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Social Impact of Economic Development Initiatives on Women's Empowerment A Case Study in Northern Malawi

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Social Impact of Economic Development Initiatives on Women's Empowerment

A Case Study in Northern Malawi



Honors Thesis

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Abstract

This study evaluates the effectiveness of these two programs during the summer of 2016 by wealth surveys and individual quantitative interview of participants. In the interviews, women were asked about their experience in the program, revealing indications of empowerment. The levels of women's empowerment proved to be the more positive results. The women showed high levels of self-confidence, autonomy in decision making, positive partner relationship, challenging gender norms, and perceived empowerment. Perceived empowerment and confidence was a stronger indicator of the effectiveness of these programs.



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Introduction

Microfinance programs have become popular in the field of international development. Specific livestock based microcredit programs have been used in areas like Bangladesh, and more recently, Malawi to promote sustainable community development and influence women's empowerment. The use of these programs for development is well supported, but the effectiveness of microfinance and credit programs is connected to the conditions of the state before the program is implemented. To account for these different conditions, there are many different models and variations of microcredit development programs: cash transfer, livestock based, community driven, sponsored, credit programs and pass-it-along. Therefore, the purpose of this study is to be able to discuss the narrative forming around microcredit economic development initiatives in northern Malawi to answer the question of best practices.

In Malawi, many people rely on livestock for wealth to be used as income, savings, and financial security. Goats are the most popular animal used because of the ease in care and breeding. D2D began a project involving revolving goats as microcredit loans to develop economic stability and social empowerment. The main goal of the project is improving opportunity for vulnerable women to engage in social and economic activities. Currently there are two livestock based microcredit projects in practice, but the effectiveness of the programs has not been deduced. There is a need to analyze the data that D2D has gathered on the program and observe the effectiveness. The use of a livestock based microcredit program fits the economic environment of Malawi, but it is necessary to compare the potential benefits of a cash based system. The two models will be compared to observe the effects that each program has on women's empowerment. The

study will also show the effectiveness of alternative income based activities supported by D2D to encourage economic growth and independence.

The subjects of this study are the women already in D2D programs and support groups. The women in the Revolving Goat Project are all economically vulnerable, but also socially marginalized. In the community, they are the ones most disadvantaged, many being older and widowed. By consulting with women already within the programs, I will be able to discover in what ways these projects have affected their lives, economically and socially. The women were previously assigned to one of D2D's projects based on their economic position to create the most potential for positive impact. By collaborating with the subjects of a real study as my research, the feedback given to the organization will be particularly applicable.

First, the theories behind microcredit programs as a form of economic development will be discussed. This discussion will include real cases of similar programs, the initial conditions suited for this type of development approach, and the results of such programs. Both the understood benefits and potential consequences of this approach will be explained, considering both livestock based programs as well as cash incentive income generating activities. Next the setting of the research will be introduced, describing the specific conditions of Malawi and the parameters of D2D's methodology in these programs. Third, the methodology used will be outlined, explaining the action taken to evaluate these conditions considering the expertise discussed above. The results of the study will follow, including all collected data as well as analysis. There is a limitation on the conclusions that can be made from this data: these results are specific to the programs of D2D and specific to the regional conditions of northern Malawi. These

conclusions will help D2D improve on their programming and correct any inappropriate approaches for the specific conditions they are trying to address, including recommendations based on combined observations and academic research. The imperative question to D2D moving forward with these programs is whether livestock based microcredit is an effective project to empower women of Malawi.

Literature Review

Microfinance programs have been implemented in the field of international development. Specific livestock based microcredit programs have been used in areas like Bangladesh, and more recently, Malawi to promote sustainable community development and influence women's empowerment. The use of these programs for development is well supported, but the effectiveness of microfinance and credit programs is connected to the conditions of the region before the program is implemented. To account for these different conditions, there are many different models and variations of microcredit development programs: cash transfer, livestock based, community driven, sponsored, credit programs and pass-it-along.

Scholars have studied the effectiveness of microfinance on sustainable development. The programs have been found to be effective in relief after a natural disaster, as well as having long term effects. A case study of programs in Mexico show micro-finance programs causing an increase in consumption and long term increases in living standards (Hermes et al 2011; Gertler et al 2012). Certain conditions must preexist the use of microcredit programs to achieve this success. The starting economies and country context are very important. Starting in an area with some level of economic stability does reduce initial operation costs of the program to maximize potential gains,

but weaker economies also have less competition, which is a benefit for these programs (Ahlin et al 2011; Hermes 2011).

The parameters of the program need to be made in consideration of the specific context. There has been increased support for community driven development models, as compared to sponsored programs or macrodevelopment focused initiatives. These methods offer hope for developing communities to enter the global economy, but do not offer enough support along the transition (Woller 2001). The community driven model is a newer approach in the field of development, moving away from the top-down approaches. Microcredit initiatives provide opportunity for poor entrepreneurs in grass-root organizations and community agents. It allows for methods more tailored to a particular context, more direct relationship with the beneficiaries and local accountability (Dasgupta 2007). It is more compatible to the current economic organization, with more opportunity for self-employment projects, street vendors, artisans and small shops (Woller 2001).

Whereas strict, formal economic structures of microcredit development can be damaging to developing economies, microcredit solutions provide more informal economic relationship between the organization and the community. For example, strict repayment schedules have a less effective impact in rural areas because it discourages investment in projects that would have a long-term gain (Pellegrina 2011; Hermes 2011). To remedy this, some programs place conditions on the loans to keep up participation but still delay strict repayment. One such condition that was effective in Nicaragua was making loans conditional on children's school enrollment. Women must keep their children in school to receive the loans (Gitter 2008).

When planning a policy to improve community economies, it is essential to consider all stake holders, including all beneficiaries and all members of the community. Communities have a good understanding of their own needs. The purpose of microcredit programs is to initiate the start-up for societies to help themselves. A strong emphasis is on self-sufficiency (Ahlin et al 2001; Masten 2000). Another important aspect to make micro-credit programs successful in promoting sustainable development is practical knowledge. Without training or education, cash transfer or loans are not effective to promote investment in development. A case study of Malawi revealed how essential training assistance is in the success of micro-finance development programs. A necessary component of these programs to be effective is training and ability to use resources well. Women need training before entering credit loan programs, especially livestock based systems, for optimal outcomes (Munguia 1982).

