committee better able to initiate activities and work towards building community capacity.	
Additional CMOC CHW N/A	**Additional CMOC CHW** N/A	**Additional CMOC CHW** N/A	
Refined N/A	**Refined** N/A	**Refined** N/A	

Additional CMOC CHCs When CHC's work is recognised by community members and they feel respected in their work, this can act as intrinsic motivation and as positive reinforcement, which may ensure CHC pride, commitment and sustainability of activities.	**Additional CMOC CHCs** N/A	**Additional CMOC CHCs** In contexts with low levels of education, CHCs who are educated will be perceived as knowledgeable and responsible, leading to being respect and trusted by community members, which increases their support for membership. When community work is largely implemented by members and volunteers, CHCs who have/have had positive experience in community engagement responsibilities will be perceived as capable and thus respected within communities, leading to their support and selection to the committee and their actions as a member. When CHCs have perceived positive attributes, including decision-making abilities, leadership skills, are a-political, and are socially responsible, this increases their social capital which influences the level of respect and trust given by community members, ultimately influencing support for their work.
Refined Individuals within CHCs are likely to be committed and have continued and active engagement with responsibilities if they have intrinsic and extrinsic motivational factors. These may consist of financial compensation and/or reimbursement (extrinsic) and positive reinforcement cues, especially if they feel respected (intrinsic) which can increase pride in their work. Community recognition of their services is a likely condition for this to occur.	**Refined** N/A	**Refined** Individual attributes of CHC members, notably their level of education, previous experience within community activities, leadership skills, decision-making abilities and if they are deemed socially responsible, works to increase influencing their social capital and thus positionality, and level of trust and respect within communities. It may be important for CHCs to either be seen as apolitical, or to not have a reputation of having their political affiliations influence public good decisions.
Data Review Edited for language to ensure consistent with data.	**Data Review** Edited for language. Revised through addition of 'conditions' as it was clear through the overarching identified contexts (Chapter 6.3.1) that this group is physically located close to	**Data Review** Edited for language.

	community and has a village-level scope.	
Refined and Resulting PT 1.1_Motivation Individuals within CHCs are likely to be committed and have continued and active engagement with responsibilities if they are motivated by both intrinsic and extrinsic factors. These may consist of financial compensation and/or reimbursement (extrinsic) and positive reinforcement (intrinsic) such as feeling respected, which can increase pride in ones' work. Community recognition of their services is a likely condition for this to occur.	**Refined and Resulting PT 1.2_Community Altruism** When CHCs are closely connected to these communities, a strong sense of community is able to develop which can lead CHCs' having volunteering altruism. This may result in CHCs being motivated and committed ensuring the health of their peers, especially in contexts with precarious health systems. A condition for this is likely the level of 'community-centeredness' contexts have and the scope of CHC work.	**Refined and Resulting PT 1.3_Social Capital** Individual attributes of CHC members, such as their level of education, previous experience within community activities, perceived stability, leadership skills and decision-making abilities, and if they are deemed socially responsible, influence their social capital. Their social capital affects positionality within communities, and can influence the level of trust and respect given to them by others. It may be important for CHCs to either be seen as apolitical, or to not have a reputation of having their political affiliations influence public good decisions.

Table 31 Case Study 1: Refinement Process for IPT 2

<table>
<tr><th colspan="3">Initial Programme Theory 2</th></tr>
<tr><td colspan="3">Committees that have broad membership make-up, have strong operations and processes in place, have strong leadership, with consistent training and supervision and work to build relationships with other community stakeholders are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities for more harmonised services, share resources and knowledge, and have strong communication and trust between members. This collaboration works to increase service delivery, with implementation addressing multiple levels of society, and also works to provide committee synergy and a strengthening of programme management – all of which are assumed to contribute capacity building for MCH</td></tr>
<tr><td colspan="3">CMOCs Elicited after Woman FGD</td></tr>
<tr><td colspan="3">When CHCs can recognise positive contributions their committee made to their communities, it acts as positive reinforce and source of encouragement/confidence within the group, which can result in motivation for, sustainability and commitment to, the group and its' activities.</td></tr>
<tr><td colspan="3">Refined Programme Theories: N/A</td></tr>
<tr><td colspan="3">Additional CMOC Men</td></tr>
<tr><td colspan="2">In interventions with CHC members' expenses are reimbursed or offset, they can rationalise that the benefits of their participation outweigh the costs, which leads continued involvement and active participation.</td><td>When CHCs have, and follow, clear processes of transparency and feedback to community members and relevant stakeholders, communities can become more invested and integrated into their own health actions and recognise CHC activity, this can lead to increased community knowledge of health activities, increased understanding of role of CHC and increased trust of CHCs by communities.</td></tr>
<tr><td colspan="3">Refined PT: N/A</td></tr>
<tr><td colspan="3">Additional CMOC CHW</td></tr>
<tr><td colspan="3">In contexts with clear hierarchies, the role of CHCs are respected, and there is little formalised health system capacity to support the health facility, CHCs can fulfil a role of oversight and monitoring where health workers become motivated/ incentivised to fulfil their job description.</td></tr>
<tr><td>2.1 Refined
In contexts where CHCs are respected, and CHCs fulfil a role of oversight and monitoring where there is little formalised capacity for this, health workers become incentivised to fulfil their job description and provide quality of care.</td><td>2.2 Refined
When CHC groups recognise the benefits and contributions of their involvement it can act as source of positive reinforcement, encouragement and increase group confidence, resulting in participation and commitment to the group and its' activities. However, it is important that these benefits outweigh the perceived costs of involvement.</td><td>2.3 Refined
Support and trust for CHC work by community and health sector stakeholders is prefaced upon them having clear and transparent rules and processes for their operationalisation. It may be especially important that feedback occurs to community members, who may increase their integration and knowledge on health activities, and that when CHCs act as links to the health centre, they focus on relationship building.</td></tr>
</table>

Additional CMOC CHCs In contexts with social hierarchies, which can determine one's influence, CHC members that have the respect of communities and other stakeholders may develop positions of power, increasing the influence they have within community health and over stakeholders.	**Additional CMOC CHCs** When CHC's level of knowledge on health topics and member processes is increased as a direct result of participation, they perceive their role as bringing personal benefit, assisting in adding value to their experience and likely assisting in sustainability and activity.	**Additional CMOC CHCs** When CHCs have, and follow, clear processes of transparency and feedback to community members and relevant stakeholders, communities can become more invested and integrated into their own health actions and recognise CHC activity, this can lead to increased community knowledge of health activities, increased understanding of role of CHC and increased trust of CHCs by communities. These are also important to make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. Procedures and processes should include: selection and membership regulations (i.e. relating to length of service, location of members) regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution).
Refined When CHC members have the respect of communities and other individuals, this creates positions of power, whereby they are listened to and have influence within the community, with stakeholders and within health facilities.	**Refined** When CHC groups recognise the benefits and contributions of their involvement it can act as source of positive reinforcement, encouragement and increase group confidence, resulting in participation and commitment to the group and its' activities. However, it is important that these benefits outweigh the perceived costs of involvement. This cost-benefit relationship can also be influenced through more tangible benefits such as reimbursements, and expansion of knowledge/training.	**Refined** Support and trust for CHC work by community and health sector stakeholders is prefaced upon them having clear and transparent rules and processes for their operationalisation. Rules and regulations including: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution) are essential make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. It may be especially important that feedback occurs to community members, who may increase their integration and knowledge on health activities, and that when CHCs act as links to the health centre, they focus on relationship building.

Additional CMOC KII N/A	**Additional CMOC KII** N/A	**Additional CMOC KII** Where CHCs are volunteers, and are mainly self-governing, to work towards sustainability and active engagement of CHC members, they require clear processes and procedures for their operationalisation and functioning which work to make commitments clear and allow members to have a frame of reference for inactivity and reprimand. Rules and regulations including: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution). They require support to assist in ensuring such procedures are followed.
Refined N/A	**Refined** N/A	**Refined and Resulting PT 2.3_Transparancy and Accountability** Support and trust for CHC work by community and health sector stakeholders is prefaced upon them having clear and transparent rules and processes for their operationalisation. It may be especially important that feedback occurs to community members, who may increase their integration and knowledge on health activities, and that when CHCs act as links to the health centre, they focus on relationship building.
		Refined and Resulting PT 2.4_Procedures and Policies To work towards sustainability and active engagement of CHC members, committees need clear procedures and processes, including: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution) are essential make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. They require support to assist in ensuring such procedures are followed.

Data Review Edited language for clarity.	**Data Review** Edited language for clarity Refined to better link with PT 1.1 – Motivation, as CMOCs indicates Cost/Benefit is not only a group condition related to trainings, reimbursements etc. but also personal factors which may be related to motivation and altruism.	**Data Review** No changes
Refined and Resulting PT 2.1_Power In contexts with strong social hierarchies, CHC who are respected attain positions of power, which impacts on their ability to have influence within the community, the health facility and other stakeholders.	**Refined and Resulting PT 2.2_Cost Benefit** CHC sustainability and engagement is influenced by cost-benefit of being involved. This cost-benefit relationship can be influenced by benefits members receive as a result of their involvement, such as expanding knowledge, encouragement and satisfaction, and also through more tangible benefits such as reimbursements. One's individual motivation (PT 1.1) and sense of community altruism (PT 1.2) are likely influential conditions for the perceived cost-benefit relationship.	

Table 32 Case Study 1: Refinement Process for IPT 3

<table>
<tr><th colspan="4">Initial Programme Theory 3</th></tr>
<tr><td colspan="4">CHCs that operate in communities that have had positive past experiences with similar initiatives, that have strong existing MCH health services and strong systems to support their implementation, and policies that favour their implementation, are assumed to lead to increased community organisation, mobilisation and participation for maternal and child health. They are also assumed to increase community members' ability to participate in health activities, have critical awareness of their rights, and advocate for their health needs. This is assumed to result in creating local leadership (champions) for MCH, increase evaluation and needs assessment, increase health services and health responsiveness, and decrease the workload for health staff and volunteers.</td></tr>
<tr><th colspan="4">CMOCs Elicited after Woman FGD</th></tr>
<tr><td colspan="2">In contexts where CHCs meet with community members to discuss and advice on health issues, community members gain trust in them and their knowledge, leading to more responsive communities and potentially improved health outcomes through positive health behaviours.</td><td>When communities recognise the workload of CHCs and/or the value of CHCs within the health system is recognised then they have increased respect for CHCs and a desire to ensure their sustainability and functioning.</td><td>When the health facility is seen as being managed well and effective, the community considers CHCs to be appropriate 'keepers' of the facility and view them as effective, which works to increase community support, value and buy-in of CHCs and has the CHCs increasing accountability of health systems to the community.</td></tr>
<tr><th colspan="4">Refined Programme Theories: N/A</th></tr>
<tr><td>Additional CMOC Men
Where CHCs are connected to communities, they have stronger relatedness and relationships, which can assist in communities feeling comfortable to express health concerns which results in the needs of communities being represented to the health facility and increased participation by communities by giving them a source to get more informed.</td><td>Additional CMOC Men
When CHCs take initiative and ownership of activities and it is transparent, stakeholders including communities, the Ministry of Health and NGOs, will have confidence in their functioning and ability to produce positive change, and will therefore continue and/or increase support for the CHCs.</td><td>Additional CMOC Men
When CHCs have and follow clear processes for feedback, transparency and accountability to communities (especially if any donations are involved), trust in activities is increased leading to (continued) support and sustainability. Additionally, communities are better able to participate in health activities of importance to them, leading to ensuring that community voices are represented in health.</td><td>Additional CMOC Men
When advocacy activities are present and run in conjunction with CHCs, community members can become empowered and encouraged, leading to more community participation in health.</td></tr>
<tr><td>3.1 Refined PT
When communities and CHC members have frequent engagement, mutual respect, recognise each other's contributions and value their work, relationships between these groups can form leading to trust, intervention responsiveness and support for CHC implementation. This can also assist in having a strong</td><td colspan="2">3.2 Refined PT
In contexts where the process, actions and outcomes of the CHCs are transparent and visible to community members, community trust and empowerment through inclusion and knowledge, are facilitated which can increase community perceived effectiveness and value, and support and buy-in for CHCs.</td><td>3.3 Refined PT
In contexts where social and empowering-oriented community activities are prevalent and strong, the acquisition of these essential skills by community members can influence important capacity building for health domains such as participation and empowerment.</td></tr>
</table>

community voice, as individuals feel more comfortable to participate in health within their community.		
Additional CMOC CHW N/A	**Additional/Refined CMOC CHW** When CHCs have and follow clear processes for feedback, transparency and accountability to communities and partners (especially if any donations are involved), trust in activities is increased leading to (continued) support and sustainability. Additionally, communities are better able to participate in health activities of importance to them, leading to ensuring that community voices are represented in health.	**Additional CMOC CHW** Where several community activities exist, and when stakeholders respect each other and their work, 'bond-making experience' occurs or when members, individuals become related through shared common goals, this can lead to increased collaboration, harmonisation and community reach.
Refined N/A	**Refined** In contexts where the procedures and processes of CHCs are transparent and visible to community members and vested stakeholders, accountability and trust is facilitated which can increase community and support and buy-in for CHCs. Community support and buy-in can also be influenced by the visibility of CHC actions/activities and their outcomes.	**Refined** In contexts where social and empowering-oriented community activities are prevalent and strong, the acquisition of these essential skills by community members can influence important capacity building for health domains such as participation and empowerment. Where several of these community activities exist, 'bond-making experience' can occur when activities are done in collaboration with individuals become related through shared common goals. This may lead to increased collaboration, harmonisation and community reach.
Additional CMOC CHCs N/A	**Refined CMOC CHCs** When communities know CHC's roles, processes and procedures, and when CHCs are transparent and accountable to communities and other stakeholders (partners) (especially if any donations are involved), trust in activities is increased leading to (continued) support and sustainability of activities.	**Additional CMOC CHCs** No revision but 18 coded references added during analysis of CHC data to support the theory.
Refined N/A	**Refined** In contexts where the roles, procedures and processes of CHCs are transparent and visible to community members and vested stakeholders, accountability and trust is facilitated which can increase community and support and buy-in for CHCs. Community support and buy-in can	**Refined** N/A

	also be influenced by the visibility of CHC actions/activities and their outcomes.	
Additional CMOC KIIs No additional, but KIIs supported CMOCs therefore requiring 'community' to be expanded to incorporate these groups.	**Additional CMOC KIIs** N/A	**Additional CMOC KIIs** N/A
Refined When stakeholders and CHC members have frequent engagement, mutual respect, recognise each other's contributions and value their work, relationships between these groups can form leading to trust, intervention responsiveness and support for CHC implementation. This can also assist in having a strong community and stakeholder voice and response, as individuals feel more comfortable to participate in health.	**Refined** N/A	**Refined** N/A
Data Review	**Data Review** Refined PT to reflect reviewed data and CMOC but making roles and processes, which is already PT 2.3, a contextual condition. This PT is around stakeholder buy-in via visibility of value.	**Data Review** Refined to add (likely) necessary conditions for this to occur. Specifically, collaborative nature (PT 3.1) and also the strength of partners. As identified in Chapter 6.3.1 and Table 17, the NGO implementing partner and the MoH in this context have a strong partnership, and have a reputation for having good community health initiatives.
Refined and Resulting PT 3.1_Relationships and Trust Frequent engagement between CHCs, stakeholders and community services, can lead to mutual respect, recognition of each other's contributions and the valuing of work. These can impact on the relationships between these groups leading to trust, intervention responsiveness and support for CHC implementation. This can also assist in having a strong community and stakeholder voice and feedback mechanisms, as individuals feel more comfortable to participate in health within their community.	**Refined and Resulting PT 3.2_Buy-In** In contexts where actions and outcomes of the CHCs are transparent and there is visible value for their operationalsation to community members and partners, trust and buy-in for the CHCs can be gained. Conditions for this likely include having clear roles and processes of CHCs, specifically the parameters of their duties, which are understood by vested stakeholders.	**Refined and Resulting PT 3.3_Integration and Partnerships** In contexts where other community activities are prevalent and strong, the sharing of resources and skills by committees members can influence important capacity building for health domains such as participation and empowerment. Where several of these community activities exist, 'bond-making experiences' can occur when activities are done in collaboration as individuals become related through shared common goals. This may lead to increased collaboration and linkages & partnerships, harmonisation and community reach. Conditions for this likely relate to collaborative relationships (PT 3.1) and the strength of implementing partners/actors.

6.5.2 Refinement at the Individual Level

Programme theory 1.1, 1.2 and 1.3 all went through two phases of refinement, as shown in Figure 17. Theories present at this level are relevant to individual members within the committee, and related largely to their reasons for becoming, or remaining an active member (PT 1.2 and 1.1, relating to being 'altruistic' and 'motivated', respectively) and how they are identified to be members, or able to be influential members (PT 1.3, relating to having 'social capital'). Taken together, these theories highlight some of the contextual conditions and resources required to have committed and motivated CHC members. The community-centeredness of members, resources or support provided to them for extrinsic motivation, recognition and positive reinforcement for intrinsic motivation, and individual attributes, such as level of education and community reputation, are all important contextual factors to consider 'how, why and for whom' CHCs work within this socio-ecological layer.

6.5.3 Refinement at the Organisational/Committee Level

Programme theory 2.1, 2.2 and 2.3 went through two, three and three phases of refinement, respectively. During the third revision for programme theory 2.3 a split occurred where a new theory, 2.4, emerged. Thus, there are four resulting programme theories relevant to the organisational/committee level of how CHCs work for capacity building. Committees need to be in positions of power (PT 2.1) while acting in a transparent and accountable way to stakeholders (PT 2.3). To assist in these, they must have clear procedures and policies (PT 2.4) that act as a frame of reference for activities. These are likely prefaced by the cost-benefit relationship to being a CHC member (PT 2.2) that is closely linked to PT 1.1, and interestingly, some of the contextual factors for 2.2 also serve as outcomes from 1.1. Other likely contextual factors to influence CHC functioning at the community level are: the level of respect for members, PT 1.3 linked to PT 2.1, if they are implemented in contexts where social hierarchy is important; if motivational factors are available to members (PT 1.1

linked to 2.2); if there are feedback structures present which are visible to communities and if/how CHCs are linked to other stakeholders (PT 2.3); and what type of responsible CHC have, and whether they have training and support on these responsibilities (PT 2.4).

6.5.4 Refinement at the Community Level

Programme theory 3.1, 3.2, and 3.3 went through two, four and three phases of refinement, respectively. These theories work to understand how CHCs best operate at the community level for capacity building. Specifically, it was identified that they need to have trust and relationships from stakeholders (PT 3.1), buy-in and support for their operations (PT 3.2) and be integrated (partnered) with other initiatives (PT 3.3). Taken together, these theories highlight some of the contextual conditions likely required for CHCs to work towards capacity building at this socio-ecological level. Namely, they likely need to be embedded within communities to have engagement (PT 3.1), their activities (and positive outcomes) and roles need to be clear to stakeholders (PT 3.2), and they should be implemented in collaboration with other strong community activities, with sharing of resources if possible (PT 3.3).

6.5.5 Results and Systems Thinking: Exploring the layers of SEM

The IPTs were organised around the socio-ecological model to best work within a systems thinking framework (Chapter 5.3). The use of SEM as an organisational tool however did not supersede the results. That is, if the results had opposed the model, its use would have been discontinued. During the refinement, these layers remained fairly consistent, with refined programme theories being categorised within the most relevant socio-ecological domain. As endorsed by both SEM and systems-thinking, complex health interventions components are not static and can move in-between layers. So as PTs are organised and presented within layers, they are not necessarily static, or confined to that layer.

Using this type of thinking also assisted in highlighting the associations or links between the various elicited CMOCs and PTs, some of which were articulated in the preceding sections. For instance, a CMOC in the 'individual level' related to members being respected, was a likely precursor for one in the 'committee/organisational level', where committees have power. Such links between CMOCs and PTs also occurred within layers. For example, CMOCs for the refined PT 1.1 elected 'motivation' as a mechanism. 'Motivation' for a CMOC in PT 1.2 however was identified as a context. In other instances, elements were similar across the layers, but with different effects. For example, 'community-closeness' was a context in relation to both PT 1.2 and 3.1, with different outcomes. The same occurred for the context of 'clear rules and procedures' within PTs 2.4 and 3.2.

6.5.6 Key Programmatic Findings from Case Study 1

In addition to the presented contexts and outcomes (Chapter 6.3) and refined programme theories, several more programmatic findings in relation to Case Study 1 emerged. First, the implementation and actions of the CHCs did not fully adhere to World Vision's AIM-Health programme guidelines (Chapter 1.5). The CHCs within Case Study 1 appear to be functioning more as a health management committee, with perceptions of their work (Chapter 6.3.1) and accompanying actions being largely focused around accountability and governance within the health centre (i.e. health staff monitoring, medicine, accommodation). While this is not directly opposed to the COMM guidelines, the programmes' overall goal envisages a more community-based focus, and aims to implement activities both within and outside of the health centre. Furthermore, where COMMs were designed to be MCH-focused groups, their work often focused on more than one specific topic.

CHCs within this context were very closely linked, both geographically and in terms of personal relationships, to community members. The level 'community-embeddedness', which was found to be influential in the working of CHC, varied across the different case

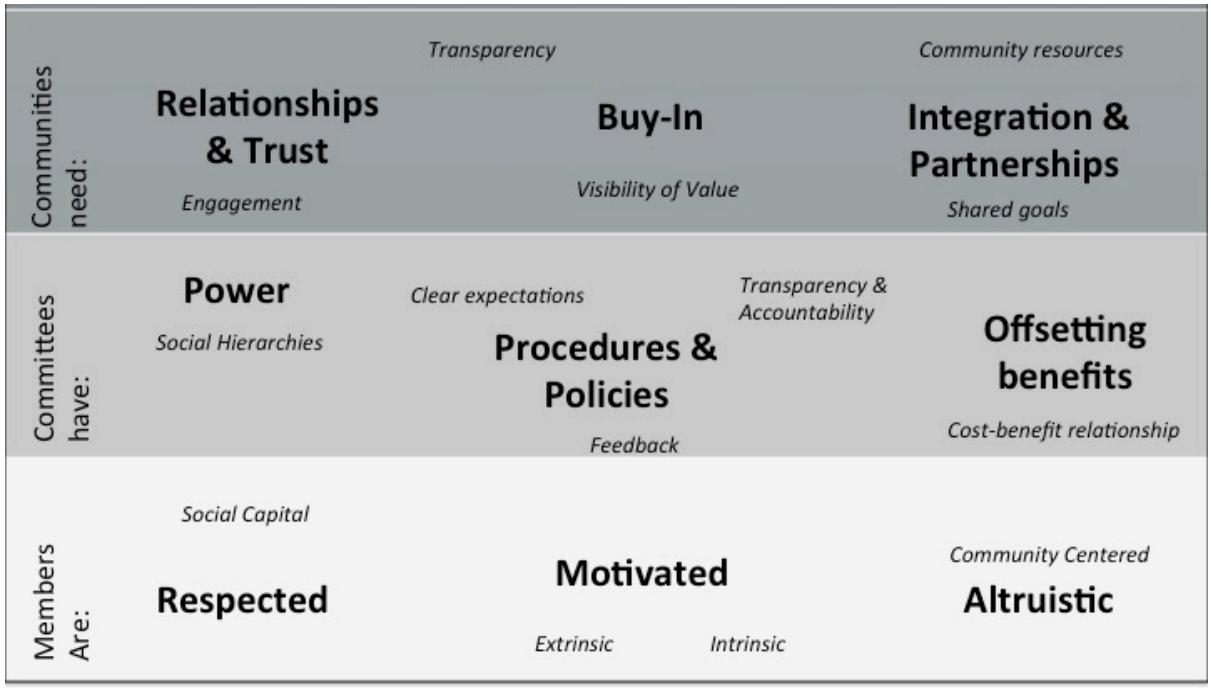
studies, and as such, a more detailed discussion of the differences and their implications is reserved for Chapter 9.

The supportive environment for Case Study 1 was also very apparent throughout the case study, and is captured in Table 17 (context). Relevant to all case studies is the policy environment in which the intervention was implemented. As noted in Chapter 1.4.3, health policies in Uganda have a strong focus on community-based health care, with the health infrastructure in North Rukiga being quite strong. World Vision has been operating in N. Rukiga since 1995, and the AIM-Health programme's CHW component was established and running for approximately two years prior to the CHC training. Moreover, the relationship between the Ministry of Health and World Vision is one of respect, shared responsibilities, collaboration and friendship. It truly is a shared programme, with the Ministry of Health being heavily involved with on the ground operations.

6.6 Chapter Summary

Data from Case Study 1 elicited 23 CMOCs that worked to refine the IPTs into 10 programme theories across the socio-ecological levels presented in Chapter 5.3. The resulting programme theories, relevant for the CHCs associated with Kitunga Health Centre II, are summarised in Table 30, Table 31 and Table 32. The below diagram, Figure 18, aims to depict main factors from each refined programme theory and visually represent it within the individual, organisational, and community layers. Important contextual influences for each programme theory are also represented. A more detailed discussion of the theoretical implications of these findings is discussed in Chapter 8, which presents a synthesis of findings across the case studies.

Figure 18 Refined Programme Theories Summary for Case Study 1



Chapter 7: Case Study 2

7.1 Introduction Case Study 2

This chapter details the results specific to Case Study 2, which took place in Kashambya. Specifically, a CHC with seven members affiliated with a Health Centre III. The following sections present the specific data sources, participants, identified contexts and outcomes, the elicited CMOCs and the refined programme theories specific to this second case.

7.2 Data and Participants

7.2 1. Data Sources

Multiple forms of data were collected for Case Study 2 in order to refine the IPTs. Table 33 below indicates the source of data, a brief description and the number of sources for each category of data source.

Table 33 Data Sources and Quantity for Case Study 2

	Source of Data	Description and Quantity of Data
1	Observations and Field Notes	Notes from primary researcher and two research assistants over 7 weeks
2	CHC Monitoring Documents and Reports	9 Community Health Committee Meeting Minutes
		4 Reports prepared by DHO
		3 World Vision and MoH quarterly reports
3	Semi-structured Interviews	3 with CHC members
		1 with Health Worker
5	Focus Group Discussions	1 Community Health Worker group, 8 participants
		1 Female community member group, 12 participants
		1 Male community member group, 7 participants
6	Community Capacity Assessment	Completed by all participants, 35
7	Coalition Self Assessment Survey	7 completed by CHC members
8	Iterative Feedback Meeting	28 stakeholders

7.2.2 Participants

A total of 35 individuals participated within Case Study 2, not including the iterative feedback meeting. The participants are broken down into stakeholder groups consisting of: Community Health Workers (CHWs), community members (men and women), Community Health Committee (CHCs) members and Health staff. Table 34 displays the method utilised for data collection for each stakeholder group and the number of respondents for that group. Demographics specific to each stakeholder group are displayed in Table 35 and Table 36 below.

Table 34 Case Study 2 Participants Number

Method	Participants	Number
Focus Group Discussions (FGDs)	Community Health Workers	8
	Women in community	12
	Men in Community	7
		27
Semi-structured Interviews (SSIs)	CHC members	3
		3
Key Informant Interviews (KII)	Health Staff	1
		1
Coalition Self Assessment Survey	CHC Members	7
Community Capacity Assessment	All participants	35
		Total: 35*

*Total number derived from adding FGDs, KIIs, and CSAS methods, not including feedback meeting. Participants that completed both CSAS and a CHC SSI were not counted twice

Table 35 Case Study 2 Community Health Committee and Community Health Worker Demographics

Demographic	CHCs (n=7)	CHWs (n=8)
Age (mean)	54	43.3
No. Females	2	6
No. Males	5	2
Married	7	8
Education		
None	0	0
Some primary	0	1
Completed Primary	3	3
Some Secondary	0	1
Completed Secondary	2	3
Diploma	2	0
Degree	0	0
Additional job (yes)	4	0
Additional job (no)	3	8
Distance to Facility* (mean in min)	32	68
Distance to Facility (range)	0-90	10-180
Months as COMM (mean)	78.8	87
Months as COMM (range)	6-120+	24-120
Additional Responsibilities in Community (Yes)	7	8
Additional Responsibilities in Community (No)	0	0

* All respondents travelled to health facility by foot

Table 36 Case Study 2 Community Member Demographics

Demographics	Women (n=12)	Men (n=7)
Age (mean)	25.8	42
Married	11	7
Education		
None	0	0
Some primary	6	0
Completed Primary	0	4
Some Secondary	2	1
Completed Secondary	4	2
Job (yes)	1	0
Job (no)*	11	7
Distance to Facility** (mean in min)	63.6	93
Distance to Facility (range).	1-120	50-180
Enrolled in AIM-Health (yes)	12	7
Member of other community groups (yes)	8	6
Attend village meetings (ever)	11	7

* All respondents identified as being subsistence farmers

**All respondents travelled to health facility by foot

7.3 Identified Context and Outcomes

In addition to those presented in Table 17, overarching contexts and outcomes integral for informing the data analysis and understanding of Case Study 2 were identified and are presented below.

6.3.1 Identified contexts for Case Study 2

Specific contexts for Case Study 2 were identified through the data collection and analysis process. These can be organised into several categories: societal, community and organisational.

Societal

- CHWs are very well known and appear to be respected by community members. Community member often acknowledge changes in their practice to CHWs, especially the discontinuation of Traditional Birth Attendants
- Health centre infrastructure noted as lacking capacity for delivery services, specifically not enough beds and lack of electricity
- More recent changes (not attributed to CHCs) have been increased support for MCH in facility
- Reported by CHW is strong relationships between community and medical staff, as a consequence of AIM-Health training (not specific to CHCs)

Community

- Many community respondents had strong knowledge on MCH, this is consistent with demographic information on AIM-Health enrollment
- Large involvement in other community activities – such as savings groups and religious networks. 8 women and 6 men belong to another community group
- Acknowledgement of AIM-Health programme for MCH improvements by communities, via CHWs and other outreach activities
- Male support during pregnancy identified as lacking by women respondents
- Limited 'community connectivity' of CHCs
- Sense of community from all participants limited, contributed partially to the catchment area size (sub-county)

Organisational

Table 36 below details contextual conditions specific to Case Study 2's Community Health Committee.

Table 37 Case Study 2 Community Health Committee Additional Contextual Conditions

	Category	Case Study 2: Kashambya (n=7)
*	Gender/Age	Unequal representation of men and women, with only 2 females. Chairperson female and VHT coordinator. Majority men over age of 60.
Organisational Level	Make-up	1 In-charge, 1 VHT coordinator, 1 retired teacher, 2 Local Council, 2 community members
	History of formation	CHCs were old/current Health Unit Management Committee's (HUMC) that were trained on NGO intervention, to be COMMs (i.e. CHCs). As such, CHCs mainly run out of Health Centre III. Policies of current committee seem to be straddling both HUMC and CHC guidelines. However concerns that as a result, neither are fully enacted. In-charge and VHT by appointment; other members selected by LC over 6-1o years ago
	Leadership	Majority of members appear unenthusiastic/apathetic to the CHC role. Difficulty in recruiting for participation in research. Very complacent in terms of inactivity. Reports from some members that 1-2 are very negative and inactive, and affect the whole functioning of group.
	Activity Level	Somewhat poor meeting and activity level. Difficulty meeting minimum COMM/HUMC standards, little additional initiative. Meeting regularity held but attendance is not always strong. Little initiative to meet with other groups. Transport issues due to distance, and lack of available reimbursements, were noted by some CHC respondents as an obstacle for CHC participation.
	CCAT	Survey indicates that the group is functioning very well in all CCAT domains. Qualitative evidence from most groups highlights areas of concern in terms of: participation, leadership staffing and relationships, committee membership, and knowledge.
	Health Knowledge	Two members with specific health knowledge. Others participated in training and mostly feel confident to pass health messages, though request more training
Community	Community centeredness	Somewhat community centered. Operating out of Level III, so have wider catchment area for CHC implementation. Do not seem very approachable to community members. As Health Centre III catchment area covers a whole sub-county, CHCs connection to communities inevitably influenced.
	Other group involvement	Reports of stronger connections to CHWs since their introduction to 'COMM Model'. Involvement with Local Council, mostly because some members are Council members. Most committee members are members of other community groups in addition to being a CHC.

*Individual Level

Perceptions of CHCs' responsibilities

Respondents were asked to identify the responsibilities of the CHCs in order to understand the activities of the CHCs within each site. Results from Case Study 2 show that, for the most part, the CHCs are perceived as being responsible for activities mainly at the health centre. A focus on wider community actions, such as the ones suggested in the COMM Guidelines (Chapter 1.5), was not very prevalent.

When discussing responsibilities, one respondent noted, "*They work with the medical staff to improve service delivery in our health centre. Secondly, when we receive new stock of drugs one of them has to be around to be witness to the exercise"* (FGD Women 2). Another respondent echoed this by saying, "*I know that when we receive new stock of drugs at the health centre, the [CHCs] are usually present to witness this. And to add on that they collect funds for construction and renovation of health centre buildings" (FGD Men 7).*

In line with this, the Health Staff key informant noted that they often act as 'supervisors' at the health centre. However, this discussion mainly focused on how this was actualised, with the respondent indicating that they can use their positions of power to act more as a 'boss', failing to provide support and constructive feedback to health workers.

CHCs themselves indicated that their duties mainly focus on monitoring staff, drug accountability, and ensuring the centre has enough supplies. Transcripts also indicate that the CHCs can act as a feedback resource for community members if they have comments on their experience at the health facility.

7.3.2 Identified outcomes of CHC group for Case Study 2

Specific outcomes that were attributed (either partially or fully) to the CHC group from Case Study 2 through interviews, documentation or observation, are as follows:

Societal

- Collaboration with CHWs on community outreach

  The [CHCs] have worked with the [CHWs] to improve sanitation in our village. For example, when a family has no pit latrine and rubbish pit, they try to talk to the family head about the dangers of not having one. So these days its hard to get one who does not have a pit latrine (FGD Men 6)

- Community surveillance and reporting
- Securing of additional health staff
- Securing porters for centre maintenance
- More suitable/cleaner health centre environment

  Our health centre is very clean. Pit latrines are good. The wards are clean and even if something to eat falls you can easily pick it (FGD CHW 2)

  The hospital is now clean. We even have porters who do the cleaning around so its now a good environment for the sick people (CHC 5)

- Securing of motorcycle for health centre
- Monitoring and accountability of medicines delivered to the health centre
- CHCs have identified the need to construct an additional maternity ward, but no concrete planning had begun
- Increases in resources for health centre, specifically medicines

  In the past when drugs would come to the health centre medical staff used to take the drugs to their own clinics but since the CHCs started working they make sure that drugs are not mismanaged and even now patients can receive drugs at any time they come (FGD CHW 3)

- Supervision of health staff
- Health staff has been strengthened due to monitoring and CHC intervention

  Another activity that has been a success is that there has been a strong improvement with the health workers. They no longer come late at the hospital. They are determined to work after the [CHCs] meeting with them and warning them about coming late (CHC 6)

  …in the past medical staff used to start working late and there was no respect for patients, but when the COMM Model was introduced we can now see the change (FGD CHW 1)

Important to highlight within these outcomes are some of the contradictions from other respondents. Specifically for supervision, the Health Centre Key Informant noted it as problematic, in that it was often not supportive or constructive. CHCs were thought to use their positions of power to 'boss' health staff, often with a lack of appropriate knowledge on what they are discussing.

The accountability of health staff was also questioned by the male FGD, with one respondent noting, and others appearing to concur, "*Medical workers are not always at the*

health centre all the time and if they are there, they open very late [in the morning] and in case you find that the medicine you want is not there, they always tell you to go to private clinics" (FGD Men 2). Though some staff achievements were reported since the introduction of the CHCs, there are still concerns over accountability and health centre functioning.

Capacity Building Outcomes

- Some linkages with CHWs and Health staff noted
- Linkages with Local Council (Leadership)
- CHCs often attend and participant in village meetings to dissemination health information to community members
- Evaluation: No documentation found on CHC's conducting any evaluation/needs assessment. Interviews report CHCs doing community disease surveillance and reporting,

> *In the community if there is an outbreak of a certain disease, they inform the medical staff to come on ground for treatment especially those affected with the disease (FGD Men 2)*

- Some community educational activities noted, such as outreach and collaboration with VHTs on sanitation issues. Questions raised on MCH focus,

> *[CHCs] normally carry out village meetings concerning sanitation but little work is done on maternal and child health, yet mothers need to learn a lot on maternal and child health (Men FGD 6)*

7.3.2.1 Coalition Self Assessment Survey, findings and reflections

All seven CHC members completed the Coalition Self Assessment Survey, which sought to explore components of the Community Coalition Action Theory. All members report being involved in at least one other organisation or committee within their community. Four of the six said there are enough representation from other groups to accomplish objectives. The others indicated that representation from youth, faith and community leadership were missing. Members reported there is enough initial training to be effective.

Decision-making was noted as being equal within the committee, with members feeling they have a lot of influence on decisions, which are made by majority-rule or by discussion until group consensus is reached. Members note that there are clear and fair rules and policies for decision-making, and they somewhat feel comfortable about the decision making process. Members reported very little (to no) conflict. All reported the committee chair as being the most significant source of leadership, more so than World Vision and the Health Centre. And members all either agreed or strongly agreed that the leadership of the committee is respected, clear, and collaborative. Overall the committee self-reports that it is well managed.

Committees ranked their three highest functions as: a) networking with other groups, b) networking with concerned community members, and c) operating particular programmes or activities. Committee members noted that they are comfortable sharing with the group. However, they reported having poor support (logistical, resource) for meetings. Members agreed that the committee strategies and plans are clear and respected. Three reported being fairly involved, and four reported being very involved in committee activities over the last year. Members agreed that the committee strategies and plans are clear and respected. All members reporting having a 'voice' within the committees, having a strong loyalty to the committee, and being satisfied with how the committee operates.

All but one member said the benefits of volunteering on the CHC outweigh the costs. Five of the seven reported having enough knowledge to function properly, and five endorsed that they have gained knowledge on MCH through their participation. All members noted that the committee is responsible for actions that would not have occurred without them, and that the committee has brought benefit to their community.

Members identified specific areas that need more attention within their committee. They note the need for: better equipping the health facility; improving staff housing; improving communication between the health staff and the community; committee

sensations' leadership and staffing; staff welfare; CHC education about roles and responsibilities and more knowledge on MCH. Outcomes they attribute to the CHCs are: repairing of a motorcycle; fencing of the health unit yard; attending community gatherings, and trained communities; did advocacy in community; and health workers kept better hours.

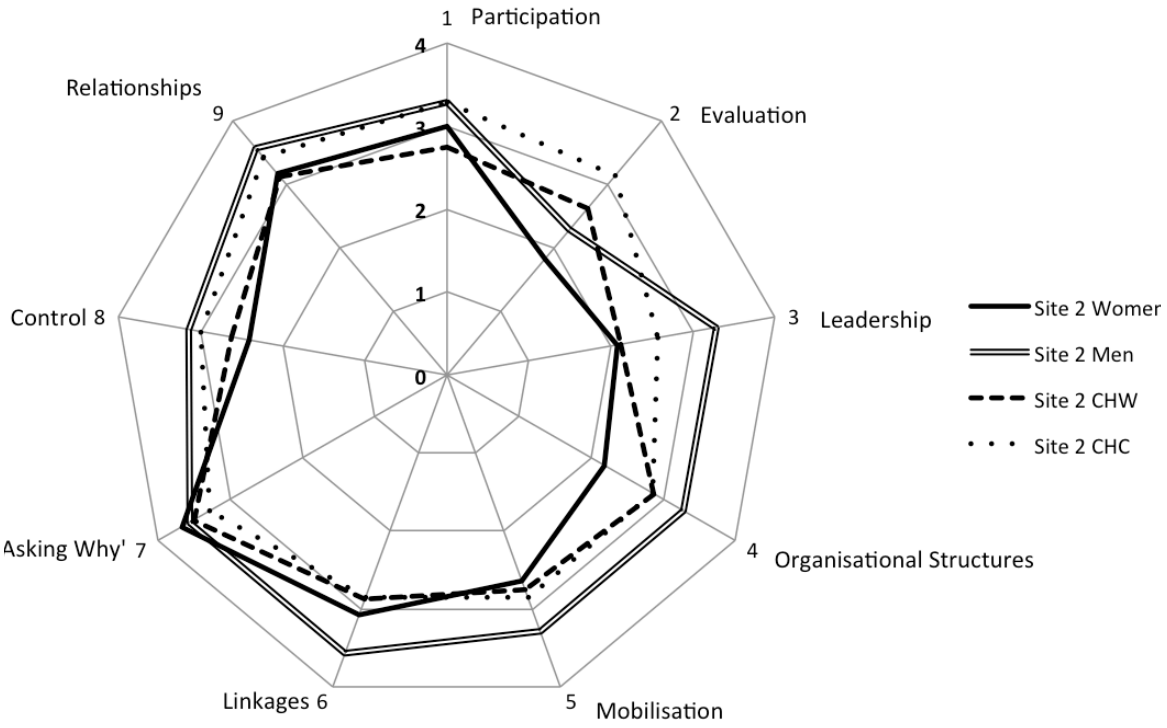
In relation to the CHCs, members said they were most proud of:

- Making crucial decisions for the development of the health facility and community at large.
- Their collaboration
- The knowledge I have acquired as a CHC, because it has helped them as individuals and their community
- The cooperation, respect and friendship of the committees, health workers and the community as a whole.
- Their committee has 'sharp' members and a 'very sharp' chair who can plan for health centre activities

7.3.2.1 Capacity Building Scores

All participants completed the capacity survey to ascertain what extent CHCs are perceived to be contributing to the capacity building domains. The below figure, in the form of a spiderweb graph of the survey responses, helps one to understand how the CHCs are doing within each capacity domain compared to the others.

Figure 19 Case Study 2 Capacity Response Spiderweb



Findings suggest that participant groups were somewhat consistent in their ratings of the CHC's capacity building ability, with the exception of 'evaluation' and 'leadership' domains, which show the most inconsistency, and also are the main problematic domains. The findings from the survey for the most part are consistent with the other data collected. For instance, CHCs relationships and linkages were noted as being strong, which matches the survey findings. CHC's needs assessment (evaluation) abilities were noted as lacking based on programme document reviews, and they had limited documented community activities, which could be a reason why 'mobilisation' was rated as low.

