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Self-Help Groups in Development:

A Review of Evidence from South Asia and Sub-Saharan Africa

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This brief synthesizes available evidence on the effectiveness of Self-Help Groups (SHGs) in promoting health, finance, agriculture, and empowerment objectives in South Asia and Sub-Saharan Africa. Our findings are intended to inform strategic decisions about how to best use scarce resources to leverage existing SHG interventions in various geographies and to better understand how local institutions such as SHGs can serve as platforms to enhance investments.

Defining Self-Help Groups

We define “self-help groups” as mutual assistance organizations through which individuals undertake collective action in order to improve their own lives. This definition is broader than the typical usage of the term in India, where “self-help group” generally refers to a savings group, or in Western contexts, where it often has mental health connotations. Collective action implies that individuals share their time, labor, money, or other assets with the group. Members of self-help groups receive individual benefits from participation, but groups may also produce positive social externalities. Interventions delivered through SHGs may better facilitate successful development outcomes than approaches targeting individuals or mass mobilization campaigns because groups can engage in collective bargaining, risk spreading, or peer education & social support.

We include in our review SHGs that meet the following criteria:

- Voluntary membership
- Self-governance and member participation in decision-making
- Member contributions of time, labor, money, or other assets
- Regular face-to-face interactions among members
- Aim to improve individual member welfare

A detailed explanation of how SHGs fit into the larger universe of community mobilization strategies, as well as an illustration of how SHGs differ from other types of community groups can be found in Appendix 1.

Evidence Review Methodology

We identified 470 published articles and program documents as candidates for review through multiple searches using permutations of search phrases combining geographies, group types, and outcomes. From our initial search of academic article databases we selected 34 articles for review based on study characteristics (e.g. methodology, intervention, geography, date, sample size) and on theoretical considerations of how SHGs contribute to development outcomes (e.g. group characteristics that are hypothesized to affect outcomes, findings within

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outcome areas). We reviewed an additional 51 articles identified in supplemental searches to fill gaps in information around cost, scale and sustainability. The supplemental articles were selected for review based on the reliability and credibility of the source and whether they reported on a model in wide use. In total, we reviewed and coded evidence from 85 high-quality and relevant articles, including 45 that systematically examined the effectiveness of SHGs in South Asia and Sub-Saharan Africa. Appendix 2 describes our methodology in detail.

Evidence Review

In this review we report on characteristics of different types of SHGs; assess evidence on association between SHG participation and outcomes of interest; assess the evidence on cost, scalability, and sustainability of SHGs; and review differences between SHGs in Sub-Saharan Africa and South Asia.

Characteristics of SHGs in this Review

We identified three main types of SHGs in our evidence base that have been systematically studied: savings groups, women's health groups, and farmers' groups.¹ Table 1 presents an overview of the characteristics of each of these SHG types. While other types of SHGs exist, including social groups, mutual support groups, and labor groups and other peer groups, we found very little systematic evidence describing or evaluating them.

Savings Groups such as Rotating and Accumulating Savings and Credit Associations (ROSCAs, ASCAs), Village Savings and Loan Associations (VSLAs), and Indian savings groups, may be initially formed by individuals, but are often promoted by NGOs or government agencies. The typical savings group is made up of 10-20 members, usually female. Savings groups often have multiple aims in addition to providing reliable mechanisms for savings and expanding access to credit; these include promoting opportunities for income generating activities, providing alternative forms of insurance, and increasing the social capital of participants. In India, savings groups are often linked to financial institutions to secure funds and gain access to external loans. Some savings groups have a set savings cycle, often a year long, at the end of which funds are dispersed and members are free to leave without penalty; other groups are intended to have more permanent membership. Savings groups are commonly used as a platform to deliver health and empowerment interventions, particularly in India. Unlike many group-based microfinance programs, savings SHGs focus primarily on savings and mobilizing internal funds, rather than taking out loans from outside sources.

Women's Health Groups are typically formed and facilitated by local women who have been selected and trained by an intervening NGO. Women's health groups are formed to increase knowledge about maternal and community health issues and to mobilize community responses, often through a "Participatory Learning and Action" model. They are usually made up exclusively of women of reproductive age or women who are pregnant, though meetings are often open to any who wish to participate. This type of SHG is almost always time-bound, lasting 1-3 years.

Farmers' Groups are typically larger than other self-help groups, ranging from 12-40 members, and most often include both women and men. Goals include increasing access to credit and inputs, risk-pooling, accessing high-value markets to sell goods, and facilitating knowledge exchange. Farmers' group members may also participate in savings groups or collective agricultural activities. They are usually formed and supported by NGOs, and are typically intended to be on-going. We exclude larger farmers' cooperatives from our analysis in this review as they do not typically meet our criteria for defining SHGs, especially with respect to member interactions and participation in decision-making.

¹ Group names in this review may not align with labels assigned by studies, as groups with the same name may vary significantly in their organization and activities.

Table 1. Characteristics of different Self-Help Group Types

	Goals	Formation	Membership	Size	Demographics	Lifespan
Savings Groups	Access to credit, lump sum payments, insurance	By members or external agent	Formal	10 - 20	Mostly Women	Mixed
Women's Health Groups	Improving maternal, child, and community health	External	Informal	10 - 20	Almost All Women	1-3 Years
Farmers' Groups	Access to inputs, risk sharing, accessing high value markets, knowledge exchange	External	Mixed	12 - 40	Men and Women	Ongoing

The Effectiveness of Self-Help Groups in Promoting Health, Financial, Agricultural and Other Outcomes

We reviewed evidence for the effectiveness of SHGs in seven broad outcome areas identified in Table 2 below. The table summarizes the evidence base for each outcome area including the number of published and unpublished studies reviewed, the geographies covered, and the scale and methodology of the studies. Appendix 2 provides detail on how we define study methodologies.

Table 2: Evidence Base by Outcome Area - 45 studies total

Outcome Area	Studies Reporting on At Least 1 Indicator in this Outcome Area*			
	# of studies**	Geographies covered***	Scale of studies	Methodology of studies
Maternal, Newborn, and Child Health (MNCH)	16 (0 not published)	2 Bangladesh, 9 India, 4 Malawi, 2 Nepal, 1 Zambia	3 local, 10 regional, 1 national, 2 multi-national	2 systematic review, 8 experimental, 2 quasi-experimental, 4 non-experimental
Reproductive Health and HIV	10 (1 not published)	3 India, 2 Kenya, 1 South Africa, 2 Tanzania, 1 Zambia, 1 Zimbabwe	5 local, 4 regional, 1 national	3 experimental, 5 quasi-experimental, 2 non-experimental
Other Health	7 (4 not published)	5 India, 1 Kenya, 1 Malawi,	2 local, 4 regional, 1 national	3 experimental, 1 quasi-experimental, 3 non-experimental
Empowerment	24 (8 not published)	1 Benin, 14 India, 5 Kenya, 1 Malawi, 1 South Africa, 3 Tanzania, 1 Uganda	11 local, 9 regional, 3 national, 1 multi-national	6 experimental, 11 quasi-experimental, 7 non-experimental
Finance	24 (8 not published)	1 Benin, 14 India, 5 Kenya, 1 Malawi, 1 South Africa, 2 Tanzania, 2 Uganda	10 local, 9 regional, 4 national, 1 multi-national	5 experimental, 10 quasi-experimental, 9 non-experimental
Agriculture	11 (4 not published)	4 India, 4 Kenya, 3 Tanzania, 2 Uganda	3 local, 4 regional, 3 national, 1 multi-national	3 experimental, 5 quasi-experimental, 3 non-experimental
Group dynamics	11 (5 not published)	6 India, 4 Kenya, 1 Tanzania,	4 local, 5 regional, 2 national,	2 experimental, 5 quasi-experimental, 4 non-experimental

*Note: Many studies report on several outcome areas.

**Published studies were published in a peer-reviewed academic journal.

***Some studies were conducted in more than one country, so the "geographies covered" column does not always sum to the total number of studies.

In each of the seven outcome areas, we identified a subset of intervention goals that were common across a large number of interventions or that addressed important underlying questions about why SHGs might be enhance development goals, including characteristics of groups and elements of group dynamics and governance.

In the tables that follow, we evaluate the findings for each outcome area according to 1) the strength of the evidence base and 2) the evidence of SHG effectiveness. The criteria for evidence strength include scale of study (local versus national), technical quality of study (such as sample size, existence and quality of control group, analytical methods, and measurement techniques), and external validity (relevance and generalizability to other

contexts of interest). We characterize an evidence base for a particular outcome as strong when there is evidence from 7 or more studies that are regional scale or higher and that have a strong or medium-strong technical quality (meaning the bulk of the evidence comes from experimental or quasi-experimental studies). Bodies of evidence evaluated as medium strength are based on 2-6 such studies, and weak evidence indicates only one study.

We characterize the evidence on SHG effectiveness within particular outcome areas as positive, mixed, or negative. We consider evidence as positive if all studies for a particular outcome reported positive results. We characterize the evidence as 'mixed' if any of the studies report non-positive results (e.g., insignificant, no-effect, mixed, or negative) in addition to positive results.

Key Findings for All Outcome Areas

- The evidence base extends across South Asia (SA) and Sub-Saharan Africa (SSA), but is largely concentrated within four Indian states and three East African countries.ⁱⁱ
- Interventions delivered through SHGs appear to be effective for reducing infant and neonatal mortality and morbidity in rural areas, but the evidence on maternal health outcomes are mixed.
- We found no evidence to suggest SHGs are an effective platform for improving MNCH outcomes in urban settings, but note that the evidence base is very limited.
- We found a weak evidence base to support the use of SHGs to achieve reproductive health and HIV-related outcomes, but studies of impacts in these outcome areas reported generally positive results.
- The evidence base for the role of SHGs in promoting health outcomes such as care-seeking for illness or disease, immunization, nutrition, and WASH is very limited and weak.
- Studies that included measures of empowerment reported generally positive outcomes for women who participated in SHG activities. However, a few studies noted that empowerment outcomes may be limited in communities with more conservative gender norms.
- Self-help groups are generally associated with positive financial outcomes including increased savings, access to credit, and ownership of assets.
- We found a large evidence base for SHGs and agricultural outcomes in general, but weak evidence for the impact of group membership on specific outcomes such as increased farm income, technology adoption, and access to and use of agricultural inputs.
- Little detailed evidence exists to connect SHG characteristics or group dynamics (governance, participation and cohesion) with development outcomes; the evidence we did find shows largely mixed results.

Evidence from Outcome Areas

We assessed the 45 articles that make up the evidence base for our seven outcome areas.ⁱⁱⁱ Appendices 3-9 provide additional detail on the evidence for each outcome area. We note some caveats on the overall quality of evidence. First, the number of studies is extremely small relative to the number of SHG interventions likely taking place. In India alone, estimates suggest the population of operating SHGs is at least 1,500,000 SHGs.¹ Second, very few studies explicitly compared SHG-based interventions to non-SHG interventions, so the evidence on the effectiveness of SHGs relative to other approaches is thin. Third, studies did not consistently report on SHG characteristics, complicating the assessment of which types of SHGs might be more effective. Finally, the quality and consistency of outcome measurement varied widely among the studies. That said, we believe this review is the most systematic assessment of the existing SHG empirical literature available.

Maternal, Newborn, and Child Health Outcomes (MNCH)

Evidence Base for MNCH

The MNCH evidence base is the strongest of the seven outcomes areas. Sixteen articles reported on at least one of five MNCH outcomes: maternal and newborn care practices at home; care-seeking for complications; institutional

ⁱⁱ Kenya, Tanzania, and Uganda and Indian states of Jharkhand, Odisha, Andhra Pradesh, and Maharashtra

ⁱⁱⁱ A detailed discussion of findings for each outcome are provided in Appendices 3-9.

or skilled attendant delivery; maternal mortality and morbidity rates; and infant or neo-natal mortality and morbidity rates.² Thirteen of the sixteen studies were evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity providing a relatively strong research base overall. Nine of the studies with medium-high or better research quality reported consistently positive results across MNCH outcomes. The remainder reported generally positive results but had at least one outcome area where their findings were not statistically significant.

Interventions that work through women’s health groups target women of childbearing age (usually 15-49 years) and women who are pregnant or give birth during the study. Most commonly, local facilitators are trained in MNCH practices and then organize women’s groups of 10-20 participants. However, in some cases the intervention works with pre-existing groups. Facilitators are often chosen by the community and NGO for their education level or social capital, and may also receive ongoing training and support during the intervention. Group members discuss and identify key MNCH problems in the community, collectively select relevant strategies to address them, implement the strategies (in some cases in partnership with the community as a whole), and assess the results. A formalized methodology for this process, called the Participatory Action Cycle, is employed in several studies. Each group is encouraged to identify and implement its own combination of strategies such as developing health education programs, establishing vegetable gardens and purchasing bed nets³ to address health challenges. In two interventions, NGOs provided appropriate means of transportation (i.e. bicycle ambulance, boat, motorcycle, etc.) to overcome barriers to reach health care facilities. Two studies described interventions that connected groups with government health providers or Accredited Social Health Activists (ASHAs).

Table 3. Evidence for Maternal, Newborn, and Child Health Outcomes⁴ - 16 Studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Maternal and newborn care practices at home	13 (0 not published)	Strong	Mixed	11 studies found positive effect, 2 found no significant effect
Care-seeking for complications	11 (0 not published)	Strong	Mixed	10 studies found positive effect, but not significant across all indicators, 1 found mixed effect
Institutional or skilled attendant delivery	10 (0 not published)	Strong	Mixed	6 studies found positive effect, 4 found no significant effect
Maternal mortality and morbidity rates	6 (0 not published)	Medium	Mixed	3 studies found positive effect, 3 found no significant effect
Infant/neonatal mortality and morbidity rates	10 (0 not published)	Strong	Mixed	8 studies found positive effect, 2 found no significant effect

Key Findings & Research Gaps

SHG-based interventions appear to be an effective tool for reducing infant and neonatal mortality and morbidity. Eight studies reported significant reductions in neonatal mortality. Two meta-analyses⁵ reported that exposure to women’s groups was associated with a 21-23% reduction in neonatal mortality. Findings on maternal mortality and morbidity rates were more mixed, with half of our studies reporting insignificant results. Maternal mortality and morbidity was also the MNCH outcome area with the weakest evidence base.

Eleven out of thirteen studies found that maternal and newborn care practices at home improved after groups were exposed to participatory health interventions. These practices included uptake of antenatal care, hand-washing, use of clean delivery kits, appropriate umbilical cord care for home deliveries, breastfeeding, and thermal care of newborns. All 11 studies reporting on care-seeking for complications during childbirth found positive differences between the intervention and control arms of their studies, but the differences were only statistically significant across all measures of care-seeking behavior in 8 of these studies. Measures included in different studies were awareness of newborn and maternal danger signs as well as care-seeking at private or government health care facilities.

The evidence did not suggest that SHG-based interventions have an effect on the proportion of births at health care facilities or attended by skilled birth attendants. While 6 studies reported positive results, the two meta-analyses included in this review reported no significant differences between intervention and control groups.

The primary research gap for MNCH outcomes is the limited evidence from urban areas. Only Alcock, et al. and More, et al. studied groups in an urban context, conducting different evaluations of the same intervention in an urban slum in Mumbai.⁶ Their results were inconclusive, raising questions about the effectiveness of SHG-based interventions in urban settings.

Reproductive Health and HIV Outcomes

Evidence Base

Ten studies reported on interventions targeting reproductive health and outcomes related to HIV. Of these, three were evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity, providing a medium strength research base overall. Three studies⁷ described interventions targeting Female Sex Workers (FSWs). The interventions studied were typically peer-mediated efforts to change behavior by improving knowledge, attitudes and awareness of HIV, and to facilitate early STI treatment. Two interventions aimed to empower FSWs by involving them in project committees or microcredit activities. Two studies⁸ described interventions targeting adolescents. NGOs trained peer educators to lead groups in discussion and education on HIV/AIDS. The EMIMA program in Tanzania used sports to mobilize adolescent groups and create a venue for discussion, while the Young Citizens Program also in Tanzania used a participatory drama method to increase community awareness of HIV transmission and prevention. The remaining five studies⁹ described interventions that used existing community groups as a basis for occasional peer education using trained locals. In some of these studies, reproductive health and HIV were not priority outcomes for the interventions.