Micro-finance programs are also found to have a specific impact on women's empowerment. In general, the programs fit the needs of women, especially mothers, and allow women to gain power and social capital in communities (Ahwireng-Obeng 1993; D'Agostino 2015; Gitter 2008; Hermes et al 2011; Pitt et al 2003). The programs provide women with strategies and opportunities to integrate into community, socially and economically. Women's empowerment is considered a process by which women have access to opportunity to make strategic life choices (Kabeer 1999). The direct effect of microcredit program participation on women's empowerment is dependent on one's understanding of women's empowerment. A student done in 2003 attempted to asses this effect considering a changing definition of empowerment. The strategy was previously thought to have little effect on women when empowerment was understood as access to

resources, but this study expanded its understanding to define empowerment as increased ability to exercise agency. With this new conceptualization of empowerment, microcredit programming can make a positive impact (Mahmud 2003).

One study describes the specific indicators that allow women's empowerment to be measured. The indicators include self-confidence, financial confidence, challenges to gender norms, autonomy in decision making, perceived contribution to household, levels of household communication, partner relationship, social group membership, collective action, and experience of intimate partner violence (Kim et al 2007).

Women take advantage of the opportunities that micro-finance programs give them to have more power over their life choices. Certain types of programs are more impactful for women. Programs that are designed to specifically involve women have the most measurable effect on women's development. Women take these opportunities to raise their status and increase their investments. The actions of women have a positive effect on the greater community. This supports the claim that women are more effective in leadership positions in general. A study was done showing that women-led agencies perform higher than male-led equivalents. In this way, small entrepreneurial programs led by women are generally successful and benefit the whole community (D'Agostino 2015; Hashemi et al 1996; Islam 2005; Pitt et al 2003).

Furthermore, Pitt et al explain that programs without a gendered focus have a more general community impact, but programs that are focused on male subjects have no effect, or even a negative effect on women's development. Without this component of supporting women's independence and development, the micro-credit programs are used

to further support patriarchal traditions and keep women in a position of limited decision-making power (Pitt et al 2003; Rahman 1999).

The initial position of women in society also impacts the effectiveness of microcredit programs on empowerment. The programs are only effective to a certain level. If women in the program are starting below a certain level of independence and empowerment, the program has the same effects as male focused programs.

This is because any resources given to women are just handed over to men. In these situations, even if women resist the traditional power dynamic, they lack the experience to handle the financial decisions or influence in the community to make economic decisions (Ahrwireng- Obeng 1993; Ahlin et al 2011; Pitt et al 2003).

Limitations and Consequences

Not all agree with the many benefits of microcredit programs, in general or their effect on women. (Ahmed et al 2001; Mayoux 2006; Rahman 1999; Rooyen et al 2012). Many studies do not consider the effects on women besides economic benefits. A study of Bangladesh shows a significant increase in emotional distress and anxiety in women participating in micro-financing programs. The programs subject the women to economic pressures of being income earners that they had never experienced before. There is also a chance of women sinking into worse financial situations because of loans and extra stress from their financial burden. These studies only look at a short-term response to the program, so it is unclear if these conditions of increased anxiety in women are just due to initial transition or a long-term effect. If the tension is a short-term side effect, it may be that the economic and social benefits outweigh this cost (Ahmed et al 2001; Rahman 1999). A similar study analyzed the difference between increasing

income and reducing poverty. When framing the outcome as reducing poverty and improving the quality of life evaluated by factors other than income and wealth, the effect of microfinance projects is more direct and positive (Wright 2012).

There is also evidence that involvement in microcredit initiatives can lead to an increased susceptibility to partner violence because of the shift of power dynamics that the program creates (Rahman 1999). To counter this issue of violence against women, one study proposed a condition of microcredit loans with participatory training on HIV risk and prevention, gender norms, domestic violence, and sexuality. The focus of the poverty alleviation program was the goal of decreasing partner violence and increasing awareness of HIV risk and prevention in South Africa, but other benefits were seen. There were improvements on nonfinancial indicators as well as financial, including a decrease in partner violence, an increase in self-esteem of women and expanded social networks and household decision making power (Kim et al 2007).

Another critique of microcredit programs as a source of women's empowerment looks at its impact on the end of fundraising and advocacy. The use of microcredit programs narrows the definition of women's empowerment and marginalizes gender issues by focusing on economic development as the primary focus. This leads to a decrease in funding for the issues. For this reason, microcredit programs, for all of their benefits, may not be the "best practice" in women's empowerment. A better way to phrase that may be that microcredit programs have many development benefits, including some positive effects on women's empowerment (Mayoux 2006).

There is a relationship between the implementation of livestock microcredit programs and women's empowerment. To answer questions about this relationship, data

were collected in northern Malawi based on programs implemented by the local non-profit organization D2D. One of the programs looked at was the livestock microcredit loan project begun in 2014, the Revolving Goat Project. The other program considered were women's groups supported by D2D involved in income generating activities. The hypothesis was in comparing types of microfinance credit loan programs as a practice of development, systems of livestock transfer have a stronger positive effect on women's empowerment compared to cash based loans. The literature shows that rural, agrarian societies are often more susceptible to microcredit programs. Therefore, livestock would be a more valuable commodity within these societies than cash.

Livestock based economic development will have more positive impact on women's empowerment in agrarian societies like Malawi because livestock is not only important but also essential to life. Women of households in agrarian societies often handle livestock, much more often than they would handle money. This model better ensures the credit to remain in control of women. It also requires less training and has less risk. Most households would know how to care for animals as a means for survival. At a minimum this model of loaning livestock would provide security against starvation if not upward economic mobility. In that way there is less risk. Transfers of cash for economic development in a form of a loan needs to be repaid. To repay on the loan, the individual needs to succeed in their intended business plan. In this model, the natural reproduction of livestock is assurance of repayment of the loan.