7.4 CMOC refinement and results for Case Study 2

7.4.1 Analysis and refinement process for Case Study 2

Data for Case Study 2 was analysed as detailed in Chapter 4.5.2. The community FGDs were analysed first, followed by the CHW FGD, the CHC SSI, and then the KII. There are a total of 93 references coded from the interviews in Case Study 2, of which 33 of these are 'Contexts and Outcomes'. Table 38 details the number of codes per source, and the number of times each IPT aggregate was coded.

Table 38 Coding breakdown for Case Study 2

Source	Number of codes IPT 1	Number of codes IPT 2	Number of codes IPT 3	Context and Outcomes	Total Codes per group
Women	2	4	8	8	22
Men	1	1	5	8	15
CHW	1	3	3	5	12
CHC 2	2	1	1	4	8
CHC 5	3	4	1	4	12
CHC 6	5	7	5	4	21
KII Health	1	0	2	0	3
Total Codes	15	20	25	33	**93**

This process resulted in the elicitation of 24 'context-mechanism-outcome configurations' and eight resulting refined programme theories. Table 39 to Table 46 detail the CMOC elicitation process organised by each refined programme theory the CMOC contributed to.

Table 39 Case Study 2: Programme Theory 1.1 Supporting CMOCs and Development

<table>
<tr><td colspan="5">CMOC: Selection</td></tr>
<tr><td>Contexts / Resources
C: When CHCs are selected by communities
C2: CHCs are close to the community and its members
C3: If positive outcomes are noticeable</td><td>Mechanisms
M: CHCs have altruistic motivation to serve</td><td>Outcomes
O: CHCs are motivated for change</td><td colspan="2">Resulting CMOC:
When CHCs are selected by communities, are close to the communities they serve, and can see positive outcomes from their work, they can have altruistic feelings towards serving them and to see their community flourish, which increasing their responsibility towards the work.</td></tr>
<tr><td colspan="3">Decision-Making:
Iterative session specifically brought up this point for further clarification. CHCs know that there are many difficulties facing their community, and they are motivated to change it. Its around CHCs individual reasons for volunteering - around relatedness to their community/connectivity and wanting the best for them. So using skills and opportunities they have to improve their community.</td><td>Sources of Supporting Evidence:
CHC5, Observations, and Iterative Session</td><td>Supporting Quote:
"The reason why I do this is because I was selected by the community to go and represent them. So I do this because I love my people in the community as I love myself. They have life as main concern so I wish them to have good health and this gives me courage to talk to them on how they should care for their lives by going to the hospital in case they need medical check-up. It promotes our village. (CHC 5)"</td></tr>
<tr><td colspan="5">CMOC: Political Positions</td></tr>
<tr><td>Contexts / Resources
C1: Political influence is prevalent/important
C2: CHC have been chosen due to political affiliations
C3: CHCs are not a robust representation of the community</td><td>Mechanisms
M1: Political will and aspirations may override CHC community altruism</td><td>Outcomes
O1: CHCs prioritise political activities/advancement over community
O2: Community loses trust in CHCs motives and CHC activities</td><td colspan="2">Resulting CMOC:
In contexts where political influence is important and CHCs have been chosen based on political affiliations, and especially where these CHCs are not representative of the community, political will can outweigh community altruism, leaving CHCs prioritising political advancement over community advancement, and having communities lose trust in CHCs and their activities.</td></tr>
<tr><td colspan="3">Decision-Making:
This point was not well addressed in the interview, however when the Iterative Feedback session was conducted we specifically addressed this point for further evidence and clarification. It became clear that within this CHC, many of the members were selected for political reasons and to this day are assumed to support these political affiliations. Many of these members were selected over 10+ years ago under HUMC processes where Local Council (LC) members selected individuals who were then ‘proposed’ to communities who 'accepted' their nomination. These members have not been replaced since this selection process. They are also not very representative of the community (4 men over 65 and educated) and may not be as 'in-tune' to community needs, or have as much understanding/empathy towards them. This group was also extremely difficult to work with during the data collection. NGO partner also raised many concerns over this groups 'volunteering' attitudes.</td><td>Sources of Supporting Evidence:
CHW4, Iteration Feedback, Document Review, Demographics</td><td>Supporting Quote:
“Yes, a lot of training has been given to the COMMs [CHCs] but still there is a lot of work to be done [by them] since some of them do not know their work, because most of these people on the committee were chosen on political lines (FGD CHW 4)”</td></tr>
<tr><td colspan="5">CMOC: Altruism - Community Commitment</td></tr>
</table>

Contexts / Resources	Mechanisms	Outcomes	Resulting CMOC:
C1: When CHCs love their cause (community) C2: Have previous past experience with such work R1: Recognise their skills can contribute	M1: Intrinsic influences, - feelings of pride for work that they are doing)	O1: Motivation O2: Encourages commitment to CHC tasks	**CMOC1:** When CHCs are passionate about their cause (community altruism), and recognise their knowledge can help, they may have personal motivation to be committed to CHC tasks. **Resulting CMOC:** **CMOC2:** When CHCs are passionate about their cause and have previous past experience with such work, they may gain feelings of pride for what they are doing, which can encourage commitment to CHC tasks.

Decision-Making:	Sources of Supporting Evidence:	Supporting Quote:
Similar to other CMOCs (selection) but details more of the mechanisms behind why community altruism is important for CHCs. Also works to understand other ways in which altruism may emerge, not only 'connectivity' but also love, and that one recognises their ability to contribute. Context here (love their community, community altruism) is mechanism in IPT 1.1 CMOCs 'Selection'.	CHC6 Feedback Meeting	*"Me as a teacher and a person who loves my country I felt proud teaching the women on how they should care about their children and themselves too when pregnant. I love teaching and sharing with people so I am proud of my knowledge and leadership so I make sure I share with people whatever knowledge I get that is helpful to them. Even when am traveling in the bus am not ashamed to tell a mother who has a child that in the fast two years of the child you can safe the life of the child or kill the child." (CHC 6)*

CMOC: Motivation

Contexts / Resources	Mechanisms	Outcomes	Resulting CMOC:
R1: CHCs have/need received training R2: Are provide some allowances	M1: Can act as an extrinsic influence	O1: Contribute to or improves CHC motivation	When CHCs receive training and are provided some allowances, this can act as an extrinsic influence to contribute or improve motivation.

Decision-Making:	Sources of Supporting Evidence:	Supporting Quote:
Brings in training as an important influence on motivation via extrinsic sources, but also expands on other sources such as allowances. From experience in this area, and observations of meetings where allowances and reimbursements are almost always discussed, the importance of extrinsic motivation via such tokens is extremely important.	Men 4 Documentation	*"I think [CHCs] have been motivated by trainings and some allowances though some of them still need more training on what they are supposed to do as [CHC]s (FGD Men 4)"*

Refined Programme Theory 1.1:

CHC members are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' characteristics (such as availability of time and knowledge), previous experience and incentives provided to them. CHCs require consistent training and supervision, which can act as extrinsic factors assisting in CHC motivation. If CHCs are close to the communities in which they serve, they may become motivated through community advancement and 'altruism/commitment'. This is especially prevalent if they observe changes due to their work. Other motivational factors, such as personal and/or political advancement can override these community-centric factors, which can negatively influence community relationship.

NB some component of the elicited CMOCs present here have been relocated to PT 2.3.

Table 40 Case Study 2: Programme Theory 1.2 Supporting CMOCs and Development

<table>
<tr><td colspan="5">CMOC: Individual Attributes</td></tr>
<tr><td>Contexts / Resources
C1: Lower education rates and where
C2: Educated people often become 'elevated' within society
R1: CHCs are educated</td><td>Mechanisms
M: Attributes confer positions of respect
M2: Respect results in increased trust</td><td>Outcomes
O1: Communities more responsive to CHC activities and leadership</td><td colspan="2">Resulting CMOC:
In contexts with lower education rates and where education is an important social stratifier, CHCs members who are educated will have the trust of community members and thus communities are more responsive to their activities</td></tr>
<tr><td colspan="3">Decision-Making:
Individual attributes of the CHC are important as evidenced by COMM Model documentation and literature, with this CMOC expanding on what specific attributes (education) are important in these contexts. From IPT KII interviews the importance of power arose -largely attributed to education. Individual attributes of CHC members, which enable them to have ‘respect’, and/or 'power' which may be associated with trust, were often discussed across all interview types. This is especially prevalent within CHCs for Case Study 2, where the make-up is largely centered around 'power' as opposed to representation as evidenced by their make-up (age and gender). This may also call into question importance of make-up: how to balance 'trust/power/respect' with representation, especially for this group that is majority male (only 2 females but 1 was appointed via VHT role), with all but 1 member (VHT) over age 55. Linked to power (IPT 3.2).</td><td>Sources of Supporting Evidence:
Women 5, Documentation, Observations</td><td>Supporting Quote
“They have worked for the community and to me I think [CHCs] have worked because they were selected by the community and also most of them went to school and also I think community members trust them (FGD Woman 5)</td></tr>
<tr><td colspan="5">CMOC: Hierarchies and Respect</td></tr>
<tr><td>Contexts / Resources
C1: Hierarchical positions/social stratifiers are prominent and important and
R1: CHCs are respected by communities</td><td>Mechanisms
M1: CHCs gain social capital
M2: CHCs can act as positive deviance models</td><td>Outcomes
O1: Communities more responsive to CHCs
O2: Positive work environment for CHCs</td><td colspan="2">Resulting CMOC
In contexts where hierarchical positions/social stratifiers are prominent and CHCs are respected, CHCs gain social capital and can act as positive deviance models, which leads to more responsive community members and ultimately a better work environment for CHCs.</td></tr>
<tr><td colspan="3">Decision-Making:
Around individual attributes of CHC members, focusing on how respect can influence work environment and CHC outcomes.
While social capital is not explicitly discussed as a mechanism, observations and my own understanding of how respect is both gained, and then influences actions, centres largely around 'social capital', which takes into account the environmental context of social hierarchies, and also how this capital is awarded to individuals. This is also supported by the CHCs within this group, whose individual attributes would typically constitute 'respected' individuals, who have gained social capital through their attributes and</td><td>Sources of Supporting Evidence:
Women 3, VHT 1, VHT2, CHC2 Demographics, observations</td><td>Supporting Quote:
"The theory explains what the [CHCs] are supposed to do to improve maternal and child health which is indeed true though they need to live as examples so that the community can respect them. (FGD CHW 1)

"I work because community members trusted me</td></tr>
</table>

experiences. VHT interviews showed 'why' people who are respected can make good CHCs, not only about their level of influence for action, but people in the community follow them, like role models 'positive deviance'. Respect linked to Power, and respect is also a mechanism, which is gained by individual attributes (CMOC 'Individual Attributes')			*and elected me on the [CHCs] and I think I have done a lot of things for them as a community. Secondly I think I am an example because I do not drink alcohol; I fulfil family obligations and I am also cooperative with the village people." (CHC 2)*

CMOC: Training			
Contexts / Resources R1: CHCs have training and C1: Where this is transparent to community members	**Mechanisms** M1: Confidence and trust in CHC abilities	**Outcomes** O1: Communities are responsive to CHCs activities	**Resulting CMOC:** When CHCs are trained and this training is recognisable by community members, confidence in CHCs can form, which positively influences the responsiveness of communities to CHC activities.

Decision-Making: Around making training knowledgeable to community members too. Important for CHC programming activities to be transparent to communities across a wide spectrum from training to activities, not just their outputs. The importance of supported by documentation and literature data on volunteer community workers; however, within this context it is not only important for CHCs to be trained, but for the training to be visible to communities. This point is understood to be about the visibility of the training by community members mostly because WV and their activities are well known within the community. Even if communities here have not explicitly seen CHC training, there are frequent WV actions taken at this community site, which have likely been noticed by community members. Linked to other context/resources of training in IPT2. May also be linked to trust for implementer – NGO's reputation within the community.	**Sources of Supporting Evidence:** Women 3, CHC 2	**Supporting Quote:** *"I like this job because I have got training from World vision and this has increased my awareness in terms of sanitation and even after training we bring them back to the community members and now as I talk the community members respect us." (CHC 2)*

CMOC: Respect			
Contexts / Resources C1: When CHCs feel they are respected by communities and	**Mechanisms** M1: Become empowered M2: Feel accountable	**Outcomes** O1: For capacity building activities O2: creating partnerships	**Resulting CMOC:** CHCs who feel respected by communities are empowered to contribute to capacity building activities, such as partnerships building.

Decision-Making: Around how being respected 'works'. The feeling of being respected gives CHCs courage (or makes them feel empowered) to conduct CHC activities. This notion is prevalent in other CMOCs, but this is more around respect as the context, and what then the mechanisms are that make change from this respect. This ties in with other CMOCs where they want to see outcomes of their work. It is around CHCs wanting the support from community members, and when they have it, it gives them encouragement and empowers them to continue working towards their duties. This may be important for recommendations and 'big picture' - the notion that CHCs need to feel supported by communities they are working towards. This support takes several forms 1) selection 2) when they know they are respected 3) they get feedback on their work (i.e. see positive changes).	**Sources of Supporting Evidence:** CHC6	**Supporting Quote:** *"People outside also respect us and this also gives us courage to work together with the politicians and the health workers (CHC 6)."*

Refined Programme Theory 1.2:
In contexts where individual attributes, such as education level, are social stratifiers, members' attributes (i.e. education level) can influence the level of trust they receive from communities, which increases the responsiveness of communities to their actions. It may be particularly important for these attributes to be recognisable by community members so that confidence in CHCs can form, which positively influences the responsiveness of communities towards CHC activities. In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital and can be seen positive deviance models, which leads to more responsive community members and ultimately a better work environment for CHCs. If this respect is felt by CHCs, they could become empowered to contribute to CHC and capacity building activities.

Table 41 Case Study 2: Programme Theory 1.3 Supporting CMOCs and Development

CMOC: Ownership and Accountability				
Contexts / Resources C1: CHCs volunteer with the objective is to serve the community and C2: communities are aware of their roles and responsibilities	**Mechanisms** M1: Community has/feels ownership over CHCs	**Outcomes** O: CHCs require accountability to communities	**Resulting CMOC:** In contexts where CHCs volunteer and it is understood the objective is to serve the community, the community has ownership over the CHCs and can demand CHC accountability.	
Decision-Making: More around how community ownership is occurring. Volunteering in these contexts is not a new service, and there have been much training and meetings on how the AIM-Health programme belongs to communities and those communities need ownership over such activities. Based on my experience with the programme, and sitting in on community meetings where members are encouraged to report non-active AIM-Health volunteers, I understand this point to be around the topic of CHCs accountability to communities via their ownership of them. May be connected to historical operations of implementing partner.			**Sources of Supporting Evidence:** Men 6, CHC2 Documentation	**Supporting Quote:** *"I think they need to understand that they volunteer to do this kind work for the good of the community so the [CHCs] should respect people's Views and be in position to report to them to World Vision their sole sponsor of the AIM Health project. (FGD Men 6)"*
CMOC: Meeting Expectations				
Contexts / Resources C1: When CHCs are selected by community members or C2: CHCs recognise trust communities put in them	**Mechanisms** M1: CHCs attempt to meet expectations	**Outcomes** **O:** CHCs are more dedicated/ committed to their work	**Resulting CMOC:** When community members select CHCs, and they recognise the trust that has been put in them, CHCs feel accountable and attempt to meet the expectations placed onto them, which may influence their dedication/commitment to their work.	
Decision-Making: How selection by community not only good for ownership and for community outcomes, but how this selection can influence CHCs work.			**Sources of Supporting Evidence:** CHC 2, CHC 5	**Supporting Quote:** *"When the community entrusts you as their representative they have trust in you that you can work for them. Therefore we work because we do not want to disappoint the people who selected us to be on the COMMs but we also work*

Prevalent throughout the literature that selection can make volunteers more committed.		*because we are willing to work." (CHC 5)*	
CMOC: Selection and Ownership			
Contexts / Resources C1: CHCs selected by the community or a representation of the community C2: In contexts where CHCs volunteer with the objective is to serve the community	**Mechanisms** M1: Communities feel ownership	**Outcomes** O1: Communities require accountability of CHCs O2: Community members trust CHCs O3: CHCs are representative of communities	**Resulting CMOC:** When communities select the CHC members they can feel ownership and accountability for the CHCs, which enables more trust between these parties and also helps to ensure that CHCs are the best representations of communities and their needs.
Decision-Making: Supports but works to further expand on the mechanisms and outcomes of why selection by communities is important. The mechanisms and outcomes within are largely supported by other 'CHW' literature (Chapter X) and also my own observations and understanding of how community health initiatives work when communities have input on activities, like selection. There are large bodies of evidence that discuss the importance of selection by community members for such initiatives, which namely site the need for ownership. This also came out in my previous study (Gilmore et al. 2015) in this same study location. Trust is often noted as a mechanism in other CMOCs. Community ownership and accountability may also be outcomes, as ultimately they are a component of capacity building and desired outcomes.		**Sources of Supporting Evidence:** FGD Women 5, Men 6, CHC 5 Documentation	**Supporting Quote:** *"I think they need to understand that they volunteer to do this kind work for the good of the community so the [CHCs] should respect people's views and be in position to report to them to World Vision their sole sponsor of the AIM Health project. (FGD Men 6)"*
Refined Programme Theory 1.3: In contexts where CHCs volunteer with clear objectives to serve communities, and when communities select these volunteer CHC members and are knowledgeable on their roles and functions, they feel ownership over the CHCs which serves to increase accountability of the CHCs and can enables more trust between these parties. This may also help to ensure that CHCs are the best representations of communities and their needs. CHCs may also feel more accountable to communities if they recognise the trust that has been put in them, which may influence their work commitment/dedication.			

Table 42 Case Study 2: Programme Theory 2.1 Supporting CMOCs and Development

<table>
<tr><td colspan="5">CMOC: Teamwork</td></tr>
<tr><td>Contexts / Resources
C1: When CHCs focus on teamwork and C2: Where individual's opinions are respected</td><td>Mechanisms
M1: Friendships (partnerships) can form</td><td>Outcomes
O1: Increasing positive work environment
O2: CHCs can have stronger internal procedures and action</td><td colspan="2">Resulting CMOC:
When CHCs focus on teamwork and where individuals' opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which can influence group dynamics, and internal processes and actions.</td></tr>
<tr><td colspan="3">Decision-Making:
Specific to Community Coalition Action Theory, discussing leadership and decision-making. Around having individuals' voices heard and feeling respected. However, if comparing this to questionnaire, most reported that they did feel that they were respected.
Can also be expanded beyond 'respect' as this may be influenced by the type/strength of leadership, which controls for strong personalities.</td><td>Sources of Supporting Evidence:
CHC6
CCAT</td><td>Supporting Quote:
As the chair person sometimes when I call like for a meeting since am not experienced in health as the health workers you find that the health worker are opposing what I am telling them because they think they know what to do more that I know so we fail to come to agreement. (CHC 6)</td></tr>
<tr><td colspan="5">CMOC: Political Influence</td></tr>
<tr><td>Contexts / Resources
C1: Where political influence is prevalent/important and C2: CHC have been chosen due to political affiliations C3: CHCs are not a robust representation of the community</td><td>Mechanisms
M: CHC political will can outweighs CHC community altruism</td><td>Outcomes
O1: CHCs prioritise political activities/advancement over community
O2: Community loses trust in CHCs motives and CHC activities</td><td colspan="2">Resulting CMOC:
In contexts where political influence is important and CHCs have been chosen based on political affiliations, and especially where these CHCs are not representative of the community, political will can outweigh community altruism, leaving CHCs prioritising political advancement over community advancement, and having communities lose trust in CHCs and their activities.</td></tr>
<tr><td colspan="3">Decision-Making:
Around political contexts, and importance of make-up.
This point was not well addressed in the interview, however when the Iterative Feedback session was conducted we addressed this point. It became clear that within this CHC, many of the members were selected for political reasons. These members were selected over 10+ years ago under HUMC processes where (even if not correct) LC members selected individuals to propose to communities who 'accepted'. These members have not been replaced. They are also not very representative of the community (4 men over 65 and educated) and may not be as 'in-tune' to community needs, or have as much understanding/empathy towards them. This group was also extremely difficult to work with during the data collection. Many 'refused' to volunteer, and demanded payment. NGO partner also raised many concerns over this groups 'volunteering' attitudes.</td><td>Sources of Supporting Evidence:
VHT4
Iterative Feedback Session</td><td>Supporting Quote:
"Yes, a lot of training has been given to the [CHCs] but still there is a lot of work to be done by [CHCs] since some of them does not know their work because most of these people on the committee were chosen on political lines" (FGD CHW 4)</td></tr>
<tr><td colspan="5">CMOC: Health System Accountability</td></tr>
<tr><td>Contexts / Resources
C1: In contexts where health system</td><td>Mechanisms
M1: They become</td><td>Outcomes
O1: Which can increase</td><td colspan="2">Resulting CMOC:
In contexts where health system accountability is problematic and CHC</td></tr>
</table>

accountability is problematic, R1: When CHCs receive training on budgets (and other management activities)	knowledgeable and empowered for health centre monitoring and accountability	accountability at the health centre	receive raining on management activities, they can become knowledgeable and empowered to assist in (financial monitoring), which can increase health centre accountability.

Decision-Making: Makes more specific the 'operations and processes' important for CHCs within this context, also makes more specific some of the potential outcomes (health system accountability) and how training can influence CHC actions of management. Despite the 'COMM/CHC' focus on CSS, CHCs within these sites were also trained to be HUMC, which had large responsibilities within the health centres as management committees. As part of that, they have a responsibility of drug supply accountability and to ensure the health staff with using funds appropriately. I have observed that many of the CHCs still focus the majority of their actions at the health centre and prioritise management responsibilities within less focus on overall 'CSS'. In this site specifically, it was observed that the CHCs had little community engagement, and were more centred around the health centre, which leads to a focus on management activities. Due to this, this point was not particularity well addressed during interviews, but upon preliminary analysis it was brought up in the iterative feedback meeting. Many respondents noted that CHCs are able to act as accountability resources, but they do require more specific training to do so.	**Sources of Supporting Evidence:** Women 3 Iterative Feedback Meeting, Programme Documentation, Meeting Minutes	**Supporting Quote:** *"I think [CHCs] also need to be empowered in terms of reading the budget and interpreting it so that they are able to account for the funds of the health centre" (FGD Women 3)*

CMOC: Roles and Responsibilities

Contexts / Resources	**Mechanisms**	**Outcomes**	**Resulting CMOC:**
R1: CHCs have/need received training R2: Specifically on their roles as a CHC and within the community health system	M1: Clarity in CHC expectations and parameters for operating by CHC members	O1: Focus of CHC activities on main components of CSS O2: Such as bridging-the-gap between medical staff and the community and resource mobilisation	When CHCs receive training, and specifically training on their roles and responsibilities, this creates clear expectations, which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff and resource mobilisation.

Decision-Making: Expands on 'strong operations and processes in place' - refines how these can be achieved, which is through training on these and their responsibilities. Also expands on what happens if these are not in place - reduced ability to contribute to components of 'capacity building' such as resource mobilisation. I had observed on several occasions and across the Case studies that CHCs were implementing activities or operating differently depending on the site. This ultimately can influence their ability to contribute to CSS, if CHCs are not meeting minimum activities. While there are multiple pathways to address CSS, a standardised core function of CHCs are to 'bridge-the-gap', which CHCs should have a strong understanding of. Linked to roles and responsibilities and clear expectations.	**Sources of Supporting Evidence:** Women 3, Women 2, FGD 5, Men 4, CHC 2, CHC6	**Supporting Quote:** *" The [CHCs] have worked because they have tried to bridge the gap between the medical staff and the community and this is because they have received training from World Vision which has helped their work (FGD Women 2)* *"[CHCs] have worked but some of them do not know their responsibilities as [CHCs] so they need more training in terms of capacity building and resource mobilisation" (FGD Women 5)*

Refined Programme Theory 2.1:
Committees should be apolitical, have broad membership make-up that is representative of communities, strong leadership, and training on necessary skills to implement their activities. CHCs also require robust training on role responsibilities and processes which can create clear expectations that can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff, and resource mobilisation and health system accountability. When CHCs focus on teamwork and where individual's opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which influence group dynamics, and internal processes and actions.

Table 43 Case Study 2: Programme Theory 2.2 Supporting CMOCs and Development

CMOC:			
Contexts / Resources C1: In resource poor contexts R1: Where CHCs volunteer without cost-offsetting benefits	**Mechanisms** M: Demotivation and frustration	**Outcomes** O1: Which can lead to job attrition and/or poor performance	**Resulting CMOC:** In resource poor contexts where CHCs volunteer, without cost-offsetting benefit CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance.
Decision-Making: Community Coalition Action Theory - Benefits of work must outweigh the costs. Also prominent in community volunteer literature those sources of motivation (intrinsic and/or extrinsic) are important. However, for this it may be less about motivation (which is mostly discussed in the literature) and more around the cost-benefit relationship. Outcomes may be the same, but the rationale and mechanisms around it can be different.		**Sources of Supporting Evidence:** CHC6 Documentation Feedback Meeting	**Supporting Quote:** *"As [CHCs] we would have to attend meetings and plan for our hospital so you would find we have spent the whole day here with no lunch and sometimes there is no refund of transport so you find people complaining that they have speared their time and left their work home but they have not gained anything"(CHC 6)*
Refined Programme Theory 2.2: In resource poor contexts where CHCs volunteer, CHCs require frequent training and supervision. Without cost-offsetting benefits for committee members, CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance.			

Table 44 Case Study 2: Programme Theory 2.3 Supporting CMOCs and Development

Merged with 1.1: CMOC elicitation and subsequent theory refinement for PT 1.1 identified the need to split the (almost) refined theory during the review stage. As such, CMOCs relevant to PT 2.3 are also noted in Table 38 above. For more details on the theory refinement process relevant to this, see Table 46 below.
Refined Programme Theory 2.3: When CHCs have positive relationships with other community stakeholders they are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities, share resources and knowledge, and have strong communication and trust between members and other networks.

Table 45 Case Study 2: Programme Theory 3.1 Supporting CMOCs and Development

<table>
<tr><td colspan="5">CMOC: Feedback</td></tr>
<tr><td>Contexts / Resources
C1: Where CHCs and communities engage
R: When action by CHCs does not occur or is not visible, and/or no feedback to communities happens</td><td>Mechanisms
M1: Communities feel frustrated and excluded</td><td colspan="2">Outcomes
O1: Reduced buy-in and support for CHCs</td><td>Resulting CMOC:
When communities engage with CHCs, if action and/or no feedback does not occur or is not visible, communities feel frustrated and excluded from activities, which can result in reduced buy-in and support for CHCs.</td></tr>
<tr><td colspan="2">Decision-Making:
Importance of buy-in by communities, but showing how can be achieved/supported
If we reverse this CMOC (take it from a negative to positive), once can see that CHCs need to follow-up with communities and/or show results to any expressed concerns. When this happens, it can help communities to feel their voices are heard and valued, and work to increase support for CHCs.</td><td>Sources of Supporting Evidence:
Men 6, Men 4, CHC6</td><td colspan="2">Supporting Quote:
“We normally report to them our problems but this takes a long time to be done, for example when it is a rainy season our wells get contaminated but nothing has been done yet. Sometimes the medical staff always opens late but when we tell me they promise us that it will be solved but nothing has been done.” (FGD Men 6)

“And when there is nothing done, people will always think that the chairperson is lazy or not working.” (CHC 6)</td></tr>
<tr><td colspan="5">CMOC: Relationship Engagement</td></tr>
<tr><td>Contexts / Resources
R1: CHCs have existing community relationships and
C1: Where CHCs activity engage with communities and other local actors including health system and local government, and
C2: Work to link communities and the more formal system</td><td>Mechanisms
M1: Can gain support from influential actors
M2: United community actors</td><td colspan="2">Outcomes
O1: Harmonisation of activities across government actions
O2: Improved relationships between actors, especially communities and more formalised resources.</td><td>Resulting CMOC:
Where CHCs have existing relationships and actively engage with communities and other local actors including health system and local government, and work to link these actors, they may gain important support from influential actors and also unite such parties, which can lead to better harmonised activities and improved relationships.</td></tr>
<tr><td colspan="3">Decision-Making:
Around how relationships can influence health activities and thus harmonisation. This CMOC could be interpreted several different ways, but within the context of the interview I believe it is around how CHCs can link different actors to make more streamlined and/or harmonised health activities. This however, is heavily relied on the connections/relationships and interactions that CHCs have with the actors, emphasising the importance of their collaboration with health centres and local council.</td><td>Sources of Supporting Evidence:
Women 2, 4 5, CHC 2, 5 Observations</td><td colspan="2">Supporting Quote:
"We normally carry out meeting and the secretary takes the minutes after which we send them to the sub county council and after the meetings we go into the community to meet the Village health team to discuss what has transpired and we also inform the LCs to always involve us in their meetings so that we can teach the community more about maternal and child health and our roles as [CHCs], we also visit churches and we teach them about health issues." (CHC 2)</td></tr>
<tr><td colspan="5">CMOC: Cooperation</td></tr>
</table>

Contexts / Resources	Mechanisms	Outcomes	Resulting CMOC:
C1: Other community health initiatives (i.e. CHWs) exist R1: These networks are supported to work together via training and/or reps included on the CHCs	M1: Harmonisation and partnerships/collaboration between community groups	O1: Streamlined activities and messages O2: Communities more accepting and/or more easily able implement messages	In contexts with other community health initiatives, and when these are supported through either the involvement of communities in CHCs or training, harmonisation of activities and partnerships can form, which results in more streamlined activities and messages for more accepting and implementable actions from communities.

Decision-Making:	Sources of Supporting Evidence:	Supporting Quote:
Largely attributed to the history of the CHC (COMM)/ HUMC programme and transition. When the HUMC were trained to be CHCs, they introduced the CHW representative onto the committee, which was previously not there. This has been noted to influence the relationships by harmonising and streaming efforts. Additionally, and more recently, MoH and WV ran training specific for CHW/CHC relationship noting some tension between the two cadres. Since the training has occurred, many interviews discussed the positive influence this had. Meeting minutes also show support for having VHT involvement and collaboration in activities. Harmonising as mechanism here, is outcome and/or context in other IPT3 CMOCs.	Women 1, Women 6, Women 7, CHW2 Programme Documentation	*"They have cooperated with the medical staff to create a good environment for service delivery and they have tried to live as examples so many people can listen to them and the fact that they got training, there are more effective than they used to be." (FGD CHW 2)*

CMOC: Advocacy

Contexts / Resources	Mechanisms	Outcomes	Resulting CMOC:
C1: Where there are advocacy teams/resources/networks and C2: CHCs connect with these teams	M1: CHC become knowledgeable on, and empowered to, promote health advocacy	O1: Communities more activity participate in health advocacy activities O2: Communities become more aware of their health rights	In contexts where advocacy resources/teams/networks exists, and CHCs connected with these teams, they can become more knowledgeable on, and empowered to promote, health advocacy to communities, which results in communities being able to more actively participate in health activities and advocacy and know their health rights.

Decision-Making:	Sources of Supporting Evidence:	Supporting Quote:
Importance of networks and linkages, but specifically health advocacy networks to support CHCs to implement this important aspect of community systems strengthening. Decision-Making: Within AIM-Health, CVAs are an integral component. Observations, minutes detailing discussions of CVA interaction, and interviews with other KIIs note the importance of this relationship. Specifically within this programme, the CHC intervention does not have a strong focus on advocacy because CVAs are in existence. However, CVA work is for general community advocacy, so strengthening partnerships with CHCs help to focus on health specifically.	Women 4 Observations	*"The [CHCs] normally meet with the advocacy team from world vision and we really see a great change since they advise us to actively participate in building our health center and the rights we have as community members over the health center" (FGD Women 4)*

CMOC: Buy-In

Contexts / Resources	Mechanisms	Outcomes	Resulting CMOC:
C1: When CHC activities are dependent on various actors, such	M1: Shared commitment to	O1: Influences the partnerships and O2: CHCs ability to properly implement	When CHC activities are depending on various actors (local government) shared commitment to activities and buy-

as local government	activities M2: Buy-in/support	systems and capacity building activities	in/support can influence the partnership and thus CHCs ability to properly implement systems and capacity building activities.

Decision-Making: Need for local buy-in, especially from influential members and people with power.	**Sources of Supporting Evidence:** CHC6	**Supporting Quote:** *"The other challenge we face is that the chief and the LCIII do not come for meetings yet they are expected to be in the meetings we always have but they do not take these meetings to be serious so they instead do their other work. So it's a challenge to us.....there is some money that comes to the council and that's the money that is to be used in facilitating the hospital so that's why we need a strong LCIII and the council to help implement some of the things because for us the COMMs or job is to only meet and suggest but not implement" (CHC 6)*

Refined Programme Theory 3.1:
Committees that operate in communities with positive past experiences with similar initiatives, that have existing health services and collaborative community systems to support their implementation, may to lead to increased community organisation, advocacy, mobilisation and participation. This is influenced by CHCs' existing relationships and if they actively engage with and link communities and other local actors, including health system and local government, and if they have shared understanding and commitment, which can lead to buy-in and support, thus creating more harmonised activities and improved relationships. Feedback and accountability on these needs collaborations and progress to be visible to partners or feelings of exclusion can occur which may influence buy-in and support.

Table 46 Case Study 2: Programme Theory 3.2 Supporting CMOCs and Development

CMOC: Influence and Power			
Contexts / Resources C1: When CHCs are respected	**Mechanisms** M1: They are in positions of 'power'	**Outcomes** O1: Communities respond to CHC's activities and teachings O2: Positive environment between communities and CHCs	**Resulting CMOC:** In contexts where CHCs are respected, this gives them positions of power, which leads to communities responding to their activities and teachings and creating positive environments between them.

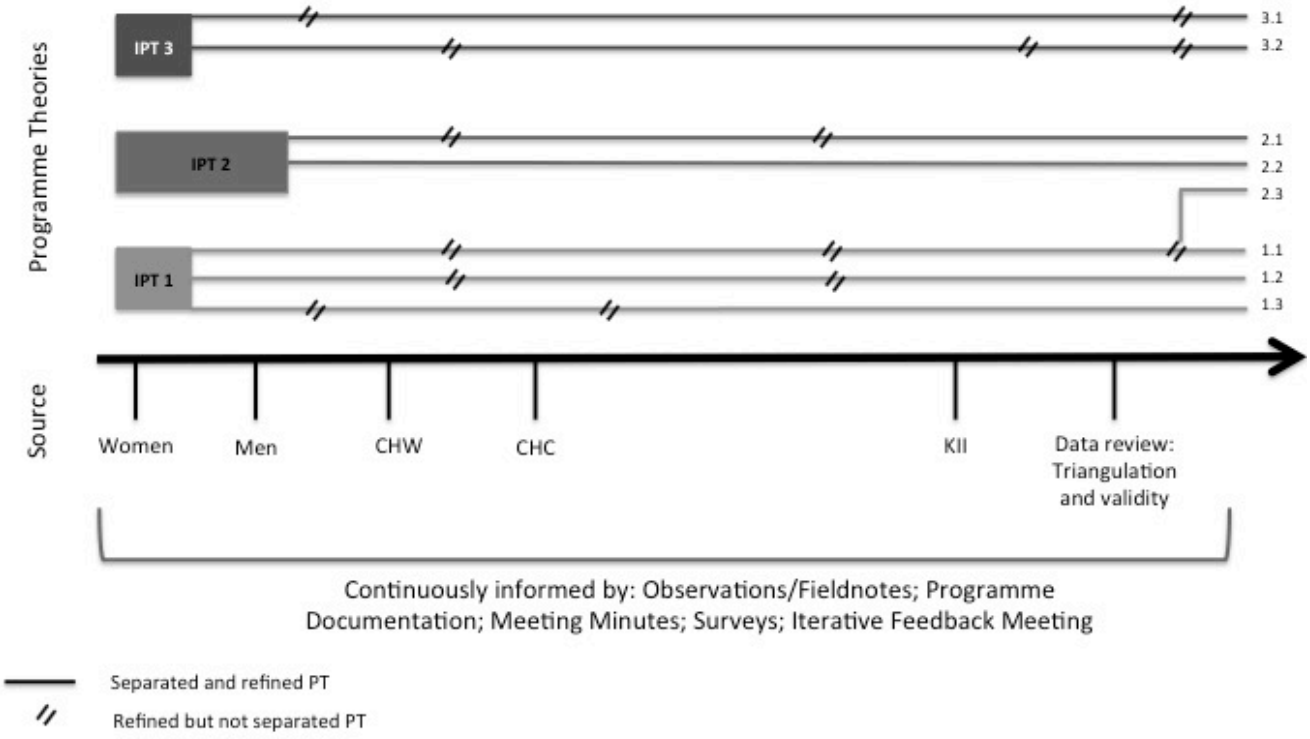
Decision-Making: Highlighting importance of respect for CHCs by community members, and how this influences the relationship between them. Respect is an individual attribute that is a result of social capital (IPT1) - how this respect then manifests at the community level of influence health is a result of the power that this respect 'bestows' upon CHC members. While the mechanism of 'power' is not explicit, from my observations and field notes, as well as overall impressions from interviews, it is power that influences community/CHC dynamic. Linked to IPT1 power/ social capital.	**Sources of Supporting Evidence:** Women 1, Women 3, CHC 6 Observations	**Supporting Quote:** *"They speak to us on sanitation issues and they also encourage us to always visit the health center more often because we have the medical staff and drugs are available for us and because the community respects them, they respond to them" (FGD Women 1)*

<table>
<tr><th colspan="5">CMOC: Abuse Power</th></tr>
<tr><td>Contexts / Resources
C1: CHCs have positions of power, especially over other health cadres
C2: Lack motivation for work
C3: Lack of clear roles and responsibilities for how CHCs work with partners (or do not follow)</td><td>Mechanisms
M1: Abuse of power dynamics and discrepancies</td><td>Outcomes
O1: CHC activities that do not align to guidelines
O2: Negative relationships between health cadres and CHCs</td><td colspan="2">Resulting CMOC:
In contexts where CHC have power and they lack motivation to do work and there are unclear (or not followed) rules and regulations, power dynamics may ensue with CHCs abusing their position. This may result harmed relationships between other cadres, especially those in less power positions, and misalignment of CHC activities.</td></tr>
<tr><td colspan="3">Decision-Making:
The majority of support for this CMOC comes from feedback and follow-up with individuals. The relationship between CHCs and CHWs in this setting was noted as being poor, with little observed connectivity between the two networks. The CHC members were observed to rarely do community outreach (though they reported differently, so we do have contrasting evidence), and would task any of this to CHWs. I think that because their relationship is not that solid, even if this distribution to tasks was appropriate the poor relationship made CHWs resent CHCs for this, as if they were their 'bosses' instead of their partners. This was echoed by the interview with the Health Worker, who mainly discussed the poor supervision CHCs provide, often exerting their ‘power’ over the health staff.</td><td>Sources of Supporting Evidence:
CHW4, KII
Health Observations</td><td>Supporting Quote:
"[CHCs] do not do a lot of work instead they normally send us to do most of their work in community”. (FGD CHW 4)</td></tr>
<tr><td colspan="5">Refined Programme Theory 3.2:
In contexts where CHCs are respected, this gives them positions of power, which leads to communities and other stakeholders responding to their activities and teachings, and creating positive environments between them. However, if CHCs take advantage of this power, which may be more prevalent in cases where altruism is low and/or if relationships with others are poor, and/or if their roles and responsibilities are not clear to members and stakeholders, this may result in unfair distribution of work and negatively impact on relationships and support between CHCs and other stakeholders. This is especially influential when CHCs are tasked with accountability/supervision services and if there are little alternative structures for feedback for stakeholders.</td></tr>
</table>

7.4.1.1 Using CMOCs for programme theory refinement

The extraction of the CMOCs worked to refine the PTs throughout the course of analysis. Multiple CMOCs worked to refine the majority of programme theories. Specifically: PT 1.1 has five CMOCs; PT 1.2 has four CMOCs; PT 1.3 has three CMOCs; PT 2.1 has 4 CMOCs; PT 2.2 has 1 CMOC; PT 2.3 has no original CMOCs as it was separated from 1.1 during the review process; PT 3.1 has 5 CMOCs; PT 3.2 has 2 CMOCs. Figure 20 below details the stages of analysis and when programme theory refinement occurred.

Figure 20 Stages of Programme Theory Refinement During Data Analysis: Case Study 2



7.5. Refined Programme Theories for Case Study 2

7.5.1 Process of Refinement for Case Study 2

The following three tables detail how each IPT was refined throughout the analysis into the finalised programme theories for Case Study 2. Refinements are depicted by underlined text, and the grey shaded boxes at the end of each table enclose the resulting refined programme theories. Appendix 17 includes an NVivo generated figure visually representing 'nodes compared by number of items 'coded'.

Table 47 Case Study 2: Refinement Process for IPT 1

Initial Programme Theory 1			
Individuals within the CHC are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' specific attributes (such as availability of time and knowledge), previous experience and incentives, training and supervision provided to them. These factors together result in increased collaboration within the committee, increased respect by community members and an overall committed committee better able to initiate activities and work towards building community capacity.			
CMOCs Elicited after Woman FGD			
When CHCs are trained and this training is recognisable by community members, confidence in CHCs can form which positively influences the responsiveness of communities to CHC activities.	In contexts with lower education rates and thus education is an important social stratefier, CHCs members who are educated will have the trust of community members and thus communities are more responsive to their activities.	In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital, which leads to more responsive community members and ultimately a better work environment for CHCs.	When communities select the CHC members they can feel ownership and accountability of the CHCs, which enables more trust between these parties and also helps to ensure that CHCs are the best representations of communities and their needs.
Refined Programme Theories			
1.1 Refined PT Individuals within the CHC are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' characteristics (such as availability of time and knowledge), previous experience and incentives provided to them.	**1.2 Refined PT** In contexts where individual attributes, such as education level, are social stratifiers, members' attributes (i.e. education level) can influence the level of trust they have from communities, and thus the responsiveness of communities to their actions. It may be particularly important for these attributes to be recognisable by community members so that confidence in CHCs can form which positively influences the responsiveness of communities to CHC activities. (IPT2). In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital, which leads to more responsive community members and ultimately a better work environment for CHCs.	**1.3 Refined PT** When communities select the CHC members they can feel ownership over the CHCs and communities can old them accountable, which enables more trust between communities and CHCs, and also helps to ensure that CHCs are the best representations of communities and their needs.	
Additional CMOC Men When CHCs receive training and are provided some allowances, this can act as an extrinsic influence to contribute or improve motivation.	**Additional/Revised CMOC Men** N/A	**Additional CMOC Men** In contexts where CHCs volunteer and it is understood the objective is to serve the community, the community has ownership over and thus requires CHC accountability.	