Table 4. Evidence for Reproductive Health and HIV Outcomes¹⁰ - 10 Studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Contraceptive usage	7 (0 not published)	Medium	Positive	All 7 studies found positive effect
Risky sexual behavior	5 (0 not published)	Medium	Mixed	4 studies found positive effect, 1 found no significant effect
Knowledge and use of family planning services and methods	2 (1 not published)	Weak	Positive	Both studies found positive effect
Transmission rates of HIV	1 (0 not published)	Weak	-	1 study found positive effect, but it is not statistically significant
Adults seeking Voluntary Counseling and Testing (VCT)	3 (0 not published)	Medium	Mixed	2 studies found positive effect, 1 found no significant effect

Key Findings & Research Gaps

The evidence to support associations between SHG participation and reproductive health and HIV outcomes is limited, but largely positive. All seven studies observing contraceptive usage reported positive association with SHG membership, and two studies reported positive association with knowledge and use of family planning services and methods. While four studies found positive associations between group membership and reduced risky sexual behavior, one study found no significant impact. In other areas, evidence was scarce or nonexistent. None of the studies we reviewed reported on adherence to HIV drug regimes. Further, while many studies examined interventions with FSWs that purported to involve mobilization of groups, few met our definition for self-help groups and were excluded from this review on that basis.

Other Health Outcomes

Evidence Base, Key Findings, & Research Gaps

We found very few studies that examined SHG-based interventions to directly target other health outcomes such as water, sanitation and hygiene (WASH),^{iv} nutrition, and immunization. Seven studies reported on these outcomes as secondary results of their interventions, however, and found positive effects. Three of seven studies were

^{iv} Groups focused solely on improving WASH outcomes were not included in this review because of the public nature of the benefits.

evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity providing a weak research base overall. Two interventions involved peer education through women’s health groups, while the other five worked through savings groups to support peer education. None of the studies we reviewed reported on anti-malarial, deworming, or incidence of disease outcomes. Since these outcomes were of secondary interest in the studies reporting on them, the authors generally did not evaluate whether the impacts of group membership were statistically significant.

Table 5. Evidence for Other Health Outcomes¹¹ - 7 Studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Care-seeking for illness or disease	1 (0 not published)	Weak	-	1 study found positive effect, but does not evaluate statistical significance
Immunization	1 (0 not published)	Weak	-	1 study found positive effect, but does not evaluate statistical significance
Nutrition	1 (1 not published)	Weak	Positive	1 study found positive effect
WASH	5 (3 not published)	Medium	Positive	5 studies found positive effect, but do not evaluate statistical significance

Financial Outcomes

Evidence Base

Twenty-four studies reported on financial outcomes, of which fifteen studies are either experimental or quasi-experimental. While the number of studies is relatively high, only seven of these studies were evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity so we characterize this evidence base as relatively strong overall. Twenty-one of the twenty-four studies involved interventions with savings groups whose primary goal was to support members’ savings and access to loans, either internal group loans or external loans from financial institutions. In most cases, interventions helped members to organize into group savings programs, facilitated decision-making, and provided some training and support to the members. In the case of many Indian savings groups and some African savings groups, the intervention involved creating linkages with formal financial services. Some interventions involved training in financial or business skills for group members. In five of the twenty-four studies,¹² the intervention focused on MNCH outcomes but financial outcomes were reported, because the intervention mobilized women from existing groups that included a savings component. One intervention supported farmers’ groups to take out bank loans.¹³

Table 6. Evidence for Financial Outcomes¹⁴ - 24 Studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Savings	18 (7 not published)	Medium	Mixed	15 studies report positive effect, 2 report mixed effect, 1 reports negative effect
Access to credit	15 (6 not published)	Medium	Mixed	12 studies report positive effect, 2 reports no effect, 1 reports mixed effect
Income	11 (6 not published)	Medium	Mixed	8 studies report positive effect, 3 report no significant effect
Ownership of assets	9 (5 not published)	Medium	Mixed	8 studies report positive effect, 1 reports no significant effect
Micro-enterprise	8 (5 not published)	Medium	Positive	8 studies report positive effect, but few evaluate statistical significance
Effect on the very poor	6 (3 not published)	Medium	Mixed	2 studies report positive effect, 3 report no effect, 1 reports negative effect

Key Findings & Research Gaps

Participation in self-help groups is generally associated with positive financial outcomes including increased savings, access to credit, and ownership of assets. Nineteen of twenty-four studies reported that interventions

that establish or work with savings groups (e.g. ROSCAs, Savings and Internal Lending Communities) allowed members to build financial discipline and skills. Bank linkage programs allowed groups to mobilize larger amounts than internal savings would allow, but the evidence for this is largely limited to India. Eight of nine studies reporting on assets found significant and positive increases in asset ownership. Eight studies found that members of groups could access funding for micro-enterprise, but the overall viability of these enterprises has not been tested. The evidence on how participation in SHG-based interventions affects the very poor is mixed and the evidence base is relatively limited.

Agriculture Outcomes

Evidence Base

Eleven studies report on agriculture outcomes and the body of evidence on the effects of self-help groups on agriculture outcomes is moderately strong.¹⁵ The number of studies is lower than other outcome areas and the measurement of outcomes is inconsistent and often imprecise. However, seven of eleven studies were evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity. Eight of the eleven studies use either experimental¹⁶ or quasi-experimental designs.¹⁷ Two studies reported on interventions covering a mix of rural and urban contexts, though the majority of interventions focused on rural populations. The impacts of SHG participation on agriculture outcomes appear to be mixed. Eight studies report positive findings,¹⁸ while the remaining three studies had mixed results.¹⁹

Table 7. Evidence for Agriculture Outcomes²⁰ - 11 Studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Productivity	5 (1 not published)	Medium	Mixed	3 studies report positive effect, 2 reports no effect
Market involvement	4 (1 not published)	Medium	Mixed	2 studies reported positive effect, 2 report mixed effect
Technology adoption	3 (1 not published)	Weak	Positive	3 studies report positive effect
Crop diversification	3 (1 not published)	Medium	Mixed	2 studies report positive effect, 1 reports negative effect
Farm income	6 (2 not published)	Medium	Mixed	5 studies report positive effect, 1 reports mixed effect
Access and use of inputs	5 (3 not published)	Medium	Mixed	4 studies report positive effect, 1 reports no effect

Key Findings & Research Gaps

Studies do not consistently report on all the agriculture outcomes areas so the number of studies for each outcome is relatively low. The studies report generally positive associations between group membership and increased farm income, technology adoption, and access to and use of agricultural inputs. Evidence on productivity, market involvement, and crop diversification was mixed, though some studies found positive associations with group membership. Three studies report positive effects of SHG participation on agricultural productivity but do not specify how productivity was measured or the size of the effect. Two studies report that SHG members were able to better access high-value vegetable markets and negotiate for prices, but another study found that only 56% of farmer groups reported improved market position. One study found that marketing through the group yielded a higher price than selling individually, but that when opportunity costs for time spent participating in collective marketing activities (i.e. transport) were included, the individual benefits decreased to almost zero.²¹

All three of the studies reporting on technology adoption reported positive associations with interventions delivered through farmers' groups and access to and adoption of improved varieties. One of these studies also reported improved productivity and reduced costs of production associated with receiving training. Two studies found that SHGs were an effective platform for introducing higher value crops, such as vegetables, as well as new crops. One study found that group members increased land allocation to a cash crop (bananas), reducing crop diversification. Five studies reported that members increased their farm income, however these studies do not account for nonfinancial costs such as the increased labor and transportation time needed to deliver goods to high

value markets. Three studies report positive associations between SHG membership and access and use of inputs including seeds, chemicals, land and labor.

The sample slightly favors Sub-Saharan Africa, but all the African studies are located in three countries in East Africa: Kenya, Tanzania and Uganda. Some important indicators, such as productivity, were inconsistently measured, with indicators often being self-reported. Other indicators, such as farm income, look only at the value of crops sold and do not account for the full value of production and marketing costs including labor and time spent transporting goods.

Empowerment Outcomes

Evidence Base

Twenty-four articles reported on at least one of four empowerment outcomes.²² Though the evidence base for empowerment contains a large number of studies, few had high technical quality or used experimental or quasi-experimental approaches. Eight of twenty-four studies were evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity.

SHGs are often used as platforms for increasing women’s control over decision-making, presence in society, political participation and autonomy. (Appendix 10 gives more detail on definitions and measures of empowerment used in the included studies). Twenty-four studies included in this review discussed outcomes related to empowerment including increases in self-confidence, perceptions of autonomy, knowledge of important issues, business training, negotiation skills, financial independence, community and political involvement for members, and changes in community norms. Fourteen of the studies discuss interventions in India, ten in Africa. Approximately half of the studies examine Indian savings groups that are part of bank linkage or other credit programs that connect pre-existing and newly created groups with financial services.²³

Table 8: Evidence for Empowerment Outcomes - 24 studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Control over decision-making	12 (6 not published)	Medium	Positive	All 12 studies report positive effect, but few evaluate statistical significance
Presence in society	7 (5 not published)	Medium	Mixed	6 studies report positive effect, but few evaluate statistical significance. 1 reports mixed effect
Political participation	9 (4 not published)	Medium	Mixed	7 studies report positive effect, 2 report mixed effect
Subjective self-efficacy and autonomy	17 (7 not published)	Medium	Mixed	15 studies report positive effect, 2 report mixed effect

Key Findings & Research Gaps

Four of the eight moderately-high or high quality studies found consistently positive results across empowerment outcomes. The others, while generally positive, found mixed, non-significant, or negative effects in one or more empowerment sub-areas. Increased control over decision-making was positively associated with SHG participation. Subjective well-being and autonomy were the most commonly used concepts employed to measure women’s empowerment and all but two studies reported positive effects. Subjective well-being and autonomy are usually self-reported and measures include increased self-confidence, perceptions of personal autonomy, increased knowledge of important issues, business training, negotiation skills, financial independence, or mobility. However, one study noted a negative association with the subjective well-being of SHG members in communities with conservative gender norms.²⁴ Another study reported that while women reported greater control of finances and assets, after participating in SHGs, divisions of household labor did not improve resulting in an increase in work burden overall.²⁵

The twelve studies that measured decision-making found that group members’ reported control over decision-making within the household and in the community improved significantly more than non-group members.²⁶ Most studies measuring women’s presence in society report that group members feel more comfortable and able to engage in economic and social activities outside of the home.²⁷ Seven studies report that political participation of

SHG members increases compared to that of nonmembers, including activities such as attendance at village meetings and running for political office.²⁸ One study found that all residents in villages where SHGs were established saw an increase female empowerment, whether or not they participated in a self-help group.²⁹

The quality and consistency of empowerment measures used in the studies varies widely. Moreover, empowerment is often an intermediate goal of interventions rather than the end goal. While the body of evidence is larger than that of MNCH, empowerment has fewer studies with an experimental design methodology; no studies explicitly compare SHG-based interventions to promote empowerment with other kinds of interventions. Evidence on presence in society, such as women’s ability to move freely outside the home, is based on studies mostly in India, with little evidence from SSA.

Group Dynamics Outcomes

Evidence Base

Eleven studies³⁰ discussed the effect of interventions on the internal group dynamics of SHGs, including changes in governance, participation, and cohesion of members. Only three of these were evaluated as having medium-high or better research quality, at least a regional scale, and at least medium external validity, providing a medium strength research base overall. Most of the studies focused on MNCH or financial outcomes but examine whether providing training or support appears to increase SHG effectiveness in achieving these goals. A few studies examined how SHG structure, including demographics, accountability mechanisms and frequency of meeting effects the levels of participation and social cohesion of the participants, but no study explicitly compared whether different forms of training or governance affected SHG effectiveness. One study³¹ examined how external funding for SHGs impacts leadership and participation of members. Table 9 provides an overview of the evidence base of studies reporting on group dynamics. Seven studies report on group governance,³² nine report on levels of participation and cohesion.³³

Table 9: Evidence of Group Dynamics Outcomes - 11 Studies

Outcome	# of studies	Strength of Evidence	Results	Notes
Governance of the group	7 (5 not published)	Medium	Mixed	4 studies report positive impact, 3 report mixed impact
Levels of participation and cohesion	9 (3 not published)	Medium	Mixed	6 studies report positive impact, 3 reports mixed impact

Key Findings & Research Gaps

Good governance is commonly thought to be a key to SHG sustainability, however several studies report that many self-help groups lack skills needed to maintain records, resolve disputes, and manage finances.³⁴ Capacity building interventions that provided training were generally associated with improvements in record keeping, financial management, and decision-making, but no studies assessed whether these improvements were associated with improved outcomes.³⁵ One study examined the effect of receiving outside assistance on internal SHG dynamics,³⁶ and found that groups receiving outside training and material support had an increase in new members and leaders of higher socio-economic status, as well as increased exit by older and more marginalized women. Additionally, outside funding did not improve meeting attendance or frequency.

As an alternative to providing training directly to groups, some NGOs in India are testing the ability of SHG federations to increase the capacity of the savings groups to support and regulate themselves. However, they note that federations may also have poor capacity for self-governance, average to low quality managers and poorly defined systems and processes.³⁷

Studies reporting on group participation and cohesion found that introducing peer accountability and solidarity mechanisms such as mandatory attendance, increased meeting frequency, and social sanctions³⁸ were associated with increased levels of group activity and adherence to rules.

Few studies directly test the effect of providing training and support on group governance, and most that do concentrate on savings groups in India. Because there are very few experimental or quasi-experimental studies testing the effect of exposure to NGO and government interventions on the composition of group members and leadership, we cannot draw strong conclusions about how groups respond to interventions or behave over time.

Cost, Scalability, and Sustainability of SHGs

Because few articles from the preliminary search included information on the cost, scalability and sustainability of SHGs, we conducted supplemental searches focused on these topics (see Appendix 2 for more details on our methodology). These supplemental articles offered additional information, much of which consisted of expert testimony and NGO program summaries. We also consider here evidence on motivation of SHG members and leaders as well as on diffusion and community engagement of SHGs, which is related to the cost, scalability, and sustainability of these groups. Appendix 11 provides additional detail.

Cost

Eight studies assessed the cost-effectiveness of interventions, of which six focused primarily on MNCH outcomes. Seven of the eight found the group-based intervention to be cost-effective. The estimated costs for the formation and initial maintenance of savings groups varied. In India, estimates ranged from \$130 to \$260 per group in 2012.³⁹ In Africa, costs per savings group member ranged from \$22.90 to \$34.50, depending on the organization.⁴⁰ One study of an MNCH intervention in Zambia estimated startup costs of training volunteer facilitators at \$408 per neighborhood that served an average of 4 SHGs. That same study estimated the annual cost of running the program at \$0.46 per group member, equivalent to \$15 per delivery involving a skilled birth attendant, and the incremental cost per additional skilled delivery was \$68, including start up, annual costs, and transportation costs.⁴¹

Scalability

There is limited evidence on SHGs programs going to scale outside of India, where savings group promotion has been adopted as part of national livelihoods strategies. One challenge to scaling up SHG promotion to the regional or national level is that maintaining adequate support and monitoring of groups places a large financial burden on the supporting agency. Forming SHG federations to provide monitoring and support to individual groups has been suggested as one approach to lower program costs. Some NGOs working with Indian savings groups, including DAHN, SERP, APMAS, Jeevika, and MYRADA have established pilot SHG federation programs with mixed success. Nair finds that federation startup costs are substantial, ranging from just under \$50 to \$100 thousand USD.⁴²

Motivations for SHG Participation & Leadership

In savings groups, most studies assume that access to savings mechanisms and credit are the key motivation for participation. However, many studies mention the importance of a number of non-financial incentives including: perceived empowerment, increased social standing, access to emergency funds and other forms of SHG-based insurance, exchange of business ideas, support for starting and managing business or income-generating activities, access to information and support for improved health practices (especially from pregnant women and mothers), and leveraging of group negotiating power to access services.

The evidence on the motivation of SHG leaders is mixed. Interventions varied widely on whether facilitator-leaders were compensated. In some cases group leaders were compensated by NGOs through salaries, a stipend, or provision of goods like bicycles. Several studies report that self-help groups with a savings and loan focus are often willing to pay for support from facilitators with financial skills. A number of studies suggest additional motivations for group leaders, including increases in social standing and social capital. No studies explicitly compared compensated and uncompensated leaders or compared different models of facilitation. Some studies indicate that group leaders gained prominence in their community as a result of their leadership of groups. Where leaders are selected by group members, they often have a higher social status than other group members and may be motivated by the desire to maintain that social standing. We did not find studies that examined variation in outcomes or in member or leader attrition depending on levels of compensation for leaders or by mode of facilitation.

Diffusion and Community Engagement

Group-based support and social pressure are commonly assumed to be factors that will support SHG development. The evidence suggests that these factors are important in savings-based SHGs, but the evidence is very limited for other kinds of groups. In savings groups, members hold each other accountable for periodic attendance and contributions to the group pot and enforce these rules through fines and social sanctions. This system of peer accountability can support better savings outcomes and may also support the diffusion of norms and practices, although there is little systematic evidence on this.

Some evidence suggests that SHGs can play a role in transmitting new norms and practices in communities. Many of the MNCH studies included community dissemination aspects that were successful, including changes in community attitudes on HIV and gender roles. Indian savings groups in particular appear to be associated with increased community participation of women, including political participation. Some grey literature reported self-replication of savings groups, most often through the assistance of a member of an existing group. The evidence for this is weak for Africa. Limited evidence suggests that for MNCH outcomes participation by 1/3 of pregnant women in a community is needed to maintain effectiveness of the intervention. Some MNCH studies mentioned that family members also participated in some of the group meetings, which might have created peer pressure to change behavior.