Research Setting

Malawi is among one of the world's least-developed countries. A small country about the size of Pennsylvania, Malawi is located in south-eastern Africa, surrounded by Zambia to the west, and Mozambique and Tanzania to the east separated by Lake Malawi. The freshwater lake runs more than half way along the eastern coastline of Malawi, providing for Malawi's strong fishing industry. According to D2D's resources, Malawi is rated number 174 out of 187 on the international Human Development Index as one of the poorest countries in the world.

Figure 1: Map of Malawi



D2D is a nonprofit community based development organization based in northern Malawi. The organization was founded by Matt Maroon, a University of Dayton graduate from the class of '06. Before continuing his education, Maroon came to Malawi for a year of service. Seeing the intense need in Malawi, Maroon started D2D to further development initiatives that he had witnessed during his time volunteering. Since then, D2D has grown into nonprofit partnering with other international organizations and universities to address the needs of the people of Malawi. The needs of the community have led to the development of D2D's four main cornerstones: education and youth support, women's empowerment, health and nutrition, and the environment.

D2D is in northern Malawi, serving the Chilumba catchment area. The organization specifically works out of a site known as "Maji Zuwa", meaning sun and water because of its location right on the shore of the lake giving incredible sunrise

views. This is the region that lies south of the Karonga district and north of the larger city of Mzuzu. DD focuses its resources on this specific region because of there is a sufficiently lower number of resources of aid serving in this area. Chilumba is a rural region of small villages, with little infrastructure, far removed from any major cities.

The Chilumba catchment area is a region that receives limited resources of aid from the government or development agencies, even in comparison to the rest of the country. Most of the population in northern Malawi lives a primarily agrarian lifestyle. The culture is reliant on agriculture and fishing for economic goods. The most dominant crop in this region is cassava. Livestock is a highly valuable good, used as security from financial hardship, raised for meat, milk and meat. In this culture, the men are traditionally the head of a household, being sole decision makers in a family. Societal norms put women in the region at a greater economic disadvantage.

Methodology

The existing literature supports the shift in development practices towards a model of microcredit loans and support of small business initiatives. Previous studies have shown the positive impacts of involvement in microcredit programs on women's empowerment, defined by financial and social decision-making power and self-esteem. The remaining question is the difference in impact between cash based or livestock based systems. Which has a greater impact on women's empowerment? Are the known negative impacts of these programs on women outweighing the economic benefits? For this research, there are many opportunities for region and project specific questions remaining. How effectively is D2D monitoring this program to optimize its effectiveness? How effective are training programs that accompany the loans? Is the

model D2D has chosen the best suited to the context? What progress is being made in the areas of social and economic empowerment?

Women's empowerment is the dependent variable. The type of credit program implemented for development will be the independent variable. Women's empowerment was characterized by similar indicators as used in study of South Africa by Kim et al. The indicators looked at were self-confidence, financial confidence, autonomy in decision making and perceived contribution to the community (Kim et al 2007). These variables were each evaluated by series of survey questions. Kim et al determined from each category how many positive responses to individual questions would qualify as a positive indicator of empowerment. For example, to evaluate the level of self-confidence within an individual, Kim et al asked two questions. A positive response to one or both questions equated to a positive quality of self-confidence.

Because this study was used in conjunction with studying the effects of microfinance on AIDS in South Africa, the questions were adjusted to focus on economic and social empowerment rather than sexual violence specifically. A full list of the indicators and survey questions is found in Table 1 in "Understanding the Impact of a Microfinance-Based Intervention on Women's Empowerment and the Reduction of Intimate Partner Violence in South Africa."

Other potential variables that may influence the dependent variable of women's empowerment include the initial condition of status of women in the community and structure of family unit. Women of difference standings in the community, like the difference of a farmer's widow or the chief's sister, are regarded with different levels of authority and respect. This affects their social influence in society. Their income also

effects this standing among members of their community, more income allowing them more decision-making power and involvement. Related to this is the structure of the family. In traditional context, men are the head of the household, sole income earners and sole decision makers. With this structure firmly ingrained in a society, it is difficult to empower women through economic means because of the lack of access to resources and barriers in the involvement of economic decision. Even if the women started contributing a substantial income, it is necessary for them to have a say in how the money is spent to effect levels of social empowerment. Most of the women involved in these programs are widowed, single income earners, or the head of their households.

The health of the livestock is another variable because the program is explicitly dependent on the reproduction and longevity of the animals. To ensure the proper care of the animals and the success of the program, a local veterinarian is closely involved. He attends regular meetings with the women and is available to see to the health of the animals and distribute medications.

Base line wealth data were analyzed to describe the economic benefits of the program on the Malawi community. These data included the value of loans, returns on investment and increase of financial capital. Signs of these indicators of economic upward mobility in an agrarian society like northern Malawi would include an increase in family expendable income for needs like food and education fees and medical treatment. Other positive financial indicators would be any startup of business or trade, like selling crafts at the market. To analyze the general program effectiveness, outside of a direct context of influence on women's empowerment, it will be crucial to observe the how D2D is monitoring and sustaining the program.

To describe the effects of the program on women's empowerment, members of the community as well as groups of local women were surveyed using a mixed method interview questionnaire. Effects of women's empowerment were not only measured by financial improvement since the program's onset, but also nonfinancial factors. Rates of partner violence and levels of community involvement were included. Consideration was given to how women see themselves in terms of their community, whether they believe their voice is being heard. Individuals were surveyed, asking them questions about their day to day routine, noting participation in community groups and events. Qualitative evaluation was used to evaluate how groups of women feel about empowerment in their local context and how they feel the loan has impacted this.

The responses to these questions and additional observations revealed conclusions about women's empowerment in the areas of Malawi affected by the D2D programs. These questions were organized into categories of the indicators of empowerment used by Kim et al discussed earlier. Within each category of empowerment indicators, there were a set of questions. A definition of a positive value was determined for each category, showing that out of the set of questions, a minimum of positive responses was necessary for a positive grade overall. The threshold for defining positive responses for a category was different and based on the measures used by Kim et al.