Refined N/A	**Refined**	**Refined** In contexts where CHCs volunteer and have clear objectives to serve communities, and when communities select these volunteer CHC members, members they can feel ownership over the CHCs and communities can old them accountable, which enables more trust between communities and CHCs, and also helps to ensure that CHCs are the best representations of communities and their needs.
Additional CMOC CHW In contexts where political influence is important and CHCs have been chosen based on political affiliations, and especially where these CHCs are not representative of the community, political will can outweigh community altruism, leaving CHCs prioritising political advancement over community advancement, and having communities lose trust in CHCs and their activities.	**Additional/Refined CMOC CHW** In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital and can act as positive examples which leads to more responsive community members and ultimately a better work environment for CHCs.	**Additional CMOC CHW** N/A
Refined Individuals within the CHC are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' characteristics (such as availability of time and knowledge), previous experience and incentives provided to them. It may also be influenced by the level of support (training, reimbursement etc.) they received however other motivational factors, such as personal and/or political advancement, may override these in which case CSS and community relationships can suffer.	**Refined** In contexts where individual attributes, such as education level, are social stratifiers, members' attributes (i.e. education level) can influence the level of trust they have from communities, and thus the responsiveness of communities to their actions. It may be particularly important for these attributes to be recognisable by community members so that confidence in CHCs can form which positively influences the responsiveness of communities to CHC activities. (IPT2). In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital and can be positive examples which leads to more responsive community members and ultimately a better work environment for CHCs.	**Refined** N/A
Additional CMOC CHCs When CHCs are selected by communities, are close to the communities they serve, and can see positive outcomes from their work, they can have altruistic	**Additional CMOC CHCs** CHCs who feel respected by communities can become empowered to contribute to capacity building activities such as partnerships building.	**Additional CMOC CHCs** When community members select CHCs and CHCs feel accountable as they recognise the trust that has been put in them, they may attempt to meet the expectations

feelings towards serving them and to see their community flourish, which increasing their responsibility towards the work. When CHCs are passionate about their cause (community altruism), and recognise their knowledge can help, they may have personal motivation to be committed to CHC tasks. When CHCs are passionate about their cause and have previous past experience with such work, they may gain feelings of pride for what they are doing, which can encourage commitment to CHC tasks.		placed on them, which may influence their dedication/commitment to their work.
Refined Individuals within the CHC are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' characteristics (such as availability of time and knowledge), previous experience and incentives provided to them. CHCs require consistent training and supervision, which can act as extrinsic, factors assisting in CHC motivation. If CHCs are close to the communities in which they serve, they CHCs may become motivated through community advancement and 'altruism/commitment'. This may be especially prevalent if they observe changes due to their work. Other motivational factors, such as personal and/or political advancement, may override these community-centric factors, which can negatively influence community relationships. When CHCs have positive relationships with other community stakeholders are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities for more harmonised	**Refined and Resulting 1.2_Social Capital** In contexts where individual attributes, such as education level, are social stratifiers, members' attributes (i.e. education level) can influence the level of trust they have from communities, and thus the responsiveness of communities to their actions. It may be particularly important for these attributes to be recognisable by community members so that confidence in CHCs can form which positively influences the responsiveness of communities to CHC activities. In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital and can be positive examples which leads to more responsive community members and ultimately a better work environment for CHCs. If this respect if felt by CHCs, they could become empowered to contribute to CHC and capacity building activities.	**Refined and Resulting 1.3_Accountability** In contexts where CHCs volunteer with clear objectives to serve communities, and when communities select these volunteer CHC members and are knowledgeable on their roles and functions, they can feel ownership over the CHCs and communities can hold them accountable, which enables more trust between communities and CHCs, and also helps to ensure that CHCs are the best representations of communities and their needs. CHCs are more likely to feel accountable to communities if they recognise the trust that has been put in them, which may influence their work commitment/dedication.

services, share resources and knowledge, and have strong communication and trust between members.		
Data Review - Separation of more organisational level components into new PT 2.3		
Refined and Finalised PT 1.1_Motivation CHC members are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This is likely to be influenced by the individual members' characteristics (such as availability of time and knowledge), previous experience and incentives provided to them. CHCs require consistent training and supervision, which can act as extrinsic factors assisting in CHC motivation. If CHCs are close to the communities in which they serve, they are likely to become motivated through community advancement and 'altruism'. This is especially prevalent if they observe changes due to their work. Other motivational factors, such as personal and/or political advancement can override these community-centric factors, which can negatively influence community relationships.		**Refined and Resulting 2.3_Relationships and Buy-in** When CHCs have positive relationships with other community stakeholders they are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities, share resources and knowledge, and have strong communication and trust between members and other networks.

Table 48 Case Study 2: Refinement Process for IPT 2

Initial Programme Theory 2	
Committees that have broad membership make-up, have strong operations and processes in place, have strong leadership, with consistent training and supervision and work to build relationships with other community stakeholders are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities for more harmonised services, share resources and knowledge, and have strong communication and trust between members. This collaboration works to increase service delivery, with implementation addressing multiple levels of society, and also works to provide committee synergy and a strengthening of programme management – all of which are assumed to contribute capacity building for MCH.	
CMOCs Elicited after Woman FGD	
When CHCs receive training, and specifically training on their roles and responsibilities, this creates clear expectations, which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff and resource mobilisation.	In contexts where health system accountability is problematic and CHC receive raining on budgets (and other management activities), they can become knowledgeable and empowered to assist in (financial monitoring), which can increase health centre accountability.
Additional CMOC Men In resource poor contexts where CHCs volunteer, without cost-offsetting benefit CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance.	
2.1 Refined PT Committees should have broad membership make-up, strong leadership and training on necessary skills to implement their activities. CHCs also require robust training on role responsibilities and processes which can create clear expectations which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff, and resource mobilisation and health system accountability.	**Refined PT** CHCs require consistent training and supervision, and cost-offsetting benefits to reduce demotivation and poor performance and/or job attrition.
Additional CMOC CHW N/A	**Additional CMOC CHW** N/A
Refined Committees should be apolitical, have broad membership make-up that are representative of communities, strong leadership, and training on necessary skills to implement their activities. CHCs also require robust training on role responsibilities and processes which can create clear expectations which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff, and resource mobilisation and health system accountability.	**Refined** CHCs require frequent training and supervision, and cost-offsetting benefits to reduce demotivation and poor performance and/or job attrition.

Additional CMOC CHCs When CHCs focus on teamwork and where individuals' opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which can influence group dynamics, and internal processes and actions. In resource poor contexts where CHCs volunteer, without cost-offsetting benefit CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance. (NB During data review this CMOC became relevant to PT 2.2)	**Additional CMOC CHCs** N/A	
Refined Committees should be apolitical, have broad membership make-up that are representative of communities, strong leadership, and training on necessary skills to implement their activities. CHCs also require robust training on role responsibilities and processes which can create clear expectations which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff, and resource mobilisation and health system accountability. When CHCs focus on teamwork and where individuals' opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which can influence group dynamics, and internal processes and actions.	**Refined** N/A	
Data Review	**Data Review** Similar CMOC, same components but different configuration due to location within socio-ecological model, relevant to this was used twice, once for PT 1.1 (around individual motivation via extrinsic motivation) "In resource poor contexts where CHCs volunteer, without cost-offsetting benefit CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance."	**PT 1.1 SPLIT into two (1.1 and 2.3)** After CHC6 data was analysed. This was done in several steps: 1- PT 1.1 was reviewed and split into two, 1.1 and 2.3, representing PTs across the different SEM levels 2. Data coded to each PT were then re-reviewed within its new PT. However, it was also kept in its previous code (did not decode from 1.1 and 2.3). 3. Data was then analysed and used to refine this new PT.
Refined and Resulting 2.1_Make-up Committees should be apolitical, have broad membership make-up that is representative of communities, strong leadership, and training on necessary skills to implement their activities. CHCs also require robust training on role responsibilities and processes which can create clear expectations which can focus activities of CHC on the components of community	**Refined and Resulting 2.2_Cost Benefit** In resource poor contexts where CHCs volunteer, CHCs require frequent training and supervision. Without cost-offsetting benefits for committee members, CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance.	**Refined and Resulting 2.3_Relationships and Buy-in** When CHCs have positive relationships with other community stakeholders, they are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities, share resources and knowledge, and have strong communication and trust between members and other networks.

systems strengthening, such as bridging the gap between communities and medical staff, and resource mobilisation and health system accountability. When CHCs focus on teamwork and where individual's opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which is likely to influence group dynamics, and internal processes and actions.		

Table 49 Case Study 2: Refinement Process for IPT 3

Initial Programme Theory 3			
CHCs that operate in communities that have had positive past experiences with similar initiatives, that have strong existing MCH health services and strong systems to support their implementation, and policies that favour their implementation, are assumed to lead to increased community organisation, mobilisation and participation for maternal and child health. They are also assumed to increase community members' ability to participate in health activities, have critical awareness of their rights, and advocate for their health needs. This is assumed to result in creating local leadership (champions) for MCH, increase evaluation and needs assessment, increase health services and health responsiveness, and decrease the workload for health staff and volunteers.			
CMOCs Elicited after Woman FGD			
Where CHCs have existing relationships and activity engage with communities and other local actors including health system and local government, and work to link these actors, they may gain important support from influential actors and also united such parties, which can lead to better harmonised activities and improved relationships	In contexts with other community health initiatives, and when these are supported through either the involvement of then in CHCs or training, harmonisation of activities and partnerships can form, which results in more streamlined activities and messages for more accepting and implementable actions from communities.	In contexts where advocacy resources/teams/networks exist, and CHCs connected with these teams, they can become more knowledgeable on, and empowered to promote, health advocacy to communities, which results in communities being able to more activity participate in health activities and advocacy and know their health rights.	In contexts where CHCs are respected, this gives them positions of power, which leads to communities responding to their activities and teachings and creating positive environments between them.
Refined Programme Theories			
3.1 Refined PT Committees that operate in communities with positive past experiences with similar initiatives, that have existing MCH health services and collaborative community systems to support their implementation, are assumed to lead to increased community organisation, advocacy, mobilisation and participation for health. Where CHCs have existing relationships and activity engage with communities and other local actors including health system and local government, and work to link these actors, they may gain important support from influential actors and also united such parties, which can lead to better harmonised activities and improved relationships. (Harmonisation). When these collaborations are supported, harmonisation of activities and partnerships can form, which results in more streamlined activities and messages for more accepting and implementable actions from communities. In contexts where advocacy resources exist and are connected to CHCs, they can become more knowledgeable on, and empowered to promote, health advocacy to communities, which results in communities being able to more activity participate in health activities and advocacy and know their health rights.		**3.2 Refined PT** In contexts where CHCs are respected, this gives them positions of power, which leads to communities responding to their activities and teachings and creating positive environments between them.	

Additional CMOC Men When communities engage with CHCs, if action and/or no feedback does not occur or is not visible, communities feel frustrated and excluded from activities, which can result in reduced buy-in and support for CHCs.	**Additional/Revised CMOC Men** N/A
Refined Committees that operate in communities with positive past experiences with similar initiatives, that have existing MCH health services and collaborative community systems to support their implementation, are assumed to lead to increased community organisation, advocacy, mobilisation and participation for health. Where CHCs have existing relationships and activity engage with communities and other local actors including health system and local government, and work to link these actors, they may gain important support from influential actors and also united such parties, which can lead to better harmonised activities and improved relationships. Feedback and accountability on these needs collaborations and progress to be visible to partners or feelings of exclusion can occur which may influence buy-in and support. When these collaborations are supported, harmonisation of activities and partnerships can form, which results in more streamlined activities and messages for more accepting and implementable actions from communities. In contexts where advocacy resources exist and are connected to CHCs, they can become more knowledgeable on, and empowered to promote, health advocacy to communities, which results in communities being able to more activity participate in health activities and advocacy and know their health rights.	**Refined** N/A
Additional CMOC CHW N/A	**Additional CMOC CHW** In contexts where CHC have power, and lack community altruism, they may lack motivation to do work and use their positions of power to unequally/unfairly distribute their work to other community networks, which can result in negative relationships between community groups that takes away from the 'partnership'.
Refined N/A	**Refined** In contexts where CHCs are respected, this gives them positions of power, which leads to communities responding to their activities and teachings and creating positive environments between them. However, if CHCs take advantage of this power, which may be more prevalent in cases with altruism is low and/or if relationships with others are poor, this may result in unfair distribution of work and negatively impact on relationships.

Additional CMOC CHCs When CHC activities are depending on various actors (local government) shared commitment to activities and buy-in/support can influence the partnership and thus CHCs ability to properly implement systems and capacity building activities.	**Additional CMOC CHCs** N/A **Additional CMOC KII Health Staff** In contexts where CHC have power, they lack motivation to do work and there are unclear (or not followed) rules and regulations, power dynamics may ensure with CHCs abusing their position. This may result harmed relationships between other cadres, especially those in less power positions, and misalignment of CHC activities.
Refined N/A	**Refined** In contexts where CHCs are respected, this give them positions of power, which leads to communities and other stakeholders responding to their activities and teachings, and creating positive environments between them. However, if CHCs take advantage of this power, which may be more prevalent in cases where altruism is low and/or if relationships with others are poor, this may result in unfair distribution of work and negatively impact on relationships between CHCs and other stakeholders. Within the health centre setting, when CHCs are in positions of power, without clear roles and responsibilities for how to engage with other cadres, negative power dynamics may occur if this power imbalance is abused.
Data Review Tightened language and excluded the paragraph on 'advocacy'. Specific CMOC for advocacy still exists, but it was excluded from PT because the ethos of it incorporated in the first section. It became too specific.	**Data Review** Expanded including 'other stakeholders' not just community stakeholders. Also better integrated its components, while keeping same idea.
Refined and Resulting 3.1_Collaboration and Relationships Committees that operate in communities with positive past experiences with similar initiatives, that have existing health services and collaborative community systems to support their implementation, may lead to increased community organisation, advocacy, mobilisation and participation. This is likely influenced by CHCs' existing relationships and if they activity engage with and link communities and other local actors including health system and local government, and if they have shared understanding and commitment, which can lead to buy-in and support, thus more harmonised activities and improved relationships. Feedback and accountability on these needs collaborations and progress to be visible to partners or feelings of exclusion can occur which may influence buy-in and support.	**Refined and Resulting 3.2_Power** In contexts where CHCs are respected, this gives them positions of power, which leads to communities and other stakeholders responding to their activities and teachings, and creating positive environments between them. However, if CHCs take advantage of this power, which may be more prevalent in cases where altruism is low and/or if relationships with others are poor, and/or if their roles and responsibilities are not clear to members and stakeholders, this may result in unfair distribution of work and negatively impact on relationships and support between CHCs and other stakeholders. This may be especially influential when CHCs are tasked with accountability/supervision services and if there are little alternative structures for feedback for stakeholders.

7.5.2 Refinement at the Individual Level

Programme theory 1.1, 1.2 and 1.3 all went through four, three and three phases of refinement, respectively, as shown in Figure 20. This also included the separation of PT 1.1 with components creating a new PT, 2.3 during the final stage of analysis. Theories present at this level are relevant to individual members within the committee, and related largely to their reasons for becoming, or remaining an active member and requirements needed for individual engagement. Specifically, motivation due to intrinsic and extrinsic factors (PT 1.1) was noted, with the importance of positive reinforcement through seeing visible changes. The potential negative impact of political motivation was also highlighted. PT 1.2 expands on the individual characteristics that can influence CHC's ability to contribute to capacity building – namely that members should have high social capital, which can result in increased trust and responsiveness from communities. Adding to how trust of members can be gained, PT 1.3 notes that members should be accountable to communities, with clear and transparent roles.

Taken together, these theories highlight some of the contextual conditions and resources required to have trusted and motivated members that are able to contribute to capacity building. CHC's accountability to communities, resources or support provided to them as extrinsic motivators, recognition and positive reinforcement for intrinsic motivation, and individual attributes, such as level of education and community reputation, are all important contextual factors to consider 'how, why and for whom' CHCs work within this socio-ecological layer.

7.5.3 Refinement at the Organisational/Committee Level

Programme theory 2.1, 2.2 went through three phases and one phase of refinement, respectively. During the fourth revision for programme theory 1.1, a bifurcation occurred where a new theory, programme theory 2.3, emerged. Thus, there are three resulting

programme theories relevant to the organisational/committee level of how CHCs in Case Study 2 work for capacity building. Committees at this level need to have clear roles and responsibilities, with membership being broad and focusing on areas of leadership and training (PT 2.1). This theory is consistent with many aspects of Community Coalition Action Theory, discussed in more detail in Chapter 5.5.1. Also important at this level, and consistent with CCAT, is the need for the benefits of participation to outweigh the costs (PT 2.2). This is closely linked to PT 1.1, and the importance of having positive community and committee relationships, which can influence respect and buy-in from other stakeholders (PT 2.3). PT 2.3 is likely to link with PT 3.1, in that when there are positive relationships, partnerships and linkages can form.

7.5.4 Refinement at the Community Level

Programme theory 3.1 and 3.2, went through three and four phases of refinement, respectively. These theories work to understand how CHCs best operate at the community level for capacity building. Specifically, it was identified that they need partnerships within the community that are a likely a result of existing relationship (PT 3.1), and CHCs are in perceived positions of power (PT 3.2). Taken together, these theories highlight some of the contextual conditions likely required for CHCs to work towards capacity building at this socio-ecological level. Namely, they need to clear feedback and accountability procedures that are transparent to stakeholders (PT 3.1), and their motives for being a member should be towards community services, as opposed to their own personal/political advancement (PT 3).

7.5.5 Key Programmatic Findings from Case Study 2

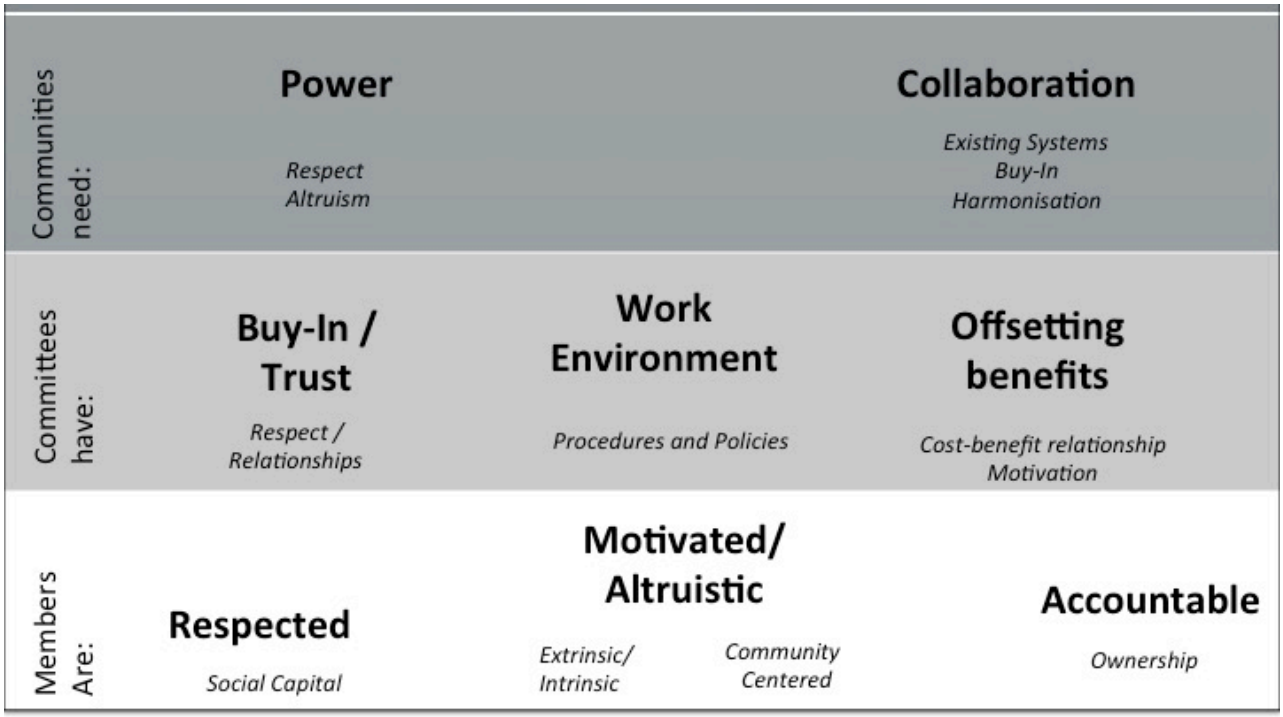
Key programmatic findings for the CHCs within Case Study 2 are consistent with several noted from Case Study 1 (Chapter 6.5.6). Specifically, rather than specifically targeting MCH, the focus of CHCs is primarily on health facility activities, and the supportive environment is provided mainly by the MoH.

Additional programmatic findings from this case however point to the importance of community representation within the committee, and the influence of individual motivation, all of which can be related back to the selection and make-up of the group. Several points relating to political motivations and/or affiliations were made, which appear to have the effect of detracting community commitment. This was, as noted by respondents, traced back to many members being selected by local councils, as opposed to by communities. To this end, the make-up of the group was inconsistent with COMM guidelines, and consequently lacked a focus on community action. The functioning of this group was noted (by WV and MoH) and observed to constitute more of 'fulfilling obligations' as opposed to an actual want for community improvement.

7.6 Chapter Summary

Data from Case Study 2 elicited 24 CMOCs, which worked to refine the IPTs into 8 programme theories across three socio-ecological levels. The resulting programme theories, relevant for the CHCs associated with Kashambya Health Centre III, can be found at the end of Table 46, Table 47 and Table 48. The below diagram, Figure 21, aims to depict main factors from each refined programme theory and visually represent it within the individual, organisational, and community layers. Important contextual influences for each programme theory are also represented. A more detailed discussion of the theoretical implications of these findings is reserved the following chapter, which presents a synthesis of findings across the case studies.

Figure 21 Refined Programme Theories Summary for Case Study 2



Chapter 8: Phase 3 - Synthesis

8.1 Introduction

The previous two chapters detailed the results of each case study ending in the refined programme theories. This chapter presents the results of Phase 3, where synthesis of the case studies took place in order to produce theories that are of middle range for 'how community health committees contribute to capacity building for community systems strengthening'. To do so, it analyses the findings from each case study looking for demi-regularities across the resulting programme theories, and supplements these with additional Key Informant Interviews and the relevant literature. A detailed description on the methods used throughout Phase 3 can be found in Chapter 4.6. The end of this chapter thus presents the overall study findings, which serves to mark the chosen endpoint of this realist evaluation by providing transferable programme theories.

8.2 Synthesis Findings

The three stages of synthesis resulted in four overarching theories that are of middle range. Each theory of middle range corresponded to one of the four socio-ecological domains.

8.2.1 Findings from the Demi-Regularity Search

Details on the demi-regularities that were identified at this stage can be seen in Appendix 18. After demi-regularities were found, synthesised (refined) programme theories were developed. At this stage, a total of 9 programme theories were identified, initially three within each of the following socio-ecological levels: individual, organisation, and community. However, while reviewing all resulting theories and their associations, it became clear that

one theory, 'cost-benefit', was more suited to the 'individual level', and was more closely related to 'motivation', and thus integrated into this domain. Theories and their associated prominent contexts, mechanisms and outcomes were then collated and refined into theories that are of middle range under each socio-ecological domain, the results of which can be found in Box 4, Box 5 and Box 6.

Box 4 Refined Theory at the individual Level – Synthesis Step 1

Individual Domain

CHCs should be made up of members who are respected, motivated, and have 'community commitment'. **Motivation** is influenced by both intrinsic and extrinsic factors. These can consist of financial compensation and/or reimbursements and training (extrinsic), and positive reinforcement through respect, community recognition of services, and if CHC members observe visible changes as a result of their work (intrinsic). These motivational factors can lead to rationalisation for volunteering through offsetting **cost-benefit relationships.** When CHCs are closely connected to communities and have positive community relationships, a sense of responsibility to the community can form, with CHCs being more likely to have **'altruistic'** motives for their involvement.

CHC member attributes can influence their **social capital**. Attributes may consist of: education level, previous experience within communities, perceived stability, leadership skill and decision-making reputation. When CHCs have elevated social capital, this confers **respect,** which can influence one's perceived capability and thus level of trust stakeholders have in the members.

Specific conditions for this to occur may be: CHCs to be seen as apolitical, or to not have a reputation of having their political affiliations influence public good decisions; community-centeredness (proximity and relationships) of CHCs may be a condition for intrinsic factors and **altruism/'volunteerism'** to occur; and roles and functions should be clear to community members to influence respect.

The importance put on social hierarchies/stratifers can influence the impact of member attributes and CHCs may feel more accountable if they recognise the trust that communities have in them. It may also be important that the communities select CHCs, which works to reinforce their commitment to community members, and also influences community ownership of activities.

If these occur they may result in:

- Dedicated and committed members with active engagement
- Sustainability of members
- CHC pride and satisfaction with work leading to confidence/encouragement
- CHCs feeling accountable to communities
- Trust in CHCs by community members
- Responsiveness and support from stakeholders towards the CHCs and intervention

Box 5 Refined Theory at the Organisational level – Synthesis Step 1

Organisational Domain

CHCs need strong organisational functioning to contribute to capacity building. This requires that they are in position of **power** and that they have strong **managerial processes**. To this end, committees should have broad member make-up that is representative of communities, strong (apolitical) leadership, and clear procedures, roles and responsibilities. Roles and responsibilities should include topics of: selection and member regulations (length of services etc.), regularity of planned meetings and clear expectations of their work. CHCs require regular trainings that focus on the skills necessary to implement their actions such as: facilitating partnerships, recording keeping and minute taking.

Specific conditions for this to occur may be: that CHCs are respected individuals; positive CHC activities and outcomes that are visible to stakeholders; roles and responsibilities are clear and transparent to stakeholders; and that community recognition is integration into activities.

If these occur they may:

- Influence positive, collaborative, work environments for CHCs
- Increase member sustainability
- Increase support and trust for CHC work by community members and other stakeholders
- Increase CHC accountability to stakeholders (influence ownership by communities)
- Increase stakeholder responsiveness and participation to CHCs

Box 6 Refined Theory at the Community level – Synthesis Step 1

Community Domain

For CHCs to contribute to capacity building, they require strong **relationships** and **buy-in/linkages** with other stakeholders. Relationships are built (or reinforced) when CHCs are respected and connected to communities, which can influence the level of respect, trust and relatability between CHCs and stakeholders. Stakeholder buy-in of CHCs is also influenced by this relatedness specifically when stakeholders recognise the value-add (perceived effectiveness) of CHCs, increasing trust in them and their work. Together these influence another important requirement of CHC **integration** with other vested parties and communities. If these occur, CHC groups may gain support for their operations, and also harmonise health activities across communities.

Specific conditions for these to occur may be: CHC connectivity to communities; other community activities/initiatives that are prevalent and strong with intentional collaboration; low health system capacity; CHCs are respected; level of CHC motivation; and if CHC work is visible, valued and recognised as important.

If these actions occur they may:

- Gain stakeholder support for CHCs functioning
- Provide a space for communities to engage in capacity building domains (participation, asking why, advocacy, leadership).
- Provide community members with a feedback source.
- Increase communities' ability to engage and participate in community health, and how receptive communities are to CHC activities.

8.2.2 Findings After Incorporating Key Informant Interviews

The four interviews were coded a total of 35 times: four for the Health Education Specialist; 16 for the AIM-Health Project Manager; six for the Health Inspector; and nine for the CVA Programme Manager. Coded references were not used to elicit additional CMOCs, but rather to support the understanding and refinement of current middle range theories, and to provide more contextual support for overarching implementation factors at the societal level. Below is a summary of the contributions from the KIIs at each socio-ecological level.

8.2.2.1 KIIs at the Individual Level

The importance of equity between CHC members and other community-based volunteers for purposes of motivation was brought up by two KIIs. Specifically, extrinsic motivational factors should be consistent across community volunteers with clear roles and responsibilities to reduce competition. The importance of individual attributes, specifically the need for 'vibrant' members and a strong leader were discussed. KII 4 noted the need to provide additional training for CHC chairpersons to foster this leadership. KII 3 cautioned against the make-up of the CHCs, in reference to Case Study 2, and how this influences actions, noting that, "*One disappointment is that the men have dominated the COMMs. That is why you see the few women on COMMs and they cannot deliberate on MCH issues, because they leave it to the men" (KII 3).* To this end, three of the four members attributed some problems to CHC functioning as a result of the selection process, which was noted by two members as being politically influenced.

Two of the respondents specifically noted the 'dormancy' of the CHCs from Case Study 2. One respondent noted, that because of their position, age and gender *"I think they look at themselves as bosses. That is my perspective. I think they look at themselves like that. They are not supposed to be bothered. They are supposed to be respected" (KII 1).*

8.2.2.2 KIIs at the Organisational Level

KII contributions at the organisation level further highlight the importance of 'power' in a group when working with an NGO, and how this contributes to reaching community objectives. It was noted that when people have power, community members attend activities and not demand anything (i.e. NGO reimbursements), because they value and respect the CHC ideas. The importance of visible outcomes was also supported, as noted by one participant *"So they [the community] have seen that these people [the CHCs] have brought*

some change. So they have to listen to them. Whenever they are talking, they have to listen because of the change" (KII2)

Three of the four KIIs noted that CHCs require more skills and training on how to operate as a management committee. It was also noted by all KIIs that the selection and make-up should be revisited, with members clearly knowing the commitment required.

8.2.2.3 KIIs at the Community Level

The need for partnerships and linkages was supported by all KIIs, with more details on how this may (or not) work emerging. All respondents brought up the importance of the Citizen Voice in Action group to create an enabling environment for CHC implementation. It was noted by three of the four KIIs that without CVA partnership, and CVA's advocacy activities within the community, many of CHC's current accomplishments would not have been actualised. For these partnerships to work however, they should have regular engagement (shared meetings) and clear roles with an emphasis on their interactions (teamwork) to limit competition between groups and increase activity harmonisation. The importance of the CHC and CHW interaction was also emphasised by two of the respondents. Together, these three harmonised activities are able to target different aspects of community health, as KII3 notes "*The COMM model and the links with the CHWs and CVAs that's the reason for success of Kitunga [Case Study 1]. I think it's very important to have these three, because when we look at the community structure, all of these three are living in the same community so they should share the same message."*

8.2.2.4 KIIs at the Societal Level

The KII interviews provided insight into important enabling environments for the CHCs. For instance, when undergoing theory refinement, one respondent noted that there is a need for stronger emphasis on supportive and enabling environments at the societal level. Three main enabling/supportive factors were identified, throughout the KIIs and also upon

reflection of Phase 2 data, namely: supportive health sector environments, strength of implementing partners, and collaborative community support.

8.3 Situating the Findings within the Literature

This next section of the synthesis examines and critically analyses extant literature relevant to the findings in the previous section. The aim of this is twofold: first, to provide a 'plausibility check' for the current theories of middle range; and second to situate the findings within formalised theories to clarify, support, or provide more explanatory factors relating to this study's findings.

This section is reported according to the different socio-ecological domains. Of note is that several of the formal theories are relevant to multiple domains, with their implications being discussed across sub-sections. Revisions to the theories of middle range from the preceding chapters will be presented at the end of each section, with highlighted text indicating revisions made to the theories presented in Chapter 8.2.

8.3.1 'Individual' Level

Factors that influence individual members' participation and engagement in CHC activities featured prominently in the CMOCs and PTs within and across the case studies. Several of these are also noted in the organisational and community domains. Individual level factors relate to theories of 'altruism', 'motivation/cost-benefit' and 'social capital' to explain how CHCs work, for whom, and why.

The following sections explore prominent formal theories that support this study's findings, and provide additional elucidative support. To better understand the MRT at this level *social identity theory* and *self-determination theory*, and how they relate to one's altruism and motivation will be examined. Following this, Bourdieu's notion of *cultural*

capital will help further illuminate how one's interaction and individual attributes contribute to CHC functioning.

8.3.1.1 Altruism and Social Identity Theory

Cooperation is noted as involving multiple actors, who work to alleviate a structural problem over sustained and on-going actions, where those who 'cooperate' typically also benefit from their work (Van Vugt et al., 2000). In the North Rukigan context, and as the above demonstrates, CHCs can be seen as a type of organising intervention (Chapter 2.5) given that: they cooperate for the benefit of their communities, that they aim to address community systems strengthening (a structure problem), and that members live in the communities that they serve and thus benefit from any improvements. Van Vugt et al. (2000) provide two sub-classification of problems cooperation targets: common resource problems and common good problems, which involve individual contributions, attributed to activity types of restraint (common resource) or action (common good). Thus, CHCs here work on common good problems. And given that their involvement involves a collective, as opposed to individual level, CHCs themselves can be termed a 'collective action' (ibid).

There are many theories that work to understand cooperation across domain of economics, sociology and psychology. However, this study's findings don't support several classic social theories related to *rational choice*, specifically Olsen's 'Collective Action' (1965) and Hardin's Tragedy of the Commons (1968). Collective action focuses on the concept of 'freeriding' in that if avoidable, individuals will not contribute to achieving a common good. In contrast to Hardin's classic sheep-grazing example, which suggests that CHC's in the community act primarily out of self-interest, in opposition to the common good (Hardin, 2009), this study's findings suggest that CHCs readily, and voluntarily, take collective action to achieve a common good. While personal gains (or the cost-benefit relationship) can be an important influencer, the decision to be an active CHC member involves a myriad of factors such as one's altruism/volunteerism, and motivation through intrinsic and extrinsic sources.

This echoes work on cooperation conducted by Van Vugt et al. (2000) who state that, "why people cooperate for the benefit of the collective is not simply determined by a calculation between immediate costs and benefits of cooperation: it is also influenced by a variety of different norms and values that people bring into these dilemma situations" (pg. 10).

Often cooperation therefore, moves beyond calculated sets of actions to promote self-interest, contrasting traditional models of *rational choice* (Scott, 2000). Rational choice's somewhat pessimistic view of human nature can thus be criticised for its lack of real world considerations (Lindenberg and Frey, 1993). Individuals and their actions are not solely comprised of emotionless and calculated (rational) considerations of costs and benefits. Integrating individual values and how these are influenced by social contexts (and thus not seeing individual and social gain as mutually exclusive) underscores that individual decisions are guided by a number of factors, both selfish and socially-orientated (Van Vugt et al., 2000)

I thus draw from the prominent *Social Identity Theory*, which helps to explain programme theory findings across all socio-ecological levels. Henri Tajfel and John Turner produced Social Identity Theory (SIT) in 1979 (Tajfel and Turner, 1979), though numerous important contributions leading to its formation were published throughout the 1960s and 1970s. Since then, multiple sub-theories focusing on social mobilisation, leadership within and between groups, collective behaviour, marginalisation within groups, and group norms and social influence, have emerged (Hogg, 2016).

Social Identity Theory (SIT) relates to inherent social classifications individuals group themselves and others into, for instance based on religion, age and gender (Hogg and Turner, 1985). This process involves individuals identifying themselves and others within society, which requires aspects of cognition (a sense of awareness) and evaluation (a sense that awareness is related to value) (Tajfel, 1982). If this occurs, SIT postulates two functions: individuals order their environment allowing one to define others; and second, through this ordering individuals can identify themselves within their social world (Ashforth and Mael,

1989). As such, SIT recognises one's personal identity (individual traits), and their social identity (group classifications) (ibid). Individuals' identify with certain groups (called 'in-groups') by categorising themselves and others. As Ashforth and Mael (1989) note "…social identification, therefore, is the perception of oneness with or belongingness to some human aggregate" (pg. 21). This process is called *self-categorization*, and is how one's identity is formed (Stets and Burke, 2000). Social groups, individuals who share common identities or view themselves as members of the same social category, are thus formed (Stets and Burke, 2000). However, as Turner (2010) notes to be considered a social group, members need only to perceived themselves to be within the same social group.

To be classified as a social group, two or more people must be involved, with groups being interdependent for a reason relating to: need satisfaction, attainment of goals, and/or validation of values and attitudes (Turner, 2010). This interdependence and identification, especially in highly cohesive groups, sees individuals defining themselves primarily at the collective (group) level as opposed to a personal level (Van Vugt et al., 2000). SIT is therefore aligned to cooperation in that it postulates that individuals undergo collective action for the common good because they evaluate their fate to be tied to their social identity (Van Vugt et al., 2000, Brewer and Kramer, 1986). Turner (2010) further emphasises this point in relation to cooperation and altruism by noting that "altruism is primarily an intragroup rather than interpersonal phenomenon, that its main necessary condition is the perception of 'we-group ties' between individuals [dependent on common social identification] and that it represents behaviour based on the cognitive extension of the self, not its abolition. We help others, apparently selflessly, because we perceive their needs and goals as those of our social category and hence as our very own" (pg. 31).

Social identity theory thus offers a better explanation for why individuals, especially those closely connected to their communities, may cooperate for the good of the 'social'. Mechanisms of altruism or volunteerism within this study, triggered by their 'community

centeredness' (a frequent context across several domains), are thus supported, and expanded upon by postulating this may be tied to one's perceived identity. This is also supported by the individual case studies as in Case Study 2, with CHCs being less connected from communities due to geographical range, the CHC group was less active and showed limited signs of community altruism. Whereas the CHCs in Case Study 1, who were noted as being well-functioning, were very close to communities, allowing for a greater social identity between CHCs and the individuals they serve to be formed.

Additional findings from this study highlight that ones' social identity may not influence commitment and action alone. In other words, do individuals volunteer (cooperate) only to elevate their perceived individual or group identity, or are there are other driving forces that work to explain why some are motivated at this level? To answer this we can draw from motivation theory literature that aims to understand why some individuals choose to engage in such work.

8.3.1.2 Motivation and Self Determination Theory

Throughout the course of the analysis I distinguished two different factors (intrinsic and extrinsic) that contribute to motivation. Upon recognising the importance of motivation within this study, and thus synthesising with formal motivational theories, this phase clarifies and distinguishes the different types of motivation beyond what was noted in Phase 1 and Phase 2 findings. As such, terminology will be updated within this section to best reflect the relevant formal theories to which this study's findings from the previous phases best align. This process does not change the underlying CMOCs, but works to better situate, and thus explain, programme theories within the relevant literature.

CMOCs and related theories specific to motivation, defined as the forces and drivers acting on or within an individual that result in the continuation (or initiation) of a behaviour (Snyder and Cantor, 1998), were the most prevalent within this study. At the individual level, it was found that both one's level of 'community commitment' and their related 'motivation'

(influenced additionally by intrinsic and extrinsic factors and the perceived cost-benefit relationship) were integral factors that explain why, how, and for whom CHCs work.

Much focus on motivation is concerned with the distinction and influence of intrinsic and extrinsic motives, as proposed by Porter and Lawler in 1968 (Gagné and Deci, 2005). Intrinsic and extrinsic motivation are differentiated by the rational for one's behaviour (Deci and Ryan, 1985). *Extrinsically motivated* actions are those that involve some tangible reward or consequence from the activity, designated as a 'controlled motivation' (Deci, 1971). In contrast, *intrinsic motivation* is when one derives satisfaction through the act itself (Ryan and Deci, 2000, Gagné and Deci, 2005). Examples of 'extrinsic' motivation relevant to this study could be training, financial incentives and tangible non-financial incentives whereas intrinsic motivation could be feelings of pride in work, all of which were identified resources, contexts or mechanisms.

Porter and Lawler's model postulates that to produce job satisfaction individuals need to be both intrinsically and extrinsically motivated (Gagné and Deci, 2005). Later work on motivation however showed that intrinsic and extrinsic motivation do not operate as additive, but can have positive and negative interactions (Deci, 1971, Gagné and Deci, 2005). Further explorations on this topic lead to *Cognitive Evaluation Theory* (CET), which highlighted the roles that *autonomy* and *competence* play within motivation. CET propositions that intrinsic motivation is increased when feelings of autonomy and competency are enhanced, however diminishing these feelings reduces intrinsic motivation.

While CET received much attention from 1960 to the mid 1980s, notable critiques, specifically around its 'one or the other' approach to intrinsic or extrinsic motives, and the difficulty in translating some of the concepts to a real world setting, were prevalent. Consequently, Deci and Ryan's (1985) more practical *Self Determination Theory* (SDT), which incorporates aspects of CET, was put forward. SDT posits that goal oriented actions must be explored in conjunction with the underlying psychological needs that influence the goals

(Deci and Ryan, 2000). To this end, it differentiates the types of motivation that influence individuals by distinguishing between *autonomous* and *controlled* motivation (Ryan and Deci, 2014). According to Ryan and Deci (2014) "autonomous motivation encompasses intrinsic motivation and well-internalised extrinsic motivation, whereas controlled motivation encompasses regulation by external factors such as externally administered rewards and punishments or by partially internalised (i.e. interjected) contingencies…" (pg. 5755). Specifically, people experience violation or self-endorsement of their actions through autonomous motivation, whereas controlled motivation relates to feelings of expectations for behaviour (Deci and Ryan, 2008).

A third concept, *relatedness*, is noted as a catalyst for autonomous motivation. Feeling connected to one's social world and the individuals within it (relatedness) therefore offers a foundation in which autonomy is more likely to develop (Deci & Flaste, 1995). All types of motivation should be present to influence behaviour, however their outcomes may differ. Individuals who are autonomously motivated are predicted to have more sustainable actions, and greater performance of activities (Deci and Ryan, 2008).

SDT's position that individuals are motivated through a combination of autonomous and controlled factors is consistent with this study's findings. And while within this work importance is not awarded based on quantity, like SDT suggests, more instances of autonomous motivation were noted across the case studies. This suggests that *why* CHCs work (in literal terms and in terms of their functioning), is consistent with the SDT model of motivation. Particularly, SDT's concept of relatedness further emphasises the need for 'community-centeredness' and reiterates Social Identity Theory's promulgation of shared social identity. Both theories highlight that CHC members' connection to communities is an important influencer on group identity, and subsequently commitment and relatedness, and thus motivation.

Additionally, work by Deci (1971) and Ryan (1982) can help to further explain and support a frequent context within this study (need for visible actions/outcomes) and mechanism (positive reinforcement). These scholars note that positive reinforcement can act as a source of autonomous motivation through the promotion of self-competence. When CHCs can attribute success to their actions, competence is increased, and their motivation becomes more volitional. However, negative results of actions can cause people to be *amotivated* through a decrease in perceived competence (Gagné and Deci, 2005). This may have implications for Case Study 2, where male community members reported (by KIIs) little value-add and influence of CHCs within the health facility.