The most common form of institutional engagement seen in the evidence base was between savings SHGs and banks, most often in India. These linkages may be driven by the banks themselves, by government bodies, or by NGOs. Government support, including provision of subsidies and backing for loans, often drives these linkages. The second most common (and much less common) form of engagement was between health centers and women's groups, though the literature did not provide evidence on the factors driving this engagement. The evidence on community engagement is weaker for Africa, especially for institutional engagement with health centers. Some evidence suggests that efforts to link savings SHGs with microfinance institutions in Africa have had very mixed results and many groups are wary of the risks involved in such linkages.

Sustainability

The evidence on SHG sustainability is weak and few studies follow groups over time. The grey literature suggests that factors such as institutional and local support, supportive public policies, and perhaps support structures such as consortiums or federations may increase sustainability of groups. Group failure for savings groups is commonly tied to loan default or financial mismanagement. However, evidence on failed groups is very limited. For savings and loans groups, training and support for financial management appears critical, as several studies find that the sustainability of SHGs requires ongoing institutional support for bookkeeping, auditing, and financial management.⁴³

While continued involvement from NGO and government partners is the most common approach for providing technical support, some organizations focus on training group members to develop the internal capacity of SHG members to manage themselves.⁴⁴ However, the impact of such training or support has not been rigorously evaluated. Additionally, some SHGs are intentionally limited in time period. In some cases this allows group members to enter and exit the savings cycle without penalty or, as in the case of some of the health and MNCH focused studies, the initial program is only designed to sustain active groups for the duration of the project.

Regional Differences in SHGs in Sub-Saharan Africa and South Asia

The use of self-help groups as platforms for development interventions has followed different trajectories in South Asia (especially India) and sub-Saharan Africa. Village development savings groups called 'credit management groups' began to be promoted by NGOs in India in 1980s, most notably by the NGO MYRADA in its programs in Karnataka, Tamil Nadu, and Andhra Pradesh. In 1992, India's National Bank for Agriculture and Rural Development (NABARD) launched its savings group linkage program and developed a policy framework and capacity building program for NGOs and SHGs to facilitate these linkages. By 2000, savings groups had become a central part of the Indian government's efforts to mitigate poverty and promote rural livelihoods. As of 2006, NABARD estimated that over 1,500,000 savings groups were in existence.⁴⁵ The number of SHGs meeting our definition is likely much larger, as we also consider groups not linked to financial institutions.

In Africa, indigenous ROSCAs and ASCAs existed prior to NGO-led initiatives but in recent years many NGOs have created standardized models such as VLSAs that build on the ROSCA foundation. CARE launched its first formal savings group program in Niger in 1991, and today, several large NGOs including Catholic Relief Services, Plan International, Oxfam, the Aga Khan Foundation, World Vision and Pact have introduced savings group promotion programs across the continent. The original goal of many of these programs was to provide members, usually rural women, with access to credit to meet subsistence needs or invest in income generating activity. Due to the flexibility of the savings group model, today NGOs often integrate activities besides savings and loans, such as improving health, farming practices, or business development into their group promotion programs. According to a 2011 report, the number of savings groups in Africa reported by seven NGOs and across 35 countries totaled just under 200,000, reaching over 3.8 million people.⁴⁶ Unlike in India, however, most governments in sub-Saharan African countries have not created explicit policy frameworks designed to link SHGs to financial institutions or public institutions.

Regional Differences in Evidence

In our review, we follow the South Asian literature that distinguishes self-help groups from the joint-liability groups promoted by microfinance institutions such as Grameen Bank. Few studies exist on SHGs in Nepal or Bangladesh and India is therefore more heavily represented in our review.

The evidence suggests that the characteristics of groups tended to differ between the South Asia and Sub-Saharan Africa regions, although this may be a result of our limited sample. Appendix 12 provides detailed information the proportion of studies reporting on particular outcome areas across the two regions. The majority of information on MNCH outcomes comes from South Asia; sixty-nine percent of the women's health group studies we reviewed were focused on South Asia. The preponderance of evidence on savings groups also comes from South Asia, likely reflecting the more institutionalized status of SHGs there. Fifty-eight percent of the savings group studies we reviewed were located in South Asia.

Less comprehensive information is available about other types of self-help groups in South Asia and Sub-Saharan Africa. High profile participatory women's health group interventions have been tested in Nepal,⁴⁷ India,⁴⁸ Bangladesh,⁴⁹ Malawi,⁵⁰ and Zambia⁵¹ and these form an important component of our evidence base, with multiple studies often reporting on the same intervention.

The evidence base on urban SHGs in India is limited; more studies in Africa were of urban-based groups. All of the evidence on farmer groups included in this review comes from Africa. This may be in part because many agriculture interventions in south Asia are implemented through savings group models. We also were careful to distinguish between community-based farmers groups, and more hierarchical cooperative organizations, which may be more common in South Asia.

SHG interventions in Africa appeared more likely to try to increase members' access to equipment or supplies, and to directly provide groups with funding or material support. In South Asia, SHG interventions appeared to focus more strongly on group development, with a higher proportion of studies reporting that interventions were designed to facilitate group decision-making. Group participation in peer education sessions was also more common in South Asia. Under half of studies based in Sub-Saharan Africa reported that facilitators received training, compared with over half of South Asian studies. Member recruitment by facilitators through home visits or other methods was reported by over a third of studies in both Sub-Saharan Africa and South Asia.

The evidence clearly demonstrates the longer and more institutionalized history of SHGs in India, which has culminated in policies supporting linkages between SHGs and financial institutions as well as local governments and public service providers. The SHG sector is more nascent in sub-Saharan Africa. While built on deep indigenous roots, efforts to link SHGs for formal institutions and achieve scale may be hampered by low risk tolerance, weak capacity and limited public policy to support such engagement.

Conclusions and Recommendations for Future Research

Our review found strong associations between SHG membership and positive neonatal, infant, and child mortality and morbidity outcomes in South Asia. SHG interventions appear linked to positive empowerment outcomes, but the quality of evidence remains weak and the measurement of empowerment is inconsistent. Participation in group saving activities is positively associated with the ability to save, access to credit, and ownership of assets, but no clear effects on income are seen and few of the studies explicitly compare SHG-based savings programs to individual savings. SHG membership appears positively related to agricultural outcomes although the measurement of these agricultural outcomes remains relatively weak.

The weak evidence base in many areas suggests opportunities for further research. First, future studies could use random assignment to explicitly compare SHG-based interventions to other community mobilization strategies such as individual or peer-to-peer delivery, providing more systematic evidence on the effectiveness of the SHG platform. We found few studies that compared the effectiveness of different community mobilization models beyond a few studies focused on MNCH outcomes.⁵² These studies found that SHG-based interventions are typically as effective as interventions delivered through health workers or clinics, but there are additional benefits from interventions that utilize both platforms.^v More systematic studies could also provide better and more consistent cost estimates to support better assessment of scale up potential and costs.

In addition, studies could provide more systematic evaluations of the relationship between SHG group characteristics and development outcomes. For example, a savings intervention could compare financial benefits for individuals in newly formed versus pre-existing SHGs, or compare facilitator-led to group-led interventions. The theoretical literature suggests that larger, more diverse groups will be less effective in achieving group goals, but available evidence sheds little light on this or other group characteristics. Appendix 13 provides detail on the evidence on the association between group characteristics and group effectiveness.

Within MNCH outcomes little evidence exists from urban settings and the relatively weak results on maternal morbidity could be further investigated. Also, the studies reviewed contained limited information about the strategies that individual women's groups chose to pursue to improve health outcomes. This information could provide insight into how groups prioritize maternal and child health issues.

For agriculture outcomes, the evidence base could be greatly expanded by additional studies based on experimental or quasi-experimental methods that assess the relative effectiveness of group versus individual interventions and improved systematic measurement of key agricultural outcomes, such as productivity.

The evidence on SHG participation and empowerment is encouraging, but incomplete. Additional studies with an explicit empowerment component could compare SHG-based interventions with empowerment components to those without, or compare empowerment outcomes for program delivered via SHGs versus individuals. In addition, since measures of empowerment are challenging to consistently apply and interpret across diverse contexts so more robust testing and sharing of measurement techniques would be helpful.

Very few studies followed group participants over time, making it difficult to assess whether SHG effects persist over time, or whether positive outcomes in the short or medium run ultimately translate into longer-term improvements in participants' lives. Studies with a longer time frame would provide useful evidence about whether extended SHG participation improves intervention outcomes.

Finally, only a handful of studies mention the potential for negative effects or harms (such as increased labor demands or household conflicts) that can result from SHG participation or from group exposure to outside funding and assistance. Further research should explore these areas to ensure SHG based interventions are do not have any unintended consequences, and that the benefits are reaching their intended populations.

^vColbourn et al, found that group interventions and improvements in health care facilities were equally effective in reducing neonatal and perinatal mortality rates, but found even greater reductions in clusters that received both interventions. Lasse et al, found that group-based interventions performed better than training health workers on reducing early neonatal mortality but not on late neonatal or maternal mortality.

Appendix 1: Taxonomy of Self-Help Groups

Figure 1 shows how SHGs fit into the larger universe of community mobilization strategies. Group-based interventions are distinct from strategies that emphasize mass mobilization or individual peer-to-peer interactions, such as community health workers. Among group-based interventions, we distinguish SHGs from other groups by noting that SHGs typically involve members in group governance and leadership, and aim primarily to improve individual member welfare.

Figure 1. Community Groups Potentially Meeting SHG Criteria

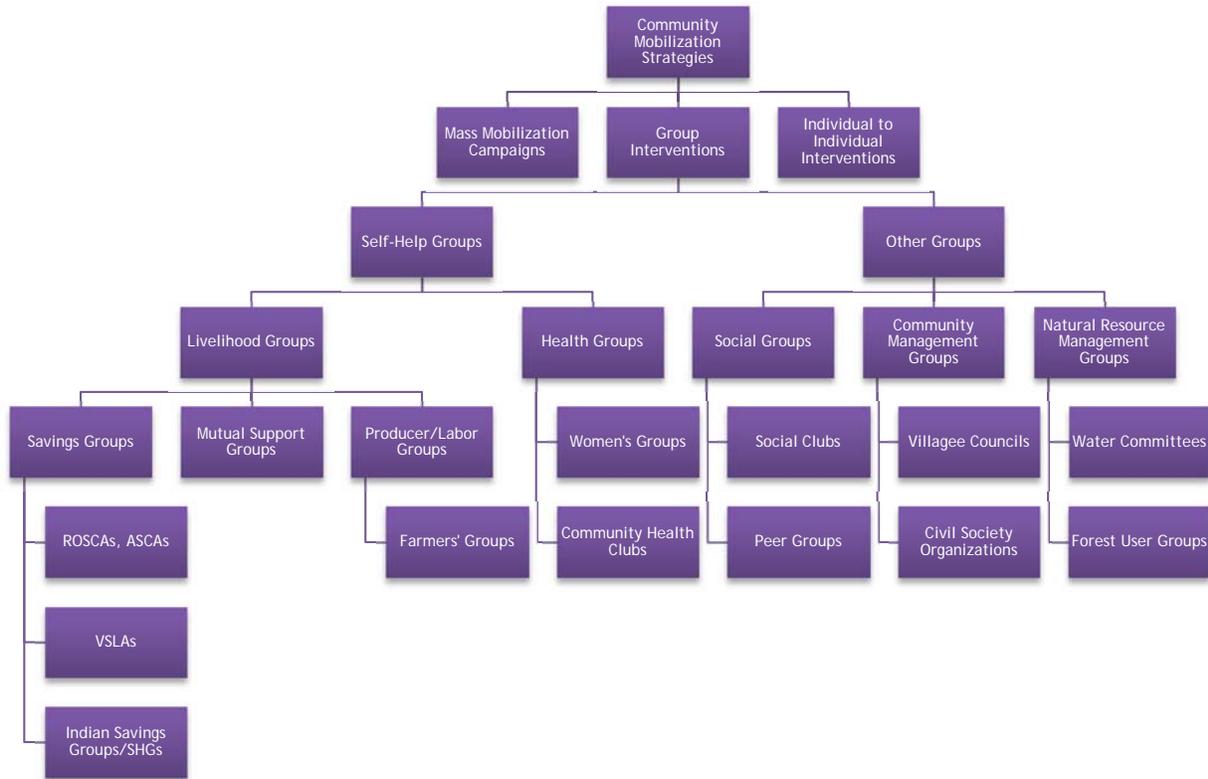
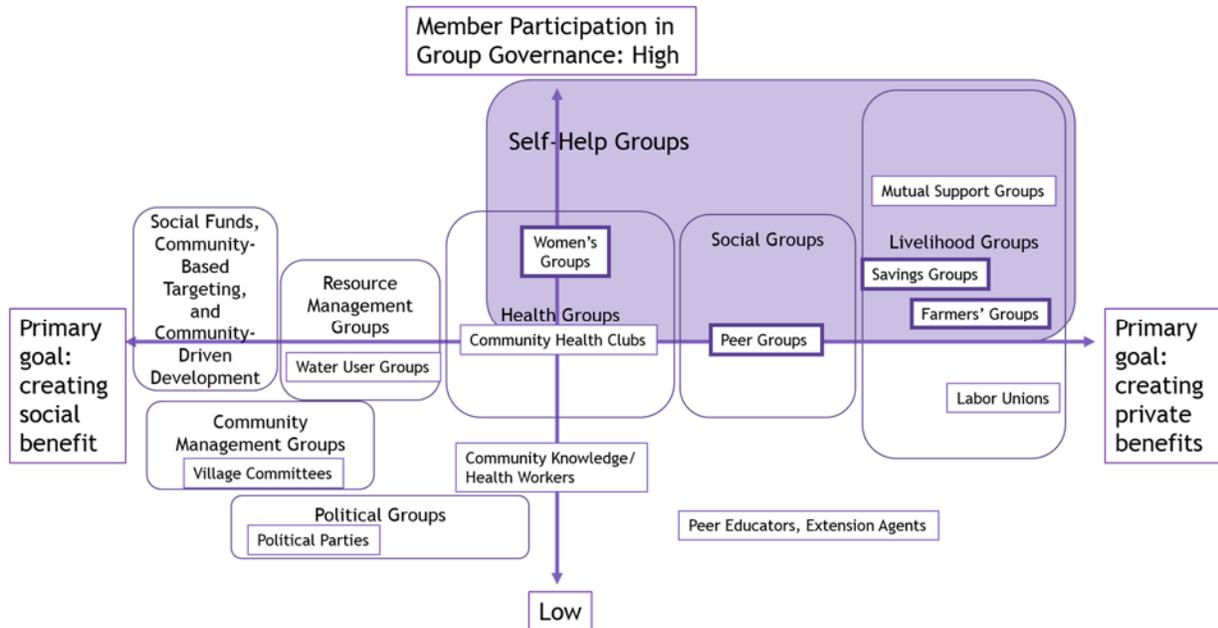


Figure 2 depicts how SHGs differ from other types of community groups along the two key dimensions: member participation in group governance and the importance of individual private benefits relative to social benefits. In our taxonomy, SHGs are community groups that typically involve member participation in group governance (vertical axis) and aim primarily to provide benefits for members (horizontal axis).^{vi}

Figure 2. Taxonomy of Self-Help Groups



^{vi} The horizontal axis reflects the “help” aspect of self-help groups and captures the “aim to improve individual member welfare” criterion for SHGs. The vertical axis reflects the “self” aspect of self-help groups. It captures the “self-governance and member participation in decision-making” and “regular face-to-face interactions among members” criteria.

Appendix 2: Literature Selection & Review Methodology

Primary Database Search and Foundation Referrals

In June 2014 an initial structured search with pre-identified search terms yielded 1812 articles covering outcome areas such as finance, health, empowerment, and economic and social impact. The databases searched included PubMed, the Cochrane Library, EconLit, PAIS, and Web of Science. In addition, foundation staff referred 12 articles to us. Of these articles, we excluded 1625 that either did not meet our screening criteria or did not have full-text availability. An additional 77 results within this first search were duplicate citations and were removed.

We assessed the remaining 149 articles that dealt explicitly with self-help groups according to their technical quality (methodology, sampling strategy, sample size, reliability of data), in order to prioritize the review of higher-quality articles. The methodology of each study was classified as experimental, quasi-experimental, non-experimental, systematic review, or program documents. Experimental design studies involve randomized controlled trials (RCTs) where study participants are randomly allocated to different interventions or to a control group. Quasi-experimental studies are trials that did not include random allocation of participants to treatment and control groups. Non-experimental design studies do not include a control group and, in most cases, only collect and analyze data from groups and then report on their findings. Systematic reviews analyzed the findings of a collection of studies. Program documents contain information from organizations that work with groups and reported on their fieldwork. Figure 3 illustrates the article search and selection process.