Table 1: Indicators of Empowerment: Study of Determined to Develop Women's Empowerment Initiatives in Karonga District, Malawi, Summer 2016

Category of Questions	Survey Questions Asked Per Category and Definition of a Positive Response	
	Revolving Goat Project	IGAs
Internal Empowerment		
-Self-confidence	7 questions (positive response to 4 or more questions)	9 questions (positive response to 5 or more of the questions)
-Financial confidence	7 questions (positive response to 4 or more)	7 questions (positive response to 4 or more)
-Challenging gender norms	Series of 6 statements according to traditional gender norms (disagree with all 6)	Series of 6 statements according to traditional gender norms (disagree with all 6)
-Perceived empowerment	2 questions (positive response to both)	2 questions (positive response to both)
Relational Empowerment		
-Autonomy in decision making	3 questions (positive response to 2 or more)	2 questions (positive response to 1 or more)
-Perceived contribution to household	4 questions (2 or more signs of contribution in responses)	3 questions (positive response to 2 or more)
-Partner relationship	3 questions (positive response to 1 or more)	3 questions (positive response to 1 or more)
Social Empowerment		
-Social group membership	1 question about participation in a range of formal and informal social group (number of groups involved in)	3 question about participation in a range of formal and informal social group (number of groups involved in and positive perception of groups)
-Experience of controlling behavior	2 questions (positive response to any question)	2 questions (positive response to any question)

Revolving Goat Project

D2D began the first round of the Revolving Goat Project in March of 2014. From the onset of the program, D2D has been collecting data showing levels of wealth and

income of all the members of the program. The women are surveyed annually to provide data showing any changes in income or living conditions. In the summer of 2016, the D2D database has a set of 120 wealth surveys of all the participants in the project, in two villages, over 3 years. These data provided a baseline of living conditions of the participants as well as quantitative data about the women's economic empowerment levels. This survey showed that the 47.5% of the participating women are widowed and 10% are divorced. In the Sangilo Goat Club, 35% of the women are the sole income contributor in their house, and 62.5% are the head of their household. At the start of the program, in 2014, the average income weekly income is less than MK2000 (less than \$3.00 USD).

To expand on these data, a survey was given including questions about personal and social levels of empowerment, including questions about self-confidence, autonomy, and gender roles. These questions were divided into categories of indicators of empowerment, following the model of Kim et al. Below is a chart of the indicator categories used in the survey as well as how the responses were scored. Each category had a minimum level of response score to indicate that category satisfied. The goal of the Revolving Goat Project was to improve the economic conditions of women's lives, but to also provide for other components of women's empowerment and improve overall conditions of life.

It was hypothesized that women involved in the Revolving Goat Project would produce a higher total value than those who were not participating in any form of economic empowerment initiative. Areas given particular attention were partner relationships and experience of controlling behavior. Data showed a tendency for

gendered economic empowerment initiatives to put women in vulnerable positions as women in relationship to men of the community. A goal of this study is to show data that challenges this trend.

Income Generating Activities

Women involved in income generating activities were also observed and surveyed to consider cash based development approaches. This system juxtaposed with the Revolving Goat Project dealt involved direct financial support to help the women's groups create sustainable businesses.

Women involved in income generating activities were surveyed by D2D to provide initial income and wealth data. Group finances have also been closely monitored by the group, along with training with basic bookkeeping and business training. These women were surveyed using the same base questions, adjusted to apply more to their program. The assumed results were to show that these women may see quicker financial success, but equal levels of social empowerment. It was also predicted that the levels of social empowerment would directly correlate to the levels of practical training, business skills training, and the levels of perceived support from the group and the organization.

Expected Results

The same system of quantifying results was used for both sets of data. This method also reveals not only overall levels of empowerment, but shows which categories are the weakest. This suggests how to adjust and improve the program to address that low scoring area of empowerment. The two programs have different aims, and therefore are expected to not yield identical results. The Revolving Goat Project has a primary goal of stability, for women who are most vulnerable. Therefore, the intended effect of the program is to uplift the women through social empowerment, building their confidence

and motivate them for a future. The sponsored women's groups are involved in income generating activities and are more directly related with economic activity. The goal of this program from the perspective of D2D is to increase the business capabilities of the women involved and address their economic situation. This program helps provide additional income to their families and offers products to the community. It is expected for this program to have a greater effect on financial empowerment and individual autonomy as the women become more successful. For each category of empowerment indicators, the program is expected to have a positive effect of increasing the strength of that area of empowerment. However, with regards to the category of experience of controlling behavior, the aim is to reduce the frequency, showing a decrease as a positive result.

For most categories of indicators, the same results were expected. Whether livestock based or cash transfer program, the expected results were increases in empowerment indicators like self-confidence, financial confidence, and feelings of autonomy. The programs have different approaches, and therefore should yield slightly different results. It is expected that the income generating activities will produce a quicker increase in financial confidence as well as improvements in surveyed wealth. However, the stronger emphasis on cash transfer within the income generative activities groups does put these women at more risk for negative consequences than the livestock based approach. These women, in IGAs, are more likely to be subjected to negative reactions from men in the community due to the change in norm of men being primary decision makers and income earners. In each area of empowerment, it is hoped that these programs are having a positive effect. The difference will become apparent in the

magnitude of effect in each category, being more for one program in one category compared to the other.

Results

Wealth Surveys

The wealth surveys collected by D2D reveal information about the financial situation and living conditions of the women. The women were first surveyed the year they received their goat. The average income at that time was MK 2092.5 (\$2.99 according to exchange rate in 2016). After one year in the program, with a goat, the average income was MK 3327.5 (\$4.75). For the first-round beneficiaries, after two years, the average income was MK 2112.5 (\$3.02). These numbers are not reflective of the positive economic gains of this program, however. According to the structure of the program, the women are not to sell their livestock until later in the program. This guarantees future investment, but makes little effect on dispensable wealth for the first few years. Therefore, the women in the Revolving Goat Project, after only two years, are not making any economic profit from this program.