8.3.1.3 Cultural (Social) Capital

Throughout the course of the analysis, I took 'social capital' to mean status (or capital) given to a person based on the accumulation of their individual perceived attributes and traits, such as education level, reputation, etc. However, when further examining contributions to the study of social capital, it became apparent that the majority of the CMOC references to social capital more appropriately reflect social stratification, and how this may influence one's *cultural capital*. Social capital, more relating to group benefits, thus helps to explain theory relating to group 'power' at the organisation level. These two concepts will be explored in tandem below, as cultural capital can be relevant to the individual, which can influence the CHC's social capital (which is relevant to both groups and individuals), and they share consistencies with Bourdieu's contributions to the field.

The sociological idea of cultural capital is largely attributed to Pierre Bourdieu's work (1977, 1986). During their review on the topic Lamont and Lareau (1988) proposed the definition of "cultural capital is institutionalised, i.e., widely shared, high status cultural signals (attitudes, preferences, formal knowledge, behaviours, goals and credentials) used for social and cultural exclusion" (pg. 156). Kingston (2001) notes that cultural capital has two defining characteristics: (a) that capital is a resource with 'market value' that is widely

accepted; and (b) that it is exclusionary, as it is not available to everyone, only the 'elite'. As such "the elite benefit because "their" particular cultural signals, not others, are rewarded" (pg. 89) insinuating that being awarded cultural capital is context dependent. Through stratification and exclusion principles, cultural capital can result in social hierarchies. As Gaventa (2003) notes, due to these formed hierarchies, cultural capital greatly influences societal power relations.

Cultural capital can be converted into other forms of capital (economic or social), depending on the conditions (Bourdieu, 2011, Bourdieu, 2003). Findings from this study insinuate that cultural capital (individual) can help in converting social capital (organisational) to the CHC groups. Middle range theories and CMOCs within this study relating to "respect" (individual level) and its influence on "power" (organisational level) can thus be further supported and explained with cultural capital. Individual attributes (resources/context) were found to trigger mechanisms of cultural capital (within the results, designated as 'social capital'), resulting in outcomes of trust and support. CHC members' who were seen as educated/knowledgeable, responsible had 'cultural signals' that rewarded them with capital. Specifically, cultural capital within this study was found to require contexts of 'social hierarchies' to trigger mechanisms; however, relating work in this field, cultural capital may itself enforce this context.

Box 7 Refined Theory at the individual Level – Synthesis Step 3

Individual Domain

CHCs should be made up of members who are respected, motivated, and have 'community commitment'. **Motivation** is influenced by both autonomous and controlled factors. Controlled factors may consist of financial compensation and/or reimbursements and training (extrinsic), and autonomous factors such as positive reinforcement which influences competence, and community recognition of services, should CHCs observe visible changes as a result of their work (intrinsic). These motivational factors can lead to rationalisation for volunteering through offsetting **cost-benefit relationships.** When CHCs are closely connected to communities and have positive community relationships, they can have a shared social identity, which can improve collective action and **'altruistic'** motives for CHC involvement. This may also result in increased relatedness, which can improve autonomous motivation.

CHC member attributes can influence their **cultural capital**. Attributes may consist of: education level, previous experience within communities, perceived stability, leadership skill and decision-making reputation. When CHCs have elevated social capital, this confers **respect,** which can influence one's perceived capability and thus level of trust stakeholders have in the members.

Specific conditions for this to occur may be: CHCs to be seen as apolitical, or to not have a reputation of having their political affiliations influence public good decisions; community-centeredness (proximity and relationships) of CHCs may be a condition for social identity to form; and roles and functions should be clear to community members to influence respect.

The importance put on cultural capital (and by extension social hierarchies) can influence the impact of member attributes and CHCs may feel more accountable if they recognise the trust that communities have in them. It may also be important that the communities select CHCs, which works to reinforce their commitment to community members, and also influences community ownership of activities.
If these occur they may result in:

- Dedicated and committed members with active engagement
- Sustainability of members
- CHC pride and satisfaction with work leading to confidence/encouragement
- CHCs feeling accountable to communities
- Trust in CHCs by community members
- Responsiveness and support from stakeholders towards the CHCs and intervention

8.3.2 At the 'Organisation Level"

Relating this study's middle range theory findings back to the literature at the organisational level involves exploring concepts of 'power', and 'managerial policies'. Relevant formal theories to these concepts have been introduced previously. Further

expansion and their applicability to refined theories will now be discussed, starting with social capital as an extension of the previous section, cultural capital.

8.3.2.1 Social Capital

Like cultural capital, there are several prominent theories relating to social capital, namely from Bourdieu (1986), Coleman (1990) and Putnam (1993). These scholars see social capital as something attributive to a group, as opposed to an individual (Lin, 1999). Bourdieu (1986) refers to s*ocial capital* as the notion that networks (groups) have benefits, which can be used to leverage economic advancements. Putnam (1993) expanded this definition by introducing shared values, norms, and trust, which work for mutual benefit through increased cooperation.

Portes (1998) notes in their extensive review of social capital that the term has been used as a catchall phrase, which consequently takes on different meanings. This review found three basic functions of social capital: source of social control, source of family support, and source of benefits through extra-familiar networks (Portes, 1998). Bourdieu's conception of social capital aligns best to the latter function, which is also consistent with this study as the most common use of benefits through networks is from social capital is from the results of stratification (linking back to cultural capital). As such, social capital can be seen as the ability to obtain benefits through relationships and memberships in social networks or other social structures (ibid). Social capital can assist in explaining access to resources (both tangible and intangible) and success of group functioning. Reviewing findings from Light (1984) and Light and Bonacich's (1998) work on immigrant entrepreneurship in America, Portes notes that trust within groups is also influenced by social capital, in that the shared contribution to activities is contingent on the trust members have in each other (Portes, 1998). Without trust, generated by shared social capital, organisational engagement may thus be limited. This point can be seen to contribute to this study's theories at both individual and organisational levels, where 'trust' was found to be both important contexts and

mechanisms. As such, social capital can further expand our understanding of how members become trusted, how individuals within groups trust and cooperate, and, as will be shown in Chapter 8.4.3, how this translates to the wider community domain.

As previously noted, 'respect' towards someone can be conferred based on their cultural capital. This also influences trust for social capital, both independently and as a continuation of cultural capital. In other words, the higher the group's social capital, the greater the respect they are given, which then can influence their ability to create connections and function. In line with Putnam's views of social capital, groups that have high social capital (influenced by their respect, level of trust, norms, cooperation etc.) can more easily work together, both through intra- and inter- group relations (Portes, 1998, Putnam, 1993). This supports findings from this study, which highlight that groups need power (ability to connect and influence), which is triggered when members are respected. Social capital, like cultural capital, can work to expand the understanding of related theories by emphasising the benefits conferred to groups with social capital (from shared values, norms and trust) and how this can leverage advancements (such as cooperation).

Portes (1998) warns however, that while social capital is instrumental in gaining group traction there are potential negatives, mostly relating to unequal representation through exclusion based shared similarities. Thus, an important component to build capital can work to impede it. Take for instance Case Study 2, where, on the outside social capital is likely very high due to the demographics, and their assumed cultural capital, of members (majority prominent men over the age of 65). These similarities work to 'bond' members through shared capital, and likely even contribute to the perpetuation of similar capital being reinforced within the committee. However, within Case Study 2 this exclusion may have negatively influenced the functioning of the CHCs for capacity building. Members in this group struggled to meet the facilitative contexts of strong processes and policies (including

appropriate community representation), and had less 'community centeredness' (lack of 'relatedness') than those in Case Study 1.

Relations between individuals, explained by SIT, may also link to Social Capital. As Portes (1998) notes, "to possess social capital, a person must be related to others, and it is those others, not himself, who are the actual source of his or her advantages" (pg. 6). Expanding on the previously introduced Social Identity Theory in relation to the organisation level can help further explain the committees' interactions.

8.3.2.1 Social Identity Theory and the Group

Independence, resulting from social capital relations, can lead to cooperative social interactions, communication, mutual attraction and influence between individuals, helping to explain positive committee functioning. SIT, as noted in Chapter 8.4.1, helps to create such relations through social classification. Thus, whereas social capital highlights why a group is awarded benefits, examining SIT at the organisational level can help understand how individuals within that group identify and operate.

Group behaviour, according to SIT, is dependent on shared social identities and one's awareness of their common categorisation (group) (Turner, 2010). An important component necessary to bring awareness to one's group is the existence of an 'out-group', as Tajfel (1982) notes that "we identify ourselves only in relation to others" (pg. 24). In this case, in-group members, those that share social identities, will be treated more fairly than those in an out-group (ibid). Relating this to CHC organisational functioning, it may help to explain the importance of member relatedness and cohesion. Specifically, why there is a need for explicit and transparent 'managerial processes/roles and regulations' (roles and values), as a way to help distinguish in-group from out-group, and in reinforce shared social identities.

To this end, groups compare themselves to others, with positive discrepancies between groups leading to prestige. According to Tajfel and Turner (2004), the need to evaluate one's group (in-group) against another (out-group) works to influence and reinforce

positive identity, as “the in-group must be perceived as positively differentiated or distinct from the relevant out-groups” (pg. 284). It is this pressure to discern one group from another that can influence group action. This aspect of SIT is particularly relevant to Case Study 1, where CHCs noted being motivated by wanting to leave visible change, and specifically having community members recognise their contributions compared to groups coming before, or after, the current make-up of the CHC. As there is only 1 CHC group within each community, this consideration may be particularly relevant to length of membership. With long service durations and limited member turnover, CHC groups have limited out-groups for comparisons. By instigating and enforcing a finite length of service for CHC members, activity level may improve out of a desire to positively differentiate themselves from any predecessor or successor.

Individuals attach value and emotional significance to their membership and affiliations within a social group (Tajfel, 2010). The perceived performance, or ‘evaluation’ of that group is therefore inherently tied to one’s self-esteem and individual motives (Tajfel and Turner, 1986). As well, individuals’ concern over the status of their group and their position within it is noted as being higher when group affiliations are stronger (Brewer and Kramer, 1986). It can therefore be conjectured that when group cohesion is stronger, individuals within that group have stronger attachment and more motivation for group performance. This may explain variation in the perceived functioning of CHCs between the two case studies, where CHC1 (noted as being closely connected) were better able to influence community capacity than CHC2. Components of SIT, and the importance of attachment and cohesion between members can also be found within Community Coalition Action Theory.

Box 8 Refined Theory at the Organisational Level – Synthesis Step 3

Organisational Domain

CHCs need strong organisational functioning to contribute to capacity building. This requires that they be in position of **power**, resulting from having high social capital influencing cooperation and trust. Groups should have high relatedness, with positive shared identities, in order to become more cohesive. This may be particularly impactful if there is an external group to evaluate actions against.

Committees also need strong **managerial processes**. They should have broad member make-up that is representative of communities, strong (apolitical) leadership, and clear procedures, roles and responsibilities. Roles and responsibilities should include topics of: selection and member regulations (length of services etc.), regularity planned meetings and clear expectations of their work. They require regular trainings, which focus on skills necessary to implement their actions such as facilitating partnerships, recording keep and minute taking.

Specific conditions for this to occur may be: that CHCs are respected (have high cultural capital); shared social identities; positive CHC activities and outcomes are visible to stakeholders; roles and regulations are clear and transparent to stakeholders; and that community recognition is integration into activities.

If these occur they may:

- Increase controlled motivation (through having strong management - roles and regulations)
- Increase cooperation and performance
- Influence positive, collaborative, work environments for CHCs
- Increase member sustainability
- Support and trust for CHC work by community members and other stakeholders
- Increase CHC accountability to stakeholders (influence ownership by communities)
- Increase stakeholder responsiveness and participation to CHCs

8.3.3 At the 'Community Level'

We can again draw from social identity theory and social capital to help understand how CHCs work within the community domain for two considerations: (a) how and why the CHCs interact with other agents; and (b) how and why other agents interact with the CHCs. Incorporating a further discussion on cooperative behaviours of groups (collective behaviour) wraps up the analysis of this study's findings at the community level.

8.3.3.1 Social Identity Theory, Cooperation and the Community

Applying the principles of SIT from the CHC as a group, who share social identity for a common good problem, and abstracting this to a community who share a social identity, we can understand how cooperation at this level can emerge. Aligned with Complex Social Identity Theory, individuals can have multiple 'social identities'. Complex SIT notes that the more complex your social identity is, the less you value personal power, and the more you value tolerance, the more positive one is about 'out groups' (Roccas and Brewer, 2002). As CHCs may identify as 'committee members' but also as 'community members' or 'community health workers' etc., this may be particularly relevant. Extracting from the previous sections on SIT, we can then postulate that collaborative and productive linkages and partnerships between CHCs and other groups are likely more prevalent when groups share similar identities. Therefore, not only are shared common goals important, but also CHCs' partnerships may be more effective when identities are shared, or members categorise themselves similarly to other partners.

In collaboration with 'shared goals' this helps to explain findings related to the strength of partnerships within this study. For instance, prior to CHC implementation reports of poor relationships and partnering between the CHWs and CHCs were prevalent. After a combined training focusing on the overall AIM-Health programme, multiple stakeholders reported improved collaboration between these groups. Likely, these trainings emphasised a common goal, and also increased shared identities amongst the CHCs and the CHWs. This finding is consistent with Allport's (1954) Contact Theory, which notes four conditions for intergroup contact (equal group status, common goals, intergroup cooperation and authority support)(Pettigrew, 1998), again highlighting the importance of common goals for intergroup collaboration.

Examining intergroup interactions through Social Identity Theory highlights several important considerations for the CHCs in this research, some of which have already been

highlighted in previous sections, specifically: the importance of having a shared 'social identity' with communities; and the need for intergroup comparisons for positive evaluation leading to activity. Particularly important at this level is that intergroup cooperation (between CHCs and other groups) can occur when there are shared goals (Tajfel, 2010). This helps to emphasise several components of the middle range theory within the community, notably how linkages and partnership can form and/or be reinforced, and how the perceived strength (commitment) of MoH/WV stakeholders is important. These observations however, can also be reversed. In other words, the Ministry of Health and World Vision might commit more to groups they feel they share goals with. Consequences of this may be reinforcing, in that stronger groups receive more support/partnerships than their lesser functioning counterparts. While not confirmed, this matches some observations where both MoH and WV appeared to have stronger connections with Case Study 1, whom they feel are strong CHCs, as highlighted during KII feedback (Chapter 8.3.2).

8.3.3.2 Social Capital – A Synergistic View

As of yet we have taken a well-defined and overall accepted view of social capital. To understand how a group's social capital can influence functioning in the community however, it is necessary to distinguish between some different schools of thought on the topic. Specific to social capital and development, Woolcock and Narayan (2000) completed a comprehensive review, which identified four main views of social capital: communitarian view, networks view, institutional view, and synergy view. Each view involves different actors and perspectives. The CHCs from this study and their functioning within the community best align with this synergistic view, which highlights the need for coproduction, participation, linkages and enhancing the capacity of community organisations. Synergy can be understood as the ideas that community engagement strengthens the state, and effective state institutions create conducive environments for community engagement (Woolcock and Narayan, 2000). This synergy, when effectively managed, can see an increase in social capital

through repetition of interactions infused with trust and shared norms. In essence, this reciprocity type interaction sees each partner gain value (Evans, 1997).

The effectiveness of government-citizen action, according to Evans (1996, 1997), is based on *complementarity* and *embededdness*. Like the name implies, *embededdness* denotes the connectivity between citizens and government individuals, that is, how well connected are they (for instance, do MoH members live within the community?) (Evans, 1996, Woolcock and Narayan, 2000). Complementarity, on the other hand, refers to any existing supportive relations and policies (for instance, already established community health worker programmes) (Woolcock and Narayan, 2000). Building off existing social capital, but also working to reinforce and enhance it, these two actions assist in linking organisations to make more effective actions. When there is pre-existing social capital, this can heighten the synergistic relations and linkages (Evans, 1996). Of note is that while Evans' (1996) original idea of synergy involved citizen groups and the government, its principles can also be applied to World Vision and other more formal partners.

The notion of synergy and social capital relates well to the theory of middle range within the community domain as it helps to further explain why, how, and for whom partnerships and linkages can form. The *complementary* component would suggest that clear roles and responsibilities between CHC members and WV/MoH (an identified context), influence the linkages of the partners, through shared trust. It is also of importance as contextual findings note that pre-existing relationships between MoH and the CHCs (then, HUMCs) were present, and between WV and the community, due to their historical involvement and the introduction of the AIM-Health Programme in 2011. Synergy also emphasises the importance of mutually beneficial relationships, and works to understand why partners may be more invested in groups with higher social capital (increased trust and more effective outcomes). Pragmatically, we can understand that if synergy is existent, not

only do CHCs benefit from increased support and resources, but partners also benefit through improved actions likely contributing to their own agendas.

Box 9 Refined Theory at the Community Level – Synthesis Step 3

Community Domain

For CHCs to contribute to capacity building, they require strong synergistic **relationships** and **buy-in/linkages** with other stakeholders. Relationships are built (or reinforced) when CHCs are respected and connected to communities, which can influence the level of respect, trust and relate-ability between CHCs and stakeholders. Buy-in is also influenced by this relatedness, specifically when stakeholders recognise the value-add (perceived effectiveness) of CHCs, increasing trust in them and their work. Productivity of these partnerships can be influenced through sharing common goals, and if CHCs and communities have shared social identities. Together these influence another important requirement of CHC **integration** with other vested parties and communities. If these occur, CHC groups may gain support for their operations, and also harmonise health activities across communities.

Specific conditions for these to occur may be: CHC connectivity to communities; other community activities/initiatives are prevalent and strong with intentional collaboration; low health system capacity; CHCs are respected; level of CHC motivation; if CHC work is visible, valued and recognised as important; the distinction between 'in-groups' and 'out-groups'; the level of social capital; and embededdness and complementarity of partners.

If these actions occur they may:

- Gain stakeholder support for CHCs functioning
- Provide a space for communities to engage in capacity building domains (participation, asking why, advocacy, leadership).
- Provide community members with a feedback source.
- Increase communities' ability to engage and participate in community health, and how receptive communities are to CHC activities.
- Increased productivity of partnerships

8.3.5 Situating the Findings within the Literature: The Societal Level

Three overarching enabling contextual factors for CHC implementation were found throughout the study, outlined in the box below. As these were not identified through realist evaluation analysis technique, but identified throughout the whole research process and specifically informed by the KIIs, they did not undergo any subsequent refinement.

With the aforementioned MRTs being refined, specific contextual factors highlighted throughout the study, can be explored to understand their influence on CHC functioning (MRTs 1-3). Specifically, looking at Uganda's Health system, (Chapter 1.4.2) and reflecting on identified contexts throughout this study (Table 17, Table 18 and Table 37) broader contextual conditions for these are historical support/legacy (implementation of World Vision community health initiatives), and health policies (Uganda's focus on CEMH). The strength of implementing partners (MoH and WV), and their commitment to the CHC intervention, is also an essential context within the wider socio-political sphere. This is likely influenced by positive relationships (previous past engagement) and the ability and commitment of individuals leading such endeavours. For instance, within this context the two main MoH partners for AIM-Health within N. Rukiga and World Visions' AIM-Health project manager were all very dedicated to the COMM intervention, were on very positive terms, and shared responsibilities for implementation (Table 17). Additionally, and most relevant to MRT 3, is that there needs to be in existence collaborative support structures for multi-level targeting. The AIM-Health programme design (Chapter 1.5) emphasises a multi-layered intervention with different activities addressing different levels of the system.

Box 10 Conditions at the Societal Level – Synthesis Step 3

Societal Domain

CHCs focusing in health centre activities, need:

(a) To have supportive health sector environments from the ministry of health, including appropriate number of health facilities, strong community health policies, and the ability (and desire) to support CHC actions, such as staff replacements and granting permission for health centre infrastructure improvements;
(b) The need for strong implementing partners within the community (WV and MoH), who themselves have positive working relationships; and
(c) Collaborative community support which focuses on aspects of community system strengthening the CHCs are not able to do, so as to make a more facilitative environment.

The last point most specifically referred to the need for strong CHWs and CVA groups that can improve community advocacy (societal level) and ensure that messages/actions are being received within households (community level). It became clear that it is unrealistic that CHCs alone can strengthen community systems. While they likely can make substantial contributions alone, success will be best achieved when collaborative alliances focusing on different aspects of capacity and health are implemented.

8.4 Chapter Summary

Phase 3 of this research, the synthesis, involved three processes: (i) a demi-regularity search across the findings from each case study, which involved combining and refining theories of middle range; (ii) supplementing the resulting theories with four key informant interviews; (iii) situating the theories within extant literature, and refining based on the literature and results from the KIIs. The finalised middle range theories for this study can be found in Box 7**-** Box 10**.** Which, taken together complete the realist research cycle by presenting Middle Range Theories for 'how, why and for whom' community health committees work to build community capacity within North Rukiga, Uganda. The MRTs emphasise several important factors for CHC functioning across four socio-ecological domains: altruism, motivation, and cultural capital (individual); power and managerial processes (organisational); synergistic relationships, buy-in and integration (community); and enabling environments through supportive health infrastructure, strong partnerships, and collaborative community actions.

Chapter 9: Implications for Practice, Methodological Reflections and Conclusion

9.1 Introduction

With an analysis of theories relevant to this study's findings undertaken in the previous chapters, presented here are programmatic and methodological implications of this research, recommendations for future work, and study limitations. This chapter aims to link theoretical concepts identified through the refinement of Middle Range Theories (Chapter 8) with operational work relevant to policy and practice for the aim of advancing the field of study and improving programme implementation.

9.2 Exploring the CHCs

9.2.1 Understanding this Study's Community Health Committees

Chapters 1 and 2 provided a detailed review of community interventions and community health committees within low-and middle-income contexts. Relating this body of knowledge back to this study's CHCs and their functioning can help to understand them in relation to other community interventions and community committees. Drawing from Table 3 presented in Chapter 2.5, Rosato's (2014) model for community intervention classification which categorised interventions based on practice variables, can help to understand where the CHCs fit in line with the five resulting categories. The committees from this study would likely be scored a 4, as practice variables have a spread from 3-5. For instance, while the CHCs' 'conceptualisation of health' would be considered socio-environmental model (4 or 5), the role of external agents could be classified as a 3 (supports community to marshal existing

capacities and bring them to bear on issues). Drawing from this, if we aim to have interventions that are classified as a 5 as discussed in Chapter 2.5, specific issues for CHCs to focus on would be: their target groups, insuring more specific targeting of marginalised groups including a stronger gender focus; the existing strengths and weaknesses, where the community lacks some skills but has other capacities; participation, where there is scope for community-driven decision-making to be improved; and resources, where some resources (for instance, money for building staff house) have been mobilised by communities, others are dependent on the external agent.

Looking at the functioning of the CHCs, McCoy's classification of seven types of committees (governance, co-management, resource generator, community outreach, advocacy, intelligence and social leveller) and how they act ('inward' performing activities at the health facility or 'outward' performing activities centred around communities), further works to classify these CHCs. Programme documents on the intervention overall indicate that the CHCs' aims suggests that they fall into several of McCoy's identified categories, specifically: 'community outreach' and 'leveller', with groups acting outwardly. However as indicated in Chapter 6.3 and 7.3, in actuality the committees would be classified more as 'governance', 'co-management' and in the case of CHC 1, 'resource generator', both whom act inwardly (are health facility focused). The reasoning for this difference between policies (programme design) and implementation (reality) is due to the priority for CHCs to be integrated into relevant existing committees during the initiation phase, as opposed creating new, and thus parallel, services. Despite this recognition however, within this study there were contradictions between the implementation focus and the COMM programme design, meaning CHCs were functioning differently than architects anticipate. As such, existing structures for implementation, monitoring and evaluation, may need revision to be more applicable to the CHCs within this context.

9.2.2 Understanding Capacity Building of the CHCs

Through administering capacity building surveys to all participants the CHC's ability to contribute to community capacity building was explored. Supplementing these findings with qualitative data and documentation further assesses the CHC's capacity building capabilities.

CHCs within this study scored quite high in their ability to build capacity, with CHC1 being slightly more influential than CHC2. As noted in Chapters 6.3.2 and 7.3.2, the CHCs struggled most with increasing evaluation, leadership and mobilisation for health within their communities. The 9 domains of capacity building are best placed within the 'community' and/or 'societal' domains of socio-ecological models. As this study addressed CHCs across other domains, resulting PTs may not directly link to a specific capacity building domain. However, we can trace the progression of PTs at levels best placed to influence 'capacity' back through the different layers, reinforcing the value of a systems approach to explaining how and why CHCs contributed to capacity building domains.

Domains of evaluation, leadership and mobilisation having the lowest score may be explained by the CHCs' actual focus within the setting (i.e. aligning more as a health facility committee), than what the NGO anticipated. For instance, one of the tasks of the CHCs was to conduct community needs assessments; however, these were not done. CHC1 did however conduct facility needs assessments, providing the MoH and WV with lists of items the health centre required. Community members, who rated CHCs lower than the CHCs and CHWs did for this domain, likely did not have evidence of their *evaluation*. Their focus may have also influenced the lowest levels of *mobilisation* reported. As noted in the previous section, the CHCs were found to be 'inward' acting, with most of their activities and focus being conducted within the health centre. Even when mobilisation activities occurred (for instance CHC1 collecting money for building new staff housing), this was done in partnership with other groups like CHWs and Local Councils, so attribution to CHCs for these may have been limited. CHCs' lower scoring on *leadership* may also be explained by the long length of

time the Chairpersons and members on the committee serve, therefore not allowing new individuals to engage and thus new leaders emerge. Additionally, while CHCs engaged in partnership activities, most of these were with pre-established groups and did not require supporting emerging leaders for health.

CHCs' ability to contribute to other capacity building domains can be understood through examining the MRTs across the system. The importance of relationships and linkages was extremely prevalent within this study. While they themselves are individual domains, this study highlights their connectivity. For instance, why and with whom strong *linkages* occur, can be explained through pre-established relationships. Yet, to have '*relationships*' it was noted that CHCs have to be trusted. For CHCs to be 'trusted', they need clear procedures and policies. *Linkages* are strongly associated with relationships, but also influenced by the availably and strength of other services and the buy-in (based on visibility of actions) these potential links have to the CHCs.

CHCs' ability to increase *organisational structures* for health within their community could be best explained by their influence at the health facility, which may explain why this was rated high amongst participants. Their strength in this domain may be attributed to stakeholders observing positive actions (visibility). Findings related to CHCs' ability to increase *control* over health services are most demonstrable by looking at outcomes related to health staff and infrastructure, and also linked to their organisational structures. For instance, in CHC1, community members were critical (*asked-why*) of some health staff, which the CHCs were able to replace. It can also be understood that if *participation* is strong, individuals are most able to critically question and '*ask why*' of their health service. Relationships between CHCs and communities (community connectivity) can influence participation.

It is evident when looking at the capacity building domains within this study that these are strongly interconnected across the system, with strength in one domain assisting in

building strength in another. Implications for this may be that low scores in one domain could be much more influential than anticipated, due to ripple effects. Aligned with systems thinking approaches, ensuring strength across all domains requires a holistic understanding of how these interact and work, with frequent monitoring to ensure that CHCs are properly supported to work towards all aspects of capacity. Yet, the importance of understanding context is again reinforced when looking at CHCs within this study. While literature and NGO programming would highlight capacity building as an essential outcome of CHC implementation, committees within this context may not have been implemented in a fashion that facilitated this across all domains. Their adapted focus (health facility) means that other unanticipated outcomes or knock-on-effects were important to understand how, why and for whom, CHCs within this context work.

9.2.3 Refinement: IPT to MRT

Large amounts of IPT refinement occurred throughout the study to produce the MRTs. Comparing the findings (MRTs) back to the lPTs highlight some important distinctions and similarities, and can work to better explain the influence of some literature presented in Chapter 5.

Elicitation of IPT 1 indicated the need for contexts/resources to distinguish between 'software' and 'hardware' components and personal attributions, which trigger mechanisms related to motivation, satisfaction and respect by stakeholders, ultimately enhancing CHC performance and retention. The findings from this study support many of the CMOs found within the IPTs, and further elaborate on some of the contextual conditions required, as well as linkages between the resources/contexts. For example, Sheikh (2011) notes that 'software' consists of relationships, power, personal ideals, which we classified at the 'individual level'. MRT findings further explain 'how and why' these software supports are formed across socio-ecological domains, and the influence they have on triggering other mechanisms (i.e. shared personal ideals can lead to common social identity, influencing

altruism and commitment to activities). Resources such as training and supervision were found to be important within this study, with additional contexts/resources required for motivation such as reimbursement, and offsetting cost-benefit relationships.

One of the biggest differences between IPT1 and MRT1 is in relation to the 'community connectivity' of individual CHC members. Whereas components of IPT2 note the need for community ownership, no IPT captured the importance of CHCs being strongly connected with their communities, something which was very evident throughout the MRTs as both a context and mechanism for how and why CHCs work (or don't).

IPT2 noted the need for broad member make-up, strong operations and processes, relationships with other stakeholders and committee resource support. These were all tested throughout the study and found relevant within the MRT. Some further refinement did occur however, namely: (i) while broad make-up is important, it is also important (maybe even more important in terms of motivation and sustainability) that members are representative of their communities in order to form shared social identity; (ii) strong managerial processes can also influence autonomous motivation of individuals as well as enforcing policies and processes; and (iii) the need for clear and transparent activities/outcomes and roles and responsibilities of CHCs and other stakeholders are required to influence trust and buy-in. A more thorough discussion on the MRTs and CCAT is discussed in Chapter 9.5.1.

IPT3, relevant to the 'community domain' identified the importance of relationships, community embeddedness and CHC perceptions to trigger mechanisms of trust and support, ownership and accountability, and collaboration. These may trigger outcomes of community/stakeholder satisfaction of interventions, motivation and sustainability of CHC members and harmonisation of activities. Refining this IPT throughout the study further emphasised a prominent finding: the importance of partnerships and linkages. These essential contexts/resources at this level are triggered when there is trust (often assisted when positive outcomes are visible), respect (influenced by cultural and social capital) and

connectivity and integration (which triggers shared identities leading to collaboration). That a CHC's ability to build capacity is influenced by the strength of its partners and linkages with other complementary activities underscores the need for a systems lens when evaluating such complex health interventions.

IPT4, while acknowledged as limited in its explanatory power throughout Phase 2, served as a tool to help understand the wider societal contextual factors for CHC functioning. While not in itself a MRT, nonetheless, findings from Phase 3 provide insight into conducive environments for CHC operationalization. Three main conditions were found important at this level. First, the supportive and strong environments including health infrastructure with appropriately numbered and resourced facilities, investment in community health programming and management and subsequent formalized support from MoH. Second, strong implementing partners (MoH and WV) that collaborate effectively to support CHC implementation. Lastly, the importance of collaborative community support structures is emphasised. Whereas these overarching socio-ecological contextual conditions are not in contrast to IPT4, one notable exclusion occurred. Specifically, the need for CHCs to be reflective of socio-cultural norms was not identified as pertinent within Phase 2. I would contend however, that this is not to say this context is irrelevant to CHCs (quite the contrary), but within this context there were limited instances of socio-cultural discrepancies or differences, leading this 'contextual condition' difficult to discern.

9.2.4 Comparing with Recently Published Literature

Since the elicitation of the IPT, several relevant studies have been published on CHCs or similar groups. As these important pieces of work did not feature in the IPTs (and thus were not incorporated into the testing or refining of theories) they will be briefly presented here and compared with this study's findings. The studies focus around two main topics: committees for accountability, in which Lodenstein and colleagues conducted both a realist review on provider responsiveness to social accountability initiatives (2016) and a cross case

comparison of health facility committees (2017); and village health committees, where George and colleagues (2015b) conducted a narrative review of contextual factors influencing health committees, and Scott et al. (2017) used this review's findings to qualitatively explore committees in India. All four studies aimed to identify contextual conditions relevant to the functioning of a type of committee.

There are several parallels that can be drawn between Lowenstein's (2016) realist review on social accountability through collective citizen action and advocacy, and the health provider's response (where many of the detailed activities were related to health facility committees), and this study. Similar to this study's use of SEM as a contextual framework, Lowenstein identified three contextual levels (micro, meso and macro) that guided their review. Their review elicited six CMOs which work to explain: 1) provider's perceptions and expectations of health service users; 2) providers' perceptions of the legitimacy of citizen groups; 3) providers' feelings of support, safety and appreciation; 4) providers' fear of repercussions from influential third parties; 5) providers' feelings of moral obligation; and 6) providers' self-perceived capacity and identity. While all identified CMOs have some common factors with this study's findings, two (CMO2 and CMO6) are particularly relevant.

Within CMO2, several attributes of citizen groups were identified that influence providers' perceptions of their legitimacy: 1) perceived capacity of health committee members as a barrier to positive collaboration with providers, 2) health providers' genuine interest in or concern for health committee, 3) internal group unity and collaboration, and 4) community group engagement in health service activities outside of monitoring and evaluation (Lodenstein et al., 2016). While not described as such, this study reinforces all of these identified contexts, with findings from this current study expanding on potential explanations of *why* some of these are important. Their attribute 1 (perceived capacity) was seen as an important contextual consideration within this current study, notably that there is CHC outcome visibility to trigger buy-in. Their attribute 4, relating to community group

engagement, draws parallels with our 'community relationships' and also the need, again, for actions to be known. And their attribute 3 can relate to our contextual findings at the organisational level of 'group management'.

CMO6 (providers' self-perceived capacity and identity), notes that "social accountability initiatives in these contexts may generate responsiveness outcomes and improved relations… if providers identity with the citizen group and its ideals or claims (M). This is likely to be facilitated when social accountability initiatives (C) build on/are embedded in large-scale societal and political change (C)" (pg. 134). Shared social identity to influence responsiveness and buy-in is a finding shared between the studies. While this current study identified contextual factors to trigger such mechanisms at a lower level (community connectivity), this study found triggering contexts at a wider meso/macro level. As their review worked to identify important contexts, hopefully this study can contribute to this existing knowledge by understanding 'how and why' some of these contexts work to generate.

Lodenstein et al. (2017), bridging from the realist review, conducted a cross case comparison of 11 health facility committees (HFC) and their influence on social accountability within three West African countries. Like this study, the authors noted that despite regulations, selection and composition of committee members varied from what implementers anticipated. The importance of remuneration was featured across the HFCs (paralleling findings on extrinsic motivation within this study). Additionally, the authors highlight the importance of informal and personal relationships, further underscoring the need for 'shared social identity' and community connectivity found within our study. Notably, Lodenstein and colleagues (2017) highlighted that HFCs exist in communities with 'multiple interfaces', such as other community groups, which often share or adopt similar roles as the HFCs. With the partnerships and linkages as an important contextual/resource factor within this current study, taken together it emphasises the need to understand the relationship (the

interface) between committees and other community initiatives. Of importance however, is that the authors note in contexts with social hierarchies, that 'elite' HFC members may better negotiate relations with health providers. Yet, comparing with this study's findings on the need for shared society identity with community members, we could then ask the question of - what effect would more 'elite' members have on communities, and specifically on members' commitment to committee actions?

George and colleagues (2015b) first conducted a review of contextual factors influencing village health committees in LMICs. The authors were able to categorise findings across four contextual spheres: community, health facility, health administration, and society. Cross-cutting issues relevant to all spheres were noted as being awareness, trust, benefits, resources, legal mandates, the role of political parties, the role of NGOs, markets, media, social movements and inequities. Within each sphere the authors note specific contextual conditions that work to influence village health committees, several of which are resonated within this study. Similarities specific to the community level are unequal representation of communities of committees, and community scepticism (lack of buy-in). They also note the need for managerial support (health administration level), and the influence of social movements and historical factors (societal). As such, MRT 1, and MRT3 within this study are able to help explain findings from George et al. (2015), to understand how, why and for whom, these contextual factors work.

Scott's (2017) study in northern India used the contextual factors identified by George et al. (2015) to explore Village Health, Sanitation and Nutrition Committees (VHSNC). The authors identified enabling contexts within each sphere (community, health facility, health administration and society). Shared contextual conditions that influence committees across their study and this current study are identified as: NGO engagement and support, health system and infrastructures, social hierarchies, and the partnering with 'allies'. The authors

also note the importance of the identification of committee value by communities through visible positive change.

Comparing this study's findings with the four studies above has thus highlighted shared contextual conditions that, due to the wide geographic range the five studies encompass, are more confidently assumed as influential contexts for committees within LMICs. This study also shared several generative mechanisms with the studies, specifically relating to social identity and relationships, and power. Findings from this research can also be used to explain some of the findings from the described studies, and taken together these five research projects work to advance the field of community health committees within LMICs.

9.3 Implications for Practice

9.3.1 Feeding into the COMM Intervention

Table 2 details COMM objectives, with Objective 1 focusing on an 'Improved and enabling community/civil society context for positive outcomes', Objective 2 on 'Improved policy and service environment for positive health', and Objective 3 'Strengthened CHW programmes for household level behavioural change communication'. Within this case, specific objectives for outcome 2 and 3 appear to be met, at least in part, within the case studies. However, several specific objectives within Outcome 1 (strongly linked to capacity building and community systems strengthening) are lacking, notably around community health causes being analysed, monitored and reported (1.2, 1.4) and that community activities are implemented to address health issues (1.3). That is not to say that some of these activities never existed, more that it was not seen as CHCs' roles and responsibilities (Chapters 6.3 and 7.3). This may be attributed to CHCs' focus in reality as they function more as an 'inward' health facility committee.

Adding to this point, where COMMs were designed to be a MCH focused group, in reality, their work was more broadly focused. This observation is consistent with COMM guidelines and objectives however, and speaks more to a mislabelled NGO focus. An intervention that aims to contribute to both community systems strengthening and health systems strengthening would essentially contradict itself if its actions were solely focused on one topic. For similar 'systems-focused' interventions, lessons can be learned for focus and subsequent intervention design. For instance, often the respondents noted the need for increased training, specifically around management skills like book-keeping (MRT2). Resources may be better placed in training CHC groups on group facilitation and management, partnership strengthening (i.e. how to facilitate and support the implementation of other, more topic-focused cadres like CHWs and health staff), instead of implementing MCH lessons. This would also align more with community capacity domains and potentially increase CHCs' ability to contribute to this desired outcome.

A prominent finding within this study is the need for the context of 'community connectivity' of CHCs. As noted in Chapter 8, this can explain differences in commitment between CHC1 and CHC2, and guide the need for more localised programming (i.e. run out of HCII instead of HCIII) for capacity building outcomes. It also guides group selection in that, while it is important to have broad membership and respected individuals, members need to be able to identify with the community. Balancing the need for shared social identities with those that have high cultural capital is likely an essential task when looking at membership make-up. This task may be best placed with the community itself. While often community-based initiatives (like CHWs) emphasise that communities should select volunteers, within this study many members were appointed as the historically operating Health Unit Management Committees, which influenced their motivation and also their shared identity. Drawing again from Social Identity Theory, we can further understand that it is important for CHCs to identify themselves relative to another group, for instance comparing themselves to

previous CHC members. This can have implication on length of service, further emphasising the need for procedures and policies for group management.

Evidenced throughout the design of this study, and supported by the findings, is that CHCs working towards capacity building work across systems. However, they cannot be expected to do everything. Partnerships and linkages within this study were found to be essential supportive factors that influence how CHCs work. To this end, for effective functioning of CHCs to build capacity, the importance and strength of other groups and their links (including but not limited to MoH/WV and CVA/CHW) may be as instrumental as the CHC itself. That is, groups working towards community outcomes (like capacity building) require other supports that share common goals.

9.3.1.1 Recommendations for Practice

Based on the above section, there are several recommendations that can be made for CHCs to work towards capacity building for community systems strengthening within this context:

1. Review COMM activities in practice and re-evaluate programme design, monitoring and evaluation tools to ensure they best reflect committee implementation
2. Stronger training on committee management and facilitation skills should be introduced
3. CHC operationalization for community capacity building and community systems strengthening should be focused at lower levels of implementation (i.e. village vs. district, HC II vs. HC III)
4. Re-evaluation of selection techniques and/or committee member requirement as members should be respected and closely connected and representative of the communities in which they work. Selection of members is likely best placed with the community
5. Managerial procedures and processes, specifically in relation to maximum lengths of time for service, should be enforced
6. CHCs work across systems and with partners. Programmes should continue focusing on strengthening other community actors (like CHWs and CVAs) and building partnerships. Relationships and collaboration between implementing partners (MoH and WV) should continue to be fostered and supported

9.4 Implications for Theory

The previous chapter incorporated a thorough discussion of relevant theories for this study, with Box 7- Box 10 presenting the refined middle range theories which explain 'how, why and for whom CHCs work to build community capacity for community systems strengthening'. As such, this section discusses Community Coalition Action Theory and its implications within this study, and provides recommendations for future research based on the findings presented in Chapter 8.

9.4.1 Community Coalition Action Theory and CHCs

Community Coalition Action Theory (CCAT) has been detailed previously (Chapter 5.5). As Phase 2 Chapters note, due to the small number of committee members within this study, the Coalition Self Assessment Form was used to provide an overview of how CHCs' perceive their committee to be working against key CCAT propositions. Generative mechanisms around theory were explored through the qualitative data; however, some concepts received insufficient data to properly explore CCAT as a whole within this study.

As evidenced by the MRT findings, CCAT provided important dimensions to explore in relation to committee functioning, such as member make-up. However, this study showed that CHCs' ability to build capacity is not just about how they function as a group, as the individuals within the committee and their relationships with the community and wider society are interconnected. Additionally, where CCAT offers insight into 'what' committees should consist of, it offers very little explanatory power (the how and why) on these propositions.

Therefore, within this context CCAT is not sufficient alone to explain how and why such interventions work even at the organisational level. Notably, the importance of community identity-connectivity, individual motivation, and respect were important contexts

for functioning at the organisational level, yet these are all lacking within CCAT. CHCs' build capacity based on a combination of contexts and triggered mechanisms across socio-ecological domains of the individual, organisational, community and society, and without sufficient pathways recognised throughout these levels, the explanatory power of theories fails to identify all that is required for capacity building.

9.4.2 Recommendations for future Research

This research has practical and theoretical findings that can inform recommendations for future research. To contribute to the development of theory within CHCs, and aligned to the realist inquiry cycle, the first recommendation is to use this study's theories and further test/refine them through additional case studies in different contexts to further develop the Middle Range Theory and make for more transferable findings. Second, future research should investigate CHCs with different functions (i.e. not as health facility focused) using the same or similar approaches to see if findings are specific to CHC functions or are relevant to a broadly applied definition of 'community health committee'. Third, it is recommended that a similar approach be used to investigate CHCs with different types of supportive environments/partnerships (for instance, without the implementation of CHWs and/or CVA groups) to further explore the relationships between these and their influence on CHC functioning. Considering its importance features heavily within this study it would be of benefit to understand the implications for CHCs' functioning without such support, and how this may impact on 'how, why and for whom' they work (or not work). Lastly, and to this end, CHCs with varying levels of NGO support should be explored to see if committees that operate without such formalised guidance work similarly, adding further support (or refinement) to concepts of partnerships.