Supplemental Searches for Areas of Interest

Few of the 149 articles from the primary database search covered agricultural topics, so an additional search was conducted in EconLit and Scopus using agriculture-specific search terms. The 444 citations identified went through the same screening and coding process described above, and 61 were included for review.

In July-September 2014 we supplemented our initial literature search with additional articles from Google and Google Scholar searches. We identified 47 articles from Google Scholar searches on agriculture and reproductive, maternal, newborn, and child health. Finally, we conducted a Google search for SHG effectiveness, cost, sustainability, and scalability in India and Africa, yielding 213 potentially relevant articles. For Africa, both a general search and country search was conducted.^{vii} For India, searches focused on program evaluations.

Article Ranking and Selection for Review

In total, 470 articles met our criteria for review. From that sample we reviewed the 85 most relevant and highest quality articles. From the primary database search 34 articles were selected for review based on study characteristics (e.g. methodology, intervention, geography, date, sample size) and on theoretical considerations of how SHGs contribute to development outcomes (e.g. group characteristics that are hypothesized to affect outcomes, findings within outcome areas). From the supplemental searches, 51 articles were selected for review to fill gaps in the primary database search results (primarily around cost, scale and sustainability information). We selected these articles based on the reliability and credibility of the source and whether they reported on a model in wide use. This brief represents our primary findings of evidence on SHGs based on our coding of these 85 studies. The entire coding framework is available upon request.

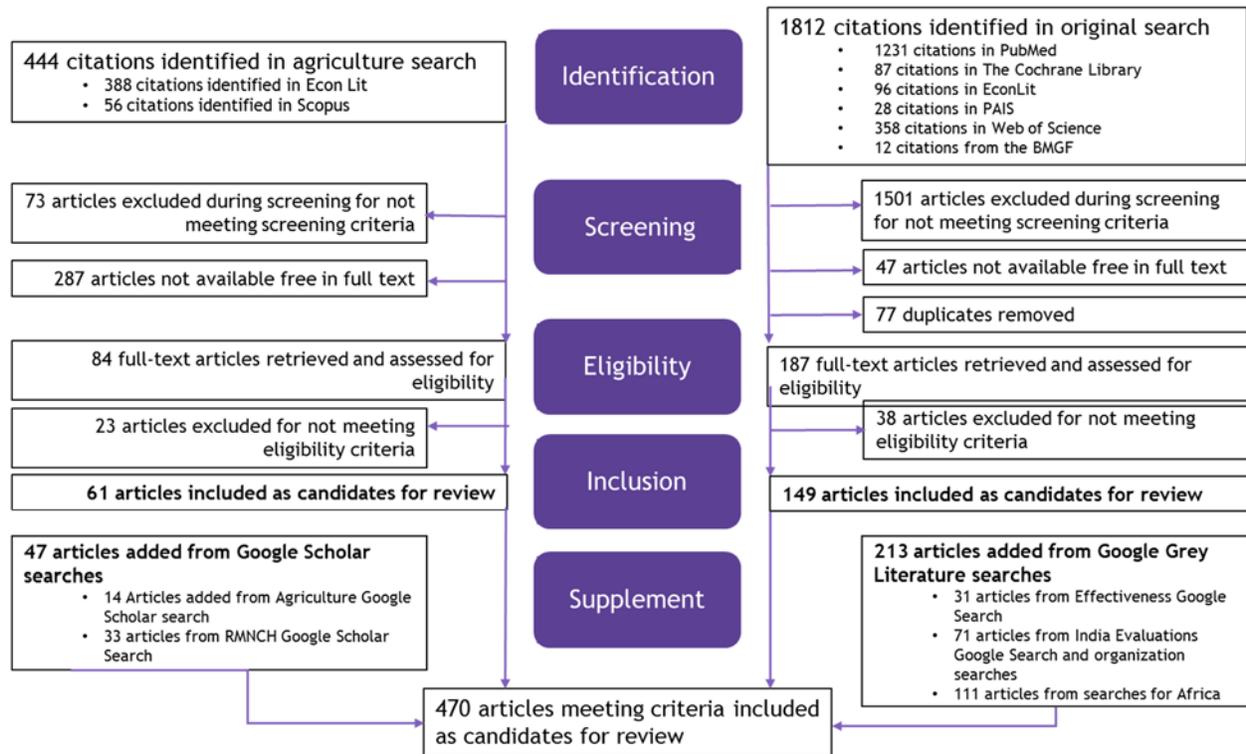
Review Limitations: Evidence on SHGs Remains Limited, Relative to the Full Population of Interventions

The final set of 85 reviewed articles is quite large in comparison to most meta-analyses or systematic reviews in this subject area, which review from 7 to 18 articles. Nonetheless, the sample is quite small in relationship to the population of SHGs and SHG-based interventions. While the true population of SHGs is unknown, it is likely in the millions. Only a small fraction of SHG interventions have been studied, and an even smaller fraction studied in a systematic manner. There may also be a publication bias in favor of positive results. For this reason, our results

^{vii} Countries included three focus countries: Kenya, Nigeria, and Ethiopia

should be interpreted as representing the evidence supplied by a relatively small, but high quality, sample of SHGs that possibly underrepresent negative or null results.

Figure 3. SHG Literature Selection Process



Screening Criteria

- Title or abstract includes mention of community mobilization efforts related to self-help groups or similar community groups
- Article is available in full text
- Article is in English

Eligibility Criteria

- Duplicate articles eliminated
- After retrieval of article, screening of text confirms that article describes groups that meet the criteria defining self-help groups

Criteria for Ranking Articles for Review

Primary Database Search

- Relevance of the research question: We ranked each article from low to high based on their potential to answer one or more of the specific research questions outlined.
- Quality of research: We assigned a rating system for articles to indicate the overall technical quality of the study. We based this on an initial analysis of the criteria for technical quality outlined in the review coding framework.
- Publication status: Articles published in peer-reviewed journals were prioritized during this phase of the search.
- Number of citations: We used the number of times Google Scholar listed that the article was cited as a market test of influence, and prioritized articles with a greater number of citations, while considering that more recent articles will have lower citations.

- Publication date post-2005: We limited our search to 2005- June 2014^{viii} to ensure that we are prioritizing the most recent information, with the assumption that more recent articles refer to prior findings and evidence, which we found to be true.
- Focus on adolescents: The foundation expressed interest in the impact of SHGs on adolescents, therefore we prioritized evidence that deals with this population.
- Cost and scalability information: We prioritized evidence that informed decision-making for the demand-side investment portfolio, such as articles that reported on costs, scalability, and sustainability of SHGs and similar demand-side interventions.
- Negative, null, or controversial outcomes: To avoid bias towards positive outcomes, we prioritized evidence of potential negative or controversial outcomes, though only to differentiate between similarly-ranking articles and not at the expense of our other selection criteria.

Supplementary Literature Searches

The screening criteria for three of our supplementary searches matches that of the primary search. Those searches include, the Google Search on Reproductive, Maternal, Newborn, and Child Health (RMNCH); SHG Effectiveness; and Agriculture SHGs.

Since we conducted the final search to address the shortage in studies on cost, scalability, and sustainability, the screening criteria was loosened. This search was intended to gather information from experts in the field on these topics, therefore many of the articles found were program documents. These articles largely had very different types of information and could not be screened based on the same measures for technical quality or number of citations. The screening criteria we used is outlined below.

- Relevance of the research question: We ranked each article from low to high based on their potential to answer one or more of the specific research questions outlined. Specifically, we included those with information on cost, scalability, sustainability, member motivation, government involvement, demand creation for services, or groups reaching financial independence.
- Quality of research: We prioritized articles that reported a systematic methodology for gathering data.
- Publication status: Because published articles were already searched for and assessed, articles published in peer-reviewed journals were not included during this phase of the search.
- Reliability of source: We assessed the source of the information, typically the organization in charge of the program supporting the SHGs. Those organizations that have a longer tenure working with SHGs were given priority.
- Negative, null, or controversial outcomes: To avoid bias towards positive outcomes, we prioritized evidence of potential negative or controversial outcomes, though only to differentiate between similarly-ranking articles and not at the expense of our other selection criteria.

Methodologies of Studies included in the Review

Experimental Studies (15)

The experimental studies in this review involve randomized controlled trials (RCTs) where study participations are randomly allocated to different interventions or to control. Most of these trials are randomized at the cluster level, in order to avoid issues of spillover and to be able to effectively introduce the self-help group interventions in a given treatment population. In general, there are an equal number of clusters assigned to the treatment and control groups. The treatment in these trials usually involves training local community members to establish and facilitate self-help groups, though in some cases the treatment also involves provision of transportation and efforts to improve local health services. The majority of experimental studies report on interventions working with women's groups to improve MNCH outcomes.

Quasi-experimental Studies (20)

The quasi-experimental studies in this review describe trials that did not include random allocation of participants to treatment and control groups. Many of the studies report on interventions that had already begun and therefore could not be randomly assigned. These studies randomly selected respondents from the intervention area and used

^{viii} June and July 2014 were the dates of the primary search, therefore anything published at a later date may not be included.

a variety of statistical techniques to attempt to isolate the effects of the interventions. Several studies use Propensity Score Matching (PSM) on observable characteristics to control for differences between treatment and control groups. Other studies use a pre-post difference-in-difference methodology with a variety of control variables.

Non-experimental Studies & Reviews (32)

This review includes a variety of non-experimental studies, with the common characteristic that they do not include a control group. In most cases, the studies only collect and analyze data from self-help groups and then report on their findings. Some studies report only on current characteristics of self-help groups or members, while others compare changes in characteristics over time. Several of the studies assess data on self-help groups quantitatively, but many report primarily qualitative findings. These non-experimental studies were included in this review because they provided information on several outcomes of interest that were not well covered by more rigorous studies.

In addition to non-experimental studies, this review also includes information from a variety of literature reviews. One study is a systematic review of RCTs focused on MNCH outcomes. The other reviews focused mainly on Indian savings groups, including a book on the development and growth of SHGs in India. These reviews provided useful information on the costs, scalability, and sustainability of self-help groups.

Program Documents (18)

This review included documents from programs working with self-help groups in a variety of countries, including Burundi, Ethiopia, Ghana, India, Kenya, Malawi, Nigeria, Tanzania, and Uganda. The organizations conducting these programs include Care, CRS, DANIDA, DFID, the Government of Odisha (India), IFAD, SEWA, the World Bank, the Gates Foundation, and Kindernothilfe (KNH). The documents reviewed are primarily program evaluations, but also include program annual reports, case studies, and other communications pieces.

Appendix 3: Detailed Discussion of Findings on MNCH

Maternal and newborn home care practices: 11 of 13 studies reported positive effects

Home care practices included uptake of antenatal care, hand-washing, use of clean delivery kits, appropriate cord care for home deliveries, breastfeeding, and thermal care of newborns. Houweling, et al. found that women's groups did not have a significant association with breastfeeding and some forms of thermal care, but reported significant effects on hygienic practices for home deliveries. Azad, et al. found no significant effects on any indicators besides delayed bathing and exclusive feeding. The only urban-based study in this group, More, et al., found no significant differences for any indicators.⁵³

Care-seeking for complications: all 11 studies reported positive effects

All eleven studies found statistically significant positive differences between treatment and control groups in care-seeking for complications. Measures included in different studies were awareness of newborn danger signs (poor sucking/feeding, lethargy/unconsciousness, hypothermia, and difficulty breathing) and maternal danger signs (anemia, malpresentation, retained placenta, obstructed labor, postpartum hemorrhage, cessation of fetal movements, etc.) as well as care-seeking at private or government health care facilities. Lassi, et al. did not find significant impact on health-care seeking for maternal morbidities, but did find a positive impact on health-care seeking for neonatal morbidities. Lewycka, et al. had some positive findings, though care-seeking indicators were not tested for significance. Only Dongre, Deshmuk, & Garg measured effects of women's groups on both awareness of danger signs and care-seeking at health care facilities, and found positive effects on both measures. The other studies measured either awareness of danger signs or care-seeking, but not both.⁵⁴

Institutional or skilled attendant delivery: 6 of 10 studies reported positive effects

Changes in delivery practices were usually measured as an increase in the proportion of births at health care facilities or attended by skilled birth attendants, and as a decrease in the proportion of births at home or attended by traditional birth attendants. More, et al. and Roy, et al. reported no significant impact of women's group interventions. However, Roy, et al. only reported that institutional deliveries remained higher in the original control group, and not whether they increased in the treatment group.⁵⁵

Maternal mortality: 3 of 6 studies reported positive effects of SHG participation

A meta-analysis of seven randomized controlled trials in South Asia⁵⁶ found that exposure to women's groups was associated with a 37% reduction in maternal mortality. Two studies found no effect of SHG participation on maternal mortality. Colbourn, et al. found that their intervention did not have a significant effect on maternal mortality, an intended outcome. More, et al. reported no significant difference in the number of maternal deaths between the intervention and control group.⁵⁷

Infant, neonatal, and perinatal mortality: 8 of 10 studies reported positive effects

Prost, et al., a meta-analysis of seven studies, found that exposure to women's groups was associated with a 23% reduction in neonatal mortality.⁵⁸ One study reported declines in neonatal mortality in both control and treatment clusters over time, while a second reported no significant difference in the neonatal, perinatal, or stillbirth mortality rate between the intervention and control group.⁵⁹

Characteristics of SHGs in MNCH Outcomes

Most studies described groups in this outcome area as primarily made up of women members. Approximately a third of studies describe groups exclusively made up of women and about half all MNCH studies state that group membership focused on women of reproductive age. The majority of studies describe interventions conducted in a rural setting, with only two of the fifteen in an urban setting and three of the fifteen in a mixed urban and rural setting. Most studies describe the facilitators as in charge of group member recruitment. Half of the studies mention that non-members participated in group meetings. Most groups, twelve out of fifteen, had a specific cycle of activities and eight of those used the Participatory Action Cycle.

Appendix 4: Detailed Discussion of Findings on Reproductive Health and HIV

Contraceptive usage: 7 studies reported positive effects

Two studies reported statistically significant positive differences between treatment and control groups on contraceptive usage, notably condoms. Ensor, et al. found a 6.8% increase in usage by mothers, while Luchters, et al. find a 22.2% increase in usage by FSWs in treatment groups relative to controls. Other studies reported increases in condom usage demonstrations, condom availability, intention to use condoms, and positive attitudes towards condoms, but did not measure whether condom usage actually increased. All but two studies reported on indicators of potential increased condom usage rather than on actual contraceptive usage. They implied, but did not evaluate conclusively, that condom usage increased.⁶⁰

Risky sexual behavior: 4 of 5 studies reported positive effects

Two studies, one focused on adolescents and one focused on FSWs, found that risky sexual behavior decreased as a result of an intervention. However, Fritz, et al. reported no significant impact of the intervention. Risky sexual behavior was measured as unprotected sex, sex with more than one partner, and number of sexual partners. Three studies found significant attitudinal effects, including HIV/AIDS knowledge, attitudes to having an exclusive sexual partner, and subjective norms about having an exclusive sexual partner. However, three of the studies measured attitudes towards risky sexual behavior rather than actual sexual behavior. Two studies focused on adolescents and therefore may have only tracked attitudes.⁶¹

Knowledge and use of family planning services and methods: 2 studies reported positive effects

Two studies reported statistically significant positive differences between treatment and control groups on knowledge and use of family planning services and methods. Desai & Joshi found that women in the intervention group were 3-6% more likely to have the final say in family planning decisions, and Saha, Annear, & Pathak reported that households in the intervention area were 48% more likely to know at least one modern family planning method and 19% more likely to ever use family planning. Since both of these studies took place in India, there is no evidence of the effect of groups in this outcome area in other settings.⁶²

HIV transmission rates: 1 study reported positive effects

Luchters, et al. found that HIV prevalence decreased as a result of the intervention, but did not find a statistically significant difference. Among FSWs, HIV prevalence was lower for group members (29.6%) compared with non-members (34.8%; $P = 0.26$), and HIV prevalence was lower for members attending more than 4 peer education sessions (25%), compared to those attending one to three sessions (34%, $P = 0.21$). Other studies did not measure HIV prevalence or transmission rates, so there is no evidence from rural contexts, non-local interventions, or outside of Kenya.⁶³

Adults seeking voluntary counseling and testing (VCT): 2 of 3 studies reported positive effects

Some studies measured rates of adults seeking voluntary counseling and testing. Carlson, et al. and Van Rompay, et al. reported increases in HIV testing as a result of the intervention. However, neither evaluated changes in testing rates between treatment and control groups during the intervention period. Fritz, et al. found that rates of HIV testing did not differ between intervention and control beer halls after implementation of the intervention.⁶⁴

Characteristics of SHGs in Reproductive Health and HIV

Half of the studies in this outcome area describe groups that only allow women, while one study examined groups that only allow men. Two studies examined groups with a focus on adolescents. The slight majority of studies were conducted in urban settings, with only three that were rural and one that was mixed urban and rural. A slight majority of studies describe groups that were formed for the intervention, while two were formed by group members, and two were a mix of both new groups and pre-existing groups. Just under half of the studies describe the facilitator as the main recruiter of group members.