Half of the women get their income solely from agricultural production. This is a variable form of income, reliant on conditions beyond their control. With such low incomes, everything made in a week goes directly to immediate needs, like buying food, salt, and soap, for the family. There is no room to put anything aside for saving. The purpose of the Revolving Goat Project was to provide an opportunity for the women to begin thinking about the future. With livestock, the women have stability, knowing cash could become available from selling their goat when needed.

Among the women involved in IGA, individual financial conditions were measured at the beginning of the program. Since then, profit of the group was monitored by D2D. The average weekly income of the women involved in D2D sponsored IGAs is MK 4440 (\$6.34). In a week, the average disposable income left over after weekly expenses is MK 2104 (\$3.00). These women are in a position where they can save half their income most weeks. This allows them to save for their future. This is why the IGA program is more suited for these women. The goal is to raise them to a higher income level and improve living conditions.

Revolving Goat Project

During the eight-week period, 37 women in the Revolving Goat Club were surveyed. The surveys provided qualitative data about signs of empowerment and living conditions for the women involved in D2D programs. Categories that yielded positive responses included Self Confidence, Financial Confidence, Autonomy in Decision Making, Perceived Contribution to the Household, Experience of Controlling Behavior and Perceived Empowerment. In each of these areas, the women responded to enough questions per category to show indicators of empowerment. In Table 2, for each category, the total number of positive responses is displayed as a percentage. Questions about perceived empowerment are separated in the results because they were added weeks into the study. Therefore, they have a smaller sample size to report on behalf of. The numbers indicated are based on the subgroup, not as a percentage of all 37 women. The full results are shown in Appendix E.

To measure social group membership, the response is taken from one question: "What other groups are you involved in?" The results showed that 38% of the women in

the Revolving Goat Project belong to at least one other group. The results of the categories of partner relationship and experience of controlling of behavior reflect the rate of occurrence of healthy, non-abusive relationships. This survey showed that the majority of the women in the Revolving Goat Project, 80%, have not experienced negative behavior or resistance from men in the community related to this project. They responded that many of the men in the community were happy for them to have been given this opportunity and have been emotionally supportive. Some women even spoke of instances in which men have helped them with the physical care of the livestock.

Table 2: Results for surveyed women in Revolving Goat Project

Category	Average Response	% Positive Response	+ or -
Self Confidence	6 out of 8	79%	+
Financial Confidence	4 out of 5	93%	+
Challenging Gender Norms	5 out of 6	85%	-
Autonomy in Decision Making	3 out of 5	69%	+
Perceived contribution to household	1.6 out of 2	81%	+
Partner Relationship	<1	27%	-
Social Group Membership	14 out of 37 women*	38%	-
Experience of Controlling Behavior (rate in which this has not occurred)	1.8 out of 2	80%	+
Additional Questions			
Perceived Empowerment	16 out of 16	100%	+

Areas that did not give positive results were challenging gender norms, partner relationship, and social group membership. In the categories, the women surveyed did not respond to enough questions in a manner that reflected social empowerment. It was suspected that the women in the Revolving Goat Project would perform well in the areas of areas of self-confidence, financial confidence, and feelings of autonomy. Empowerment to one woman means encouraging financial self-sufficiency, and this program is helping her achieve this.

Women were asked to identify differences in having cash or having value in livestock. Of the 37 women, 28 could point to the long-lasting investment of keeping value in livestock, specifically talking about saving for the future and the sustainability of wealth in livestock, although cash is notably more available for immediate needs. "Having goats is like money in the bank." The women in the program responded that the gift of these goats by D2D was an investment in their future that would accumulate benefit for them and their children. When specifically asked whether they would prefer a loan of cash rather than this livestock model, overwhelmingly women responded in favor of livestock. One woman from the village of Kamlota said, "The difference [between a loan of cash or livestock] is that money is spent quickly. If I was given money, I would spend the whole amount that same day. Livestock- the benefits are for the future." It is recognized that value in livestock is an investment, not accessible now, but a savings for a later date. Even though wealth survey reports do not show a great change in financial wealth because of the program as of yet, there is an overall indication of improvements of confidence and empowerment.

The members of the Revolving Goat Project were also asked about their general impressions of the program. The questions included inquiring if the women felt well supported and had access to enough resources. Are you satisfied in general with this program and its promise to help you? The women were overwhelmingly positive, expressing gratitude for the program and the opportunities D2D has given them. Critiques of the program given by the participants are discussed below in Recommendations.

Income Generating Activities

The women in each women's group were interviewed as a collective group. This decision was to reflect the collective process these women are involved in, as compared to the individual care of livestock in the program discussed earlier. The same questions as discussed above were asked to each women's group. The women were also asked about the training process, business plan, the strengths and weaknesses of their business, and questions about empowerment. Their answers were recorded and summarized below. A full description of the responses can be found in Appendix 3.

Table 3: Results for surveyed women in Income Generating Activities

Category	Out of	Percent of Positive Response	Nase Women's Group (Baking)	Temwa Mother's Group (Sewing)	Tigwirizane Village Group (Vegetable garden)	Mponela Mothers and Widows Group (Poultry Farming)	Positive or Negative
Self Confidence	9	97%	8	8	7	8	+
Financial Confidence	7	70%	5	7	3	5	+
Challenging Gender Norms	6	96%	6	6	6	5	-
Perceived Empowerment	2	100%	2	2	2	2	+
Autonomy in Decision Making	2	88%	2	2	1	2	+
Perceived contribution to household	3	100%	3	3	3	3	+
Partner Relationship	3	67%	2	2	2	n/a	+
Social Group Membership	3	75%	2	2	3	2	+
Experience of Controlling Behavior	2	63%	1	1	2	1	-

The areas in which women responded the most positively are self-confidence, challenging gender norms empowerment, and perceived contribution. The women shared how confident they were within their group. They compared the relationships to something of family members, not just women working together.