More programmatic research recommendations would be to understand the relationship between 'cost-benefit' and 'motivation' - both of which were found to be important, but difficult to discern throughout the work. Specifically, for programmes

understanding potential retention levels (i.e. at what cost-benefit expense will volunteers become demotivated and/or lead to attrition) can help address programme efficiency. Additionally, more research on the relationships and connectivity between other community actors and initiatives (i.e. CVAs, CHWs and CHCs) and how these can be best supported and sustained is suggested.

9.5 Methodological Implications

As discussed, realist evaluation methodology as a whole is still being defined, explored and expanded upon by scholars. To add to this, there is little methodological precedent for using realist evaluations within NGO operations research projects and within LMICs. Advancing this field therefore requires researchers to be reflective and transparent with their experience on using realist evaluations. Thus, this section aims to contribute to the advancement of realist evaluation methodology by reflecting upon this study's processes, challenges, and adaptations.

9.5.1 Realist evaluation for operations research within NGO programming

There are few realist studies within low-income contexts, and specifically within NGO programming for operations research. Yet – and as evidenced by the specific strand focusing on "Realist approaches in international development" at the upcoming 2017 International Conference for Realist Research, Evaluation and Synthesis, and Van Belle, van de Pas and Marchal's (2017) recent call for such approaches within global health research, this is a field of growing interest. I think both academics and NGOs are seeing the potential for realist studies to be used as a form of operations research within NGO complex health interventions, and if others share my experience, this field will only continue to grow. As such, it is important to reflect upon some lessons learned throughout this process.

When discussing operations research methodology with NGO partners, the mantra (and thus promise) of investigating 'what works, for whom, and why' is extremely appealing to programme implementers. Caution around ignoring the great deal of complexity concerning answering this question, and thus the subsequent complexity in the answers, should be clearly laid out. Commissioners of research should be clear that findings will not be as straight-forward as "[A] works, for [B], because of [C]", and expectations around the language of dissemination and potential level of analysis transparent. I would go as far as to suggest avoiding incorporating the realist mantra until NGOs are convinced of realist's applicability through a more fundamental exploration of its methodology and processes to identify demi-regularity patterns and subsequent theories of generative causation, which may provide for transferable findings within programmes.

Like all research, the time and resources required to undertake such a project should not be underestimated and may not conform to NGO timeframes and budgets. Specifically, realist evaluations require a lot of investment at the beginning stages of eliciting IPTs, which then inform the field study design. This may also have implications for ethical review boards where the IPT may need to be developed prior to submission. Another important consideration prior to embarking on a realist operations research project is the level of capacity within countries of study as there are few realist researchers based in low- and middle- income countries. The resources and time required to train any research assistants should not be underestimated; yet, this provides a wonderful opportunity to build capacity for this methodology within research countries and should be seen as an opportunity, not an obstacle, of such work.

Reflective of some of the conditions noted above, some adaptations were required to make the research more conducive to an NGO environment. The case studies were run simultaneously, some data collection tools (such as using focus group discussions for community data) were purposefully chosen despite having a limited previous use with REs,

and ‘checking’ data through a feedback session as a substitute for CMOC validation were all done. In many NGO operations research programmes, researchers may not have the time to conduct case studies iteratively, with data collection tool adaptation taking place between case studies, or revisiting sites to validate CMOCs. Additionally, within community health programming, FGDs may often be a more suitable method to gain community acceptance. As such logistical influences should not jeopardise the ethos and rigour of realist evaluations, further work may also need to be reflective of the conditions in which these programmes operate, with some adjustments made to best reflect the situation and context.

Reflections from the NGO partner and myself both highlight the value realist evaluations can bring to operations research for intervention improvement. Partners were very receptive to the research reports and the findings provided, specifically noting their applicability for contextually informed recommendations. I do think that using a systems-thinking approach within this work also contributed to its practical value, as NGO partners were familiar with similar models and this helped in visualising findings across intervention domains (Chapter 1.3).

9.5.2 Power and Realist Evaluation

The topic of power imbalances between researchers and participants is heavily discussed within qualitative methodologies. To my knowledge however, and despite the frequent use of qualitative methods and tools, there have been no discussions on power imbalances between researcher and participant and the implications for findings in realist evaluation methodology to date. Likely exacerbated by the rural, community based setting in which this research was conducted, I specifically note that power imbalances influenced the ‘realist interview technique’ and therefore collaborative theory refinement.

The most current discussion on realist interviews comes from Manzano’s (2016b) publication titled ‘*The craft of interviewing in realist evaluation*’ which reviewed 40 realist evaluations published between 2004-2013. Based on these studies and Manzano’s own

experience in realist evaluation, the publication provides guidance in the area of the realist interview. This paper notes that reported difficulties in realist evaluation methodology typically come from the analysis phase, noting "surprisingly, qualitative interviewing is treated as unproblematic with little attention given to fieldwork processes or the act of the interview itself" (Manzano, 2016b). Even within this robust research the topic of power-imbalances was not addressed. The objective of this section is therefore to report on challenges experienced while conducting realist interviews, and to provide some potential adjustments to the realist interview to reduce the potential limitations these challenges might have.

To begin a distinction is needed between power that influences participants' voice and input, and the knowledge that researchers have of the subject. I think that the topic of 'power' within data collection may be missing from realist developments because it is recognised that researchers do have power within realist studies, as we are 'engaged researchers' who are expected to bring in our own experiences into the study (see Chapter 3.6.5 on retroduction). This however, is different from the inequitable power distributions between researcher and participant that bias responses. It is the latter that I take forward for this discussion.

Qualitative data in this study was done by first conducting semi-structured interviews using an interview guide. Following that, a visual representation of the IPTs was introduced and the 'teacher-learner' approach was used to further refine theories. This process was found suitable and informative for data collection within some participant groups (key informants for Phase 1 and 3). However, with so many participants in Phase 2, the teacher-learner approach proved difficult. The 'spelling out' of the tentative theories was very rarely met with opposition, with participants often agreeing with and accepting the proposed IPT. I attribute some of these difficulties to the perceived power imbalances between the researchers and participants, as this process meant having an educated research team (one

being foreign) 'teaching' participants what we thought and then asking them to 'teach' us what they thought (that is, tell us where we are wrong). Relating this notion back to education systems, rarely are children taught to question what teachers are saying as they are the knowledgeable authority.

Throughout the data collection different techniques were tried to mitigate these difficulties. These included adjusting our language (removing terms such as 'teaching' or 'theory'), continual encouragement for more contribution, and referring back to topics the participants discussed in the FGDs/IDIs, specifically things that would refine or reject our theory. While these techniques did assist in fostering more input from participants, the most influential modification occurred when the 'teacher-learner' was reversed. In some instances following a FGD/IDI, having the participants first teach us their theory (with guidance from us based on what the discussions entailed) generated more input. While this was only done in a couple of interviews, adjusting the interview technique in this way proved a useful adaptation to adjust for power imbalances within realist evaluation.

In sum, depending on the context, realist methods and tools might need to be adjusted to limit the negative impact power imbalances may have on the data. Specifically, the realist interview technique could be re-envisioned to allow for participants to 'teach' first after a guided interview. At the very least, it is important for researchers working in such contexts to consider the approaches they use within data collection and put in place appropriate tools to reduce any discrepancies that can bias data. This may be particularly important given the potential rise in realist evaluations within LMICs (Chapter 3.3.1).

9.5.3 Systems-Thinking and Realist Evaluation

As evidenced by the resulting MRTs, the use of systems thinking approaches within a realist evaluation, namely incorporating the socio-ecological model to help organise and understand the CHCs across different socio-ecological levels, proved to be very compatible and useful. Using SEM as a theoretical framework to highlight functioning within specific

levels (individual, organisational, community and societal) was extremely instrumental in organising the data, as it gave some structure to code sources to. Given the number of coded references and resulting CMOCs, during data analysis this allowed for a clearer picture of how (and where) the contexts and mechanisms generate change by acting as a framework.

SEM also worked to highlight interactions between the CMOCs, PTs and thus the systems levels. In doing so it not only highlights specific PT contexts and mechanisms, but also other contextual conditions at different systems levels necessary for such CMOCs to exist. For instance, to have 'linkages' (community level), having the resource of 'existing partnerships' (community level) can act as a trigger for trust and buy in (i.e. understanding within the same level); however, expanding beyond the community level it is clear that 'power' (organisational level) is important for partnerships, which is influenced by 'respected individuals' (individual). Thus, systems-thinking, and namely using SEM as a tool for systems-thinking, allows us to trace PTs and their enablers or disablers across multiple levels. For other realist evaluations that are looking at interventions across multiple levels (i.e. not just CHCs as individuals, but how they work as a whole) incorporating systems thinking may be specifically helpful.

9.5.4 Methodological Adaptations and Recommendations

This section reports on lessons learned to contribute to the methodological advancement of realist evaluation, specifically within low-and middle-income contexts and/or within NGO operations research based on this previous section's discussions. Within the Focus Group Discussions, some of the CMOCs did not come from one respondent, but multiple respondents building from one another's statements. As it is important for CMOCs to be found as an extractable unit within the source, I contend that having participants build ideas and explanations together is equally as valid as having one individual describe a CMOC. However, the literature and support for the FGDs within realist interviewing is limited and

would benefit from further investigation into the process of conducting and analysing a realist focus group is recommended.

Further investigation into how power imbalances influence realist evaluation data collection, specifically the realist-interview technique should also occur. Specifically for methodological adaptations, switching the order of the realist-interview may assist in reducing some of these power imbalances.

Other adaptions made due to logistical reasons were running case studies consecutively, with the synthesis of findings to produce MRTs, and using 'data checks' with participants as opposed to feeding back refined CMOCs and PTs. These processes were well suited to conducting a realist evaluation within an NGO operations research project. It is recommended that other studies employing similar adaptations, or that those using realist evaluation within NGO programming document and reflect upon their processes to contribute to the methodological advancement of realist evaluation.

While not an adaptation per se, but a note to other realist researchers, is the potential use of NVivo during the analysis process for data management. The process I used for Phase 2, described in Chapter 4.5.2, was the result of multiple trial-and-errors. While informed by Dalkin and Foster (2015), to my knowledge this specific process for realist evaluation analysis had not been done before. However, I do think that it facilitated the application of the principles of retroduction and the process of iteration within theory refinement, while ensuring transparency through tracking the refinement process. I would recommend that other researchers consider using such a technique in their analysis.

Lastly, this study used a 'theory within a theory' to better understand relationships and organise findings relating to the CHCs. Using the socio-ecological model was not only consistent with a systems-thinking approach, but it allowed for connections between contextual domains (individual, organisational, community and society) to become clearer. For studies that look across multiple systems-levels, frameworks/theories (if driven by the

evidence during IPT elicitation) can be a useful tool both logistically and theoretically for a realist evaluation. To this end, I think it is important to further explore the relationship between using systems-thinking and realist evaluation. While this study highlights their compatibility and suggests realist evaluation may be a valuable methodological tool within systems-thinking approaches, further exploration of, and evidence for, their synergy would help to strengthen both fields moving forward.

9.6 Reflections

9.6.1 Reflecting on the methodology

This section provides reflections related to Phase 2 and Phase 3 of the study. As it was pertinent to assisting in field study design, reflections for Phase 1 were previous discussed (Chapter 5.8). To avoid repetition, reflections from the individual case studies are presented together unless otherwise stated.

This was my first experience analysing realist data using NVivo using the methods described in Chapter 4.5.2. As such, reflecting upon my experience during the analysis phase allowed for alterations to be made. For almost all sources I initially coded more 'coded references'. Once coding was complete and I reviewed the coded references specific to each node, many of them did not fit or contribute to the research question. At times, I would move the coded reference to different nodes, but more often I deleted the code entirely. There are two principal scenarios where a code was deleted. First (and most frequently), the code was deleted if, upon review, the coded reference did not contain an extractable CMOC. Before deleting the code, I would review the source of the code to verify that indeed, no extractable CMOC was present at the source. The second scenario where a code was deleted was if the coded reference did not contribute to the research question. I believe this happened when I would lose sight of the IPT/PTs, and code for anything relevant to CHCs, instead of how they work for capacity building.

As systems are not static (and CHCs are complex health interventions), some challenges in Phase 2 and Phase 3 arose specifically in relation to deciding where some programme theories were located within the system. Programme theories can actually occur across various domains concurrently and are likely frequently changing. However, to best organise and then draw relationships, I attempted to categorise them, which was not always a straightforward process. Decisions were normally based around where the Ms' were located. So while some CMOC components may be in one level, I categorised the CMOC (and PT) depending on where I thought the mechanism was best placed. For example, in Case Study 1 IPT 1.3 could be argued to fit best in the '3s – community' due to the need for community selection and ownership. However, the mechanism here is more around the CHCs themselves feeling accountable to communities (i.e. individually), and thus their work/dedication, because of these contexts.

The beginning stages of the analysis were quite cumbersome and a lot of time was necessary to analyse one source for one IPT. The process however got quicker as the analysis went on. While partially due to the fact that I became more experienced in the analysis, analysis also became easier as more CMOCs were extracted, and thus the newly coded references could just be added to the existing CMOCs (if they were similar).

It became clear that my own understanding of how CHCs work, and how they organise across socio-ecological domains, largely influenced the analysis and thus, the results. This process is not a limitation of a realist evaluation, but itself part of the methodology (being an engaged researcher). Specifically, my past experience in community health and human resources most influenced the resulting PTs in the 'individual' and 'community' domains. Mechanisms here were more easily elicited as I already had my own understandings of 'how, why and for whom' things work at these levels. CMOC extraction and PT refinement at the 'group' level required more consideration as I have less experience in organisational functioning.

9.6.2 Reflecting on the findings

This section presents reflections across several domains that are relevant to the study findings and the overall understanding of the CHCs within this context. It unpacks what a 'community' is within this study, and also further explores the 'who' in the mantra of 'what works, for who and why'. This section concludes by framing this study's findings with more contextual considerations, notably in relation to gender and the wider socio-political context, and the resulting power relations that arise from these conditions.

9.6.2.1 The Definition of Community

Readers are reminded that from the onset of this work, George et al.'s (2016) definition of a community as "the social boundaries that define the individuals and households whose health outcomes matter as a health system goal, but also the social context for the relationships that underpin the success of many health systems interventions" (pg. 48) was used (Section 2.1.1). Reflecting on this definition in relation to this study's process and findings highlights several points of harmonisation. The importance of social boundaries (more so than geographical boundaries as descriptors, as described in Section 2.1.1) as a defining characteristic is consistent with this work, especially findings from Case Study 2 where the participants were more geographically dispersed, yet still constitute a community.

To this point however, it was noticed that SIT was lower within Case Study 2 who were more dispersed. It could therefore be interesting to further explore concepts of the 'social boundaries' as a defining characteristic of communities, especially considering the importance that SIT plays within the functioning of community health committees. We can ask ourselves: is there a limit to how far social boundaries expand, before they no longer constitute a community?

While based on the available literature at the time of IPT formation, George's definition was thought most fitting. I would adjust, and add to it however, to ensure that

there is attention to all actors within a community – both those that are recipients of services (i.e. 'those whose health outcomes matter as a health system goal…') and those that are a part of the system that makes up health. It is very apparent from this work that a community is not just made up of individuals who are concerned with their individual and household health outcomes, but all persons that work within the system surrounding these health outcomes. As this study strongly showed the importance of partnerships and linkages, and social identity across the whole SEM system, stakeholders across all levels should be more prominently featured within a definition of community. Additionally, in contrast to George's definition, not all groups produce 'success'. Social ties that bind individuals are not always effective or responsible for reaching goals (for instance some of the difficulties that Case Study 2 faced), yet stronger communities may contribute to increased success. I therefore propose to adapt the aforementioned definition of a 'community' and put forward the following as a result of this work:

> *The social boundaries that define individuals who are related as a matter of a health system goal, and also the social context for the relationships that underpin collaborative efforts within many health systems.*

9.6.2.2 Who in the community do CHCs work for?

As noted in Section 2.1.1, communities are heterogeneous entities. In light of discussions in Chapter 8, we see communities not being defined by 'who' is in them, but what commonalities (whether personal or goal-oriented), they may share. As such, noting the make-up of a community will always be context dependent.

Within this work, the community consisted of numerous sub-groups (and sub-groups within sub-groups), that together constitute the community. While not exhaustive in reality, for the purpose of this work sub-groups can be considered: community women, men, pregnant and/or lactating women including marginalised populations, Community Health Workers, CHC members, community leaders, other community groups (CVAs, savings groups,

women's groups etc.), health workers, MoH staff and World Vision Staff. Remember however that these are not mutually exclusive, people can and do have numerous 'identities'.

While a purpose of the study is to understand 'for whom' the CHCs work, we can only extrapolate this based on those who were involved in the work. To provide information on the 'for whom', stakeholder groups were interviewed separately and their data was analysed separately. As well, collecting demographic information on the community participants (Table 16 and 35) aimed to help understand differences in participants, to provide insight into 'for whom'. Despite these measures, the findings from this work provide little difference in how the CHCs operate for different populations. To understand why, it was important that I considered any limitations within the research design and data collection.

Reviewing the CMOCs resulting from each population group (i.e. those formed from the women community interviews, from the male community interviews etc.), there are very little discernable differences between CMOCs and few CMOCs that specifically answer questions relating to 'for who'. Going back further to the data to see if I missed extracting CMOCs that related to 'for who' identified no additional findings for this important element of a realist evaluation. It is therefore necessary that I consider why this piece of the puzzle may be lacking.

This may have been the result of a research design flaw, specifically in relation to the inclusion criteria not comprehensively enough looking for different sub-groups. Or the location of the interviews as in each case they were the community gathering points, which also happened to be at or directly beside the health facility. This point may have resulted in individuals who are more likely to access health services and thus be knowledgeable of the CHCs being included for convenience reasons.

Notably, while reviewing the community member raw demographic data, it is seen that the respondents are very similar in education, occupation and family relations. This may be a result of having somewhat homogenous communities, or again from bias within

participant selection (Section 9.8.1). For instance, the inclusion criteria noted that individuals were to be potential beneficiaries of the AIM-Health intervention, (to ensure we were capturing the programmatic targets of the intervention), which may have recruited a more similar type of community member. As such, this research may have failed to consider other community sub-groups that could have provided invaluable insight into 'who' the CHCs work for, such as more marginalised populations.

It could also be that not enough tools aimed explicitly to look at population differences in how the CHCs work. I fully accept the position that I may have thought this would come more naturally, without requiring in-depth measures to ensure it is captured. It is recognized that the 'for whom' requires further attention and a possible follow-up study, with potential reasons (and thus considerations for solutions) noted above. Yet, reviewing the study findings and reflecting upon them based on my understanding and knowledge of the CHCs and the context can also work to provide some important insight into 'for whom' the CHCs work.

There are some actions of the CHCs that all persons who visit the health centre may benefit from. For instance, enacting social accountability through monitoring staff performance and resources (financial, drug etc.), can work to benefit the entirety of service users. However, as CHCs had a more 'inward' focus, the CHCs may not work at all, or work very little, for community members that have difficulty accessing services for numerous reasons (knowledge, distance, time). This point may be particularly relevant to Case Study 2, where there was found to be little to no community engagement by the CHCs (i.e. the CHCs did not act 'outwardly'). While the CHCs in Case Study 1 did preform more outwardly, they still had a stronger inward focus than the NGO programme anticipated, and did not demonstrate that their activities specifically sought to include hard to reach populations. Most community activities were conducted within schools, churches, village meetings, or by tagging on to efforts by the Community Health Workers. Thus, they may have worked for

people who engaged in the aforementioned events, but likely not for those that were not part of these community activities.

While these likely affected marginalised members (for reasons such as distance from community centre, lack of knowledge on events, or lack of resources to participate) in both case studies the most, there are also specific sub-groups that the CHCs may have disproportionately not worked for. As noted in Table 17, North Rukiga has strong gendered norms and values, with subscribed roles for men and women resulting in power imbalances. While women do the majority of the farming, housework and childcare, men are the decision makers. Women often require permission from husbands[35] before they engage in community activities or visit health centres. Additionally, I have observed that if a woman is not married, it does not mean that she is able to make decisions outside of the prescribed gender norms; on the contrary, this may go against community culture and power dynamics. If anything, women who are not married are even less likely to engage in community activities and have less representation and power.

In line with the above, CHCs are also likely to work best for people who share similar characteristics with them, or at least not work well for those who are vastly different. According to SIT, this may mean that CHCs work for 'in-groups' but not 'out-groups'. Applying this thinking to the study, this highlights grave concern, specifically for Case Study 2 that was made-up of majority older men. Within this context, this group has higher cultural capital, which awards power to such members. With the power dynamics residing on the side of the CHC members, and them likely not sharing an in-group with certain sub-groups of the population (i.e. the more powerless), questions on if the groups are truly representing the needs of the more vulnerable must be raised. That is, who's voice is heard and who is represented? Based on the actions of the CHC groups in Case 2 in particular, I contend that this is a major failure of the CHCs, and highlights who they are not working for.

[35] Please note that all but one woman community member participant was married. Typically, people do not start having children until after marriage.

This point is also consistent with the study findings that the CHCs were not acting specifically for MNCH (again, not necessarily a failure of the programme, but something that needs to be reevaluated moving forward), but for the wider health facility. While the data collection focused more on MNCH activities, it could be important to further explore what this means for other health topics. Interestingly, I understand the CHCs of Case Study 2's specific focuses (monitoring/accountability and facility infrastructure), to be consistent with having the majority of older men. Acting as 'watchdogs' and working towards building maintenance, is a role that men within North Rukiga may conform to in everyday life. What this means however is that CHCs functioning may not intentionally work for the original targets of the intervention.

Considering the CHCs were meant to focus on MNCH, failing to reach more marginalized sub-groups may have resulted in them 'working least' for these women. It would be recommended that the intervention in the future, and other similar CHC programmes, aim to first ensure such sub-groups are included in activity plans. Especially considering the make-up of the groups, SIT posits that many community sub-groups (specifically the in-group), will likely be involved in activities through their existing connections. It is therefore more necessary that interventions ensure their targeting works beyond in-groups, and explicitly aims to find out-group members that are least likely to have the intervention 'work' for them.

Therefore, the CHCs are thought to 'work' best for individuals who already have relationships with the health system and other community groups and who share similar characteristics to the CHC members, but likely did not work for more marginalised sub-groups of the population, and in particular marginalised women, hypocritically a sub-group the programme intended to benefit most. This may be particularly important in contexts with discrepancies in power dynamics and strong gendered social norms and values.

9.6.2.3 The Social and Historical Context of the Community

As highlighted in Table 17, there are many contextual conditions within which the CHCs work. These overarching contexts inevitably influenced how the CHCs work (for whom and why), and were influential in interpreting data, eliciting CMOCs and refining theory. As such, the below provides reflections on how the wider context influenced the intervention and theory refinement, by expanding upon the most influential factors within the system for additional contextualization of the study and its findings.

As previously noted, I had worked in North Rukiga on several occasions prior to the data collection. I had a strong understanding of the NGO and the health systems functioning within North Rukiga, and I attempted to understand the social, cultural and political contexts within the study site. These wider contextual factors all shaped how I interpreted the data and thus are a large component of the resulting theories, though not necessarily presented within the theories as these factors are at a higher level of abstraction than the intended findings. These were captured as best as possible within the CMOC elicitation tables (under the heading 'Decision Making'). Yet, it is important to further situate these within this study to provide information and support to readers, which can ultimately assist in transferability beyond this study site.

Socially, North Rukiga is a cooperative context. There are numerous community groups such as savings and loan groups, women's groups and farming groups, that all work together for a common set of goals or for support. They are also a somewhat hierarchical society with large power imbalances, in that those with high cultural capital (educated, wealthy, older) are given respect. While there is difference between community members in terms of religion or political affiliation, this did not appear to divide community members[36].

[36] Important to note is that I did not collect information on religion. It is possible that many respondents were Christians (the majority religion in the region), and thus in terms of religion, other sub-groups could also be a group that the CHCs 'worked less' for, especially considering that within Case Study 1 the CHCs used the church as a tool for engagement.

This intervention may not work as well in contexts that do not have a strong cooperative society, and they may work different in contexts that have varying forms of social orders, especially as so much of their functioning was related to the CHC members' position within society and how that translated across the system. Yet, this very point provides caution for how power imbalances within society can influence the CHC functioning, in terms of who makes the decisions (and why) and who the intervention works for.

Historically, North Rukiga had almost 20 years of experience with World Vision. Originally, WV ran a sponsorship programme where they enrolled children in schools and provided families with tangible supports, such as livestock. As noted as a context within some of the refinement tables, World Vision was very visible within the communities (from sign posts acknowledging the building of a school or health facility, to CHWs t-shirts, or to the frequent trucks with the logo plastered on the side). Members also reported strong ties with World Vision and appeared to value the work that they had done in the community. These positive (and obvious) historical relationships likely made implementation of the CHCs quite acceptable to communities.

To this end, the relationship between WV and the MoH also had almost two decades to mature. To further benefit this relationship, WV provides stipends to MoH staff when they are contributing towards their programmes. As the CHC intervention was aimed to be embedded within existing MoH policies and initiatives, normally it was the MoH who conducted trainings and supervisory visits to the CHCs and other AIM-Health activities. What transpired was frequent engagement of the MoH within the programme and thus North Rukiga[37]. With regards to World Vision and the MoH, both parties appeared to have very clear roles, responsibilities and expectations of one another.

[37] Frequent meaning approximately two times a week a District MoH staff would be engaged with the AIM-Health programme (despite North Rukiga being only 1 of 13 counties they are responsible for, a consideration that warrants exploration from the perspective of the remaining 12 counties).

Additionally, there was existing structures in place that enabled for a more seamless initiation of the CHC groups, both from the side of the NGO and the MoH. The preexisting HUMC structure (while noted as inactive prior to CHC invigoration), enabled a strategic starting point that required less initial preparation. As the HUMC was a key component of Uganda's Community Health Extension Strategy, the CHC intervention was able to easily integrate into existing efforts, with political support. To this end, the AIM-Health programme was already working with the Village Health Teams, and had established Citizen Voice in Action groups. Uganda's focus on community health, and the preexisting structures for implementation, enabled political support and a more seamless uptake and initiation of the CHC intervention.

Such an intervention may not be as successful in contexts where there are no relationship foundations between implementer and community and/or implementer and the Ministry of Health, and it may work differently in contexts where there are not the same preexisting structures and political support for implementation.

While the NGOs presence appeared to be a welcome one within North Rukiga, it is important to recognize their role as an outside agent and what power their role as donor brings. As noted, this donor role likely influenced MoH staff and their relationship with the programme. Additionally, their traditional role of 'gift givers' in North Rukiga, despite a shift in programming, leaves behind a legacy with communities either hoping for, or expecting, this role to continue. Encompassing all of this is the omnipresent notion that World Vision 'gives' and communities (and the government) 'receive'. This inevitably translates into power relations, which could have numerous implications for CHC programming. Especially considering the hierarchical society the CHCs are implemented within, questioning of the funder may be non-existent, and have the communities being more passive recipients of interventions, instead of the desirable partners in decision-making, planning and implementation. To this end, further exploration on how much power CHCs actually feel they

have to voice their own autonomous decisions, or if they are aligning their work to what they believe is expected of them from World Vision, could be beneficial.

This likely 'power over' scenario may have also distorted CHC functioning. CHCs were active, for the most part fulfilling their 'NGO requirements' for programming by doing facility checks, keeping meeting minutes, running activities for systems improvement and so on. While this was noted to come from a place of intrinsic motivation and community centeredness, the external influence the funder had is impossible to avoid. As such, against this backdrop of external agency influence, the functioning of the CHCs can be further explored. A comprehensive exploration of this topic is beyond the scope of this work, as a realist evaluation aims to elicit theories that are of middle-range abstraction (and such policies would sit at a higher level of abstraction). Additionally, much of the 'decision-making' for CMOC elicitation factored in such dynamics, as such the role of these parties has been considered within the resulting programme theories. Yet, highlighting some of the more influential aspects of the role of external agents can provide important insight and guidance on how such interventions work.

This exploration brings into light programme sustainability. As CHC operationalisation is largely influenced by the donor, will efforts continue in their absence? While the CCAT asked this question of all CHC members, with the majority answering that the programme will continue, it is likely that some level of functioning will change without NGO support. While many community health programmes rely on donor investment for initiation and maintenance, and positively the global health field has seen a shift to more community-led design (or at least some input) of such programmes, questions can always be asked of who's priorities exactly are such interventions targeting (and thus, who are they actually working for?). As a likely inextricable scenario, it is therefore all the more important to take stock of NGO interests within realist evaluations of interventions. As this work aimed to explore how

the CHCs worked for communities, an equally important question is how they worked for World Vision.

CHC programmes implemented through externally funded NGOs may 'work' according to NGO expectations, which might not always be aligned to community priorities. It is therefore important to embed such considerations into their study, to truly understand who it is the programmes are working for.

9.6.3 Reflecting on social norms

Much has been said in the last section on gender norms, value and power within the community, and what these mean in the context of the findings. This section explores further how such social norms may have been embedded within the work, and what implications this has on the study and realist evaluation as a whole.

- Both power and gender dynamics are omnipresent, and impossible to control for. Researchers should be cognizant of such social norms within their research context, and ensure that they work to understand how these may influence the work. Within this work, I undoubtedly came from a place of power for many participants, as too did the research assistants. Coupled with conducting research within an external NGO programme, such relationships inevitably factored into the work. The research team was all female, as this was an MCH programme and we wanted to ensure that women within communities were comfortable, yet gendered norms and values within North Rukiga very likely came into play. Consideration needs therefore to be given to how such social norms influenced the research, and highlight potential mitigating factors for further work. For instance, as it was an all-female team, did male participants respond to us differently than if they were interviewed by a male? Would they have discussed issues that they did not feel comfortable divulging to females – the answer is quite possibly. Did my gendered perspective influence the questions posed, my reactions and how I interpreted the data – again, extremely likely. Could this work have taken a more robust gendered approach to the design and analysis – undoubtedly yes.

- Yet, realist evaluation acknowledges this ‘power’ that the researcher has, and notes it as an essential component of the evaluation. As opposed to other methodologies like Theory of Change that involve more participatory approaches to data collection, realist evaluation makes no contentions on the role of the researcher, with this influence of this on data collection being discussed in Section 9.5.2. Aligned to the above sections however, as some representation and voice was ultimately missing within this work, it would be important moving forward to better explore how realist evaluation methodology can ensure that it, while coming from powered positions, still captures important social norms and values that influence intervention functioning. For future work in such contexts (or all contexts) it could be important to conduct a thorough gender analysis prior to study design (and possibly even alongside the evaluation), to ensure issues of representation and voice are strongly considered.
- It may not be enough for realist evaluations to work to understand ‘context’ within the study, there may need to be explicit tools used in tandem with such work to ensure that important contextual conditions, such as social norms and values, are featured.

9.7 Limitations

This section introduces the limitations of realist evaluation methodology and highlights limitations or research considerations specific to this project.

9.7.1 Limitations in Realist Evaluation

While realist evaluations offer solutions to many prominent issues in the study of complex health interventions, they are not without limitation. Many specific limitations can be attributed a lack of procedures and precedent regarding its practice (Rycroft-Malone et al., 2010). A limitation of concern most frequently highlighted by realist researchers is the difficulty of defining and distinguishing 'mechanisms', especially in relation to contexts (Rycroft-Malone et al., 2010, Marchal et al., 2012c, Salter and Kothari, 2014). In addition,

identifying contextual elements has been seen as problematic, often because it is either not reported upon (mostly within the literature) and/or participants have difficulty in identifying everyday contextual conditions. The latter was likely an occurrence in this study, where within the societal domain, context related to 'socio-cultural norms' was not refined through Phase 2, as noted in Chapter 9.2.3. If no discrepancy between such norms in relation to the CHCs occurred, identifying this as an important contextual condition is easily missed. To add further difficulty to the mix, not only are these two elements often hard to distinguish, but there is often difficulty in distinguishing between these tightly intertwined concepts (Salter and Kothari, 2014, Westhorp, 2008).

Byng (2005) notes that multiple combinations of contexts and mechanisms can bring about one, or several, outcomes, and thus CMOCs themselves are not always straightforward. As programmes can have an infinite number of CMOCs, developing meaningful configurations is a time-consuming process that requires great detail and a skilled researcher. Thus, coding for and identifying CMOCs and theories requires a substantial amount time that is often not anticipated (Tolson et al., 2007), and requires a considerate amount of researcher reflection, and creativity - skills that are not always easily learned (Dalkin et al., 2015).

Logistical issues with realist evaluations includes how and when to identify an appropriate end-point to the study (as theory can be continually refined) and a lack of researcher capacity. The contribution of research participants may also present challenges. Individuals unfamiliar and/or uncomfortable with the realist interview technique may not fully engage with its processes. Such techniques used within Focus Group Discussions for example, have not been fully explored, and may present additional challenges. Leeuw (2003) cautions that when the elicitation of theories is done in an interactive manner, or 'dialectic atmosphere', the knowledge of individuals is important, though often poorly understood, which may negatively influence findings. As summarised, "To establish a dialectic

atmosphere on the basis of empirically incorrect assumptions is inefficient and ineffective" (Leeuw, 2003, Pg. 16).

Important for this study may be the ethos of realist evaluation. To my knowledge, this was the first realist evaluation that was undertaken within this region of Uganda. Unfamiliarity with the concepts and question-types by all participants may have influenced the responses and data quality. While realist evaluation is a growing field, and this limitation was inevitable, it nonetheless may have influenced study findings.

A number of steps were taken within the current research to mitigate these limitations. As suggested by Adams et al. (2015) the realist evaluation included multi-disciplinary partnerships to enable insights that go beyond technical recommendations; clear communication channels were established to support the contribution by team members to the research process and allow more comprehensive analyses; procedures were taken to ensure engagement of decision-makers throughout the research process; and reflexivity was built into the process which enabled the methodological challenges to be identified and addressed.

9.7.2 Limitations Within This Study

9.7.1.1 Study Design

Several aspects of the study design, while unavoidable for logistical reasons, may have presented some limitations. Notably: the literature review for the IPT elicitation (Phase 1) did not take a systematic approach; the level of extraction related to IPT4 was found (during Phase 2) to be too abstract, however the testing of this IPT was incorporated into the field design; the case studies were conducted simultaneously and not iteratively so theory refinement throughout the data collection was not incorporated; and lastly, at the time of study design the focus of the COMMs was not noted as being largely facility-based (which the

findings show), and as such, the study was designed around understanding community activities, with less focus on the facility.

9.7.1.2 Data Collection

There are several limitations to this study specific to data collection: the use of non-realist researchers, despite their training, may have limited the quality of realist data; as I did not speak the language (Rukigan) that was used predominately with participants, interviews and documents had to be translated into English which may have left some findings 'lost in translation' or missing cultural nuisances; there was a recent end-line evaluation to the AIM-Health programme which involved some participants from this study (mostly KIIs, though some households were sampled), potentially resulting in research fatigue; and the Coalition Self Assessment Survey, though translated into Rukigan, was lengthy for several participants to complete and may have led to respondent fatigue and inaccurate responding. Additionally, as data was collected sequentially (starting with Case Study 1), it is possible that our understanding of 'what worked' for Kitunga may have biased data collection within Kashambya. This could have resulted in the research team incorrectly assuming we understand a participant from Kashambya's contribution based on the already collected data from Kitunga. Mitigating tools were used to reduce this bias however, notably doing collaborative refinement with participants during the main data collection phase and discussing our initial findings back to the participants in the iterative meetings.

9.7.1.3 Participants

Limitations in relation to the participants included in this study largely revolve around the recruitment and the differences between the two case studies. Community members were recruited from either CHW gatekeepers, and while asked to target individuals living in various locations with different background, no specific sampling quotas were put in place.

Therefore I may have missed potential groups or individuals that could have contributed to theory refinement.

Within the two case studies there were more participants within Case Study 1, specifically for CHC semi-structured interviews and key informant interviews. Numbers of IDIs of CHCs within Case Study 2 met the desired amount outlined in the original study protocol, though the reader will notice there are fewer participants than in Case Study 1. This is because all members from Case Study 1 wanted to participate, so instead of selecting only three, I made the decision to involve all. This option was given to all CHC groups. Other differences in numbers between Case Study 1 and Case Study 2 can be attributed to the size of focus groups. While I aimed to recruit 6-8 per FGD, I disseminated 12 participant information leaflets seven days prior to the discussions to accommodate for individuals not wanting to, or being unable to participate. People were not refused participation. In hindsight, some of the FGD could have been divided into two groups, though what typically transpired was that individuals came late and joined as the introductions/consent process had already begun. No Local Council Key Informants participated in Case Study 2. Two of the CHC members within this group are also LC representatives, and both work within the region where the health centre is located. We attempted to recruit an additional LC KII within Case Study 2, but were unsuccessful. Case Study 2 had twice the number of members at the iterative feedback meeting than Case Study 1.

The number of participants able to complete the Coalition Self Assessment Survey (CSAS) was less than originally anticipated. When designing the study we expected groups to adhere to COMM guidelines, having 12-14 participants however as explained in Chapter 6 and Chapter 7, this was not the case within this study context. As such, the CSAS did not contribute as much to theory revision as anticipated and, while there are lessons for CCAT from some of the more descriptive findings, any future studies of this nature, I would suggest, should find an alternative method to examine Community Coalition Action Theory.

Respondent bias may have also played a role within this study. Specifically, for the CSAS, as members were part of the group they may have had positive reporting bias, ascribing higher value to CCAT components than the actual value. This may have also been because participants were cautious that if CHCs were scored low, that they would lose potential benefits or the committee would lack support (despite what was laid out in the informed consent process). Additionally, while attempts were made to distance the research team from World Vision staff (see Information Letter in Appendix 6) participants may have associated the research team with the NGO, from whom they were benefiting. Chapter 9.6.2 above, elaborates more upon how power imbalances may have influenced respondents.

Bias may have also been introduced due to a difference in the understanding of the community health committees between participants. As all participants would have had different experiences and exposure levels with the CHCs, participants were responding to questions based on their own internalised functioning of the committees. As these were likely varied across individuals, so too would be the responses to the questions. While this bias is impossible to eradicate, it was anticipated for as best as possible by beginning each interview by asking participants what they know of the CHCs and/or their experiences/relationships with the CHCs. This therefore allowed for additional questions and clarifications during the interview, and most importantly helped to frame the analysis towards one's specific understanding. Yet, while these differences may introduce some bias, they speak to the very nature and purpose of conducting a realist evaluation, in that while CHCs do exist for all those interviewed, how individuals see their own social world (or the CHCs) influences their understanding of them, and as such are an integral part of this work.

Additionally, bias could have been introduced due to how different participants understood the study questions, and more specifically the study surveys of the CCAT and the Coalition Assessment. Acknowledging these potential biases prior to data collection, the research team planned to assist all individuals in completing the survey. For CCATs with the

CHC members, when possible these were done in small groups (with members having enough space to ensure privacy of answers), with a RA reading questions and providing additional explanations if necessary. A similar format was used for the Coalition Survey. This process was also done on an individual basis, in that no participant was left isolated in completing the surveys, and all explanations were consistent across participants and participant groups.

9.7.1.3 Data Analysis

There are three main limitations of the data analysis. First, I was not able to verify the finalised CMOCs and programme theories with all of the participations once the analysis was complete. As I was aware of this logistical (financial) constraint prior to data collection, I intentionally included a 'feedback' session to the field design to assist in ensuring appropriate understanding and interpretation of respondent's data; however, this feedback session was only based on a preliminary analysis and did not include completed CMOCs/PTs for triangulation. Second, survey data, specifically for the CSAS, had low participant numbers that limited the use of additional analytical techniques such as statistical tests. And lastly, related the general study design of running simultaneous case studies, as Case Study 1 analysis preceded Case Study 2, I think it was inevitable that findings from the first analysis influenced the findings for this second case study. While I attempted to look at each case study separately, my preconceived notion on what PTs are present (from Case Study 1) likely influenced how I elicited CMOCs from Case Study 2. This is typically overcome by the process outlined in the realist inquiry cycle, where realist evaluation case studies are conducted iteratively; that is, findings from one influence the data collection from the other, and work to refine one's sequence of programme theories. However, as these case studies were run simultaneously and thus their analysis independent from one another, this influence could have introduced biased findings.

9.8 Study Conclusion

This study aimed to answer 'how community health committees build capacity for community systems strengthening for maternal and child health'. To answer this question, a realist evaluation on CHCs within South-Western Uganda using a systems-thinking lens was conducted. This study consisted of three phases: Phase 1 involved the elicitation of the Initial Programme Theories; Phase 2 consisted of two intra-programme case studies using mixed methods to test and refine the IPTs; and Phase 3 involved the synthesis of the findings from the previous phase to produce Middle Range Theories for the research question. In doing so this study has made several unique contributions to the field, namely: highlighting the use and applicability of a systems thinking lens within realist evaluation; advancing realist evaluation methodologies for operations research within low-income contexts; and contributing to the development of the theoretical basis for CHCs within LMICs.

Understanding complex health interventions requires moving beyond traditional positivists approaches to methodologies that provide explanations of change. The use of realist evaluation methodology within this study was able to do just that. Through explaining how community health committees work across this study's system, we can more confidently transfer lessons learned to other contexts. And while a realist study is never completed, it is the hope that this work can provide insights into community health intervention functioning and be used as a guide and starting point for further discussions and explorations.

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Appendix 1 Ethical Approval – Trinity College Dublin

COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH | TRINITY COLLEGE DUBLIN
Ollscoil Átha Cliath | The University of Dublin

Brynne Gilmore
7 Bookends Apartment
Exchange St Lower
Dublin 2

3 March 2015

Re: Community Committee's contribution to community systems strengthening for maternal and child health: A Realist Evaluation

Application 17D/2014/11

Dear Brynne,

Thank you for your submission of the above proposal to the HPM/CGH REC.

The REC has given ethical approval to the proposed study.