Appendix 5: Detailed Discussion of Findings on Other Health

Care-Seeking for illness or disease: 1 study reported positive effects

In a non-experimental study that sampled households in both urban and rural settings in Kenya, Molyneux, et al. (2007) found that groups encouraged care-seeking for illness by allowing access to group funds for medical emergencies.⁶⁵ However, the authors did not evaluate whether the differences were statistically significant.

Immunization: 1 study reported positive effects

In a cluster-randomized controlled trial, Lewycka, et al. reported that exposure to a community mobilization⁶⁶ delivered through women's health groups increased complete immunization of infants at 6 months increased by more than 250 percent. Rates of infants receiving any vaccine dosages were 3 percentage points higher in intervention clusters, while rates of receiving three or more vaccine dosages were 9 percentage points higher in intervention clusters. However, the authors did not evaluate whether the differences were statistically significant.⁶⁷ None of the other studies reported on immunization, so there is no evidence from urban contexts or from outside of Malawi.

Nutrition: 1 study reported positive effects

In nutrition outcomes, Deininger & Liu found a statistically significant program-induced increase of about 9% for caloric intake and 17% for protein intake for new group members relative to non-members. For members of existing groups converted for the intervention, they found no effect on caloric intake and a smaller effect of about 8% on protein intake.⁶⁸ None of the other studies reported specifically on nutrition, so there is no evidence from outside of India.

Water, sanitation, and hygiene: 5 studies reported positive effects

Five studies reported that SHG-based interventions resulted in positive effects on water, sanitation, and hygiene. Desai & Joshi found that group members were more likely to file grievances related to water supply. Molyneux, et al., More, et al., Reddy & Manak, and Sinha, et al. reported that groups implemented community-based projects such as piped water, construction of latrines, installation of sewer coverings, and improved water supply.⁶⁹

Characteristics of SHGs in Health Outcomes

There is limited evidence on the characteristics of groups that focus on health outcomes. Most studies on women's health groups did not describe frequency of meetings, though based on other studies, most women's health groups appear to meet at least monthly. Frequent meetings may improve SHG outcomes.⁷⁰ Training in governance is critical for the success of women's health groups. All studies of women's health groups described facilitators selected and trained by NGOs to form and lead groups. Without these trained facilitators, it is unlikely that the group members could have effectively addressed their health improvement objectives. It is possible that for existing groups, interventions might involve training elected group members.⁷¹

Appendix 6: Detailed Discussion of Findings on Finance

Savings: 15 of 18 studies reported positive effects

Studies found that interventions targeting savings that establish or work with savings groups (e.g. ROSCAs, Savings and Internal Lending Communities) allowed members to build financial discipline and skills. Dagnelie & LeMay-Boucher found that ROSCA members saved around 10 percentage points more than non-members. Two studies showed that ROSCA savings groups also supported women's decision-making on how to spend accumulated savings, ensuring it went toward needed household expenses rather than being appropriated by male household members. However, Molyneux, et al. reported that in some cases, people lost money because fellow members were unable to pay their contribution or because of corrupt group leaders. Therefore, there is a risk of loss to members of savings groups. It is not clear to what extent these issues have a negative effect on individuals' savings.⁷²

Access to credit: 12 of 15 studies reported positive effects

In interventions in SHGs with savings components, group members benefited from access to credit via loans from internal savings. In the case of Indian savings groups, the Bank Linkage intervention allowed for groups demonstrating financial discipline to access loans from banks, which were usually significantly larger than the loans the groups could mobilize on their own. Deininger & Liu reported that access to bank loans for group members increased significantly for newly formed groups, from 16% to 37%. However, Reddy & Manak reported that only 50% of Indian savings groups in the intervention felt that the Bank Linkage loan size was adequate, that it could take more than four months to get a bank loan, and that 10% of Indian savings groups were forced to take loans to repay their bank loan. While members of savings groups benefited from increased access to credit from internal savings, there was limited evidence of savings groups outside of India benefiting from linkages to formal financial services such as bank loans.⁷³

Income and small enterprises: 8 of 11 studies reported positive effects

Eight studies reported higher farm earnings, increased income from non-sex work enterprises, income generation from microfinance, increased business profits, and increased business connections with other members. Bhoj, Bardhan & Kumar reported that average annual household income increased after joining savings groups and that the increase was significant across all wealth categories of households. Caro, Pangare, & Manfre found that 62% of women in self-help groups reported increases in income, with an average increase of 27%, though they did not provide data on income for a control group. Three studies found no significant impact of SHG participation on income. None of the studies quantitatively compared the change in income for group members to that of non-members. One drawback of existing research is that few of the studies reviewed specifically aimed to increase members' income.⁷⁴ However, SHG-based savings may also have negative effects. Molyneux, et al. found some cases where members lost money because of fellow members being unable to pay their contribution or because of corrupt group leaders.⁷⁵

Ownership of assets: 8 of 9 studies reported positive effects

Four studies found that members used savings groups to accumulate savings for individual purchase, including household assets. Bhoj, Bardhan & Kumar found a significant difference in asset possession by members before and after joining savings groups for all categories of respondents. Baird, et al. noted that group members increased private assets, though group elites who contributed more were more likely to gain assets. Dagnelie & LeMay-Boucher observed that 18% of group members made a home purchase or repair and 14% made a durable good purchase. Sinha, et al. found that members used group credit to access larger natural assets for production by leasing land or ponds for cultivation or pisciculture. Deininger & Liu did not find any significant impact on accumulation of assets over time, perhaps due to droughts and large crop failures at the time of the survey.⁷⁶

Micro-enterprise: 8 studies reported positive effects

Eight studies found that members of groups could access funding for micro-enterprise. Dagnelie & LeMay-Boucher found that 49% of ROSCA members used the funds to invest in small business, while Holvoet reported that 40% of group members used their loans to start a small cottage business. Sinha, et al. observed that 21% of groups were involved in a SHG-based enterprise. Greaney, et al. reported that business investment and time spent in business rose and was significantly greater for group members than for non-members. Only Sinha, et al. evaluated whether the micro-enterprises were viable, finding that roughly half of group enterprises appeared to be viable, though with relatively low earnings for Indian savings group members.⁷⁷

Effect on the very poor: 2 of 6 studies reported positive effects

Self-help groups may have a lesser effect on the very poor. The intervention described by Deininger & Liu fostered formation of savings groups by targeting the “leftover poor”, and launched campaigns on social issues to overcome caste and class barriers within the villages. To cater to the needs of the poor, the earlier focus on micro-credit was expanded to include in-kind credit for food, provision of insurance, and empowerment of the most marginalized. Swain reported that the poverty headcount ratio for savings group members was over 70%, and that in the linkage model where NGOs specialized in training and banks in lending, there were statistically significant effects on a poverty-based vulnerability measure. However, most interventions did not specifically target the very poor and found weak penetration of financial services to the very poor. Molyneux, et al. found that the poorest households and individuals are least likely to be reached through existing groups and that working only through existing CBOs may risk widening gaps between less poor and poorest. Sinha, et al. reported that the barriers to entry for the poor are high, and that moreover, for women who have been a member of an Indian savings group for seven years or more, half are (still) poor, including 13% very poor.⁷⁸

Characteristics of SHGs in Finance Outcomes

In 21 of the studies, the interventions worked with savings groups whose primary goal is to support members' savings and access to loans, whether internal or from banks. In most cases, the intervention helped members to organize into group savings programs, facilitated decision-making, and provided some training and support to the members. In the case of Indian SHGs, the intervention frequently involved creating linkages with formal financial services. Some interventions involved training in financial or business skills for group members. In 5 of the studies,⁷⁹ the intervention is focused on MNCH outcomes but financial outcomes are reported because the intervention mobilizes women from existing groups that included a savings component. In the remaining study,⁸⁰ the intervention supports farmer groups to mobilize to take out a bank loan.

Appendix 7: Detailed Discussion of Findings on Agriculture

Productivity: 3 of 5 studies reported positive effects, but productivity is not well measured

Three studies report positive effects of SHG participation on agricultural productivity, but do not specify how productivity was measured nor the size of the effect. Place, et al. reported that seedling generation improved, especially for groups with female leadership, diversity in ages, and a number of members closer to the overall average. However, Fischer & Qaim observed no increase in yield following the intervention, which might have been due to lag in adoption of improved crop varieties.⁸¹ No studies reported productivity per unit of labor or land, so it is not clear whether group members are better off as a result of increased productivity.

Market involvement: 2 of 4 studies reported positive effects

Two studies reported that women group members were able to better access high-value vegetable markets and negotiate for prices, but one additional study found that only 56% of farmer groups reported improved market position. Another study found that marketing through the group yielded a higher price than selling individually, but that when opportunity costs for time spent participating in collective marketing activities (i.e. transport) were included, the individual benefits decreased to almost 0.⁸²

Technology adoption: 3 of 3 studies reported positive effects

Caro, Pangare, & Manfre reported that group members who participated in project-led training and exposure to new practices and knowledge were able to increase productivity and reduce production costs. Fischer & Qaim found that adoption rates for improved variety banana ranged between 72-73% for group members compared to 14-20% among non-members. Kaganzi, et al. merely reported that group members were able to access improved varieties.⁸³

Crop diversification: 2 of 3 studies reported positive effects

Two studies found that groups lead to more diversification. Barham & Chitemi found that groups diversified into higher value crops such as vegetables. Caro, Pangare, & Manfre reported that group members grew new crops either on fallow land or in their own gardens. However, Fischer & Qaim found that group members increased their allocation of land to banana plantations following the intervention, thereby decreasing their income diversification.⁸⁴

Farm income: 5 of 6 studies reported positive effects

Five studies reported that members increased their farm income. Bhoj, Bardhan & Kumar reported a significant increase in average annual household income for the pooled sample across all wealth categories of households. Caro, Pangare, & Manfre found that 62% of women in groups reported increases in income, and that average increase in income for all districts was 27%, though they did not provide control group data. Fischer & Qaim reported that members selling through the group experienced a significant increase in total banana income and a higher contribution of this crop to total income. Kaganzi, et al. (2009) found that while group marketing to high-value buyers increased financial income, but that increased effort may have significant non-financial costs. Barham & Chitemi (2008) observed that only 56% of farmer groups reported improved market performance.⁸⁵

Access and use of inputs: 4 of 5 studies reported positive effects

Caro, Pangare, & Manfre found that the intervention increased the group members' access to inputs by negotiating with an input supply company to provide the group members with input discount cards. Fischer & Qaim reported a significant increase in the use of chemical fertilizers and pesticides among group members relative to non-members. Sinha, et al. noted that some group members used group credit to access larger natural assets for production.⁸⁶

Characteristics of SHGs in Agriculture Outcomes

Three studies⁸⁷ describe interventions that provide loans for income generating activities and business training to group members. These interventions are not necessarily targeted at farmers, though some farmers who are group members use loans for agricultural purposes. Five studies⁸⁸ describe interventions that work to strengthen existing smallholder producer groups and enhance access to and better use of inputs, services, and markets. One study⁸⁹ describes an intervention that worked to increase financial independence of groups through improved administration. This intervention is not necessarily targeted at farmers, though some group members are farmers. One study⁹⁰ describes an intervention that disseminates nursery stock for fodder trees to group members.

Appendix 8: Detailed Discussion of Findings on Empowerment

Control over decision-making: 12 studies reported positive effects

All studies that measured decision making found that group members' reported that control over decision-making improved significantly more than non-members in the study area. Holvoet considers effects of group membership on multiple different kinds of decision-making, and finds that group membership significantly shifts decision-making authority away from males and community norms toward the group, and that longer group membership has positive effects on female decision-making position. Three studies⁹¹ report increased participation in household decision-making around spending and ownership of assets. Two studies report that group members gain decision-making authority through involvement in community events.^{92,93}

Presence in Society: 6 of 7 studies reported positive effects

Membership in SHGs may also increase women's overall civic participation. Six of the studies in South Asia report on women's participation in society. Deininger & Liu report that about 21% of groups implemented specific activities in the social sphere to counter discriminatory practices and enhance female empowerment, and that membership in a group increases women's freedom to participate in economic and social activities by between 5 and 11 points, depending on the indicator. Holvoet finds that social group intermediation gradually transformed groups into actors of local institutional change, becoming increasingly involved in extra-household bargaining with the community. 4 studies find that participation in groups makes women more comfortable, and able, to leave the house and becoming more engaged in the community. This includes participating in extra-household bargaining with community groups, improving community services, and participating in social action programs. However, while these studies report increases in group members' participation in these areas, they do not include quantitative measures comparing group members and non-group members.⁹⁴

Political Participation: 7 of 9 studies reported positive effects

Nine studies examined women's participation in the political system, though all evidence is based in South Asia. Deininger & Liu find that group membership led to increased attendance at village meetings by 5% of women overall and by a slightly higher proportion of group members. Sinha, et al. find that 25% of Indian SHGs have a member who ran for local political office (in the panchayat or village council), and that a woman member has been elected in 20% of Indian savings groups. Tesoriero finds much higher effect on participation, with 67% of women group members participating in the local elected village council.

Reddy & Manak find that there have been several occurrences of Indian savings groups resolving disputes between members and the community at large, including initiating legal action, arbitration, divorce and others, all of which are traditionally controlled by men.

The other studies report increases in political participation among group members, including attending village council meetings, standing for election, and participating in public decision-making bodies, but do not report magnitudes of effect of the interventions.⁹⁵

Sinha, et al. report mixed effects of SHG-based interventions on community norms. They find that women's participation in community governance increased, but that in some cases women representatives are ignored by men. The authors report that Indian savings groups help bridge social divisions through mixed membership and take action on social justice issues, but find that these are not regular group activities and may be only partly successful in changing community norms.

Desai & Joshi find that the intervention resulted 2% village-wide increase in interaction with the village governance institutions. Sinha, et al. report increased participation in governance by group members and find evidence of synergies between Indian savings groups and local politics through increased involvement of female group members and support by Indian savings groups and SHG clusters and federations.

Reddy & Manak add that Indian savings groups not only empower its members but also wield a powerful political role as a group as well, as the leaders of SHGs are often invited to attend and speak at local village meetings.

Subjective Well-Being and Autonomy: 15 of 17 studies reported positive effects

Subjective well-being and autonomy were the most used measures for women's empowerment with positive association found across the board. Bhoj, Bardhan, & Kumar report that Indian savings groups significantly contribute to empowering women socially, financially and culturally across all wealth categories. Deininger & Liu find that the share of groups conducting activities for female empowerment rose from 1% to 21% during the

intervention period, and the share conducting activities to reduce vulnerability rose from 11% to 47%. The other studies report positive effects of SHG-based interventions on a variety of measures of empowerment and self-efficacy, including self-confidence, perceptions of autonomy, knowledge of important issues, business training, negotiation skills, financial independence, and mobility. Increased financial independence in particular is highlighted in 6 studies. However, Care, Pangare, & Manfre note that in spite of increased empowerment for female group members, division of labor remained unchanged resulting in a larger work burden.

De Hoop, et al. add that Indian savings group participation is associated with higher feelings of autonomy, but there is a significant negative effect on subjective well-being in communities with more conservative gender norms.⁹⁶ The authors suggest that increases in female autonomy are not enough to overcome gender norms in the short run, as social sanctions remain high. However, they hypothesize that sustained violation of gender norms by increasing number of women may eventually change them.

Characteristics of SHGs in Empowerment Outcomes

Three studies⁹⁷ do not describe interventions and instead evaluate impacts of existing savings groups on outcomes of interest. Ten studies⁹⁸ consider the impacts of Indian SHGs that are part of bank linkage or other credit programs. These interventions involve NGOs or banks that work with a mixture of pre-existing and newly-created groups to support group savings, facilitate group decision-making, build capacity of group members, and create linkages with financial services. Three studies⁹⁹ describe women's group MNCH interventions but also report on empowerment outcomes. One study¹⁰⁰ looks at an intervention that targets adolescents and trains peer educators to lead adolescent groups in discussion and education in HIV/AIDS. This study also evaluates how the intervention impacted measures of empowerment. The remaining four studies¹⁰¹ describe interventions involving savings groups that target vulnerable populations, poorly managed groups, poor women, and FSWs, respectively. The studies report on at least on measure of empowerment.