The women in each group were asked to articulate what women's empowerment means. All the women articulated positive and attainable things. They also indicated a belief that this activity, their business activities sponsored by D2D would help them reach that goal of empowerment.

Highlighted Differences

Table 4: Compared Data

Areas that the two programs performed differently in are financial confidence, partner relationship, social group membership, and experience of controlling behavior. Women in the livestock group reported higher responses about financial confidence, while women in the IGAs excelled in the latter three categories.

The greatest difference was in the indicator category of experience of controlling behavior. Women in IGAs reported 30% more incidence of

Category	Group with stronger positive response rate	Difference
Self Confidence	IGA	<10%
Financial Confidence	Goats	25%
Challenging Gender Norms	IGA	11%
Perceived Empowerment	-	0%
Autonomy in Decision Making	IGA	<10%
Perceived contribution to household	IGA	19%
Partner Relationship	IGA	31%
Social Group Membership	IGA	43%
Experience of Controlling Behavior	Goats	30%

controlling behavior or resistance from males in the community towards their activities. The women raising goats reported more supportive responses from the community. The IGA women recalled initial verbal discouragement on the start of their programs, but a general shift as their businesses became more successful. Neither group reported strong indications of partner abuse or mistreatment or gender based discrimination. They, on the other handed, descried strong perceptions of support from D2D and their community.

Discussion and Conclusion

The results of this study show that both programs have had positive effects on the women and thier attempts at empowerment. The goal of the livestock based microfinance loan program was for the participants to gain stability and experience improved confidence and reflect signs of empowerment. These results reflected that of the study evaluating the impact of microcredit initiatives to reduce poverty as compared to increasing income, showing a stronger correlation between the microcredit projects and social empowerment than economic status (Wright 2012). By this measure, the program is successful.

The strongest areas for the women involved in livestock loans was self-confidence and related indicators. This program is run by the women and focuses on the individual. The structure of the program has group meetings and the group holds each other accountable, but the responsibility and the resulting profit is held by the individual. By giving a woman a goat, teaching her to care for it, she learned new skills and gained independence. Even without dispensable cash, she feels more financially independent and capable. D2D trusted women with this responsibility, and the effect was a noticeable impact in self confidence among the women.

An important facet of empowerment is social capital, a category in which the Revolving Goat Project did not report highly. Above, the benefits of an individualist focus were discussed. There are also negative effects of this individualism relating to social group membership. The Revolving Goat Project operates like a club, but not effectively. Areas of ineffectiveness include attendance, levels of participation, and group relations. There is a committee of members that work to lead the group, but, generally, they are the only active members. Attendance at regular meetings is very poor, usually representing the leadership roles, and a few women in the first round of beneficiaries. Women who have not yet received their goat are not active in the program, even though it is required of them by D2D. This indicates how the effects of the program, the hope and confidence, that is instilled in the women comes from the receiving of the loan, not the participation in the group atmosphere. Relationship ties are not built through this program beyond relationships that exist within the community. Extending social group membership and increasing social capital is a necessary to achieve the desired levels of women's empowerment in an area like Malawi.

Social capital is an area that the IGAs were significantly stronger in. The IGA model is a women's support group and a small business. These women came together because of a common struggle and have built an enterprise together with D2D. The women see their success dependent on each other. Both their strengths and weaknesses as a business spoke to their group dynamics, showing how valued this dynamic is to the individuals within. They recognize the benefit that comes from their group effort and how instrumental that is towards their success. The very atmosphere of these groups was filled with energy and positivity. They had songs celebrating how far they have come and

anecdotes about their journey to date. The Revolving Goat Project lacks an opportunity for these types of relationship dynamics to form.

Recognition is another factor with these programs. Women involved in IGAs reported much better partner relationships. The emphasis on individual stability within the Revolving Goat Project allows for limited community involvement. The IGA groups put the women in a visible position to the community. The Nase Women's Group had trouble in the beginning of their business when men discouraged them. Recently, men throughout the village line up in anticipation to buy their breads. This contribution to the community creates a foundation for improved relationships.

The conditions of the relationships of both groups was better than anticipated based on research. Based on the review of literature on the effects of economic initiatives of women's empowerment, generally, gender based violence increased as a result (Rahman 1999). This project did not follow that trend, following instead the methods and results of Kim et al.

Based on the results of this project and its apparent effect on women's empowerment, D2D's projects are effective. There is definite evidence to suggest that livestock based microcredit is the much more viable choice in this area. Women asked about their preference of cash or livestock unanimously chose livestock, even with the knowledge of how long the program was taking to see an increase in wealth. When asked why livestock is preferred, more than 91% describe how livestock is a more sustainable option than cash. Cash can solve immediate problems, but is spent too quickly. Livestock takes a long time, but it is an investment in their future. The women recognize how choosing livestock allows for more room for profit, as the animals reproduce, and that the

profits will help them more than just paying one bill, but will be an overall increase in financial position.

Another indicator to lean towards livestock rather than cash is the effect on gender roles. Most of the women in this program are widows or in old age. Their main responsibilities are towards their families, whether that is working in the fields or caring for young children. Many of the women admitted they would like to start a business, but fear they would fail because they wouldn't have time to manage the business because of the responsibilities they have to their families. This way, with livestock, they can manage their responsibilities and have money for their futures. Caring for livestock is simply more compatible with their lifestyle.

This is not to say that these women are confined to traditional gender roles. All women indicated discordance with traditional gender rules of men being primary income earners and women primary child care rearers. A desire for equal participation in each role was indicated by all of the women.

Northern Malawi has the right social and cultural context to create a setting susceptible to the economic empowerment initiatives implemented. Trying to reach two different groups of vulnerable women, the two different models of approach are appropriate. The livestock loan program and the income generating activities are both effective in their perspective goals and approaches, to effect economic stability and social empowerment. Neither program is overall more effective than the other, based on the indicators measured in this study. The programs do however have something to offer the others.