Yours sincerely,

Prof Charles Normand
Chair of the HPM/CGH REC

An Coiste um Thaighde Eitice
An Lárionad Pholasaí agus Bhainistíocht Sláinte/Lárionad na Sláinte Domhanda
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Appendix 2 Ethical Approval – Makerere University

MAKERERE UNIVERSITY

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COLLEGE OF HEALTH SCIENCES
SCHOOL OF PUBLIC HEALTH
HIGHER DEGREES, RESEARCH AND ETHICS COMMITTEE

Makerere University School of Public Health • Higher Degrees, Research and Ethics Committee • Valid Thru: 17 SEP 2016

18th September, 2015

Ms. Brynne Gilmore
Principal Investigator, protocol (338)
Centre for Global Health, Trinity

Re: Approval of Proposal titled: Community committees' contribution to community capacity building for maternal and child health: A realist evaluation.

This is to inform you that the MakSPH – Higher Degrees, Research and Ethics Committee has granted approval to the above referenced study which was reviewed during the 131st IRB meeting held on 04th August 2015, some suggestions and comments were provided which you have adequately provided.

Please note that your study protocol number with HDREC is 338, please be sure to reference this number in any future correspondence with the MakSPH HDREC. Note that the initial approval date for your proposal is 18th/09/2015, and therefore approval expires at every annual anniversary of this approval date. The current approval is therefore valid until **17th/09/2016.**

Continued approval is conditional upon your compliance with the following requirements:

1) No other consent form(s), questionnaire and /or advertisement documents should be used. The consent form(s) must be signed by each subject prior to initiation of any protocol procedures. In addition, each subject must be given a copy of the signed consent form.

2) All protocol amendments and changes to approved documents must be submitted to the HDREC and should not be implemented until approved by the HDREC except where necessary to eliminate apparent immediate hazards to the study subjects.

3) Significant changes to the study site and significant deviations from the research protocol and all unanticipated problems that may involve risks or affect the safety or welfare of subjects or others, or that may affect the integrity of the research must be promptly reported to the HDREC.

4) All deaths, life threatening problems or serious or unexpected adverse events, *whether related to the study or not*, must be reported to HDREC in a timely manner as

specified in the National Guidelines for Research involving Humans as Research Participants.

- Please complete and submit reports to HDREC as follows:

a) For renewal of the study approval – complete and return the continuing Review Report - Renewal Request (Form 404A) at least 60 days prior to the expiration of the approval period. The study cannot continue until reapproved by the MakSPH HDREC.

b) Completion, termination, or if not renewing the project – send a final report within 90 days upon completion of the study.

Finally, the legal requirement in Uganda is that all research activities must be registered with the Uganda National Council of Science and Technology. The forms for this registration can be obtained from their website www.uncst.go.ug please contact the Administrator of the HDREC on 0393 291 397, if you encounter any problems

Yours Sincerely,

Makerere University School of Public Health
Valid Thru:
17 SEP 2016
Higher Degrees, Research and Ethics

Dr. Suzanne Kiwanuka
Chairperson: Higher Degrees, Research and Ethics Committee

Appendix 3 Research Approval – Uganda National Council for Science and Technology

Uganda National Council for Science and Technology

(Established by Act of Parliament of the Republic of Uganda)

Our Ref: SS 3933 4th November 2015

Brynne Gilmore
Makerere University
Kampala

Re: Research Approval: **Community Committees' Contribution To Capacity Building For Maternal And Child Health: A Realistic Evaluation**

I am pleased to inform you that on **29/09/2015**, the Uganda National Council for Science and Technology (UNCST) approved the above referenced research project. The Approval of the research project is for the period of **29/09/2015** to **29/09/2016.**

Your research registration number with the UNCST is **SS 3933**. Please, cite this number in all your future correspondences with UNCST in respect of the above research project.

As Principal Investigator of the research project, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the research protocol or the consent form (where applicable) must be submitted to the designated Research Ethics Committee (REC) or Lead Agency for re-review and approval **prior** to the activation of the changes. UNCST must be notified of the approved changes within five working days.
3. For clinical trials, all serious adverse events must be reported promptly to the designated local REC for review with copies to the National Drug Authority.
4. Unanticipated problems involving risks to research subjects/participants or other must be reported promptly to the UNCST. New information that becomes available which could change the risk/benefit ratio must be submitted promptly for UNCST review.
5. Only approved study procedures are to be implemented. The UNCST may conduct impromptu audits of all study records.
6. A progress report must be submitted electronically to UNCST within four weeks after every 12 months. Failure to do so may result in termination of the research project.

Below is a list of documents approved with this application:

	Document Title	Language	Version	Version Date
1.	Research Proposal and Appendices	English	2.0	September 2015
2.	Data Collection Tools	English	2.0	September 2015
3.	Informed Consent Forms	English	2.0	September 2015

Yours sincerely,

Hellen .N. Opolot
for: Executive Secretary
UGANDA NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

cc. Chair, School of Public Health, Higher Degrees, Research and Ethics Committee

LOCATION/CORRESPONDENCE

Plot 6 Kimera Road, Ntinda
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COMMUNICATION

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FAX: (256) 414-234579
EMAIL: info@uncst.go.ug
WEBSITE: http://www.uncst.go.ug

Appendix 4 NIH Protecting Human Research Participants

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Brynne Gilmore** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 11/27/2014

Certification Number: 1626760

Appendix 5 Study Introduction Letter

STUDY INTRODUCTION LETTER

Dear Sir or Madam,

My name is Brynne Gilmore and I am a student at Trinity College, Dublin, in Ireland. For part of my doctoral thesis research, I am conducting operations research on World Vision's 7-11 ttC Programme, under the Access to Infant and Maternal Health (AIM-Health) Project.

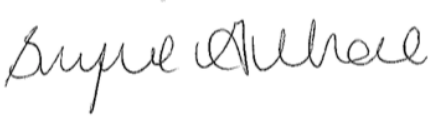
This research, titled "Community committees contribution to community capacity building for maternal and child health" aims to look at how COMMs in your community are functioning as part of the 7-11 ttC Programme. The purpose of this is to provide recommendations for the COMMs based on the participant's feedback, and hopefully improve maternal and child health outcomes in your community.

For this research, we want to include the many groups that work with the COMMs, including: community members (programme beneficiaries); community committee members; community health workers; health staff and World Vision staff.

After you have read the study information pamphlet, and if you are willing to participate in this research, I will return in approximately 7 days (time to be set with you).

Thank you for your time, and I look forward to seeing you in a week.

Kind regards,



Brynne Gilmore, B.Sc., M.Sc
Contact:
gilmorb@tcd.ie
Number: xxx (will provide in-country number)

Appendix 6 Participation Information Leaflet

Participation Information Leaflet

CENTRE FOR GLOBAL HEALTH. TRINITY COLLEGE, DUBLIN

Research title	Community committees contribution to community capacity building for maternal and child health
Principle Investigator	Brynne Gilmore Centre for Global Health, Trinity College Dublin
Supervisors:	Dr. Nazarius Mbona Tumwesigye Makerere University School of Public Health Dr. Fiona Larkan Centre for Global Health, Trinity College Dublin Prof. Eilish McAuliffe School of Nursing, Midwifery and Health Systems, University College Dublin

This study is conducted in partial fulfillment of the Doctorate in Global Health programme at Trinity College, Dublin

Brynne Gilmore is a PhD student at Trinity College, Dublin. She, nor any other member of the research team, is World Vision staff. The research team has been asked to do this work independently from World Vision.

What am I doing and why?

My name is Brynne Gilmore and I am a student in Ireland. I have come to do research on World Vision's 7-11 ttC programme in your community. I want to know about the jobs of the Community Committees (COMMs) that work in your community. I would like to talk to you about how you feel about these committees. What do you like about them? What don't you like about them? Do you think the committee has made any changes in the community? Do you have any ideas for the committees? I want to listen to any problems you have had with the COMMs or any ideas that you have for them.

I am doing this work so that I can lean from you and your experiences. I want to learn from your experiences, and your ideas, so that we can help make Community Committees in your area work better to help improve maternal and child health in your area.

If you want to talk to me, I will ask you to participate in a focus group discussion, which I talk about below.

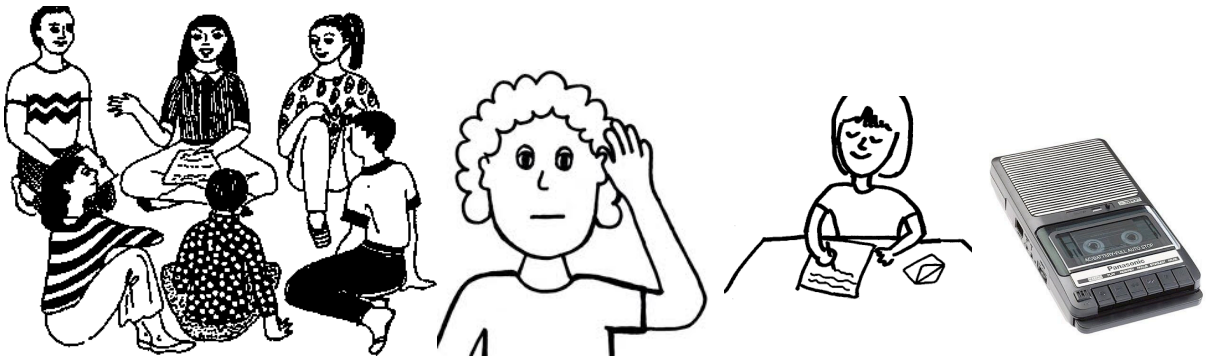
7-11 ttC Programme

The 7-11 ttC Programme has Village Health Teams visiting pregnant women and families with children under-2 in the house. It aims to reduce maternal and child deaths in your area by counseling women and families on health practices. This programme has your Community Committees working with them to help with the programme and other areas of health.

What will happen if you participate?

This study is trying to look what people think of the Community Committees, and also what the Community Committees think of their own work. We are talking to lots of different people about how the COMMs work, and what types of activities they do. It is important to talk to you because we really want to understand your feelings and views on the community committees.

I would like to talk to you in a focus group. This means that there will be 6 or 7 other women talking with us and we will all discuss this together. The focus group will be between 45 minutes to 90 minutes. We will meet at a place that is comfortable and easy for everyone, which we can decide together. In the focus group I will be there and maybe also a research assistant who can help with translating our talk. I will be listening to what you say, and will also be taking notes during our talk. The talks will also be recorded so that I can listen to them again later.



What will happen to the information?

We are doing this study so that we can help to improve World Vision's Programme in your community, so the information that we gather from our talks will be told back to World Vision – while keeping your privacy and identify secret. World Vision works in many countries around the world using the Community Committees, so we will also share the information with other country programmes so that everyone can benefit. There is also a chance that some of this information will be published and available for all people that are interested. That means that the information we talk about might be shared in print articles such as books or on the internet and computer. If you choose to participate in this study, you are allowing us to use this information in these ways.

After we talk, if you have any questions after, or you want to listen to the tape or see what I wrote you can call me. If you decide you do not want me to use your information that is ok. You can call me and tell me.



Potential Risks

You may be asked to answer some questions regarding your work that you may find difficult to answer. For example, some questions may involve reporting negative events or your criticisms. There is also the potential risk of false expectations arising from your participation in this study. It is important that you understand that not all of the issues you bring us will be met as a result of your participation.

The research team **will never** tell anyone that we talked or what we talked about. But there is a chance that people may know that we talked. This may cause problems with your family, community, Village Health Teams, World Vision and Community Committee Members. This could result in being treated differently from these groups or people.

Being in a focus group also means that others in the group will know that you participated and hear what you have said. All of the people in the focus group will be pregnant or breastfeeding women like you. If you want to talk to me but don't want to talk in a group, we can decide to meet and talk in private.

It is important to remember that though this research is being done with World Vision 7-11 Strategy, **the researchers are not employees of World Vision** and will not relay any private information back to World Vision and groups, like the community or the ministry of health.

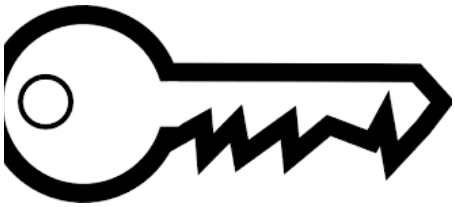
Potential Benefits

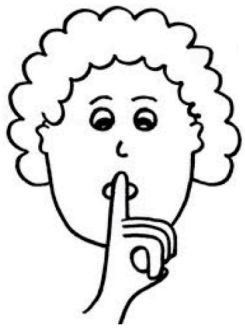
By participating in this research you are helping us to better understand how COMMs work in your community and what the parts of COMMs that you like or don't like. The information collected during this research will help us to not only improve the 7-11 ttC Programme in your community, but also in other countries that World Vision and governments use community committees for maternal and child health. We hope that this research will directly benefit your community by improving the programme.

What We Talk About Being Secret

Who you are, and what we talk about will be kept a secret from Community Committee members, World Vision Staff, Health Staff, community members, and Village Health Teams. This means that no one on the research team is allowed to talk to anyone about what you tell us. We will only use your name on the

consent form that you will sign before we start the work. This form will be locked away in a safe place so that no one can see it. We will use a number for you on all other pieces of information, and only the researcher, Brynne Gilmore, will know what number you are. All of my notes, any recordings of us, and the forms will then be brought back to Ireland and locked away in a drawer for a period of 10 years.





Voluntary and Right to Stop

Participation in this research is entirely voluntary. You do not have to participate in this project – it is your choice. Please read this information and ask any questions. If you want to participate, I will be back in about 7 days to talk to you about the research. If you do not want to talk to me that is ok! This is your choice and no one will be angry if you talk to me or do not talk to me. If you do decide to participate in this project, you can also stop at anytime after the research has started. You also do not have to answer any questions that you do not want to, or talk about things you do not want to talk about. At any point during the research you can stop your participation without having to give a reason. If you choose to stop your participation it will not result in any penalty or loss of benefit to which you are currently entitled.

Termination of Participation by Researcher

In the event of any of the following the principle investigator reserves the right to terminate your involvement in the study:

- It is in your best interest to terminate your involvement, as protecting your safety and well-being takes precedence over the research protocol
- You are not complying with the study requirements, including but not limited to being harmful towards any members of the research team
- If the entire study has stopped

Permission

The Principle Investigator, Brynne Gilmore, has obtained ethical approval from XXXX (will input depending on country of research) and the Health Policy & Management and Centre for Global Health Research Ethics Committee in Trinity College, Dublin.

Contacts

Should you have any questions prior to, during or after the research, or at any point wish to stop your participation, please contact:

Principle Investigator:
Brynne Gilmore
Centre for Global Health
7-9 Leinster St. South, Dublin 2, IRE
gilmorb@tcd.ie
+266 xxxxxxxxx (will provide local number)

Supervisor:
Nazarius Tumwesigye
Makerere University School of Public Health
naz@musph.ac.ug

Supervisor:
Dr. Fiona Larkan
Centre for Global Health
7-9 Leinster St. South, Dublin 2 IRE
larkanf@tcd.ie
+ 353 1 8962764

Supervisor:
Prof. Eilish McAuliffe
UCD Health Sciences Centre
UCD, Belfield, Dublin 4 IRE
Eilish.mcauliffe@ucd.ie
+353 1 7166456

Ugandan Contact
IRB Chairman
Dr. J. Ssempebwa
+ 256 703 944 404

Appendix 7 Informed Consent Example (Community Member)

Informed Consent for Research Participation

CENTRE FOR GLOBAL HEALTH. TRINITY COLLEGE, DUBLIN

Project title	Community committees contribution to community capacity building for maternal and child health
Principle Investigator	Brynne Gilmore Centre for Global Health, Trinity College Dublin
Supervisors:	Dr. Nazarius Mbona Tumwesigye Makerere University School of Public Health Dr. Fiona Larkan Centre for Global Health, Trinity College Dublin Prof. Eilish McAuliffe School of Nursing, Midwifery and Health Systems, University College Dublin

You have expressed an interest in participating in a focus group discussion for the research study titled: Perceived effectiveness of Community Committees (COMMs) contributing to community systems strengthening and empowerment within health systems. By doing so, you are helping to contribute to designing better community committees for community systems strengthening for maternal and child health in your area, through the 7-11 ttC Programme.

Study Purpose and Objective

The purpose of this research is to understand what functions of community committees (COMMs), or village health committees, are seen to be effective in promoting community systems strengthening and increasing positive maternal and child health outcomes. Findings from this study will be used to better design maternal and child health programmes that use community committees in your area, including making improvements to World Vision's current AIM-Health 7-11 ttC Programme so that we can help further improve the health of your community.

Study Procedure

Should you agree to participate, your involvement will consist of a focus group discussion with other community health workers in your area. This means that there will be 6 or 7 other

women and we will all discuss this together. The focus group will last between 45 minutes to 90 minutes. We will meet at a place that is comfortable and easy for everyone, which we can decide together. In the focus group I will be there and maybe also a research assistant who can help with translating our talk. I will be listening to what you say, and will also be taking notes during our talk. The talks will also be recorded so that I can listen to them again later.

Confidentiality

The answers you provide through your participation in the focus group discussion are entirely confidential. This means that no one on the research team is permitted to talk to anyone about what you tell us. Your name will not be written on any form, except for your consent form, which will be kept in a locked and secure location during the research process. Your name will never be used in connection with any of the information you provide. To ensure this we will use an identity coding system which whereby you will be given a number for all records related to the research. All of our records, including this information will be transported back to Ireland, and stored in the Centre for Global Health Offices, in a locked cabinet along with any recordings of the interview.

Right to Discontinue

Your participation in this study is entirely voluntary and refusal to participate will not result in any penalty or loss of benefit to which you are currently entitled. Your refusal to participate will not effect your implication in the AIM-Health Programme or your employment status. At any point in the study you may refuse to answer or skip any topic that you do not wish to discuss. You may end your participation in this research at any time without having to give a reason for withdrawing from this research.

Declaration

I have read the information leaflet for this project and I understand the contents. I have had the opportunities to ask questions and all of my questions have been answered to my satisfaction. I freely and voluntarily agree to participant in this In-Depth Interview or Focus Group Discussion, through without prejudice to my legal and ethical rights. I understand that I can withdraw from this study at any time and my decision to withdraw will not result in any penalty. I give my consent for the data collected from this research to be used in future studies without additional consent and I agree to the possible publication of this results of this research. I have received a copy of this agreement.

Participant's Name: _____ Date: _____

Signature:_____ Contact No: _____

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of Witness:_____ Thumb-print of participant



Signature of witness _____ Date:_____

Statement of investigator's responsibility

I have explained the purpose of this research study, the procedures to be undertaken and any risks that may be involved. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

Investigator's Signature: _____ Date:_____

Participant's Copy

Declaration

I have read the information leaflet for this project and I understand the contents. I have had the opportunities to ask questions and all of my questions have been answered to my satisfaction. I freely and voluntarily agree to participant in this In-Depth Interview or Focus Group Discussion, through without prejudice to my legal and ethical rights. I understand that I can withdraw from this study at any time and my decision to withdraw will not result in any penalty. I give my consent for the data collected from this research to be used in future studies without additional consent and I agree to the possible publication of this results of this research. I have received a copy of this agreement.

Participant: _____

Contact Details:_____

Signature:_____ Date:_____

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of Witness:_____ Thumb-print of participant

Signature of witness _____ Date:_____

Statement of investigator's responsibility

I have explained the purpose of this research study, the procedures to be undertaken and any risks that may be involved. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

Investigator's Signature:_____ Date: _____

Investigator's Contact

Should you have any questions prior to, during or after the research, please contact:

Principle Investigator:
Brynne Gilmore
Centre for Global Health
7-9 Leinster St. South, Dublin 2, IRE
gilmorb@tcd.ie
+266 xxxxxxxxx (will provide local number)

Supervisor:
Nazarius Tumwesigye
Makerere University School of Public Health
naz@musph.ac.ug

Supervisor:
Dr. Fiona Larkan
Centre for Global Health
7-9 Leinster St. South, Dublin 2 IRE
larkanf@tcd.ie
+ 353 1 8962764

Supervisor:
Prof. Eilish McAuliffe
UCD Health Sciences Centre
UCD, Belfield, Dublin 4 IRE
Eilish.mcauliffe@ucd.ie
+353 1 7166456

Ugandan Contact
IRB Chairman
Dr. J. Ssempebwa
+ 256 703 944 404

Appendix 8 Nondisclosure Agreement for Research Assistants

Nondisclosure Agreement

This Nondisclosure Agreement is entered into by _____

(Translator) and_____ (Researcher) for the purpose of

preventing the unauthorized disclosure of Confidential Information as defined below. The parties agree to enter into a confidential relationship with respect to the disclosure of certain proprietary and confidential information.

1. Definition of Confidential Information

For purposes of this Agreement, "Confidential Information" shall include:

- Information or material that has or could have commercial value or other utility in the business in which Researcher is engaged
- Any communication (oral, written) between Researcher and Translator regarding study and/or participants
- Conversations with participants regarding the study
- Information, opinions and ideas gathered during data collection (ie. during interviews and focus groups)
- Information on the participants, especially that which could indicate or suggest the identify of the participant

2. Obligations of Translator

Translator shall hold and maintain the Confidential Information in strictest confidence for the sole and exclusive benefit of the Researcher. Translator shall carefully restrict access to Confidential Information to employees, contractors and third parties as is reasonably required and shall require those persons to sign nondisclosure restrictions at least as protective as those in this Agreement. Translator shall not, without prior written approval of Researcher, use for Translator's own benefit, publish, copy, or otherwise disclose to others, or permit the use by others for their benefit or to the detriment of Researcher, any Confidential Information. Translator shall return to Researcher any and all records, notes, and other written, printed, or tangible materials in its possession pertaining to Confidential Information immediately if Researcher requests.

3. Time Period

The nondisclosure provisions of this Agreement shall survive the termination of this Agreement. The Translator's duty to hold Confidential Information in confidence shall remain in effect indefinitely unless Researcher sends written notice releasing Translator

from this Agreement.

4. Integration

This Agreement expresses the complete understanding of the parties with respect to the subject matter and supersedes all prior proposals, agreements, representations and understandings. This Agreement may not be amended except in a writing signed by both parties.

5. Waiver

The failure to exercise any right provided in this Agreement shall not be a waiver of prior or subsequent rights.

This Agreement and each party's obligations shall be binding on the representatives, assigns and successors of such party. By signing this agreement, the Translator agrees to have fully understood the conditions of the Nondisclosure Agreement. By signing this Agreement, the Translator accepts all conditions of this Agreement and understands the severity of breaking such contract.

Declaration

I have read the nondisclosure agreement and have fully understood all that it entails. By signing this agreement, I agree to have fully understood the conditions of the Nondisclosure Agreement. By signing this Agreement, I accept all conditions of this Agreement and understand the severity of breaking such contract.

Translator/Enumerator's Name: _____

Contact Details:_____

Signature:_____ Date:_____

Statement of investigator's responsibility

I have explained the purpose of this research and the procedures required of the translator/enumerator. I have offered to answer any questions and fully answered such questions. I believe the translator/enumerator understands this Agreement and the duties and consequences that it entails.

Investigator's Signature_____Date_____

Research Assistant's Copy

Declaration

I have read the nondisclosure agreement and have fully understood all that it entails. By signing this agreement, I agree to have fully understood the conditions of the Nondisclosure Agreement. By signing this Agreement, I accept all conditions of this Agreement and understand the severity of breaking such contract.

Translator/Enumerator's Name: _____

Contact Details:_____

Signature:_____ Date:_____

Statement of investigator's responsibility

I have explained the purpose of this research and the procedures required of the translator/enumerator. I have offered to answer any questions and fully answered such questions. I believe the translator/enumerator understands this Agreement and the duties and consequences that it entails.

Investigator's Signature_____Date_____

Investigator's Contact

Should you have any questions prior to, during or after the research, please contact:

Principle Investigator:
Brynne Gilmore
Centre for Global Health
7-9 Leinster St. South, Dublin 2, IRE
gilmorb@tcd.ie
+266 xxxxxxxxx (will provide local number)

Supervisor:
Nazarius Tumwesigye
Makerere University School of Public Health
naz@musph.ac.ug

Supervisor:
Dr. Fiona Larkan
Centre for Global Health
7-9 Leinster St. South, Dublin 2 IRE
larkanf@tcd.ie
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Supervisor:
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UCD Health Sciences Centre
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Eilish.mcauliffe@ucd.ie
+353 1 7166456

Ugandan Contact
IRB Chairman
Dr. J. Ssempebwa
+ 256 703 944 404

Appendix 9Example Disseminated Policy Brief

Policy Brief

Findings from a study on Community Committees (COMMs) contribution to capacity building for Maternal and Child Health

Key Points

- Three COMM groups were involved in study: Kitunga, Mparo and Kashambya
- Men, women, village health teams, COMM members, Ministry of Health and World Vision were participants
- Overall, COMMs from study ***working well to build community capacity for maternal and child health***
- Main areas of success include: partnership and linkage building, COMM initiatives and harmonization of WV/ MoH activities
- Main areas of concern include: commitment of individual members (length of time serving), selection process and support (training and incentives), and proximity of COMM group to community
- Recommendations for improvement: revise selection and term process, continue partnership support, increase COMM autonomy of HC activities, restructure of COMM groups from HC IV (or increased community education of COMM)

Participants

A total of 116 participants were included in this study, from three different COMM groups, Kitunga (Health Centre II) Kashambya (Health Centre III) and Mparo (Health Centre IV). All groups are located in North Rukiga, and part of World Vision's AIM-Health initiative.

Members were selected based on their involvement with the COMM group of study.

Focus Group Discussions, Interviews and Surveys were administered to the participants, as seen in the table below. All participants completed a Capacity Assessment to understand how COMMs are building capacity.

Method	Participants	Total Number
Focus Group Discussions	Women community	14+10+8 = 32
	Men Community	10+8+7 = 25
	VHTs	14+10+8 = 32
Total		88
Interviews	COMMs	4+6+4 = 14
Total		14
Key Informant	Community	2
	World Vision	3
	Ministry of Health	2
Total		7
COMM survey	COMM Members	8+7+6 = 21
Capacity Survey	All Participants	116
Study Total		118

Total number: calculated by adding number of participants per site

Findings

Data from the surveys, focus groups, interviews as well as programme documents and observations were analysed to answer two question:

"Are Community Committees working to build capacity for Maternal and Child Health?"

and

"How do the Community Committees work to build community capacity for Maternal and Child Health?"

Question 1:

Overall, this study found that the COMMs ***are working*** to build capacity for Maternal and Child Health. The COMMs are for the most part meetings their Programme (AIM-Health) objectives, and are reported to be contributing well to several domains of Capacity Building, specifically:

- Building **relationships** for health within their community
- Increasing **community control** over health activities

Trinity College Dublin

MAKERERE UNIVERSITY

Appendix 10 Community Capacity Domain Survey

Community Committee Capacity Assessment

Please rate on a scale of 0-4 (with 0 being not at all, and 4 being very much) how you feel the Community Committees (Health Unit Management Committee), in your area contribute to the following statements in relation to HEALTH:

(Note: all questions had the following scale directly below for participants to circle after each question:

0	**1**	**2**	**3**	**4**
Not at all	Very Little	Ok	Well	Very well

1. COMMs improve stakeholder (community members, VHTs, other groups etc) participation for Health in my community:

2. COMMs increase problem assessment and evaluation capacities for Health in my community

3. COMMS help to develop local leadership for health in my community

4. COMMS build empowering organizational structures for Health

5. COMMs improves community resource mobilization for Health in my community

6. COMMs strengthen links to other organisations and people in the community

7. COMMs enhance stakeholder's (community members, VHTs etc) ability to 'ask why' (have critical awareness and analysis of the health situation in the community)

8. COMMs Increase stakeholder control over Health programme (AIM-Health and Health Centre activities) management in my community

9. COMMs help create equitable relationship with outside agents (VHTs, World Vision, Health Centre Staff, other community groups etc) in my community

s survey is to be completed by Community Committee members. It aims to understand how your functions. Please follow the instructions in each section, and if you have any questions ask the researcher. he survey, please make sure you have completed the consent process. You do not have to participate in this survey if you do not want.

Appendix 11 Coalition Self Assessment Survey

None of the answers you provide will be reported back to the committee or any other organization, and will not affect your role in the committee

Coalition Self Assessment Survey

For Researcher Use Only:

Site ID:	**Demographics**
_____	_____ **Taken & Attached**
Administrated by:	**Follow-up**
_____ **research assistant**	_____ **Yes (details included)**
_____ **participants**	_____ **IDI Consent taken**
Language:	**Researcher ID:**
_____ **English**	_____ **(name)**
_____ **(other, please list)**	

If you have any questions after the completion of this survey, please contact the researchers at the following details:

Principle Investigator:
Brynne Gilmore
Centre for Global Health
7-9 Leinster St. South, Dublin 2, IRE
gilmorb@tcd.ie
0685 27 0809

Please answer the following questions from your experience in the Community Committee. To answer, circle the number or choice that best fits or describes your experience, as follows:

Circle 1. Yes or 2. No

Role in Committee

1.What is your role in the Committee? (Circle more than one answer if appropriate)

a) Committee Chairperson
b) Committee Secretary
c) Other _____ (please specify)

2. What group do you represent on the committee? (please circle all that apply)

a) Community Leadership member
b) Community Health Worker
c) Community Elder
d) Women's Group
e) Health Centre Member
f) Faith Based Group
g) Youth Group
h) Community-based organization (Non-governmental organization, NGO)
i) Government Member
j) Other _____ (please specify)

3. How did you become a committee member?

a) Volunteered when heard about the group
b) Was already a member of a similar group
c) Was asked by someone in the group
d) Other _____ (please specify)

4. How long have you been a member of the Community Committee? (please fill in both years and months where applicable)

_____ Years _____ Months _____ Don't Know

Inclusion, Recruitment, Membership

5. In your opinion, does your committee have enough representation from groups, organizations, and/or schools and health centres, in your community to be able to accomplish your committee's objectives?

a) No
b) Yes (if yes, go to question 7)
c) Don't Know

6. If you answered "No" above, in your opinion what type of groups/organizations are NOT well represented in you committee?

a) Health centres/ clinics
b) Schools
c) Minority groups
d) Youth groups
e) Parent Groups
f) Women's Groups
g) Faith-Based Groups
h) Community-based organizations (Non-governmental organization, NGO)
i) Community Elders
j) Community Leadership Members
k) Community Health Workers
l) Government Members
m) Other _____ (please specify all)

7. In your opinion, do new members receive enough training and information to be effective members of the committee?

a) No
b) Yes
c) Don't know

Decision-Making, Conflict Resolution

8. Please circle the number below that shows HOW MUCH INFLUENCE you think the person or group has in deciding actions and policies for your committee.

	No Influence	Some Influence	A Lot of Influence	Not Applicable
a) Committee Chair	1	2	3	4
b) Committee secretary	1	2	3	4
c) Members from Health Centre and/or World Vision	1	2	3	4
b) Committee Members	1	2	3	4

9. Please circle the number that shows how much influence YOU PERSONALLY have in making committee decisions?

No Influence	Some Influence	A Lot of Influence
1	2	3

10. How are decisions usually made regarding committee priorities, policies and actions? (Please circle NO MORE THAN TWO of the mains way(s) you think decisions are usually made).

a)	Committee members vote, with majority rule
b)	Committee members discuss the issues and come to a consensus
c)	The committee chair makes the final decision
d)	The committee executive or steering person makes the final decision
e)	The lead agency (World Vision) makes the final decisions
f)	The Ministry of Health representatives make the final decision
g)	The Community Elders make the final decision
h)	Don't know

11. Please circle a number to show how COMFORTABLE you are overall with the committee decision-making process

Not at All Comfortable	Somewhat Comfortable	Very Comfortable
1	2	3

12. Please circle the number to show how much you Agree or Disagree with the following statements.

	Strongly Disagree	**Disagree**	**Neither**	**Agree**	**Strongly Agree**
a) The committee has clear and explicit procedures for making important decisions	1	2	3	4	5
b) The committee follows standard procedures for making decisions	1	2	3	4	5
c) The decision-making process used by the committee is fair	1	2	3	4	5
d) The decision-making process used by the committee is timely	1	2	3	4	5
e) The committee makes good decisions	1	2	3	4	5

13. Circle the number that represents the amount of CONFICT in your committee

a)	More conflict than I expected
b)	Less conflict than I expected
c)	About as much conflict as I expected

14. Please circle the number that best represents your opinions of how much conflict within the committee was caused by each of the following things:

	None	**Some**	**A lot**	**Don't Know**
a) Differences in opinion about committee mission and goals	1	2	3	4

b) Differences in opinion about specific objectives	1	2	3	4
c) Differences in opinion about the best strategies to achieve committee goals and objectives	1	2	3	4
d) Personality differences	1	2	3	4
e) Fighting for power, prestige and/or influence	1	2	3	4
f) Fighting for resources	1	2	3	4
g) Differences in opinion about who gets community recognition	1	2	3	4
h) Procedures used for completing the work	1	2	3	4
i) People aren't included enough in the committee processes/decision making	1	2	3	4
j) Member(s) who dominate and control the committee meetings and stop proper collaboration	1	2	3	4

15. Please circle the main strategy your committee has used to address conflicts that occur (circle no more than two).

a) Open debate or discussion about opposing viewpoints
b) Postponing or avoiding discussions of controversial issues
c) Having someone else not in the committee mediate between the opposing viewpoints
d) Having the opposing parties negotiate directly with each other
e) One party in the conflict usually gives in
f) Don't know

Leadership, Staffing, Relationships

16. Who do you think is the MOST SIGNIFICANT in providing leadership for your committee (circle only one)

a) Committee chair
b) Committee secretary
c) World Vision
d) Health staff
e) Don't know
f) Other _____ (please specify)

17. With respect to the leadership you just identified, please circle a number to show how much agree or disagree with the following statements

The leadership of our committee:	**Strongly Disagree**	**Disagree**	**Neither**	**Agree**	**Strongly Agree**
a) Has a clear vision for the committee	1	2	3	4	5

b) Is respected in the community	1	2	3	4	5
c) Gets things done	1	2	3	4	5
d) Is respected in the committee	1	2	3	4	5
e) Controls decisions	1	2	3	4	5
f) Intentionally seeks other's views	1	2	3	4	5
g) Utilises the skills and talents of many members, not just a few	1	2	3	4	5
h) Creates an appropriate balance of responsibility between leaders, staff and members	1	2	3	4	5
i) Advocates strongly for its own opinions and agendas	1	2	3	4	5
j) Builds consensus on key decisions	1	2	3	4	5
k) Works collaboratively with committee members	1	2	3	4	5
m) Keeps the committee focused on tasks and objectives	1	2	3	4	5
n) Is skillful in resolving conflict	1	2	3	4	5
o) Is ethical	1	2	3	4	5

18. Who actually sets the agenda for meetings of the committee and its task forces? (please circle all that apply)

a) Committee chair
b) Committee secretary
c) World Vision
d) Health Centre Staff
e) Committee Members
f) Don't know

19. Please circle a number to show how much you agree or disagree with each statement

	Strongly Disagree	**Disagree**	**Neither**	**Agree**	**Strongly Agree**
a) The committee is well managed	1	2	3	4	5
b) The work of the support staff (World Vision) supports the work of the committee	1	2	3	4	5
c) People know the roles of World Vision compared to the committee members	1	2	3	4	5
d) Committee members take responsibility for getting the work done	1	2	3	4	5

20. Please circle a number to show whether the following functions are major, minor, not a function, or you don't know.

The FUNCTIONS of our committee are to:	Not a Function	A Minor Function	A Major Function	Don't Know
a) Network with other groups	1	2	3	4
b) Network with concerned community members	1	2	3	4
c) Conduct strategic planning	1	2	3	4
d) Make decisions about priority needs and problems	1	2	3	4
e) Recommend or make decisions to allocate resources	1	2	3	4
f) Operate particular programs or activities	1	2	3	4
g) Advocate for local policy objectives	1	2	3	4
h) Advocate for state public policy objectives	1	2	3	4
i) Providing funding for current programs	1	2	3	4
j) Raise funds to sustain long-term coalition activities	1	2	3	4

Trust

21. Please circle a number to show how much you agree or disagree with each statement

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) Relationships among committee members go beyond individuals in the group, to include member organizations	1	2	3	4	5
b) I am confortable requesting assistance from other committee members when I feel their input could be of value	1	2	3	4	5
c) I can talk openly and honestly at the coalition meetings	1	2	3	4	5
d) I am comfortable expressing my point of view even if they might disagree	1	2	3	4	5
e) I am comfortable bringing up new ideas at coalition meetings	1	2	3	4	5
f) Coalition members respect each others' points of view even if they might disagree	1	2	3	4	5

g) My opinion is listed to and considered by other members	1	2	3	4	5

Mission Strategies and Action Plans

22. Please circle a number to show how much you agree or disagree with each statement

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) Our committee has a clear and shared understanding of the problems we are trying to address	1	2	3	4	5
b) There is a general agreement with respect to the mission of the committee	1	2	3	4	5
c) There is general agreement with respect to the priorities of the committee	1	2	3	4	5
d) Members agree on the strategies the committee should use in pursuing its priorities	1	2	3	4	5
e) Our action plan defines well the roles, responsibilities and timelines for conducting the activities that work towards achieving the stated mission of the committee	1	2	3	4	5

23. Please circle a number to show how much you agree or disagree with each statement

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) Notification of meetings is timely	1	2	3	4	5
b) Background materials needed for meetings are prepared and distributed in advance of meetings (agenda, minutes, additional documents)	1	2	3	4	5
c) Informative task force reports are routinely made to the entire committee	1	2	3	4	5

Participation

24. Over the past year, how involved have you been in committee activities?

a) Not at all involved
b) A little involved
c) Fairly involved
d) Very involved

25. Please circle a number to show how many times over the last year you personally have done the following for the committee:

	Never	Rarely 1-2 times	Sometimes 3-4 times	Often 5+times	Not Applicable

a) Recruited new members	1	2	3	4	5
b) Served as a spokesperson	1	2	3	4	5
c) Attempted to get outside support for committee positions on key issues	1	2	3	4	5
d) Worked on implementing activities or events supported by the committee (other than committee meetings)	1	2	3	4	5
e) Acquired resources for the committee	1	2	3	4	5

26. Please circle a number to show how much you agree or disagree with each statement

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) I feel that I have a voice in what the committee decides	1	2	3	4	5
b) I go to community meetings because its part of my job	1	2	3	4	5
c) I am satisfied with how the committee operates	1	2	3	4	5
d) I feel a strong sense of loyalty to the committee	1	2	3	4	5

27. From your own professional and/or personal perspective, do the benefits of participating in the committee appear to outweigh the costs at this point?

a) No
b) Yes
c) Don't know

Communication

28. Please circle a number to show how much you agree or disagree with the following statements

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) The current method for communication between coalition staff/leadership and its members is effective	1	2	3	4	5
b) Members can communicate between themselves as necessary or desired	1	2	3	4	5
c) The committee staff facilitates communication between committee members	1	2	3	4	5
d) The committee staff effectively and efficiently notifies me of meetings, agendas items, etc.	1	2	3	4	5

Knowledge

29. Do you feel you have adequate knowledge about maternal and child health and other community health problems to function effectively in the committee?

a) No
b) Yes

30. Has the committee helped you learn more about maternal and child health?

a) No
b) Yes

Committee Maturity, Readiness, Sustainability

31. Has your committee been responsible for activities or programs that otherwise would not have occurred?

a) No
b) Yes
c) Don't know

32. Has your committee brought benefit to your community?

a) No
b) Yes
c) Don't know

33. Please circle a number to show how much you agree or disagree with the following statements

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) The committee is making progress in implementing the activities that have potential to improve maternal and child health	1	2	3	4	5
b) The committee is improving health outcomes for women and children	1	2	3	4	5

34. Please circle a number to show how much you agree or disagree with the following statements

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) The committee is making plans to continue operating after/if the programme is terminated	1	2	3	4	5
b) The committee has begun to look for resources to continue operating after/if the programme is terminated	1	2	3	4	5
c) Resources are being identified to support the systemic, programmatic changes implemented through the work of the committee	1	2	3	4	5
d) the committee will continue to exist beyond the World Vision Maternal and Child Health programme	1	2	3	4	5

35. Please circle a number to show how much you agree or disagree with the following statements

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a) The committee is essential to the improvement of maternal and child health	1	2	3	4	5
b) One or a small number of people or organizations could make a significant difference in maternal and child health without the committee	1	2	3	4	5
c) In general, I am satisfied with the committee	1	2	3	4	5

36. What issues should the committee leadership and staff be paying more attention to?

37. Are there any critical events over the past year that have had an impact on the committee? Please describe

Thank you for participating in this questionnaire. We appreciate your time and efforts towards the development and understanding of your committee.

We will be holding interviews with interested committee members to further explore some of the things from the survey. If you are interested, please talk to a researcher and fill out the section below so that we can contact you.

I declare that I am interested in participating in an in-depth interview to further discuss my committee. I give the research team permission to contact me at the number below to arrange a meeting. I understand that providing my details does not mean that I have to participant and I do not have to unless I freely choose.