Appendix 9: Detailed Discussion of Findings on Group Dynamics

Governance of the Group: 4 of 7 studies reported positive effects

Good governance, including record keeping, financial management, and decision making is commonly held to be key to group sustainability, however several studies report that many self-help groups lack capacity in these areas. Reddy & Manak find that areas such as financial management, governance and human resources range from weak to average quality for a majority of Indian savings groups in their study. Sinha, et al adds that 15% of Indian savings groups have good quality records, another 39% have records of moderate quality, and 40% have weak records. Few studies directly test the effect of providing training on group governance, and most that do concentrate on savings groups in India. Baird, et al. find that groups that received training had statistically significant increases in maintaining financial records and within-group perception of transparency, compared to groups that did not receive training. Deininger & Liu report that the share of groups that maintained records for internal lending increased from 28% to 55% over the course of the intervention (which did this...). Anderson, Baland, & Moene describe how an intervention can increase savings group effectiveness by tailoring the pot allocation mechanism in order to provide the best possible enforcement of group rules, and it did this.

A study by Gugerty and Kremer examined the effect receiving outside funding has on internal group dynamics. The authors found that an intervention to provide group leaders with two days of training on leadership skills, group management techniques, bookkeeping, and project administration and provide agricultural inputs to the group saw an increase in participation of new members of higher socio-economic status, and were more likely to have leaders of higher status as well. The shift in leadership led to increased exit by older and more marginalized women due to conflict.

As an alternative to providing training directly to groups, some NGOs in India are testing the ability of SHG federations to increase the capacity of the savings groups to support and regulate themselves. Reddy & Manak (2005) describe how the spread of Indian savings groups has led also to the formation of SHG Federations that are a more sophisticated form of organization that involve several SHGs and promote group governance. However, they note that the SHG Federations have poor capacity for self-governance, average to low quality managers and poorly defined systems and processes.¹⁰²

Levels of Participation and Cohesion: 6 of 9 studies reported positive effects

4 studies report on interventions to develop peer accountability and solidarity mechanisms such as formal rules and social sanctions. Deininger & Liu found that the level of group activity and adherence to rules improves, as seen in the increased number of groups who met at least monthly, which rose from 48% to 70% overall.

Several studies emphasize the importance of group trust. Baird, et al. report that group training builds trust and cooperation, while Molyneux, et al. found that dishonesty among leaders and fellow members is a major problem and that successful groups tend to be embedded in social relations that take time to develop.

Sinha, et al. report that as amounts of external loans start increasing, some members may take higher loans than the rest based on their absorption capacity, which could affect social dynamics within the group. This implies potential negative effects on group cohesion as a result of the linkage intervention.¹⁰³

Characteristics of SHGs in Group Dynamics Outcomes

Thirteen of the studies involve interventions working with women's groups that are focused on MNCH outcomes for women of child-bearing age. Six of the studies describe interventions that worked with savings groups, with goals including improved group governance, increased empowerment, and supporting access to credit. Nine studies report on interventions that work with Indian SHGs. Five of these report on impacts of different SHG bank linkage programs. Two report on interventions using SHGs to improve health outcomes. The other two interventions worked with SHGs to increase empowerment. The remaining three studies describe interventions that aim to use peer groups to improve reproductive health and HIV outcomes. Two target adolescents, and one targets female sex workers.

Appendix 10: Discussion on Empowerment Measures

The twenty-four articles that measure empowerment by examining the respondents' autonomy, decision making, and/or presence in society. Studies consider the respondent more autonomous if they increased their ability to leave the house, increased confidence, knowledge or skills, widened their social network or support systems, received economic benefits, or enhanced business skills. Measured used by studies to indicate an increase in the woman's decision making power include increased control over finances, increased asset possession, and increased power in agricultural decisions. Studies measured presence in society by asking respondents' comfort leaving their home, their ability in extra-household bargaining in the community, and involvement in government and politics.

Measures of Empowerment from studies with strongest focus on empowerment

	deHoop, et al. (2014)	Deininger & Liu (2009)	Desi & Joshi (2012)	Odek, et al. (2009)
Autonomy	<ul style="list-style-type: none"> I have control over my own life I am able to go to a doctor without asking a man I am able to go to the market without asking a man How happy are you with your life in general? 	<ul style="list-style-type: none"> Able to go alone to market Able to visit friends along Able to go to the health center alone 		<ul style="list-style-type: none"> Skill building (increased self-esteem, self-confidence) Small business skills
Presence in Society	<ul style="list-style-type: none"> Men asked if women should be able to go to the market without a male permission Men asked if women should be able to go to community meetings on their own Men asked if women should be able to go to the doctor without a male escort 	<ul style="list-style-type: none"> Able to go to the community center Able to participate in community events Increased trust in other community members (castes, religions) 		
Political Participation		<ul style="list-style-type: none"> Increased trust in elected representatives, government employees, and police 	<ul style="list-style-type: none"> Knowledge of where to report types of grievances about utilities and public services Reporting or demanding improvements Awareness of bribes Knowledge of local government bodies 	
Decision Making		<ul style="list-style-type: none"> Able to save individually 	<ul style="list-style-type: none"> Increased savings Decision making in children's schooling, medical and family planning Women's ability to have a 'final say' in decisions 	<ul style="list-style-type: none"> Negotiation over condom use Control over resources Increased Income

Appendix 11: Evidence on ICO Key Questions

Motivation

What factors motivate beneficiaries to join and continue participating in a SHG, other than financial incentives through savings/loan?

Motivations other than financial incentives include: perceived empowerment, increased social standing, access to emergency funds and other forms of SHG-based insurance, exchange of business ideas, support for starting and managing business or income-generating activities, access to information and support for improved health practices (especially from pregnant women and mothers), and leveraging of group negotiating power to access services. The importance of these different motivations varies with the type of self-help group.

What motivates a group leader (e.g. a Sakhi/Saheli) to work voluntarily and yet remain dedicated towards her group/community? What are the common traits that should be used to identify a SHG leader?

In some cases group leaders were compensated by NGOs, whether through a salary, a stipend, or provision of goods like bicycles. Several studies also report that self-help groups with a savings and loan focus are willing to pay and do pay for support from facilitators with financial skills. However, in many studies, including studies where group leaders receive compensation and studies where they do not, increases in social standing and social capital are mentioned as sources of motivation for group leaders. Some studies indicate that group leaders either had been community leaders, or gained prominence in their community through their leadership of groups. Few details are available on whether motivation differs when the group leader is an elected executive as opposed to an external facilitator. However, where leaders are selected by group members, they often have a higher social status than other group members and may be motivated by the desire to maintain that social standing.

Are volunteer leaders truly effective at bringing about behavior change? If not, what are the primary assumptions that commonly break down? When is it necessary to incentivize leaders by paying them?

We are not able to answer this question. Regardless of the level of incentives provided, there appears to be some level of intrinsic motivation for the group leaders based on social status and social capital, but there is also a risk of attrition of group leaders. Even in studies where group leaders are paid and receive materials and support from NGOs there is evidence of attrition. However, no study compares outcomes or levels of attrition for groups whose leaders receive different levels of incentives. Funding studies comparing and assessing types of leadership in self-help groups would inform this area.

Diffusion

To what extent do SHG members influence each other? To what extent do SHG members influence other members of the community?

Each other: The evidence base is weak for groups that do not include a savings and loan component. In these types of self-help groups, members hold each other accountable for periodic attendance and contributions to the group pot, and enforce these rules through fines and social sanctions. Several studies report that group membership supports improved savings habits for group members. One study found that group rules resulted in more regular attendance. Some grey literature noted that savings groups self-replicate, most often through the assistance of a member of an existing group.

Members of the Community: Evidence is stronger for this area. Many of the MNCH studies included community dissemination aspects that were successful. Some studies have evidence to support changes in community attitudes (on HIV and gender roles). Indian savings groups in particular appear to be associated with increased community participation of women, including political participation, reflecting slow changes in gender norms reinforced by repeated violations of existing norms by female group members. The evidence for this is weak for Africa, future studies exploring this aspect of African savings groups would inform this area.

How do SHGs engage with local institutions and service providers to improve access to and quality of services? What type of providers are most common and what are the driving factors in order for this to occur?

The most common institutional engagement was between savings groups and Banks. These linkages may be driven

by the banks themselves, by government bodies, or by NGOs. Government support, including provision of subsidies and backing for loans, often drives these linkages. The second most common (though much less common) form of engagement was between health centers and women's groups. We cannot assess the driving factors for this to occur. More research on these relationships is necessary, especially focused on what kind of government support is needed for sustainable relationships between groups and service providers. The evidence on this is weaker for Africa, especially for institutional engagement with health centers.

Sustainability

What factors contribute to SHG sustainability? That is, why do some SHGs remain active for a long time while others close after a few months?

The evidence on this question is weak. Several studies (many from the grey literature) propose their theories on this based on their observations/experience. Factors such as institutional and local support, supportive policies and government, and perhaps support structures such as consortiums or federations may increase sustainability of groups. For savings and loans groups, training and support for financial management is critical. Provision of loans should also be tied to an assessment of groups' financial needs and capacities. However, the impact of such training or assessments have not been rigorously evaluated. More research comparing successful groups and (especially) failed groups that are in similar contexts would inform this area.

What does the evidence say about SHGs ability to be scaled?

There is limited evidence on scalability. There are some reports of models self-replicating, but these are limited and primarily focus only on savings groups. For MNCH-focused groups, there is evidence of similar groups being replicated in different contexts and expanding in successive phases of interventions. Evidence from MNCH suggests that one group per 450-750 people and participation by 1/3 of the pregnant women is needed to maintain effectiveness of interventions as they go to scale. More research on successful and unsuccessful scaling efforts would inform this area.

What is the relationship between social capital and any barriers that inhibit group formation? Does social capital enhance group formation and sustainability?

We are not able to answer this. Some articles report that groups members are recruited by the NGO chosen facilitator, who had some sort of social standing. This may imply that motivation to join is also associated with the social capital of the facilitator. More research on the relationships between social capital and group formation would inform this area.

Desired Outcomes

What components of an SHG lead to empowerment and behavior change? (e.g. the facilitator, group leader, homogeneity of the group)

We are not able to answer this question as it was not evaluated in the studies. More research is needed that compares different structures and the outcomes.

To what extent do SHGs increase empowerment within members? Is empowerment necessary before broader outcomes (e.g. improved health, resources, etc.) are achieved, or are there cases when empowerment has inhibited the extent to which these broader outcomes are achieved?

In general, the studies find that self-help groups are associated with increased empowerment of their members, which may be measured as increased control over decision-making, improved perceptions of self-efficacy/autonomy, and increased political participation. However, the impact of groups on indicators empowerment is rarely rigorously evaluated and is more often reported qualitatively. In addition, the sequence of outcomes is not explicitly addressed. Some of the studies that look at empowerment find that group members gained more access to financial, household, and community decision making. In some cases, increased confidence and knowledge was needed for the interventions that relied on members conducting community dissemination campaigns (such as MNCH). More research is needed to assess the potential for empowerment to inhibit the achievement of broader outcomes.

To what extent has participation in a community groups led to desired outcomes such as 1) behavior change among beneficiaries (improved health behaviors, contraceptive use) 2) RMNCH outcomes, 3) improved community

resources (i.e. toilets, access to school, etc.)? What are the timeframes required to see change in each? Studies report mostly positive outcomes for outcome areas (health, agriculture, finance, empowerment). Timeframes for change vary but are not evaluated. Likely factors effecting timeframes for outcomes include whether pre-existing groups are used and the outcome area of interest (for example, MNCH requires 2-5 years because of biological limits, etc.). However, few studies were shorter than 2 years and some grey lit program documents are based on programs that have been on-going for many years. Research on impacts of groups on sanitation and non-MNCH education outcomes is weak.

Does peer pressure from friends/family play a role in the extent to which outcomes are achieved? For example, a study found that results were greater when there was a critical mass of pregnant women in the group. Is this common, and are there other factors about the group's composition that are important for achieving results? Maybe. In many cases groups were recruited by facilitators, who are usually trained local community members. This may increase the effectiveness of the groups, but cannot be evaluated because outcomes were not compared against groups with non-local facilitators. The literature suggests that peer accountability and the potential for social sanctions is critical for positive outcomes in savings and loan groups. Limited evidence suggests that for MNCH outcomes participation by 1/3 of pregnant women is needed to maintain effectiveness of the intervention. More research is needed to understand the role of peer pressure, especially in non-finance based groups. Some MNCH studies mentioned that family members also participated in some of the group meetings, which might have created peer pressure to change behavior. Additionally, the literature on savings group strongly emphasize the impact of peer pressure from group members (who are often family, friends, and neighbors) to improve savings habits.

Is group membership associated with collective action (resulting in community benefits) or individual action (resulting in individual benefits)?

Membership in SHGs (as we define them) results primarily in individual benefit. However, community benefits are common across outcome areas reviewed, though the evidence for this is concentrated in India. More research on collective benefit in Africa would inform this area. Additionally, SHG-based interventions for health outcomes beyond MNCH and HIV are largely unstudied.

Alternatives

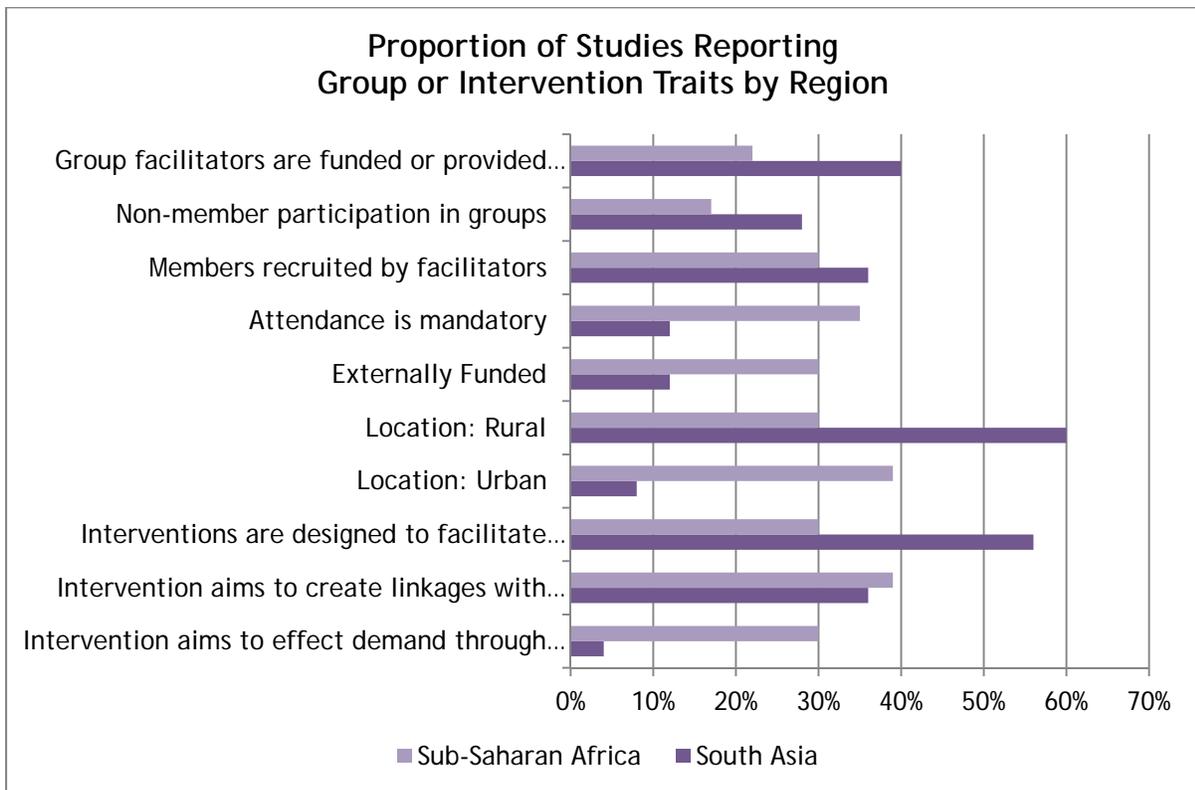
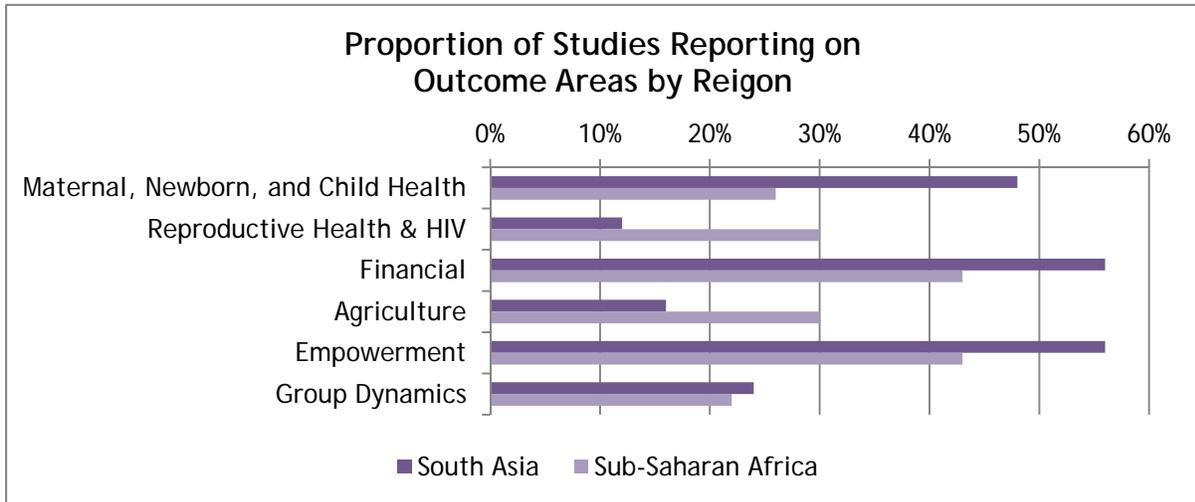
Which factors lead to behavior change from the messages disseminated through various community platforms? Is one platform better at driving change than another? We are not able to answer this. Only one study compared outcomes for different community platforms (women's groups vs. peer educators vs. both). Funding studies that test a variety of dissemination methods and platforms may inform this area.