Recommendations

Next Step

The first movements towards improving these programs is to learn from the results. This study has shown that the measures of social interaction among the income generating activities has been more effective than that of the Revolving Goat Project. Therefore, the social components of the Revolving Goat Project should be modeled more after the other program to create a similar environment of support. There have been some structures put into place to create this social aspect, but those structures are not being upheld. Attendance among the group is poor and group dynamics are low. Actions must be taken by D2D if it intends to improve the social group membership of the women in their programs to contribute to their overall levels of empowerment.

Now that it is apparent that, overall, social empowerment is on the rise as a result of these programs, a stronger focus can be made on the other outcomes of the programs. It cannot be assumed that empowerment is the direct outcome from financially sustainable micro-finance alone (Mayox 2006). To better ensure women's empowerment as a result of these programs, Determined to Develop needs to increase the clarity of gender empowerment as the vision and intended goal. For the women of Chilumba, this may be a discussion about women's opportunity in the community and gender norms at the start of the program to start tackling false assumptions about gender roles. Another opportunity to contribute to the social goals of the program is in the structure of regular meetings. Instead of meetings focusing on the logistics of goat rotation schedule and veterinary check-ups, routine evaluations of social wellbeing should be taken.

The women in the livestock program gave suggestions on how to improve the program to maximize benefits for them. Further developing and increasing the profits made by the women in these programs should be the new goal moving forward. With the levels of social empowerment reached by the measures in place, the women are ready for more economic roles in society. The program is essentially risk free, in terms of entering into the loan agreement. There are instructions on how to manage the loan however. The women are instructed that they are not to sell any of the goats until they come in possession of a particular number of goats. On the onset of this project, D2D set the limit so high to guarantee maximum economic stability. With little experience handling money, and with many motivations to desire quick access to cash, the women in the program may be tempted to sell too early. According to the women, this limit is too high. The women expressed an understanding of why this rule is there and appreciate the precaution to ensure the profits are being capitalized instead of squandered, but the waiting time is too long. In emergencies, the wealth in the goats need to be accessible by allowing selling of the goats. Lowering this regulation will give the women in the program a better preparedness for economic hardships that may arise.

This will also provide the women with more ability to make decisions over their own situation, allowing them the decision to sell their livestock or not. In the early stages of the program, it is important for the outside party, referring to the organization implementing the program, to manage these decisions to ensure the success of the program, for the women and for D2D. This is necessary to achieve the desired outcome of stability. But as the program has progressed and as the women become more capable and financially confident, they need experience in making decisions over their own

finances. This does not mean that all regulation and monitoring should be removed, just minimized. This could be reducing the threshold for selling the goats from having 10 to 6. The women get to make more decisions with less regulation, permitting them to make mistakes under the safety of D2D's monitoring. This way the decision to sell, if it is a mistake, will not ruin the total progress being made.

Areas for Future Research

This study provides D2D with an evaluation of the effectiveness of the programs yet, but these results are not conclusive. There is more research to be done and more questions to answer. Because of the scope and limitations of this study, there are still some incomplete data sets.

More research is needed to be able to make conclusions based on income and wealth data. The data collected can be used to show small changes over time, but this change is not necessarily relative to the D2D programs. Economies so strongly based on agricultural production are variable from year to year. The change is too small from one year to another to definitively state that the programs are causing that change.

The effect of these programs to improve economic statuses for the women will be more apparent in the near future. The projects, especially the Revolving Goat Project, is still in early phases. In a few years, when the first round or two have reached that point, then measures of wealth can indicate the progress of the program to create financial stability for vulnerable women. Finally, based on this study, it is difficult to directly compare the conditions and outcomes of the two program approaches, looking at livestock and cash based systems as independent variables because of the many other variations in the program approaches. Additional data is needed, concentrating on

different factors than this study, to compare with authority the effectiveness of livestock versus cash based systems.

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Appendices

Appendix A: Revolving Goat Project Qualitative Questions

1. What was your reaction to being selected for this group? **Positive answer= 1, Negative answer = 0**
2. How confident are you to share at meetings by raising your opinion **Yes = 1** or asking for advice/ help? **Yes = 1** How confident are you about giving advice to others? **Yes = 1** Do you feel all members contribute equally? **No answer = 0, Negative response = -1**
3. Are you involved in anything new in the past 2 years (any activities or groups that you weren't involved in before)? **# per activity**
4. Are you involved in decision making in general in your house? **Head of House = 1, Not head of house = 0, Involved in decision = 1, not involved = 0, Money spending = 1 or 0, More involved = +1, no change = 0, less = -1, Can you make decisions without asking: yes = 1, no = 0**
5. How does your husband view your contribution to the household income? **Valued = 1, no response = 0**
6. Does your husband or other men recognize how this activity could benefit more than just you? **yes = 1, no response = 0, negatively = -1**
7. Has your husband ever suggested you engage in a new activity for your own benefit? An income activity? **yes = 1, no = 0**
8. How does your husband or men in your life feel about this program? Supportive or not? if so why? **Supportive = 1, neutral = 0, negative = -1**
9. Has your husband ever prevented you from participating in this group? **Yes = -1, No = 0**
10. Have you ever experienced any negative opposition from men in the community about you receiving livestock or being in this decision making position? Or has a man or your husband ever tried to prevent you from participating, by stopping you from attending meetings by telling you to do things at home instead? **Yes = -1, No = 0**
11. Do you feel the training provided was adequate, now that you been in the program for over a year? **Yes = 1, No = 0**
12. What is the difference between receiving cash loans or loans of livestock like this goat program? **livestock is more sustainable = 1, no difference = 0, cash is better = -1**
 - a. are there any benefits with cash that you can't get with livestock:
13. In this program, it takes a long time to make any useable profit. Is it worth waiting?: **Yes = 1, No = 0**
 - a. Would you have preferred to have received a cash loan of equal value as two goats at the beginning instead of this instead of livestock like you received at the beginning of this program? **No= 1, Yes = 0**
14. Do you feel **supported** (help) in this program by...(family, community, village leaders, D2D, committee)? (please explain as much as possible and give examples) **yes = 1, no = 0**