Participant ID:_____

Contact Number: _____

Appendix 12 Interview Guide – Key Informant Interview for IPT Elicitation

Key Informant Skype Interview -
Developing the Initial Programme Theory

Introduction

Study Purpose/Description

Consent

Question

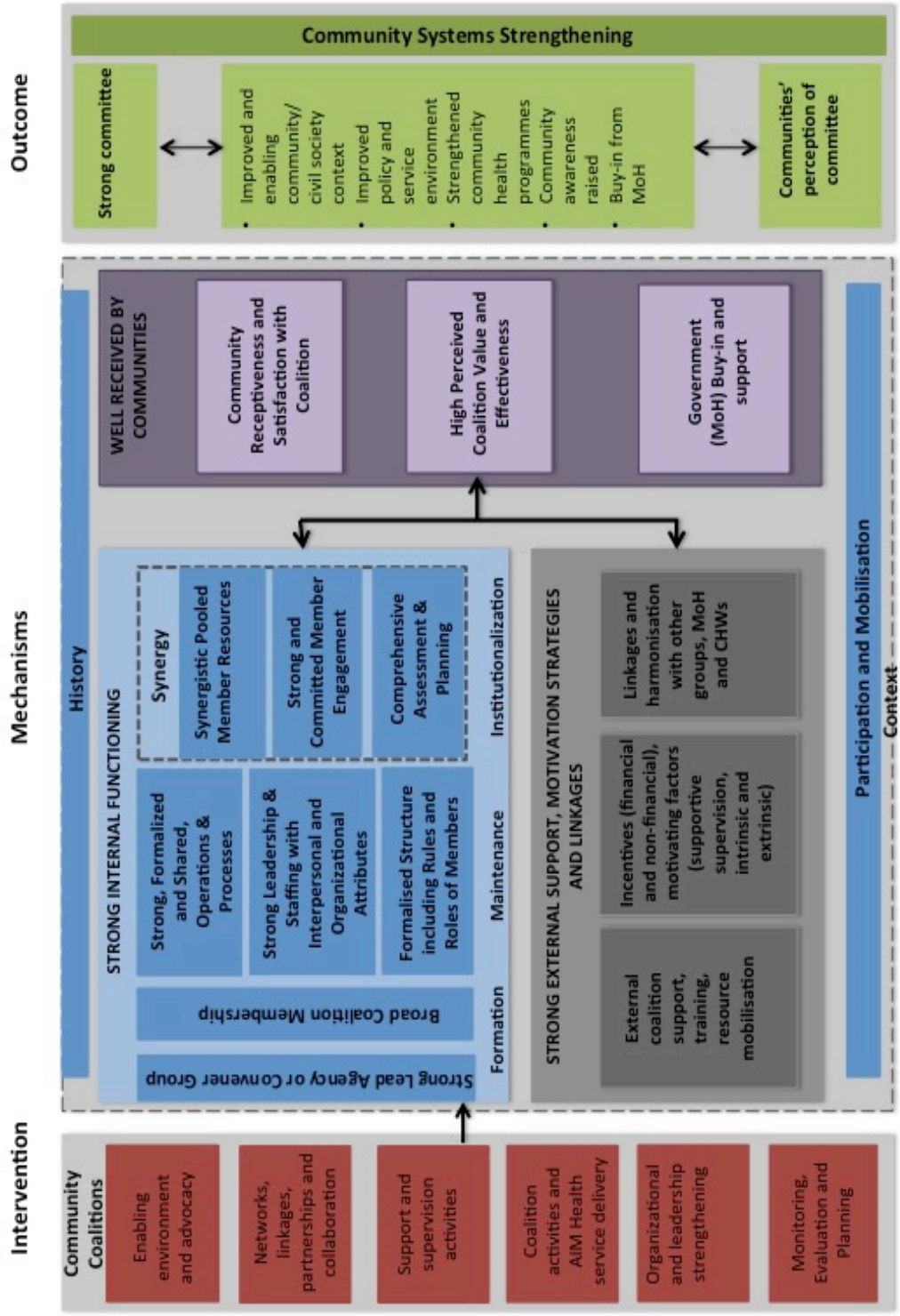
1. Can you describe to me your involvement COMM programme?
2. Can you describe to me in your own words what the COMM model is?
3. And why do you think it is important for health?
4. So within World Vision, what was the rationale for implementing this type of model?
5. Can you tell me how a perfectly functioning COMM model should work? (PROBE)
6. Why do you think that should work? What is it about the model that works, or how does it work? (PROBE)
7. Do you see this happening in practice? Why, or Why not (do you think)?
8. How does the COMM model influence capacity at the community level? (PROBE)
9. Do you think the COMM model works better for some persons in the community over others? (PROBE)
10. From your experience, do you see differences in how the COMM model works across difference contexts? And why do you think this is? (PROBE for social context, etc)
11. Do you see any problems with the COMMS/unexpected things? Why do you think these happened?
12. Would you change anything about the COMM programming? If so, what?
13. Did you have a chance to look at the Visual 'Theory' I sent you via email? Can we discuss it together?
    - "teacher learner". Probe the specific components of the theory.
14. Any questions about what we just talked about, or anything else that you want to add that we didn't talk about?

Follow-up

Anyone else you think that I should talk to? Would it be OK to contact you again if I have any follow-up questions related to this interview?

Thanks & Good-bye

Appendix 13 Visual Articulation of Theory for IPT Elicitation with KIIs



Appendix 14 Focus Group Facilitation Guide (Community)

Facilitation Guide for Focus Groups

1. Introduction

We will discuss the purpose of this study, and allow for any questions that were not previously answered, or answered in the introduction letter and information pamphlet that was distributed 7 days prior to focus group

2. Consent

Consent and confidentiality will be explained and discussed. Participants will then be required to verbally consent and sign/mark a consent form.

3. Welcome/Creating Safe Environment

Participants and researchers will introduce themselves and we will establish objectives and expectations for the meeting. Focus group ground rules will be discussed, such as: no cell phones, respecting other's opinions and that things discussed should remain private. Participants will be asked if they have any other rules or suggestions they would like to add.

4. Discussion/Themed Questions

- Tell me about any work going on in your community for maternal and child health
    - Explore the work: For example, what they like about it, don't like about it, who is doing it, why do they do it? How do they do it? How would they like them to do it?
- As community members, how do you think you should interact with your health and the health system?
    - What rights do they have, what responsibilities, feedback mechanisms, they are part of the health system?
- Do you feel like you have control over your health, or are able to express concerns regarding you or your child's health?
    - Why, or Why not?
- Can you tell me about the Community Committee (Health unit management committees?) – Explore what they know about them. What do they perceive their function to be?
- What experiences, if any, do you have interacting with COMMs?
- Do you think the COMMs help improve health in your community?
    - Why do they think they do/do not. Any examples?
- Do you think COMMs help you community to better address health issues (capacity)?
    - **What is it that the COMMs do to achieve this**?
    - **WHY do you think that happens/works? Or doesn't.**

- **WHO do you think it works best for?**
- What changes do they see since the COMMs
- Any problems they have had with either the programme or COMMs
- If they have any advice or recommendations for the COMMs

GO THROUGH PROGRAMME THEORY with them by using 'teacher-learner' technique. Remember to ask questions on **WHAT** WORKS**, WHY** DOES IT WORK, **and WHO** DOES IT WORK FOR?

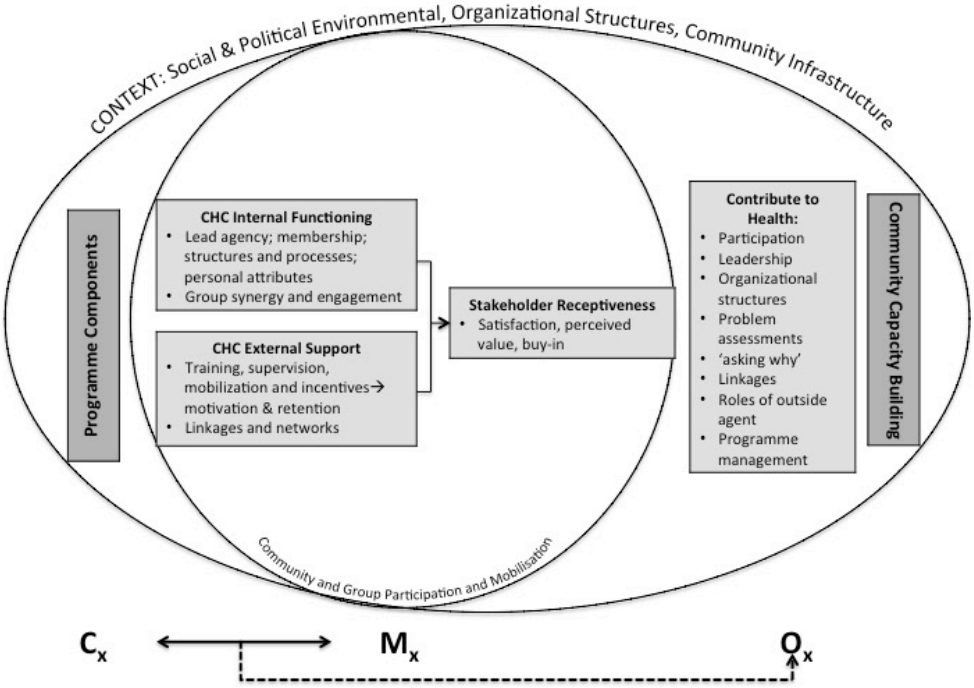
5. Background Questions

Participant will be asked the questions on the background sheet for FG participants and answers will be written directly on the paper.

6. Closing

Participant will have time to add anything they feel was missed during the discussion and ask any questions to the researchers. Research dissemination will be discussed.

Appendix 15 Visualisation of Theory Phase 2



Appendix 16 Fieldnote Excerpts

10th November, 2015.

Setting: World Vision Offices Kabale

(Names excluded intentionally)

Met mostly with WV AIM-Health PM and briefly with DHMT community manager. Arranged a meeting with DHMT for the next day to interview. Will bring him all of my ethics documents.

Apparently evaluation is supposed to start soon. PM said:

- I should meet CVA facilitator (who also runs an NGO for OVCs)
- CVAs help to follow action plans of COMMs
- PM is reporting increased use of health facility
- One HC started deliveries because of the COMMs, they did a needs assessment and said that they need a midwife. So it was though Community dialogue and needs assessment.
- Around 90 COMM members, with 12 difference facilities. (There are 535 VHTs)

PM said the following documents could be available to me:
- Needs assessments (done by COMMs)
- Report on Health service delivery
- 1/4 meeting reports (DHMT heads, share messages, retrains). DHMT writes reports and shares with WV>.

Identified 2 COMM groups to look at. Based on PM's impressions (and DHMT confirmed). 2 well functioning, 1 struggling.
Kitunga HC II (good), Kashambya III (struggling).

- PM reported that Kashambya is struggling, and said that some of it is because they had a bad supervisor (I think, maybe chairperson), to begin with.

- COMMs were trained May 2014.
Before that, they were somewhat established (via MOH) but not active, and most of the terms were up. When PM started the job (early 2014), she scaled up training and with DHMT, they started fresh. About 50/50 new and old COMMs.

PM on COMMs: “We [World Vision] can’t do without them. If it weren’t for the COMMs, people woudln’t be having land [to build health facility - as in it would be owned by MoH and not community].
“We have now planted them to be a structure that the district cannot do without”
“They are the bosses of the facility”
“We have empowered them to be the bosses”
- Having good COMMs makes PMs job easier.
- Size of COMM group depends on the health centre.
- Called: HUMC (health unit management committee)

- Because of COMMs district allocated 20million. COMMs and community decided if enough, and they worked together to see what to do.
- Ripple effect with COMMs. Other sub-counties in Kabale want the same model.
- COMMs trained in ttC and PdHearth

- PM is reporting an increase in mothers delivering at health facility. Used to be 15/mth, now 30/mth. She attributes it to the COMMs.
- COMMs have a 1/4 meeting with VHTs. At first the relationship with VHTs wasn't great, as there was potentially power differences and some threats to work. But they were brought together to meet, and now it seems like they work well and recognise that they are a partnership.

- Reporting that only 2 women died this year in N. Rukiga, but even at that they died in Kabale district hospital upon referral for operation.
- Always involves MoH and informs of everything that they are doing.

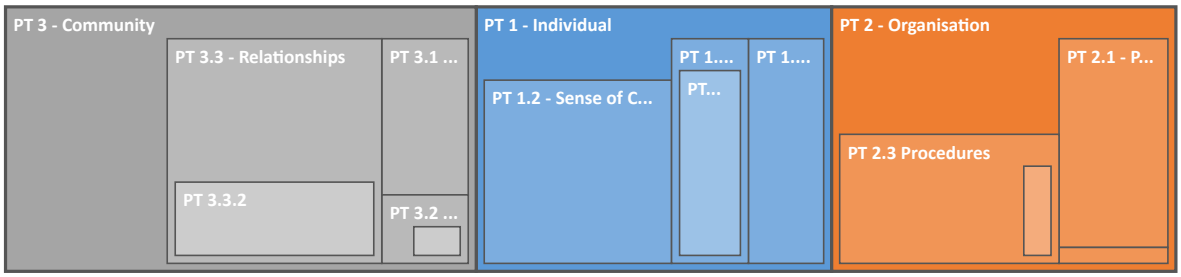
Challenges:
- Expectations. They always want money. PM said that she makes it very clear that they are doing this for themselves and their community. Once and a while she pays them, but they are supposed to get 5000/quarter, and she has saved it so that they weren't paid at all. She will give them the whole 20,000 this month though. She said that the money sents a precedent. And that they will do the work regardless. She told them that World Vision might be going away, and they need ownership of the programme.

Observations:
DHMT came into the office quickly. They are friends it seems like, and they really do collaborate. They share information and resources. PM said that she is always very transparent with MoH and never does anything without their knowledge. They really do seem to work more in a partnership and collaborate. WV does pay MoH staff though, so they can be motivated to do this work. But PM noted that this happens everywhere, and sometimes you pay and they do nothing. They are very accountable here, and make sure that work is done before MoH gets paid. I think DHMT likes the work that WW does.

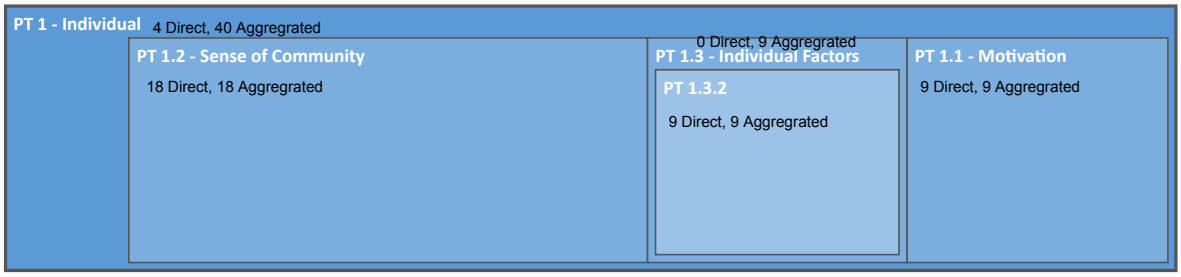
PM and him both seem really strong and committed. They seem respected, and like good leaders. Maybe that is a key ingredient in this work. Is to have several very strong and committed people in leadership positions.
PM also said she never does anything without informing the counties and appropriate leaders there.
PM really values the COMM programme. She is proud of the work that she has done here, both in terms of visible outcomes, and also what the COMMs are doing on a daily basis. She believes in the COMM model, and has no problem expressing this and getting others to believe in it too.
PM also gave lots of praise to WV Assistant. PM has been sick, so she needed some help with running things. She really trusts WV Assistant, and said that she is wonderful. PM has some strong support at the admin level then for this work. They are both very personable and friendly.

Appendix 17: Nodes and Coding References - Data Analysis

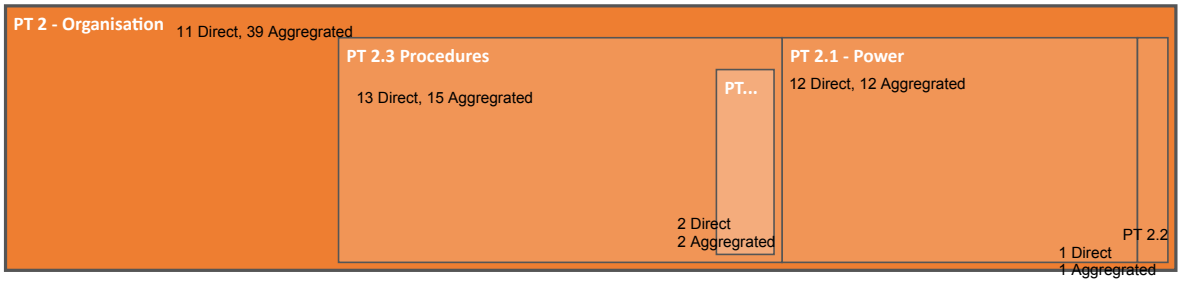
Case 1: Nodes compared by number of items coded for programme theories*[38]



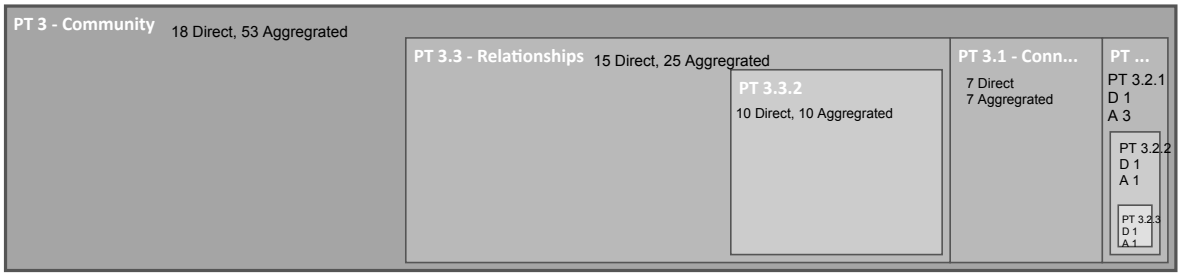
Case 1: IPT 1 Coding references number



Case 1: IPT 2 Coding references number



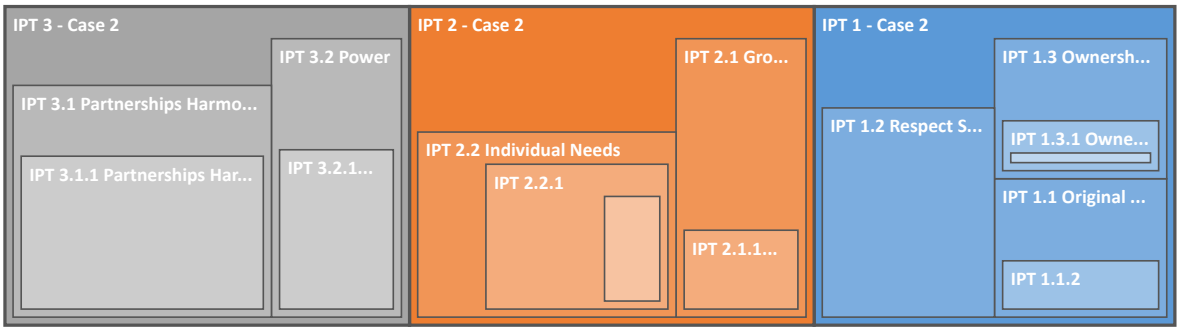
Case 1: IPT 3 Coding references number



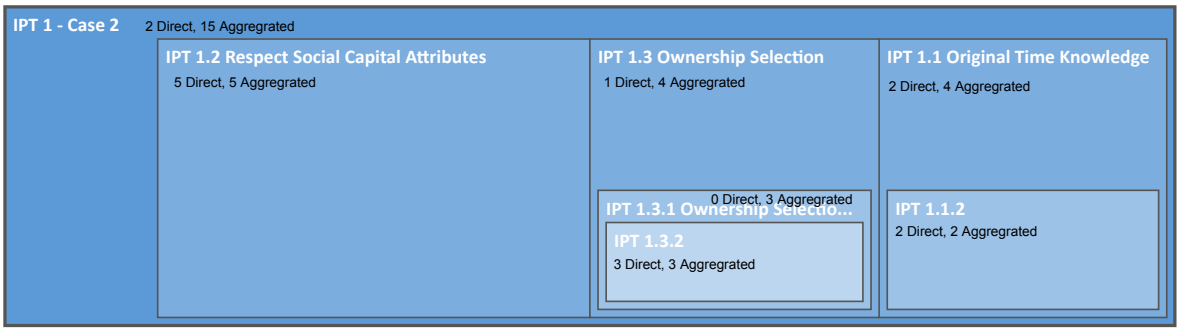
[38] * Graphics only allow for to view across 4 levels, as such PT 2.4 not visible as it was elicited from PT 2.3.2 and thus at one level lower.

- Figures from coding prior to "Data Review" phase after which some PTs were further refined.
- Size of boxes related to amount of codes. Order of boxes related to number of codes, from higher (left) to lower (right)

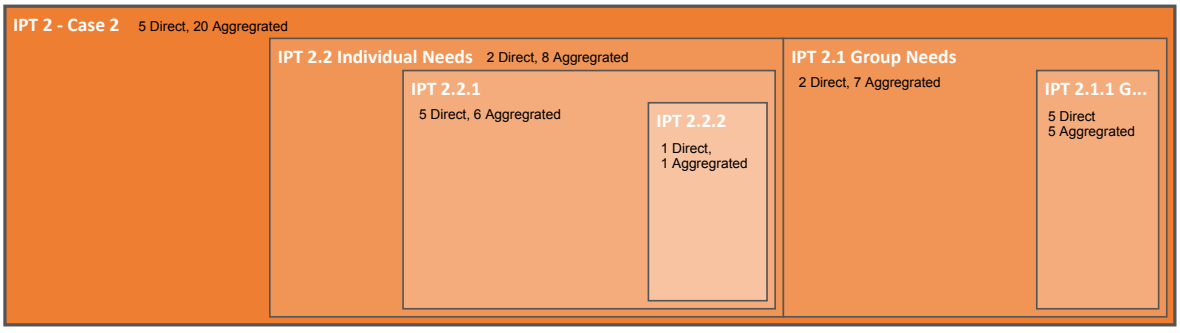
Case 2: Nodes compared by number of items coded for programme theories



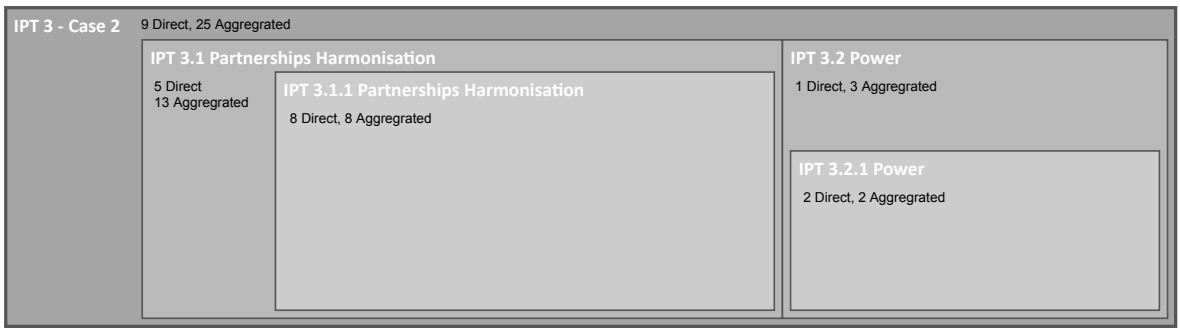
Case 2: IPT 1 Coding references number



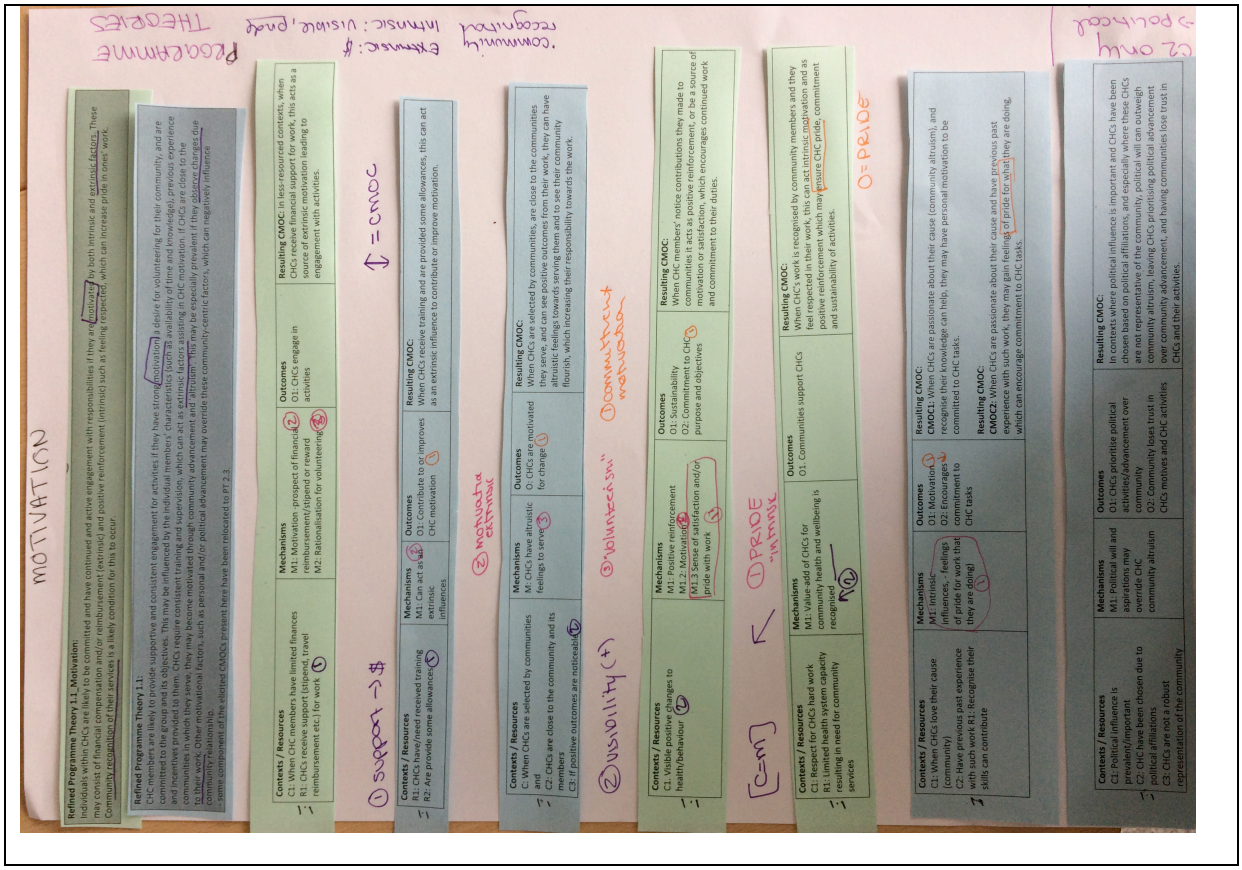
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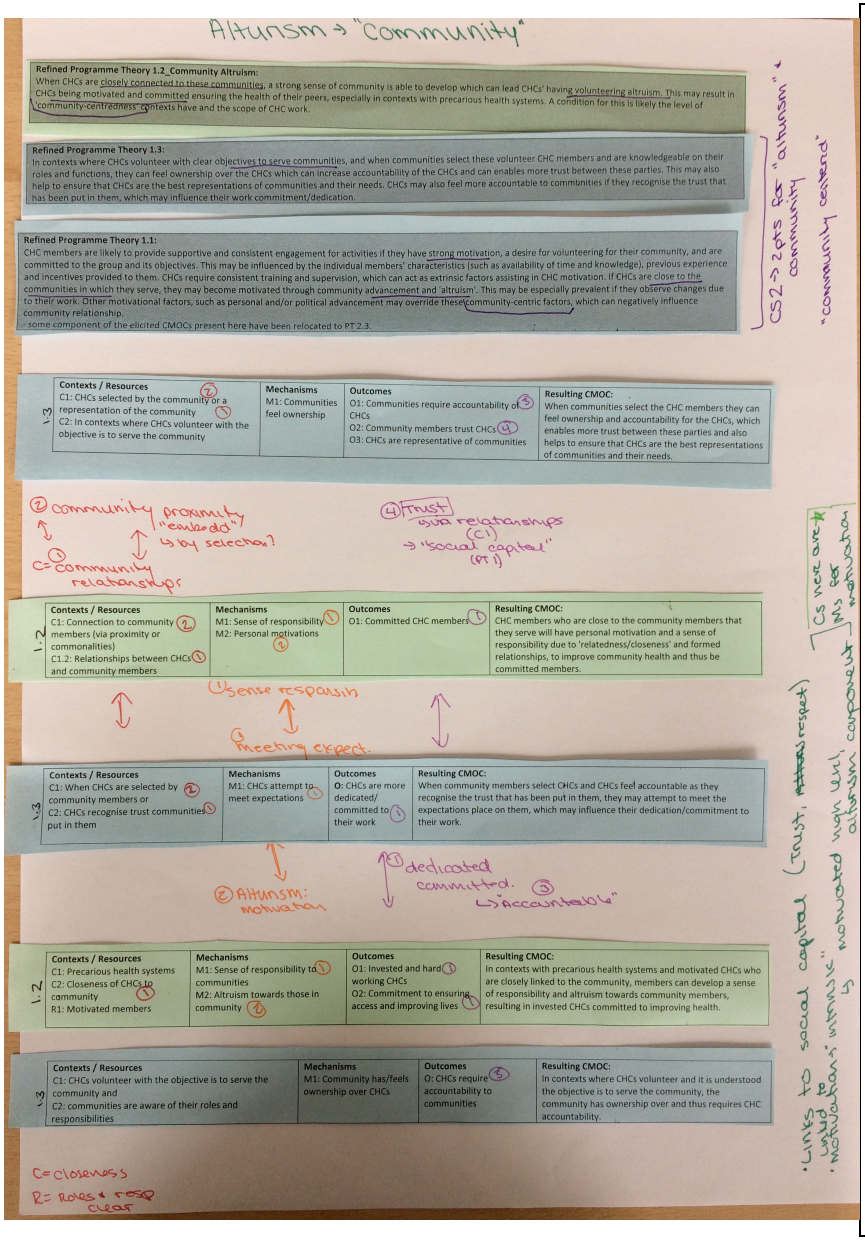


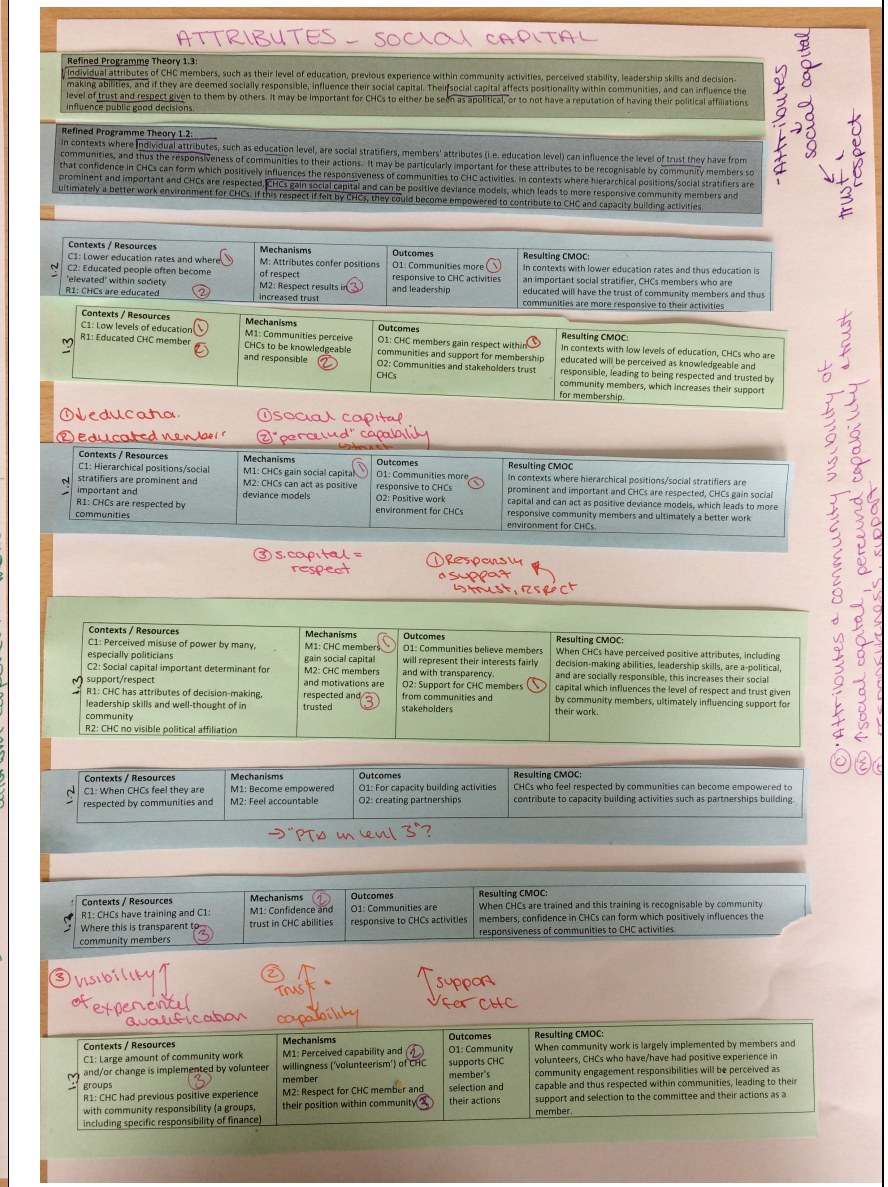
Case 2: IPT 3 Coding references number

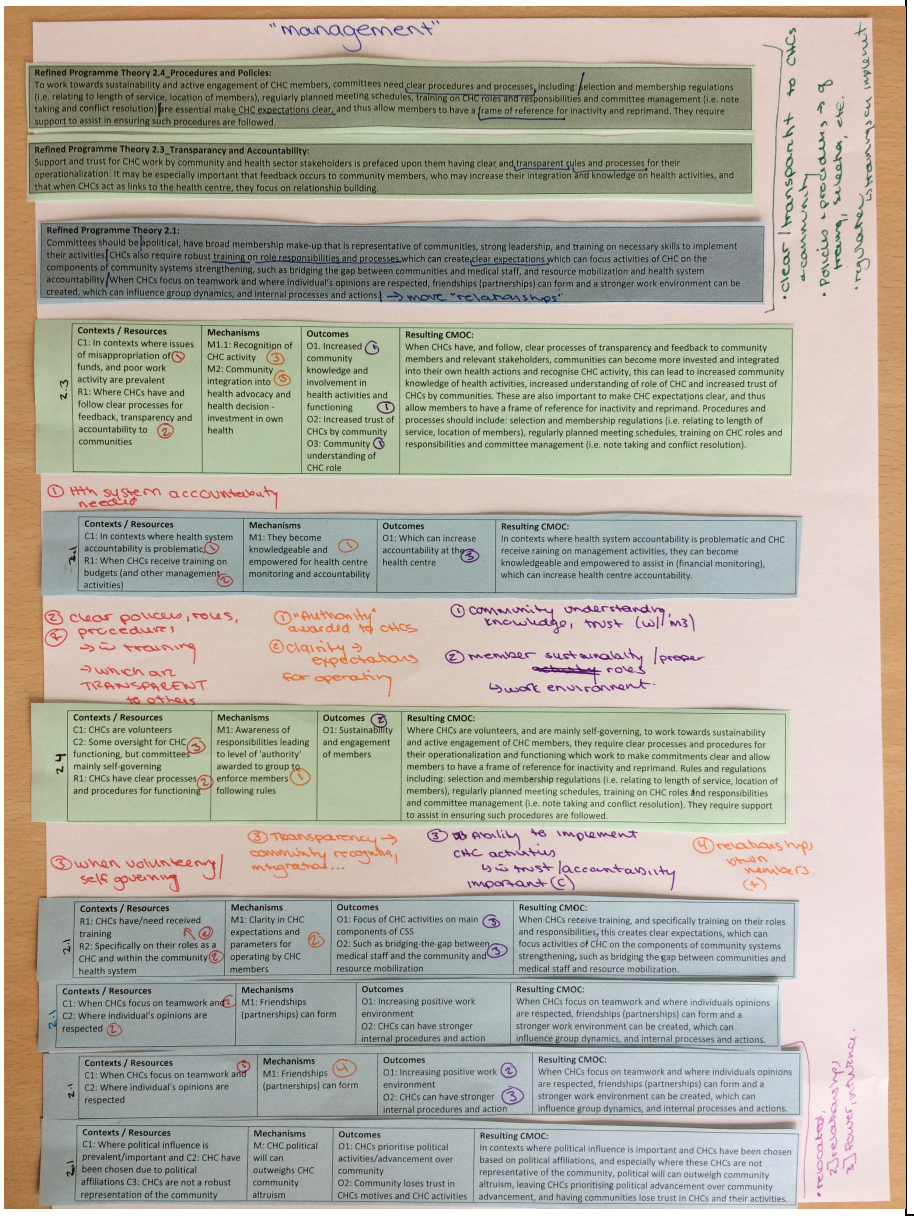


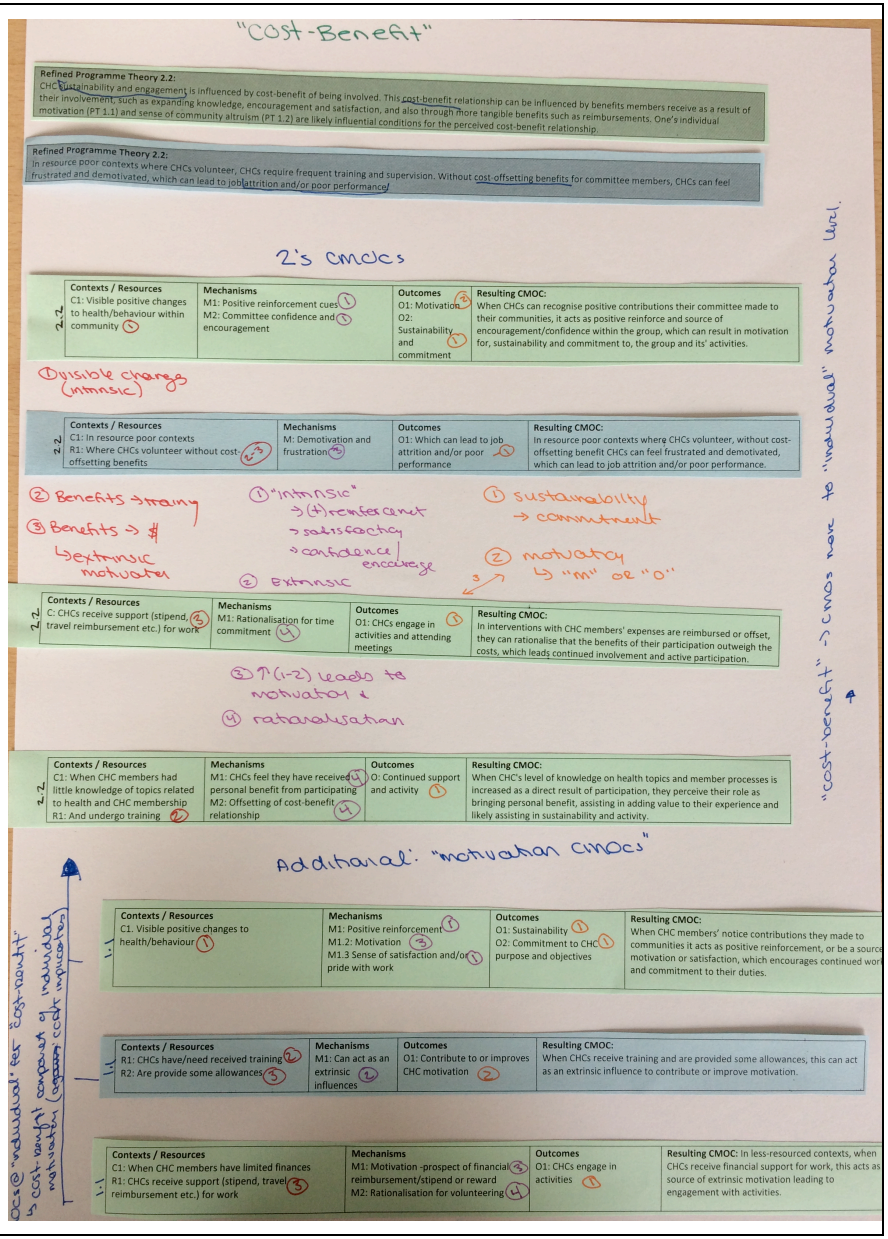
Appendix 18: Looking for Demi-regularities