Is there research on the extent to which SHGs are cost effective relative to other interventions? We cannot quantitatively answer whether SHGs are a cost effective platform relative to other interventions, however grey literature program documents and a few peer-reviewed studies (mostly in MNCH) indicate that SHG-based interventions are considered a cost effective approach.

How do non-SHG community mobilization methods (for example, working through different types of groups such as women's health groups/mothers groups) compare to SHG?

SHGs as we defined them include these types of groups and we did not compare to groups outside of our definition. We did compare outcomes for different group types within our definition of SHGs. Group types include Indian savings groups, which dominate the Indian landscape, along with savings groups, women's groups, farmers' groups, and other peer groups.

Appendix 12: By Region: proportion of studies providing information on outcomes and group characteristics



Appendix 13: Evidence on Impacts of Group Characteristics

Group Size

We found no evidence that small group size was associated with improved outcomes. Anderson, Baland, & Moene reported that randomized ROSCAs could reduce enforcement problems by increasing the number of members, which reduces the likelihood of being the last to receive the pot.¹⁰⁴ However, savings groups are generally small, with 10 to 20 members. Group size may have different effects depending on the outcomes, as smaller groups may be better able to achieve financial goals but less able to achieve empowerment or other social goals. Barham & Chitemi found that group size was not significantly related to group marketing performance. Place, et al. reported that mid-size groups performed better than the smallest and largest groups.¹⁰⁵

Homogeneity

Savings Groups tend to be homogeneous, often comprised of members of the same caste, tribe, or social group. Sinha, et al. found that two-thirds of Indian savings groups in their sample were single-caste groups. There is no evidence that homogeneity of members supports improved outcomes for these groups. Some types of homogeneity may matter more than others. Group members may vary according to age, gender, occupation, level of education, socioeconomic status, and tribal, ethnic, religious, or caste affiliation. Some heterogeneity in level of education and socioeconomic status may benefit groups if it adds leadership or business skills. Gender and occupational homogeneity may help group members to define common objectives.¹⁰⁶ Farmers' Groups tend to be less homogeneous and larger than other kinds of self-help groups. However, they retain occupational homogeneity, which may be the most relevant for group effectiveness. Place, et al. reported that groups self-appraised themselves as highly heterogeneous, and found that age diversity of group members was positively associated with household seedling management. Barham & Chitemi reported that there was no evidence to support the hypotheses that homogeneity of identities helps groups to improve their market situation, and that indicators for trust had no significant relationship with farmers' group performance. However, Kaganzi, et al. reported that farmers' group members had shared affiliations that strengthen their network.

Shared Social Networks

Shared social networks are important for group success in savings groups. In savings groups, members must trust that each member will give their periodic contribution to the group pot, even after they have had their turn receiving it. The need for trust in savings groups helps explain the importance of shared social networks among group members. Molyneux, et al. reported that identifying and building groups with a strong internal trust base was critical for successful interventions, and that low levels of trust often undermined the success of groups. They found that successful savings groups tended to be embedded in social relations that took time to develop. Swain, et al. found that in Indian savings groups, shared social networks facilitated the pooling of savings and supported regular meetings. Anderson, Baland, & Moene found that ROSCA members belonged to larger shared social networks, which supported enforcement of group savings and loans rules.¹⁰⁷ Kaganzi, et al. report that for farmers' groups in their study, collective action was essential for raising capital needed to access markets.¹⁰⁸

Poverty of Members

Bhoj, Bardhan, & Kumar reported positive associations between group membership and an empowerment index, asset possession, and household income for all wealth categories, including the poorest members. They did not find significant differences in amount of improvement for different wealth categories. These findings may be biased by the fact that most self-help groups do not include the poorest community members. Molyneux, et al., Reddy & Manak, Sinha, et al., and Swain reported significant barriers to entry for the very poor, especially for joining savings groups. Swain found that the required saving amount rules the very poor out. Reddy & Manak found that the penetration of microfinance to the poorest of the poor is still weak and needs a wider reach. Anderson & Baland reported that married women with a regular income-earning occupation are most likely to participate in a ROSCA. On the other hand, Deininger & Liu described an intervention that fostered formation of SHGs by targeting the "leftover poor." They reported positive financial outcomes, but did not evaluate whether there was a relationship between group poverty levels and group outcomes.¹⁰⁹ Barham & Chitemi found that group wealth ranking (a measure of groups' physical and financial assets) did not prove to be a significant factor in improving farmers' groups' market situation.

Savings Component

SHG-based savings are generally associated with positive outcomes for group members, but no studies explicitly compared groups with and without a savings component. Reddy & Manak found that SHG-based savings created an ethic that focused on savings first and Swain, et al. added that groups built financial discipline. Sinha, et al. reported that SHGs enabled women to grow their savings. Members also built financial skills and individual credit histories, as found by Caro, Pangare, & Manfre and others. Molyneux, et al. found that group savings could serve as part of a safety net supporting households to meet unexpected expenses. A group savings component also supports women to increase their control over household finances. Holvoet found that the group fund and individual savings accounts made it possible for members to protect part of their income from men's leverage and provided them with longer-term access to financial resources, thereby increasing their position within the household. Anderson & Baland reported that ROSCAs were the only means for women to save for large household expenditures.

Length of Group Membership

Holvoet found that longer-term group membership strengthened positive group outcomes. Swain reported that longer membership duration in SHGs positively affected asset creation. Deininger & Liu compared outcomes from an intervention that both created new savings groups and converted existing groups to participate. For most outcome variables, there was not a significant difference in the outcomes for newly formed and converted groups. However, converted groups may not have had the advantage of past successful experiences given that these experiences did not cover the same activities as those implemented as part of the program.¹¹⁰

Barham & Chitemi evaluated outcomes for 14 groups that were formed for an intervention and 20 that were pre-existing. They found that pre-existing groups were significantly correlated with the ability to improve marketing performance. Initial successful experiences in groups can lead to ongoing group effectiveness, and in some contexts more mature groups have more positive outcomes. Barham & Chitemi reported that more mature farmers' groups were more likely to improve their market situation. Fischer & Qaim found that a significant increase in banana income could only be observed in older groups. Kaganzi, et al. reported that farmers' groups with shared norms and past successful experiences were better prepared for collective marketing. However, Place, et al. found that the age of the group was not significantly related to measures of group performance.¹¹¹

Scope of Group Activities

While groups were created with the objective of facilitating group savings and access to loans, they regularly conducted activities beyond their original scope. Indian savings groups regularly pursued activities intended to increase female empowerment, including becoming involved in local decision-making bodies. Sinha, et al. reported that SHGs supported by NGOs and government bodies were often "microfinance plus" where SHGs are part of a wider village development program, as opposed to SHGs supported by banks that focus just on microfinance. The savings groups in the studies focused on financial activities, but most groups also carried out other activities in the community. Molyneux, et al. reported that savings groups often implemented community-based projects.¹¹²

For farmers' groups limiting group activities within certain boundaries does not appear to improve group performance. Farmers' groups tend to be created with clear boundaries, generally focused on production and marketing of one type of crop. However, Barham & Chitemi found that farmers' groups with other activities were correlated with higher performance. Place, et al. reported that groups who had taken on new directions and activities performed better on three of the six performance measures (number of seedlings produced per member, quality of seedlings, and survival rate of seedlings).

Frequency of Meetings

One study found that more frequent meetings improved group outcomes. Holvoet found that more frequent meetings created more additional effects than longer group membership. Meeting at least monthly appears to be a common characteristic for successful savings groups. Deininger & Liu reported that improvements in the level of group activity and adherence to rules were most clearly visible from the increased number of groups who met at least monthly. Swain, et al. added that monthly meetings appeared to be a common lower bound for Indian savings groups. Anderson & Baland reported that while members contributed daily in 10% of ROSCAs, weekly in 35% of ROSCAs, biweekly in 6% of ROSCAs, and monthly in 49% of ROSCAs, they did not need to attend meetings to make all of these contributions. However, general assembly meetings, typically scheduled once a month, were important

social occasions and lasted three to four hours. Groups insisted on the presence of the members at each meeting, and absenteeism was often punished by a fine. These meetings supported group trust and peer accountability.¹¹³

Membership Fees

Anderson, Baland, & Moene found that a minority of savings groups in their sample had a membership fee. On average, this up-front fee was only equal to approximately 25% of the monthly contribution, which was too low to deter defection but was used to cover administrative costs. This function of membership fees would therefore support group effectiveness.¹¹⁴ Greaney, et al. compared groups that paid fees to hire a trained professional to carry out administrative needs of the group to groups whose trained professional was paid by an NGO, while these groups were profitable, membership also became better off.¹¹⁵ Fischer & Qaim reported that farmers' group members in their study paid fees, but that NGOs provided subsidies for some inputs. It appears that paying membership fees allowed members to access the benefits of group membership, including access to discounted inputs and collective marketing.

Support for Group Governance

Training to support group governance appears to improve performance of savings groups in India. Sinha, et al. reported that support from self-help promotion agencies (SHPAs) seemed critical in providing or facilitating ideas for SHG-based enterprise. Holvoet described enterprise development training and human resource building for Indian savings groups, and reported that intensive training and investment in building groups created more additional effects than longer group membership did. Swain, et al. added that the training of members provided by the SHG program could enhance their entrepreneurship skills as well as their ability to perceive and process new information and both evaluate and adjust to changes, thus increasing their productivity and self-confidence. Swain reported that training by NGOs positively helped members to create assets.¹¹⁶ Barham & Chitemi reported that training for farmers' groups included leadership, establishing action plans, and cost-benefit analysis for risk management. However, the study did not compare outcomes for groups that did and did not receive this training.¹¹⁷

Quality of Leadership

Poor leadership negatively effects group performance. Molyneux, et al. found that numerous members of savings groups reported having lost money because of fellow members being unable to pay their contribution or because of corrupt group leaders. Dishonesty among leaders and fellow members was a major problem, indicating the importance of appropriate leadership. Several studies indicated that leaders were often better off or had more social standing than other group members. Reddy & Manak found that Indian savings group leaders were usually from the dominant social group's category. Sinha, et al. reported that SHG leaders were of all castes, reflecting the caste composition of their group. SHG leaders were more likely to be better off and have some schooling compared to other members, which may have supported group effectiveness. Swain, et al. also found that elected SHG officers were usually more educated. In savings groups, the founder often leads the group, but the collection of friends, relatives, and neighbors who form the group collectively decide on who should lead the group and collect contributions. Indian savings groups usually elect group officers.¹¹⁸

Strong leadership appears to improve effectiveness of farmers' groups. Place, et al. reported that strong leadership was associated with improved farmers' group performance. However, they did not define "strong leadership." Kaganzi, et al. found that strong leadership within farmers' groups was the most important factor in identifying and maintaining market links and was therefore associated with improved group performance. Barham & Chitemi did not evaluate the quality of farmers' group leadership but found that groups with male leaders were better able to improve their situation.¹¹⁹

The degree of elite capture in savings groups and Indian savings groups is mixed, and is not always associated with negative group outcomes. Molyneux, et al. found evidence of elite capture negatively effecting group performance. They reported that numerous members of savings groups lost money because of corrupt group leaders. Group members cited untrustworthy officials as the primary reason groups collapsed and as the second most important reason they left a group. However, this study did not quantify the extent or prevalence of elite capture by group leaders. Sinha, et al. found evidence of elite capture, but did not find that it always adversely affected group outcomes. The authors reported that in up to 18% of Indian savings groups, leaders accessed more credit, especially over a longer time frame. However, other group members were aware of this imbalance and did not report that the arrangement was exploitative. In addition, the authors found relatively low standard deviation

around the mean for number of loans and amount borrowed by members, indicating that elite capture may be limited in extent. Further, they reported that as amounts of external loans started increasing, equal distribution of loans would lead to some members being unable to repay the loans they had taken. The authors argued that the financial implication is that some members may take higher loans than the rest, based on their absorption capacity, but pointed out that this could negatively affect social dynamics within the group. Swain, et al. did not find evidence of elite capture in their study. They reported that Indian savings group officers were usually more educated, but did not find that they captured any undue amounts of group surplus, as the relationship between officers and asset creation of members was not significant.¹²⁰

Peer Accountability Mechanisms

The evidence indicates that peer accountability mechanisms are essential for the success of savings groups. Holvoet found that members themselves suggested that peer pressure and the availability of a group fund increased the probability that the loans were effectively used for the intended productive purpose. Anderson, Baland, & Moene demonstrated that exclusion from savings groups alone was insufficient to deter members from leaving the ROSCA after receiving the pot and that member fees were insufficient to ensure enforcement. Peer accountability in these groups supported enforcement of repayment through the threat of social sanctions, especially in random ROSCAs where members were more likely to be connected to shared social networks. Peer accountability mechanisms may be less important in other group types. Anderson & Baland found that the collegial support within savings groups appeared instrumental in empowering women, and that a wide range of mechanisms reinforced solidarity. Deininger & Liu reported that discipline in periodic meeting attendance, saving, and repayment was essential for success of Indian savings groups. Sinha, et al. reported a variety of peer accountability mechanisms for savings group members who failed to repay their loans. These various mechanisms helped enforce repayment and supported group effectiveness.¹²¹

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⁹ Desai & Joshi (2012); Ensor, et al. (2014); Hargreaves, et al. (2009); Van Rompay, et al. (2008); & Saha, Annear, & Pathak (2013)

¹⁰ Carlson, et al. (2012); Desai & Joshi (2012); Ensor, et al. (2014); Fritz, et al. (2011); Hargreaves, et al. (2009); Kuhlmann, et al. (2013); Luchters, et al. (2008); Maro, Robert, & Sorensen (2009); Odek, et al. (2009); Saha, Annear, & Pathak (2013); Van Rompay, et al. (2008)

¹¹ Deininger & Liu. (2009); Desai & Joshi. (2012); Lewycka, et al. (2013); Molyneux, et al. (2007); More, et al. (2012); Reddy & Manak (2005); Sinha, et al. (2006)

¹² Colbourn, et al. (2013); Houweling, et al. (2013); Rath, et al. (2010); Roy, et al. (2013); Tripathy, et al. (2010)

¹³ Kaganzi et al (2009)

¹⁴ Anderson & Baland (2002); Baird, et al. (no date); Bhoj, Bardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Colbourn, et al. (2013); Dagnelie & LeMay-Boucher (2008); de Hoop, et al. (2014); Deininger & Liu (2009); Desai & Joshi (2012); Dongre, Deshmuk, & Garg (2007); Greaney, et al. (2013); Hargreaves, et al. (2010); Holvoet (2005); Houweling, et al. (2013); Kaganzi, et al. (2009); Molyneux, et al. (2007); Odek, et al. (2009); Rath, et al. (2010); Reddy & Manak (2005); Roy, et al. (2013); Saha, Annear, Pathak (2013); Sinha, et al. (2006); Swain, et al. (2009); Swain (2012); Tesoriero (2006); Tripathy, et al. (2010); Van Rompay, et al. (2008).