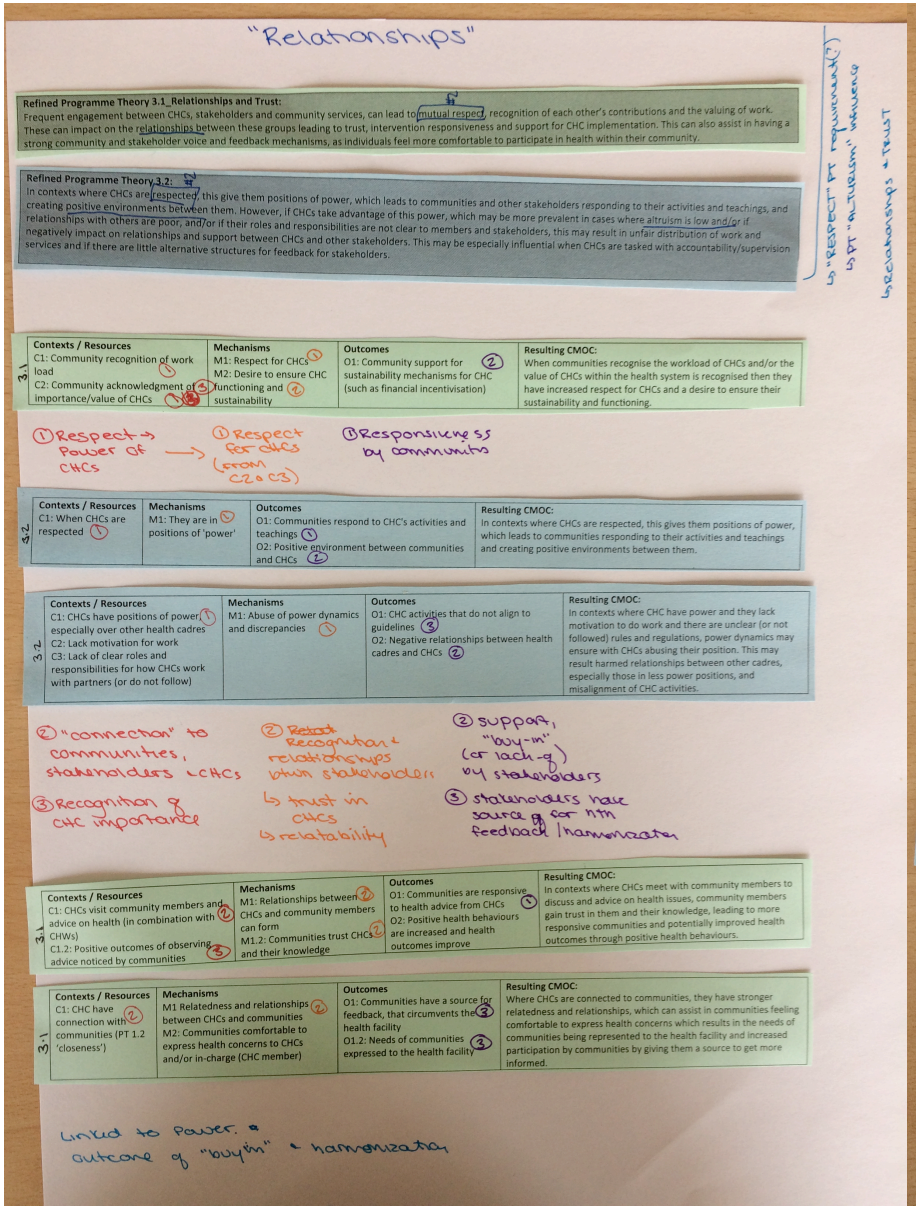


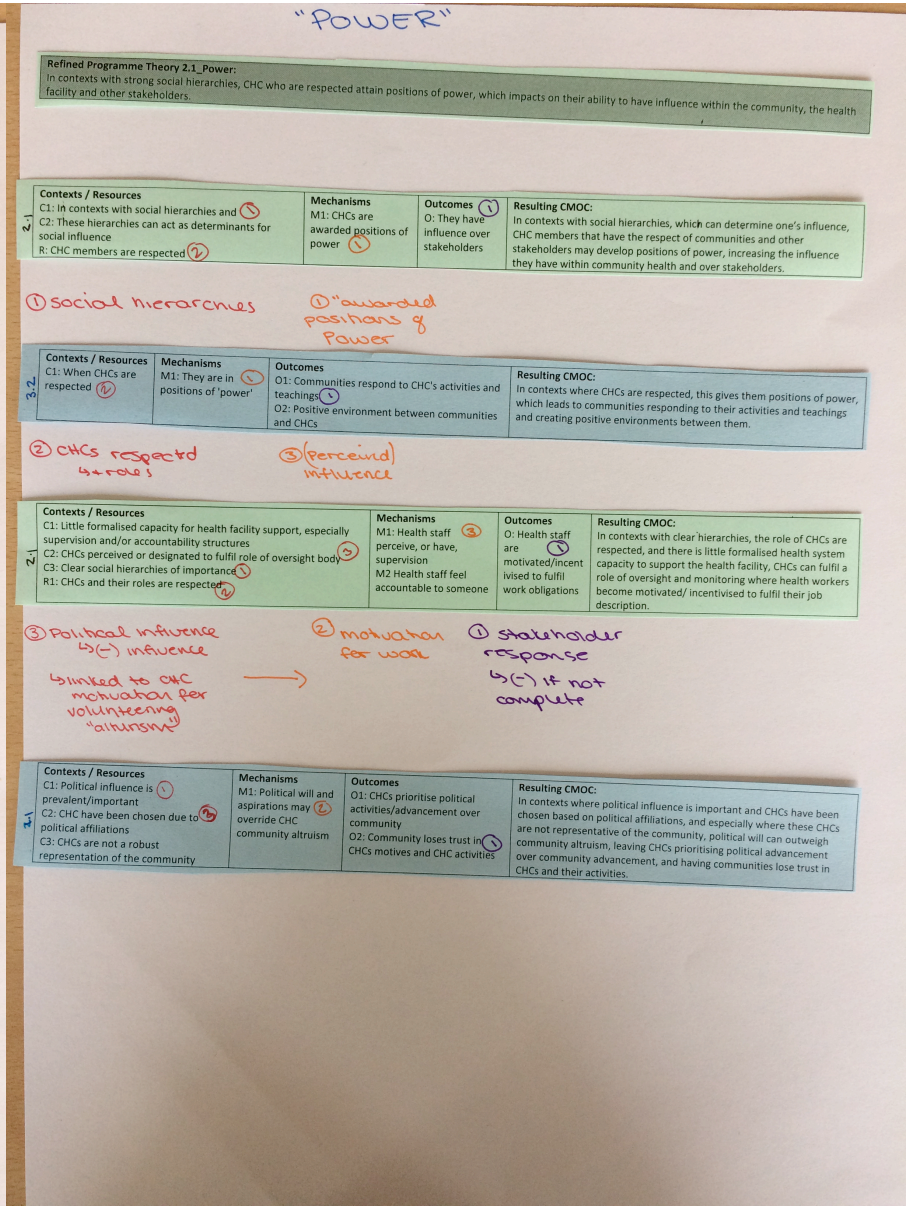

Altruism → "Community"
Refined Programme Theory 1.2_Community Altruism:
When CHCs are closely connected to these communities, a strong sense of community is able to develop which can lead CHCs' having volunteering altruism. This may result in CHCs being motivated and committed ensuring the health of their peers, especially in contexts with precarious health systems. A condition for this is likely the level of community-centredness contexts have and the scope of CHC work.
Refined Programme Theory 1.3:
In contexts where CHCs volunteer with clear objectives to serve communities, and when communities select these volunteer CHC members and are knowledgeable on their roles and functions, they can feel ownership over the CHCs which can increase accountability of the CHCs and can enables more trust between these parties. This may also help to ensure that CHCs are the best representations of communities and their needs. CHCs may also feel more accountable to communities if they recognise the trust that has been put in them, which may influence their work commitment/dedication.
Refined Programme Theory 1.1:
CHC members are likely to provide supportive and consistent engagement for activities if they have strong motivation, a desire for volunteering for their community, and are committed to the group and its objectives. This may be influenced by the individual members' characteristics (such as availability of time and knowledge), previous experience and incentives provided to them. CHCs require consistent training and supervision, which can act as extrinsic factors assisting in CHC motivation. If CHCs are close to the communities in which they serve, they may become motivated through community advancement and 'altruism'. This may be especially prevalent if they observe changes due to their work. Other motivational factors, such as personal and/or political advancement may override these community-centric factors, which can negatively influence community relationship.
- some component of the elicited CMOCs present here have been relocated to PT 2.3.
CS2 → 2pts for "altruism" + community
"community centred"
1.3
Contexts / Resources
C1: CHCs selected by the community or a representation of the community
C2: In contexts where CHCs volunteer with the objective is to serve the community
Mechanisms
M1: Communities feel ownership
Outcomes
O1: Communities require accountability of CHCs
O2: Community members trust CHCs
O3: CHCs are representative of communities
Resulting CMOC:
When communities select the CHC members they can feel ownership and accountability for the CHCs, which enables more trust between these parties and also helps to ensure that CHCs are the best representations of communities and their needs.
community proximity "enabled" by selection?
C= community relationships
Trust via relationships (C1) → "social capital" (PT 1)
1.2
Contexts / Resources
C1: Connection to community members (via proximity or commonalities)
C1.2: Relationships between CHCs and community members
Mechanisms
M1: Sense of responsibility
M2: Personal motivations
Outcomes
O1: Committed CHC members
Resulting CMOC:
CHC members who are close to the community members that they serve will have personal motivation and a sense of responsibility due to 'relatedness/closeness' and formed relationships, to improve community health and thus be committed members.
Sense responsib
Meeting expect.
1.3
Contexts / Resources
C1: When CHCs are selected by community members or
C2: CHCs recognise trust communities put in them
Mechanisms
M1: CHCs attempt to meet expectations
Outcomes
O: CHCs are more dedicated/ committed to their work
Resulting CMOC:
When community members select CHCs and CHCs feel accountable as they recognise the trust that has been put in them, they may attempt to meet the expectations place on them, which may influence their dedication/commitment to their work.
Altruism: motivation
dedicated committed. "accountable"
1.2
Contexts / Resources
C1: Precarious health systems
C2: Closeness of CHCs to community
R1: Motivated members
Mechanisms
M1: Sense of responsibility to communities
M2: Altruism towards those in community
Outcomes
O1: Invested and hard working CHCs
O2: Commitment to ensuring access and improving lives
Resulting CMOC:
In contexts with precarious health systems and motivated CHCs who are closely linked to the community, members can develop a sense of responsibility and altruism towards community members, resulting in invested CHCs committed to improving health.
1.3
Contexts / Resources
C1: CHCs volunteer with the objective is to serve the community and
C2: communities are aware of their roles and responsibilities
Mechanisms
M1: Community has/feels ownership over CHCs
Outcomes
O: CHCs require accountability to communities
Resulting CMOC:
In contexts where CHCs volunteer and it is understood the objective is to serve the community, the community has ownership over and thus requires CHC accountability.
C= closeness
R= roles & resp clear
Cs were a* Ms per motivation
• Links to social capital (trust, respect)
• Altruism & community = motivated high level, altruism component
"motivation"

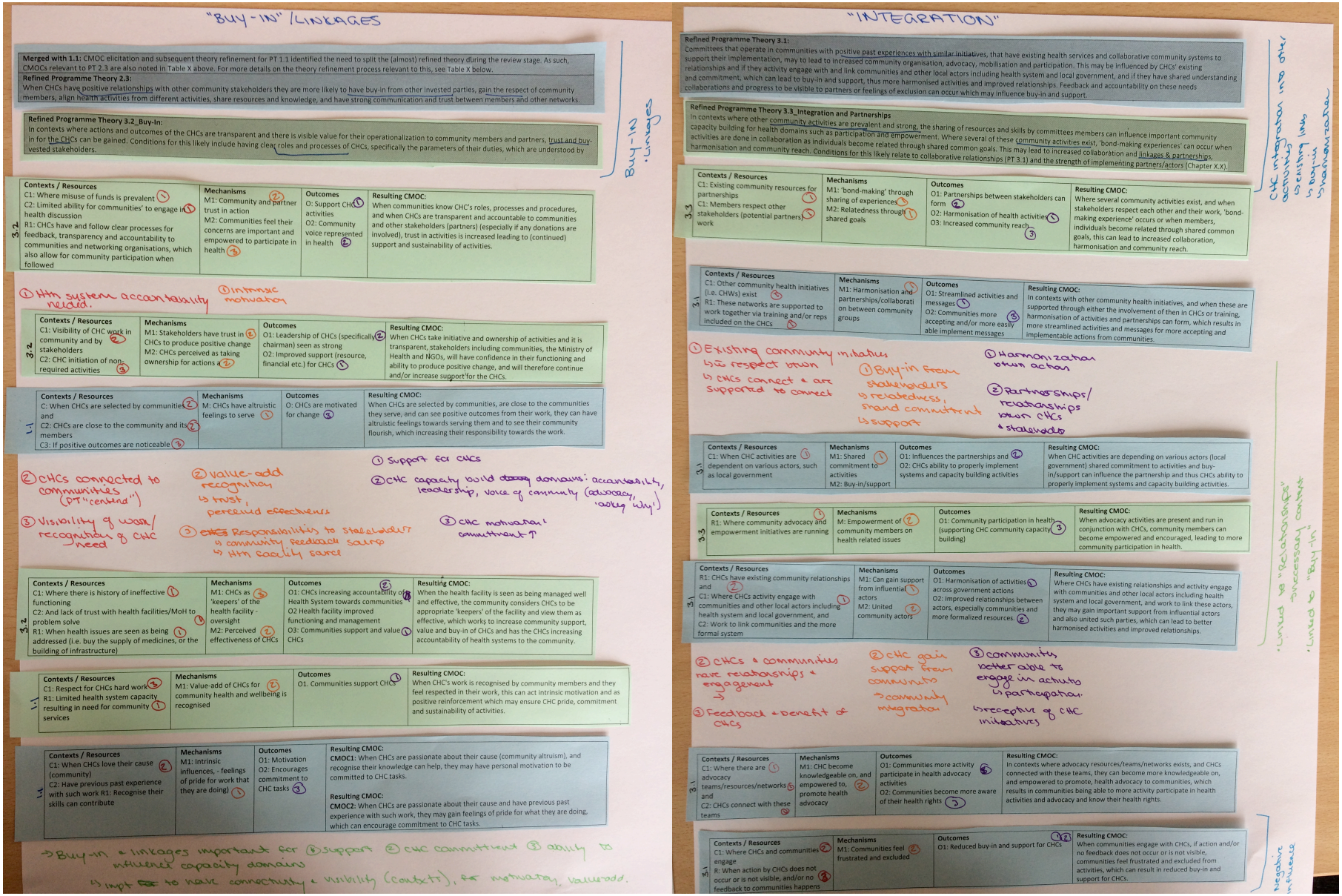

ATTRIBUTES - SOCIAL CAPITAL
Refined Programme Theory 1.3:
Individual attributes of CHC members, such as their level of education, previous experience within community activities, perceived stability, leadership skills and decision-making abilities, and if they are deemed socially responsible, influence their social capital. Their social capital affects positionality within communities, and can influence the level of trust and respect given to them by others. It may be important for CHCs to either be seen as apolitical, or to not have a reputation of having their political affiliations influence public good decisions.
Refined Programme Theory 1.2:
In contexts where individual attributes, such as education level, are social stratifiers, members' attributes (i.e. education level) can influence the level of trust they have from communities, and thus the responsiveness of communities to their actions. It may be particularly important for these attributes to be recognisable by community members so that confidence in CHCs can form which positively influences the responsiveness of communities to CHC activities. In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital and can be positive deviance models, which leads to more responsive community members and ultimately a better work environment for CHCs. If this respect if felt by CHCs, they could become empowered to contribute to CHC and capacity building activities.
-Attributes → social capital → trust + respect
1.2
Contexts / Resources
C1: Lower education rates and where
C2: Educated people often become 'elevated' within society
R1: CHCs are educated
Mechanisms
M: Attributes confer positions of respect
M2: Respect results in increased trust
Outcomes
O1: Communities more responsive to CHC activities and leadership
Resulting CMOC:
In contexts with lower education rates and thus education is an important social stratifier, CHCs members who are educated will have the trust of community members and thus communities are more responsive to their activities
1.3
Contexts / Resources
C1: Low levels of education
R1: Educated CHC member
Mechanisms
M1: Communities perceive CHCs to be knowledgeable and responsible
Outcomes
O1: CHC members gain respect within communities and support for membership
O2: Communities and stakeholders trust CHCs
Resulting CMOC:
In contexts with low levels of education, CHCs who are educated will be perceived as knowledgeable and responsible, leading to being respected and trusted by community members, which increases their support for membership.
① Education.
② Educated members
① social capital
② "perceived" capability
1.2
Contexts / Resources
C1: Hierarchical positions/social stratifiers are prominent and important and
R1: CHCs are respected by communities
Mechanisms
M1: CHCs gain social capital
M2: CHCs can act as positive deviance models
Outcomes
O1: Communities more responsive to CHCs
O2: Positive work environment for CHCs
Resulting CMOC
In contexts where hierarchical positions/social stratifiers are prominent and important and CHCs are respected, CHCs gain social capital and can act as positive deviance models, which leads to more responsive community members and ultimately a better work environment for CHCs.
③ s.capital = respect
① Respons'ty & support → trust, respect
1.3
Contexts / Resources
C1: Perceived misuse of power by many, especially politicians
C2: Social capital important determinant for support/respect
R1: CHC has attributes of decision-making, leadership skills and well-thought of in community
R2: CHC no visible political affiliation
Mechanisms
M1: CHC members gain social capital
M2: CHC members and motivations are respected and trusted
Outcomes
O1: Communities believe members will represent their interests fairly and with transparency.
O2: Support for CHC members from communities and stakeholders
Resulting CMOC:
When CHCs have perceived positive attributes, including decision-making abilities, leadership skills, are a-political, and are socially responsible, this increases their social capital which influences the level of respect and trust given by community members, ultimately influencing support for their work.
1.2
Contexts / Resources
C1: When CHCs feel they are respected by communities and
Mechanisms
M1: Become empowered
M2: Feel accountable
Outcomes
O1: For capacity building activities
O2: creating partnerships
Resulting CMOC:
CHCs who feel respected by communities can become empowered to contribute to capacity building activities such as partnerships building.
→ "PTs in level 3"?
1.3
Contexts / Resources
R1: CHCs have training and C1: Where this is transparent to community members
Mechanisms
M1: Confidence and trust in CHC abilities
Outcomes
O1: Communities are responsive to CHCs activities
Resulting CMOC:
When CHCs are trained and this training is recognisable by community members, confidence in CHCs can form which positively influences the responsiveness of communities to CHC activities.
③ visibility of experience/ qualification
② Trust + capability
support for CHC
1.3
Contexts / Resources
C1: Large amount of community work and/or change is implemented by volunteer groups
R1: CHC had previous positive experience with community responsibility (a groups, including specific responsibility of finance)
Mechanisms
M1: Perceived capability and willingness ('volunteerism') of CHC member
M2: Respect for CHC member and their position within community
Outcomes
O1: Community supports CHC member's selection and their actions
Resulting CMOC:
When community work is largely implemented by members and volunteers, CHCs who have/have had positive experience in community engagement responsibilities will be perceived as capable and thus respected within communities, leading to their support and selection to the committee and their actions as a member.
ⓒ • Attributes a community visibility of + trust
↑ social capital, perceived capability
(PT 2)


"management"
Refined Programme Theory 2.4_Procedures and Policies:
To work towards sustainability and active engagement of CHC members, committees need clear procedures and processes, including selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution) are essential make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. They require support to assist in ensuring such procedures are followed.
Refined Programme Theory 2.3_Transparancy and Accountability:
Support and trust for CHC work by community and health sector stakeholders is prefaced upon them having clear and transparent rules and processes for their operationalization. It may be especially important that feedback occurs to community members, who may increase their integration and knowledge on health activities, and that when CHCs act as links to the health centre, they focus on relationship building.
Refined Programme Theory 2.1:
Committees should be apolitical, have broad membership make-up that is representative of communities, strong leadership, and training on necessary skills to implement their activities. CHCs also require robust training on role responsibilities and processes which can create clear expectations which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff, and resource mobilization and health system accountability. When CHCs focus on teamwork and where individual's opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which can influence group dynamics, and internal processes and actions. → move "relationships"
2.3
Contexts / Resources
C1: In contexts where issues of misappropriation of funds, and poor work activity are prevalent
R1: Where CHCs have and follow clear processes for feedback, transparency and accountability to communities
Mechanisms
M1.1: Recognition of CHC activity
M2: Community integration into health advocacy and health decision - investment in own health
Outcomes
O1. Increased community knowledge and involvement in health activities and functioning
O2: Increased trust of CHCs by community
O3: Community understanding of CHC role
Resulting CMOC:
When CHCs have, and follow, clear processes of transparency and feedback to community members and relevant stakeholders, communities can become more invested and integrated into their own health actions and recognise CHC activity, this can lead to increased community knowledge of health activities, increased understanding of role of CHC and increased trust of CHCs by communities. These are also important to make CHC expectations clear, and thus allow members to have a frame of reference for inactivity and reprimand. Procedures and processes should include: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution).
Hth system accountabilty needed
2.1
Contexts / Resources
C1: In contexts where health system accountability is problematic
R1: When CHCs receive training on budgets (and other management activities)
Mechanisms
M1: They become knowledgeable and empowered for health centre monitoring and accountability
Outcomes
O1: Which can increase accountability at the health centre
Resulting CMOC:
In contexts where health system accountability is problematic and CHC receive raining on management activities, they can become knowledgeable and empowered to assist in (financial monitoring), which can increase health centre accountability.
clear policies, roles, procedures → training → which are TRANSPARENT to others
"Authority" awarded to CHCs
clarity → expectations for operating
community understanding, knowledge, trust (w// M3)
increase sustainability / proper roles & work environment.
2.4
Contexts / Resources
C1: CHCs are volunteers
C2: Some oversight for CHC functioning, but committees mainly self-governing
R1: CHCs have clear processes and procedures for functioning
Mechanisms
M1: Awareness of responsibilities leading to level of 'authority' awarded to group to enforce members following rules
Outcomes
O1: Sustainability and engagement of members
Resulting CMOC:
Where CHCs are volunteers, and are mainly self-governing, to work towards sustainability and active engagement of CHC members, they require clear processes and procedures for their operationalization and functioning which work to make commitments clear and allow members to have a frame of reference for inactivity and reprimand. Rules and regulations including: selection and membership regulations (i.e. relating to length of service, location of members), regularly planned meeting schedules, training on CHC roles and responsibilities and committee management (i.e. note taking and conflict resolution). They require support to assist in ensuring such procedures are followed.
when volunteering / self governing
Transparency → community recognition, integration ...
Ability to implement CHC activities → trust / accountability important (5)
relationships (own members)
2.1
Contexts / Resources
R1: CHCs have/need received training
R2: Specifically on their roles as a CHC and within the community health system
Mechanisms
M1: Clarity in CHC expectations and parameters for operating by CHC members
Outcomes
O1: Focus of CHC activities on main components of CSS
O2: Such as bridging-the-gap between medical staff and the community and resource mobilization
Resulting CMOC:
When CHCs receive training, and specifically training on their roles and responsibilities, this creates clear expectations, which can focus activities of CHC on the components of community systems strengthening, such as bridging the gap between communities and medical staff and resource mobilization.
2.1
Contexts / Resources
C1: When CHCs focus on teamwork and
C2: Where individual's opinions are respected
Mechanisms
M1: Friendships (partnerships) can form
Outcomes
O1: Increasing positive work environment
O2: CHCs can have stronger internal procedures and action
Resulting CMOC:
When CHCs focus on teamwork and where individuals opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which can influence group dynamics, and internal processes and actions.
2.1
Contexts / Resources
C1: When CHCs focus on teamwork and
C2: Where individual's opinions are respected
Mechanisms
M1: Friendships (partnerships) can form
Outcomes
O1: Increasing positive work environment
O2: CHCs can have stronger internal procedures and action
Resulting CMOC:
When CHCs focus on teamwork and where individuals opinions are respected, friendships (partnerships) can form and a stronger work environment can be created, which can influence group dynamics, and internal processes and actions.
relocated: 2) relationship; 3) Power influence.
2.1
Contexts / Resources
C1: Where political influence is prevalent/important and C2: CHC have been chosen due to political affiliations C3: CHCs are not a robust representation of the community
Mechanisms
M: CHC political will can outweighs CHC community altruism
Outcomes
O1: CHCs prioritise political activities/advancement over community
O2: Community loses trust in CHCs motives and CHC activities
Resulting CMOC:
In contexts where political influence is important and CHCs have been chosen based on political affiliations, and especially where these CHCs are not representative of the community, political will can outweigh community altruism, leaving CHCs prioritising political advancement over community advancement, and having communities lose trust in CHCs and their activities.
clear / transparent to CHCs community
Policies, procedures, roles, etc.
regulary transparent implement


"Cost-Benefit"
Refined Programme Theory 2.2:
CHC sustainability and engagement is influenced by cost-benefit of being involved. This cost-benefit relationship can be influenced by benefits members receive as a result of their involvement, such as expanding knowledge, encouragement and satisfaction, and also through more tangible benefits such as reimbursements. One's individual motivation (PT 1.1) and sense of community altruism (PT 1.2) are likely influential conditions for the perceived cost-benefit relationship.
Refined Programme Theory 2.2:
In resource poor contexts where CHCs volunteer, CHCs require frequent training and supervision. Without cost-offsetting benefits for committee members, CHCs can feel frustrated and demotivated, which can lead to jobl attrition and/or poor performance.
2's CMOCs
2.2
Contexts / Resources
C1: Visible positive changes to health/behaviour within community
Mechanisms
M1: Positive reinforcement cues
M2: Committee confidence and encouragement
Outcomes
O1: Motivation
O2: Sustainability and commitment
Resulting CMOC:
When CHCs can recognise positive contributions their committee made to their communities, it acts as positive reinforce and source of encouragement/confidence within the group, which can result in motivation for, sustainability and commitment to, the group and its' activities.
visible changes (intrinsic)
2.2
Contexts / Resources
C1: In resource poor contexts
R1: Where CHCs volunteer without cost-offsetting benefits
Mechanisms
M: Demotivation and frustration
Outcomes
O1: Which can lead to job attrition and/or poor performance
Resulting CMOC:
In resource poor contexts where CHCs volunteer, without cost-offsetting benefit CHCs can feel frustrated and demotivated, which can lead to job attrition and/or poor performance.
Benefits → training
Benefits → $ → extrinsic motivator
"intrinsic" → (+)reinforcement → satisfaction → confidence encourage
Extrinsic
sustainability → commitment
motivation → "in" or "o"
2.2
Contexts / Resources
C: CHCs receive support (stipend, travel reimbursement etc.) for work
Mechanisms
M1: Rationalisation for time commitment
Outcomes
O1: CHCs engage in activities and attending meetings
Resulting CMOC:
In interventions with CHC members' expenses are reimbursed or offset, they can rationalise that the benefits of their participation outweigh the costs, which leads continued involvement and active participation.
↑(1-2) leads to motivation
rationalisation
2.2
Contexts / Resources
C1: When CHC members had little knowledge of topics related to health and CHC membership
R1: And undergo training
Mechanisms
M1: CHCs feel they have received personal benefit from participating
M2: Offsetting of cost-benefit relationship
Outcomes
O: Continued support and activity
Resulting CMOC:
When CHC's level of knowledge on health topics and member processes is increased as a direct result of participation, they perceive their role as bringing personal benefit, assisting in adding value to their experience and likely assisting in sustainability and activity.
"cost-benefit" → CMOCs more to "individual" motivation level.
Additional: "motivation CMOCs"
CMOCs @ "individual" "cost-benefit" & cost-benefit component of individual motivation (opposed to CMOC indicators)
1:1
Contexts / Resources
C1. Visible positive changes to health/behaviour
Mechanisms
M1: Positive reinforcement
M1.2: Motivation
M1.3 Sense of satisfaction and/or pride with work
Outcomes
O1: Sustainability
O2: Commitment to CHC purpose and objectives
Resulting CMOC:
When CHC members' notice contributions they made to communities it acts as positive reinforcement, or be a source motivation or satisfaction, which encourages continued wor and commitment to their duties.
1:1
Contexts / Resources
R1: CHCs have/need received training
R2: Are provide some allowances
Mechanisms
M1: Can act as an extrinsic influences
Outcomes
O1: Contribute to or improves CHC motivation
Resulting CMOC:
When CHCs receive training and are provided some allowances, this can act as an extrinsic influence to contribute or improve motivation.
1:1
Contexts / Resources
C1: When CHC members have limited finances
R1: CHCs receive support (stipend, travel reimbursement etc.) for work
Mechanisms
M1: Motivation -prospect of financial reimbursement/stipend or reward
M2: Rationalisation for volunteering
Outcomes
O1: CHCs engage in activities
Resulting CMOC:
In less-resourced contexts, when CHCs receive financial support for work, this acts as source of extrinsic motivation leading to engagement with activities.


"Relationships"
Refined Programme Theory 3.1_Relationships and Trust:
Frequent engagement between CHCs, stakeholders and community services, can lead to mutual respect, recognition of each other's contributions and the valuing of work. These can impact on the relationships between these groups leading to trust, intervention responsiveness and support for CHC implementation. This can also assist in having a strong community and stakeholder voice and feedback mechanisms, as individuals feel more comfortable to participate in health within their community.
Refined Programme Theory 3.2:
In contexts where CHCs are respected, this give them positions of power, which leads to communities and other stakeholders responding to their activities and teachings, and creating positive environments between them. However, if CHCs take advantage of this power, which may be more prevalent in cases where altruism is low and/or if relationships with others are poor, and/or if their roles and responsibilities are not clear to members and stakeholders, this may result in unfair distribution of work and negatively impact on relationships and support between CHCs and other stakeholders. This may be especially influential when CHCs are tasked with accountability/supervision services and if there are little alternative structures for feedback for stakeholders.
3.1
Contexts / Resources
C1: Community recognition of work load
C2: Community acknowledgment of importance/value of CHCs
Mechanisms
M1: Respect for CHCs
M2: Desire to ensure CHC functioning and sustainability
Outcomes
O1: Community support for sustainability mechanisms for CHC (such as financial incentivisation)
Resulting CMOC:
When communities recognise the workload of CHCs and/or the value of CHCs within the health system is recognised then they have increased respect for CHCs and a desire to ensure their sustainability and functioning.
3.2
Contexts / Resources
C1: When CHCs are respected
Mechanisms
M1: They are in positions of 'power'
Outcomes
O1: Communities respond to CHC's activities and teachings
O2: Positive environment between communities and CHCs
Resulting CMOC:
In contexts where CHCs are respected, this gives them positions of power, which leads to communities responding to their activities and teachings and creating positive environments between them.
3.2
Contexts / Resources
C1: CHCs have positions of power, especially over other health cadres
C2: Lack motivation for work
C3: Lack of clear roles and responsibilities for how CHCs work with partners (or do not follow)
Mechanisms
M1: Abuse of power dynamics and discrepancies
Outcomes
O1: CHC activities that do not align to guidelines
O2: Negative relationships between health cadres and CHCs
Resulting CMOC:
In contexts where CHC have power and they lack motivation to do work and there are unclear (or not followed) rules and regulations, power dynamics may ensure with CHCs abusing their position. This may result harmed relationships between other cadres, especially those in less power positions, and misalignment of CHC activities.
3.1
Contexts / Resources
C1: CHCs visit community members and advice on health (in combination with CHWs)
C1.2: Positive outcomes of observing advice noticed by communities
Mechanisms
M1: Relationships between CHCs and community members can form
M1.2: Communities trust CHCs and their knowledge
Outcomes
O1: Communities are responsive to health advice from CHCs
O2: Positive health behaviours are increased and health outcomes improve
Resulting CMOC:
In contexts where CHCs meet with community members to discuss and advice on health issues, community members gain trust in them and their knowledge, leading to more responsive communities and potentially improved health outcomes through positive health behaviours.
3.1
Contexts / Resources
C1: CHC have connection with communities (PT 1.2 'closeness')
Mechanisms
M1 Relatedness and relationships between CHCs and communities
M2: Communities comfortable to express health concerns to CHCs and/or in-charge (CHC member)
Outcomes
O1: Communities have a source for feedback, that circumvents the health facility
O1.2: Needs of communities expressed to the health facility
Resulting CMOC:
Where CHCs are connected to communities, they have stronger relatedness and relationships, which can assist in communities feeling comfortable to express health concerns which results in the needs of communities being represented to the health facility and increased participation by communities by giving them a source to get more informed.
Linked to Power. & outcome of "buy-in" & harmonization
↳ "RESPECT" PT requirement(?)
↳ PT "altruism" influence
↳ Relationships & Trust
① Respect → Power of CHCs
① Respect for CHCs (from C2 & C3)
① Responsiveness by communities
② "connection" to communities, stakeholders & CHCs
② Retain Recognition & relationships btwn stakeholders
↳ trust in CHCs
↳ relatability
② support, "buy-in" (or lack-of) by stakeholders
③ Recognition of CHC importance
③ stakeholders have source of for n'th feedback / harmonization


"POWER"
Refined Programme Theory 2.1_Power:
In contexts with strong social hierarchies, CHC who are respected attain positions of power, which impacts on their ability to have influence within the community, the health facility and other stakeholders.
2.1
Contexts / Resources
C1: In contexts with social hierarchies and
C2: These hierarchies can act as determinants for social influence
R: CHC members are respected
Mechanisms
M1: CHCs are awarded positions of power
Outcomes
O: They have influence over stakeholders
Resulting CMOC:
In contexts with social hierarchies, which can determine one's influence, CHC members that have the respect of communities and other stakeholders may develop positions of power, increasing the influence they have within community health and over stakeholders.
3.2
Contexts / Resources
C1: When CHCs are respected
Mechanisms
M1: They are in positions of 'power'
Outcomes
O1: Communities respond to CHC's activities and teachings
O2: Positive environment between communities and CHCs
Resulting CMOC:
In contexts where CHCs are respected, this gives them positions of power, which leads to communities responding to their activities and teachings and creating positive environments between them.
2.1
Contexts / Resources
C1: Little formalised capacity for health facility support, especially supervision and/or accountability structures
C2: CHCs perceived or designated to fulfil role of oversight body
C3: Clear social hierarchies of importance
R1: CHCs and their roles are respected
Mechanisms
M1: Health staff perceive, or have, supervision
M2 Health staff feel accountable to someone
Outcomes
O: Health staff are motivated/incentivised to fulfil work obligations
Resulting CMOC:
In contexts with clear hierarchies, the role of CHCs are respected, and there is little formalised health system capacity to support the health facility, CHCs can fulfil a role of oversight and monitoring where health workers become motivated/ incentivised to fulfil their job description.
3.1
Contexts / Resources
C1: Political influence is prevalent/important
C2: CHC have been chosen due to political affiliations
C3: CHCs are not a robust representation of the community
Mechanisms
M1: Political will and aspirations may override CHC community altruism
Outcomes
O1: CHCs prioritise political activities/advancement over community
O2: Community loses trust in CHCs motives and CHC activities
Resulting CMOC:
In contexts where political influence is important and CHCs have been chosen based on political affiliations, and especially where these CHCs are not representative of the community, political will can outweigh community altruism, leaving CHCs prioritising political advancement over community advancement, and having communities lose trust in CHCs and their activities.
① social hierarchies
① "awarded positions of Power
② CHCs respected & roles
③ (perceived) influence
③ Political influence ↳ (-) influence
↳ linked to CHC motivation for volunteering "altruism"
② motivation for work
① stakeholder response
↳ (-) if not complete


"BUY-IN" / LINKAGES
Merged with 1.1: CMOC elicitation and subsequent theory refinement for PT 1.1 identified the need to split the (almost) refined theory during the review stage. As such, CMOCs relevant to PT 2.3 are also noted in Table X above. For more details on the theory refinement process relevant to this, see Table X below.
Refined Programme Theory 2.3:
When CHCs have positive relationships with other community stakeholders they are more likely to have buy-in from other invested parties, gain the respect of community members, align health activities from different activities, share resources and knowledge, and have strong communication and trust between members and other networks.
Refined Programme Theory 3.2_Buy-In:
In contexts where actions and outcomes of the CHCs are transparent and there is visible value for their operationalization to community members and partners, trust and buy-in for the CHCs can be gained. Conditions for this likely include having clear roles and processes of CHCs, specifically the parameters of their duties, which are understood by vested stakeholders.
Buy-in Linkages
3.2
Contexts / Resources
C1: Where misuse of funds is prevalent
C2: Limited ability for communities' to engage in health discussion
R1: CHCs have and follow clear processes for feedback, transparency and accountability to communities and networking organisations, which also allow for community participation when followed
Mechanisms
M1: Community and partner trust in action
M2: Communities feel their concerns are important and empowered to participate in health
Outcomes
O: Support CHCs activities
O2: Community voice represented in health
Resulting CMOC:
When communities know CHC's roles, processes and procedures, and when CHCs are transparent and accountable to communities and other stakeholders (partners) (especially if any donations are involved), trust in activities is increased leading to (continued) support and sustainability of activities.
① Htn system accountability needed.
① Intrinsic motivation
3.2
Contexts / Resources
C1: Visibility of CHC work in community and by stakeholders
C2: CHC initiation of non-required activities
Mechanisms
M1: Stakeholders have trust in CHCs to produce positive change
M2: CHCs perceived as taking ownership for actions a
Outcomes
O1: Leadership of CHCs (specifically chairman) seen as strong
O2: Improved support (resource, financial etc.) for CHCs
Resulting CMOC:
When CHCs take initiative and ownership of activities and it is transparent, stakeholders including communities, the Ministry of Health and NGOs, will have confidence in their functioning and ability to produce positive change, and will therefore continue and/or increase support for the CHCs.
1.1
Contexts / Resources
C: When CHCs are selected by communities and
C2: CHCs are close to the community and its members
C3: If positive outcomes are noticeable
Mechanisms
M: CHCs have altruistic feelings to serve
Outcomes
O: CHCs are motivated for change
Resulting CMOC:
When CHCs are selected by communities, are close to the communities they serve, and can see positive outcomes from their work, they can have altruistic feelings towards serving them and to see their community flourish, which increasing their responsibility towards the work.
② CHCs connected to communities (PT "centend")
② Value-add recognition
↳ trust,
perceived effectiveness
① Support for CHCs
② CHC capacity build domains: accountability, leadership, voice of community (advocacy, 'asking why')
③ Visibility of work/ recognition of CHC need
③ Responsibility to stakeholders
↳ community feedback satisp
↳ Htn facility satisf
③ CHC motivation/ commitment ?
3.3
Contexts / Resources
C1: Where there is history of ineffective functioning
C2: And lack of trust with health facilities/MoH to problem solve
R1: When health issues are seen as being addressed (i.e. buy the supply of medicines, or the building of infrastructure)
Mechanisms
M1: CHCs as 'keepers' of the health facility - oversight
M2: Perceived effectiveness of CHCs
Outcomes
O1: CHCs increasing accountability of Health System towards communities
O2 Health facility improved functioning and management
O3: Communities support and value CHCs
Resulting CMOC:
When the health facility is seen as being managed well and effective, the community considers CHCs to be appropriate 'keepers' of the facility and view them as effective, which works to increase community support, value and buy-in of CHCs and has the CHCs increasing accountability of health systems to the community.
1.1
Contexts / Resources
C1: Respect for CHCs hard work
R1: Limited health system capacity resulting in need for community services
Mechanisms
M1: Value-add of CHCs for community health and wellbeing is recognised
Outcomes
O1. Communities support CHCs
Resulting CMOC:
When CHC's work is recognised by community members and they feel respected in their work, this can act intrinsic motivation and as positive reinforcement which may ensure CHC pride, commitment and sustainability of activities.
1.1
Contexts / Resources
C1: When CHCs love their cause (community)
C2: Have previous past experience with such work R1: Recognise their skills can contribute
Mechanisms
M1: Intrinsic influences, - feelings of pride for work that they are doing)
Outcomes
O1: Motivation
O2: Encourages commitment to CHC tasks
Resulting CMOC:
CMOC1: When CHCs are passionate about their cause (community altruism), and recognise their knowledge can help, they may have personal motivation to be committed to CHC tasks.
Resulting CMOC:
CMOC2: When CHCs are passionate about their cause and have previous past experience with such work, they may gain feelings of pride for what they are doing, which can encourage commitment to CHC tasks.
→ Buy-in & linkages important for ① support ② CHC commitment ③ ability to influence capacity domains
↳ Impt for to have connectivity & visibility (contxts), & motivator, valueadd.
"INTEGRATION"
Refined Programme Theory 3.1:
Committees that operate in communities with positive past experiences with similar initiatives, that have existing health services and collaborative community systems to support their implementation, may to lead to increased community organisation, advocacy, mobilisation and participation. This may be influenced by CHCs' existing relationships and if they activity engage with and link communities and other local actors including health system and local government, and if they have shared understanding and commitment, which can lead to buy-in and support, thus more harmonised activities and improved relationships. Feedback and accountability on these needs collaborations and progress to be visible to partners or feelings of exclusion can occur which may influence buy-in and support.
Refined Programme Theory 3.3_Integration and Partnerships
In contexts where other community activities are prevalent and strong, the sharing of resources and skills by committees members can influence important community capacity building for health domains such as participation and empowerment. Where several of these community activities exist, 'bond-making experiences' can occur when activities are done in collaboration as individuals become related through shared common goals. This may lead to increased collaboration and linkages & partnerships, harmonisation and community reach. Conditions for this likely relate to collaborative relationships (PT 3.1) and the strength of implementing partners/actors (Chapter X.X).
CHC integration into other activities
↳ existing links
↳ Buy-in
↳ Harmonization
3.3
Contexts / Resources
C1: Existing community resources for partnerships
C1: Members respect other stakeholders (potential partners) work
Mechanisms
M1: 'bond-making' through sharing of experiences
M2: Relatedness through shared goals
Outcomes
O1: Partnerships between stakeholders can form
O2: Harmonisation of health activities
O3: Increased community reach
Resulting CMOC:
Where several community activities exist, and when stakeholders respect each other and their work, 'bond-making experience' occurs or when members, individuals become related through shared common goals, this can lead to increased collaboration, harmonisation and community reach.
3.1
Contexts / Resources
C1: Other community health initiatives (i.e. CHWs) exist
R1: These networks are supported to work together via training and/or reps included on the CHCs
Mechanisms
M1: Harmonisation and partnerships/collaboration between community groups
Outcomes
O1: Streamlined activities and messages
O2: Communities more accepting and/or more easily able implement messages
Resulting CMOC:
In contexts with other community health initiatives, and when these are supported through either the involvement of then in CHCs or training, harmonisation of activities and partnerships can form, which results in more streamlined activities and messages for more accepting and implementable actions from communities.
① Existing community initiatives
↳ respect btwn
↳ CHCs connect & are supported to connect
① Buy-in from stakeholders
↳ relatedness, shared commitment
↳ support
① Harmonization btwn actors
② Partnerships/ relationships btwn CHCs & stakeholds
3.1
Contexts / Resources
C1: When CHC activities are dependent on various actors, such as local government
Mechanisms
M1: Shared commitment to activities
M2: Buy-in/support
Outcomes
O1: Influences the partnerships and
O2: CHCs ability to properly implement systems and capacity building activities
Resulting CMOC:
When CHC activities are depending on various actors (local government) shared commitment to activities and buy-in/support can influence the partnership and thus CHCs ability to properly implement systems and capacity building activities.
3.3
Contexts / Resources
R1: Where community advocacy and empowerment initiatives are running
Mechanisms
M: Empowerment of community members on health related issues
Outcomes
O1: Community participation in health (supporting CHC community capacity building)
Resulting CMOC:
When advocacy activities are present and run in conjunction with CHCs, community members can become empowered and encouraged, leading to more community participation in health.
"Linked to "Relationships" "Processes/ Contxts"
"Linked to "Buy-in"
3.1
Contexts / Resources
R1: CHCs have existing community relationships and
C1: Where CHCs activity engage with communities and other local actors including health system and local government, and
C2: Work to link communities and the more formal system
Mechanisms
M1: Can gain support from influential actors
M2: United community actors
Outcomes
O1: Harmonisation of activities across government actions
O2: Improved relationships between actors, especially communities and more formalized resources.
Resulting CMOC:
Where CHCs have existing relationships and activity engage with communities and other local actors including health system and local government, and work to link these actors, they may gain important support from influential actors and also united such parties, which can lead to better harmonised activities and improved relationships.
② CHCs & communities have relationships & engagement
→
③ Feedback & benefit of CHCs
② CHC gain support from communities
→ community integration
③ Communities better able to engage in activity participation
↳ receptive of CHC initiatives
3.1
Contexts / Resources
C1: Where there are advocacy teams/resources/networks and
C2: CHCs connect with these teams
Mechanisms
M1: CHC become knowledgeable on, and empowered to, promote health advocacy
Outcomes
O1: Communities more activity participate in health advocacy activities
O2: Communities become more aware of their health rights
Resulting CMOC:
In contexts where advocacy resources/teams/networks exists, and CHCs connected with these teams, they can become more knowledgeable on, and empowered to promote, health advocacy to communities, which results in communities being able to more activity participate in health activities and advocacy and know their health rights.
3.1
Contexts / Resources
C1: Where CHCs and communities engage
R: When action by CHCs does not occur or is not visible, and/or no feedback to communities happens
Mechanisms
M1: Communities feel frustrated and excluded
Outcomes
O1: Reduced buy-in and support for CHCs
Resulting CMOC:
When communities engage with CHCs, if action and/or no feedback does not occur or is not visible, communities feel frustrated and excluded from activities, which can result in reduced buy-in and support for CHCs.
Negative influence