¹⁵ Baird, et al. (no date); Barham & Chitemi (2008); Bhoj, Bardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Greaney, et al. (2013); Gugerty & Kremer (2008); Kaganzi, et al. (2009); Place, et al. (2004); Sinha, et al. (2006); Swain, et al. (2009)

¹⁶ Gugerty & Kremer (2008); Baird, et al; Greaney, et al. (2013)

¹⁷ Swain, et al. (2009); Barham & Chitemi (2008); Fischer & Qaim (2011); Bhoj, Bardhan & Kumar (2013); Place, et al. (2004)

¹⁸ Baird, et al.; Bhoj, Gardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Greaney, et al. (2013); Kaganzi, et al. (2009); Place, et al. (2004); Sinha, et al. (2006); Swain, et al. (2009)

¹⁹ Barham & Chitemi (2008); Fischer & Qaim (2011); Gugerty & Kremer (2008)

²⁰ Baird, et al. (no date); Barham & Chitemi (2008); Bhoj, Bardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Greaney, et al. (2013); Gugerty & Kremer (2008); Kaganzi, et al. (2009); Place, et al. (2004); Sinha, et al. (2006); Swain, et al. (2009)

²¹ Barham & Chitemi (2008); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Kaganzi, et al. (2009)

²² Alcock, et al. (2009); Anderson & Baland. (2002); Anderson, Baland, & Moene. (2009); Baird, et al.; Bhoj, Bardhan & Kumar. (2013); Caro, Pangare, & Manfre. (2013); Colbourn, et al. (2013); Dagnelie, & LeMay-Boucher. (2008); deHoop, et al. (2014); Deininger & Liu. (2009); Desai & Joshi. (2012); Greany, et al. (2013); Gugerty & Kremer (2013); Hargareaves, et al. (2010); Holvoet. (2005); Maro, Robert, & Sorensen. (2009); Odek, et al. (2009); Reddy & Manak. (2005); Sinha, et al. (2006); Swain, et al. (2009); Swain (2012); Tesoriero (2006); Tripathy, et al. (2010)

²³ 10 studies (Bhoj, Bardhan & Kumar (2013); de Hoop, et al. (2014); Deininger & Liu (2009); Desai & Joshi (2012); Holvoet (2005); Reddy & Manak (2005); Sinha, et al. (2006); Swain, et al. (2009); Swain (2012); Tesoriero (2006))

²⁴ Sinha, et al. (2006);

²⁵ Caro, Pangare, & Manfre. (2013)

²⁶ (this is for the whole "decision making" section) Key citations: Anderson & Baland. (2002); Anderson, Baland, & Moene. (2009); Bhoj, Bardhan & Kumar. (2013); Caro, Pangare, & Manfre. (2013); Dagnelie, & LeMay-Boucher. (2008); Deininger & Liu. (2009); Desai & Joshi. (2012); Holvoet. (2005); Maro, Robert, & Sorensen. (2009); Reddy & Manak. (2005); Sinha, et al. (2006); Tripathy, et al. (2010)

²⁷ (for the participation in society section) Key citations: Caro, Pangare, & Manfre. (2013); Deininger & Liu. (2009); Desai & Joshi. (2012); Holvoet. (2005); Sinha, et al. (2006); Tesoriero. (2006)

²⁸ (for political participation) Key citations: Deininger & Liu. (2009); Desai & Joshi. (2012); Holvoet. (2005); Reddy & Manak. (2005); Sinha, et al. (2006); Tesoriero. (2006)

²⁹ Deininger & Liu. (2009);

³⁰ Anderson & Baland. (2002); Anderson, Baland, & Moene. (2009); Baird et al.; Caro, Pangare, & Manfre (2013); Deininger & Liu. (2009); Gugerty & Kremer (2008); Holvoet. (2005); Molyneux, et al. (2007); Reddy & Manak (2005); Sinha, et al. (2006); Swain (2012).

³¹ Gugerty & Kremer (2008).

³² Anderson & Baland. (2002); Anderson, Baland, & Moene. (2009); Baird et al.; Caro, Pangare, & Manfre (2013); Deininger & Liu. (2009); Gugerty & Kremer (2008); Holvoet. (2005); Molyneux, et al. (2007); Reddy & Manak (2005); Sinha, et al. (2006); Swain (2012).

³³ Colbourn, et al. (2013); Deininger & Liu. (2009); Desai & Joshi (2012); Holvoet. (2005); Houweling, et al. (2013); Lewycka, S. et al. (2013); Luchters et al. (2008); Maro, Robert, & Sorensen (2009); Molyneux, et al. (2007); More et al. (2012); Prost, et al. (2013); Rath, et al. (2010); Reddy & Manak. (2005); Rosato et al. (2006); Roy et al. (2013); Sinha, et al. (2006); Swain (2012).

³⁴ Reddy & Manak (2005); Sinha, et al. (2006).

³⁵ Anderson, Baland, & Moene. (2009); Baird et al.; Caro, Pangare, & Manfre (2013); Deininger & Liu. (2009)

³⁶ Gugerty & Kremer (2008).

³⁷ Reddy & Manak. (2005), Tankha, (2012)

³⁸ Anderson & Baland. (2002), Anderson, Baland, & Moene. (2009); Deininger & Liu. (2009); Holvoet. (2005)

³⁹ Tanka, A. (2012)

⁴⁰ Odell, Marcia (2011) "Microfinance in Africa: State-of-the-sector Report 2011"

⁴¹ Ensor, et al. (2014)

⁴² Nair, Ajai (2005)

⁴³ Sinha, et al., 2006; Reddy & Manak, 2005; Bhawan & Marg, 2008

⁴⁴ Swain & Varghese, 2009; Reddy & Manak, 2005; Seibel, 2012

⁴⁵ IFAD <http://www.ifad.org/operations/projects/regions/pi/paper/3.pdf>

⁴⁶ CARE <http://www.care.org/sites/default/files/documents/MF-2011-CARE-Access-Africa-Closing-the-Gap.pdf>

⁴⁷ Manandhar, et al. (2004)

⁴⁸ The Ekjut Trial in Jharkhand and Odisha: Tripathy et al (2010); Rath et al (2010); Houweling, et al. (2013); Roy et al (2013) and the City Initiative for Newborn Health (CINH) Community Mobilization in Mumbai: Alcock, et al. (2009); More et al. (2012) are two examples.

⁴⁹ Azad, et al. (2010)

⁵⁰ The MaiMwana Trial in the Michinji district, Lewycka, S. et al. (2013), Rosato et al. (2006) and the MaiKhanda Trial in Lilongwe, Kasungu, and Salima Districts, Colbourn et al. (2013).

⁵¹ Ensor, et al. (2014)

⁵² Lassi, Haider, & Bhutta (2010); Lewycka, S. et al. (2013),

⁵³ Alcock, et al. (2009); Azad, et al. (2010); Ensor, et al. (2014); Houweling, et al. (2013); Lewycka, et al. (2013); More, et al. (2012); Prost, et al. (2013); Tripathy, et al. (2010)

⁵⁴ Azad, et al. (2010); Dongre, Deshmuk, & Garg. (2007); Ensor, et al. (2014); Lewycka, et al. (2013); More, et al. (2012); Prost, et al. (2013); Rosato, et al. (2006)

⁵⁵ Azad, et al. (2010); Dongre, Deshmuk, & Garg. (2007); Ensor, et al. (2014); Lewycka, et al. (2013); Manandhar, et al. (2004); More, et al. (2012); Roy, et al. (2013)

⁵⁶ Prost et al. (2013); The seven studies are Mandahar, et al (2004); Trapathy, et al. (2010); Azad, et al. (2010), More, et al. (2012); Lewycka, et al. (2013); Colbourn, et al. (2013); and Fortrell, et al. (2013)

⁵⁷ Colbourn, et al. (2013); Lewycka, et al. (2013); Manandhar, et al. (2004); More, et al. (2012); Prost, et al. (2013)

⁵⁸ The seven studies in the systematic review include: Manandhar et al, 2004 (Nepal); Tripathy et al, 2010 (India); Azad et al, 2010 (Bangladesh); More et al, 2012 (India); Lewycka et al, 2013 (Malawi); Colbourn et al, 2013 (Malawi); Fottrell et al, 2013 (Bangladesh)

⁵⁹ More, et al. (2012)

⁶⁰ Ensor, et al. (2014); Fritz, et al. (2011); Luchters, et al. (2008); Maro, Robert, & Sorensen. (2009); Van Rompay, et al. (2008)

⁶¹ Carlson, et al. (2012); Fritz, et al. (2011); Hargreaves, et al. (2009); Kuhlmann, et al. (2013); Luchters, et al. (2008); Maro, Robert, & Sorensen. (2009)

⁶² Desai & Joshi (2012); Saha, Annear, & Pathak. (2013)

⁶³ Luchters, et al. (2008)

⁶⁴ Carlson, et al. (2012); Fritz, et al. (2011); Van Rompay, et al. (2008)

⁶⁵ Molyneux, et al. (2007)

⁶⁶ The MaiMwana Trial in Malawi.

⁶⁷ Lewycka, et al. (2013)

⁶⁸ Deininger & Liu. (2009)

⁶⁹ Desai & Joshi. (2012); Lewycka, et al. (2013); Molyneux, et al. (2007); More, et al. (2012); Reddy & Manak. (2005); Sinha, et al. (2006)

⁷⁰ Colbourn, et al. (2013)

⁷¹ Colbourn, et al. (2013)

⁷² Anderson & Baland (2002); Caro, Pangare, & Manfre (2013); Dagnelie & LeMay-Boucher (2008); Desai & Joshi (2012); Holvoet (2005); Molyneux, et al. (2007); Rath, et al. (2010); Reddy & Manak (2005); Sinha, et al. (2006); Greaney, et al. (2013)

⁷³ Caro, Pangare, & Manfre (2013); Dagnelie & LeMay-Boucher (2008); Deininger & Liu (2009); Holvoet (2005); Kaganzi, et al. (2009); Molyneux, et al. (2007); Reddy & Manak (2005); Saha, Annear, Pathak (2013); Sinha, et al. (2006); Swain (2012)

⁷⁴ Bhoj, Bardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Dagnelie & LeMay-Boucher (2008); Deininger & Liu (2009); Desai & Joshi (2012); Greaney, et al. (2013); Kaganzi, et al. (2009); Odek, et al. (2009); Saha, Annear, Pathak (2013); Swain, et al. (2009)

⁷⁵ Reddy & Manak (2005); Sinha, et al. (2006); Caro, Pangare, & Manfre (2013); Molyneux et al. (2007); Holvoet (2005); Anderson & Baland (2002)

⁷⁶ Anderson & Baland (2002); Baird, et al. (no date); Bhoj, Bardhan & Kumar (2013); Dagnelie & LeMay-Boucher (2008); Deininger & Liu (2009); Desai & Joshi (2012); Sinha, et al. (2006); Swain, et al. (2009); Swain (2012); Tesoriero (2006); Tripathy, et al. (2010); Van Rompay, et al. (2008)

⁷⁷ Anderson & Baland (2002); Baird, et al. (no date); Caro, Pangare, & Manfre (2013); Dagnelie & LeMay-Boucher (2008); Greaney, et al. (2013); Holvoet (2005); Odek, et al. (2009); Sinha, et al. (2006)

⁷⁸ Deininger & Liu (2009); Molyneux, et al. (2007); Reddy & Manak (2005); Sinha, et al. (2006); Swain (2012)

⁷⁹ Colbourn, et al. (2013); Houweling, et al. (2013); Rath, et al. (2010); Roy, et al. (2013); Tripathy, et al. (2010)

⁸⁰ Kaganzi, et al. (2009)

⁸¹ Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Kaganzi, et al (2009); Place, et al (2004)

⁸² Barham & Chitemi (2008); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Kaganzi, et al. (2009)

⁸³ Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Kaganzi, et al. (2009)

⁸⁴ Barham & Chitemi (2008); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Greaney, et al. (2013); Sinha, et al. (2006); Swain, et al. (2009)

⁸⁵ Baird, et al. (no date); Barham & Chitemi (2008); Bhoj, Bardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Kaganzi, et al. (2009)

⁸⁶ Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Sinha, et al. (2006)

⁸⁷ Baird, et al. (no date); Sinha, et al. (2006); Swain, et al. (2009)

⁸⁸ Barham & Chitemi (2008); Bhoj, Bardhan & Kumar (2013); Caro, Pangare, & Manfre (2013); Fischer & Qaim (2011); Kaganzi, et al. (2009)

⁸⁹ Greaney, et al. (2013)

⁹⁰ Place, et al. (2004)

⁹¹ Bhoj, Bardhan & Kumar, Desai & Joshi, and Caro, Pangare, & Manfre

⁹² Tripathy, et al. and Sinha, et al.

⁹³ Key citations: Anderson & Baland. (2002); Anderson, Baland, & Moene. (2009); Bhoj, Bardhan & Kumar. (2013); Caro, Pangare, & Manfre. (2013); Dagnelie, & LeMay-Boucher. (2008); Deininger & Liu. (2009); Desai & Joshi. (2012); Holvoet. (2005); Maro, Robert, & Sorensen. (2009); Reddy & Manak. (2005); Sinha, et al. (2006); Tripathy, et al. (2010)

⁹⁴ (for the participation in society section) Key citations: Caro, Pangare, & Manfre. (2013); Deininger & Liu. (2009); Desai & Joshi. (2012); Holvoet. (2005); Sinha, et al. (2006); Tesoriero. (2006)

⁹⁵ (for political participation) Key citations: Deininger & Liu. (2009); Desai & Joshi. (2012); Holvoet. (2005); Reddy & Manak. (2005); Sinha, et al. (2006); Tesoriero. (2006)

⁹⁶ (for efficacy and autonomy) Key citations: Bhoj, Bardhan, & Kumar. (2013); Caro, Pangare, & Manfre. (2013); de Hoop, et al. (2014); Deininger & Liu. (2009); Desai & Joshi. (2012); Greaney, et al. (2013); Hargreaves, et al. (2010); Reddy & Manak. (2005); Sinha, et al. (2006); Swain, et al. (2009); Swain. (2012); Tesoriero. (2006); Tripathy, et al. (2010)

⁹⁷ Anderson & Baland (2002); Anderson, Baland, & Moene (2009); Dagnelie, & LeMay-Boucher (2008)

⁹⁸ Bhoj, Bardhan & Kumar (2013); de Hoop, et al. (2014); Deininger & Liu (2009); Desai & Joshi (2012); Holvoet (2005); Reddy & Manak (2005); Sinha, et al. (2006); Swain, et al. (2009); Swain (2012); Tesoriero (2006)

⁹⁹ Alcock, et al. (2009); Dongre, Deshmuk, & Garg (2007); Tripathy, et al. (2010)

¹⁰⁰ Maro, Robert, & Sorensen (2009)

¹⁰¹ Baird, et al. (no date); Greaney, et al. (2013); Hargreaves, et al. (2010); Odek, et al. (2009)

¹⁰² Alcock, et al. (2009); Anderson, Baland, & Moene. (2009); Azad, et al. (2010); Baird, et al. (no date); Deininger & Liu. (2009); Dongre, Deshmuk, & Garg. (2007); Lewycka, et al. (2013); Luchters, et al. (2008); Maro, Robert, & Sorensen. (2009); Reddy & Manak. (2005); Rosato, et al. (2006); Saha, Annear, Pathak. (2013); Sinha, et al. (2006); Swain. (2012); Tesoriero. (2006)

¹⁰³ Anderson & Baland. (2002); Anderson, Baland, & Moene. (2009); Baird, et al. (no date); Deininger & Liu. (2009); Holvoet. (2005); Houweling, et al. (2013); Lewycka, et al. (2013); Molyneux, et al. (2007); Rath, et al. (2010); Rosato, et al. (2006); Sinha, et al. (2006); Swain. (2012); Tripathy, et al. (2010)

¹⁰⁴ Anderson, Baland & Moene (2009)

¹⁰⁵ Barham & Chitemi (2008); Place, et al. (2004); Fischer & Qaim (2011); Kaganzi, et al. (2009)

¹⁰⁶ Sinha et al. (2006); Bhoj, Bardhan, & Kumar (2013)

¹⁰⁷ Molyneux, et al. (2007); Swain, et al. (2009); Anderson, Baland, & Moene

¹⁰⁸ Place, et al. (2004); Barham & Chitemi (2008); Kaganzi, et al (2009).

¹⁰⁹ Bhoj, Bardhan, & Kumar (2013); Molyneux, et al. (2007); Reddy & Manak (2005); Sinha, et al. (2006); Swain (2012); Anderson & Baland (2002); Deininger & Liu (2009)

¹¹⁰ Holvoet (2005); Swain (2012); Deininger & Liu (2009)

¹¹¹ Barham & Chitemi (2008); Fischer & Qaim (2011); Kaganzi et al. (2009); Place et al. (2004)

¹¹² Sinha, et al. (2006); Molyneux et al. (2007)

¹¹³ Holvoet (2005); Deininger & Liu (2009), Swain (2012); Anderson & Baland (2002)

¹¹⁴ Anderson, Baland & Moene ()

¹¹⁵ Greany et al. (2013)

¹¹⁶ Sinha et al. (2006); Holvoet (2005); Swain, et al. (2009)

¹¹⁷ Barham & Chitemi (2008); Place, et al. (2004); Fischer & Qaim (2011)

¹¹⁸ Molyneux, et al. (2007); Reddy & Manak (2005); Sinha, et al. (2006); Swain, et al. (2009)

¹¹⁹ Kaganzi et al. (2009); Barham & Chitemi (2008)

¹²⁰ Molyneux, et al. (2007); Sinha, et al. (2006); Swain, et al. (2009)

¹²¹ Holvoet (2005); Anderson, Baland & Moene (); Anderson & Baland (2002); Deininger & Liu (2009); Sinha, et al. (2006)