15. What has been the most difficult part of participating in this program? **nothing = 1, something = 0**
16. Are you satisfied with this program? **yes = 1, no = 0**
17. Confident this program will help you financially? **yes = 1, no = 0**
18. Agree or disagree with the following 6 statements **1 point for every disagreement**
 - a. Women should do most of the household chores, even if the husband is not working.
 - b. Men should be the only one responsible for earning an income.
 - c. Women are the only one responsible for raising and taking care of the children.
 - d. It is more important for girls to get married than to finish school.
 - e. If married, the husband should be the sole decision maker.
 - f. Men should be the sole decider of how money is spent.
19. What does the term "Women's empowerment" mean to you?
 - a. Do you feel like this program can empower you/ is empowering you as a woman? **Yes = 1, no = 0, no responses = 0**

Appendix B: IGA Qualitative Questions

Training questions

1. Do you feel you received adequate training?
2. Do you feel as though you could teach this skill to someone else?
3. What business skills did you learn? (like writing business plans, marketing and handling money)
4. What are some common challenges or problems with starting/ running a business in Malawi
5. How is your activity dealing with these challenges?
6. Additional concerns about training?

Income and business plan

1. Before this IGA, what did you do for money?
2. Now, are you involved in any other income activities?
3. Are you the primary income contributor in your house?
4. What expectations did you have at the beginning for this activity?
5. Has this IGA been successful in your opinion? Why or why not?
 - a. why or why not?
 - b. as successful as you had originally expected?
6. Have you, personally, made a profit from this activity?
 - a. how much
 - b. is it enough: to cover the costs of this activity? to cover basic needs? more than basic needs?
7. Do you feel like your lifestyle has improved because of this activity? How?

8. How do you expect this IGA to fair in the next year? 2 years?
9. Do you feel well supported?
10. Do you feel confident that this program will help you financially?

SWOT (Strengths, weaknesses, opportunities and threats- compared to original business plan of group)

1. What are the strengths of this IGA?
2. What are the weaknesses?
3. What opportunities does this business have in the market?
4. What threats (or competition)?
5. How is your group dealing with the weaknesses or threats to your business?
6. What are your future business plans?

Empowerment and Social Perceptions

1. Are you involved in any other informal groups/ activities?
2. How often do you meet with the women in your group?
3. What are the relationships like within the group (between members- friends, co-workers, supportive)?
4. Would you consider your activity to be a "social" activity or strictly work? Do you feel your husband/ men in the area recognize how this activity benefits more than just you personally?
5. Does your husband support your participation?
6. How does your husband view your income contribution?
7. Does he recognize how this activity benefits more than just you?
8. Ever suggested you engage in a new activity for your own benefit? An income activity?
9. Has your husband ever prevented you from participating in this group (or other men)?
10. Have you ever experienced any negative reactions or opposing from men towards this women's group?
11. Has this activity made you feel more independent/ self-reliant?
12. What does the phrase "women's empowerment" mean to you?
13. Do you feel "empowered" by this activity? How so?
14. Do you enjoy this activity (baking, sewing, gardening, raising chickens)?

Additional questions:

Agree or disagree to the following statements:

1. Women should do most of the household chores, even if the husband is not working.
2. Men should be the only one responsible for earning an income.
3. Women are the only one responsible for raising and taking care of the children.
4. It is more important for girls to get married than to finish school.
5. If married, the husband should be the sole decision maker.
6. Men should be the sole decider of how money is spent.

Appendix C: Revolving Goat Project hypothesized effects and categorization

Indicators	Survey Question	Hypothesized Effect From Intervention
Power within		
-Self-confidence (positive response to 4 or more)	<p>If you were at a meeting, how confident are you that you could raise your opinion?</p> <p>Do you feel you were adequately trained?</p> <p>Do you feel supported?</p> <p>How did you feel when you were selected for this program?</p> <p>What has been the most difficult part of this program?</p> <p>Do you feel this program/ activity can empower you?</p> <p>What are your plans with the profits (wealth survey)?</p>	Increase
-Financial confidence (positive response to 4 or more)	<p>Are you satisfied with this program?</p> <p>Do you feel confident this program will help you financially?</p> <p>What is the difference between receiving cash and livestock loans?</p> <p>Are there benefits of having cash?</p> <p>Is it worth waiting?</p> <p>Would you have preferred cash?</p> <p>What are your plans to do with the profits (wealth survey)?</p> <p>Improvements in finances according to wealth survey</p>	Increase
-Challenges gender norms (disagree with all 6)	<p>6 statements:</p> <p>Women should do most of the household chores, even if the husband is not working.</p> <p>Men should be the only one responsible for earning an income.</p>	Increase

	<p>Women are the only one responsible for raising and taking care of the children. It is more important for girls to get married than to finish school. If married, the husband should be the sole decision maker. Men should be the sole decider of how money is spent.</p>	
-Perceived empowerment (positive response to all questions)	<p>What does women's empowerment mean to you? Do you feel like this activity can empower you?</p>	Increase
Power to:		
-Autonomy in decision making (has autonomy in half of decisions)	<p>Who is the head of your household? Who is the primary decision maker? Do you make decisions on how money is spent?</p>	Increase
-Perceived contribution to household (contribution is recognized as important)	<p>How does your husband view your contribution to the household income? Are you the primary contributor? Does he recognize you as that? Are men supportive of this activity? Do they recognize how this activity could benefit them or the whole family?</p>	Increase
-Partner relationship (positive response to 1 or both)	<p>Does your husband support your participation/ encourage you participation in this activity? Has your husband ever suggested you engage in a new activity for your own benefit? An income activity? Are men supportive of this activity? (positive question)</p>	Increase
Power with:		
-Social group membership (number of such groups)	<p>Are you involved in any other formal or informal activities?</p>	No affect
Experience of controlling behavior (positive response to any questions)	<p>Has your husband ever prevented you from participating in this group? Have you ever experienced any resistance from men towards this activity?</p>	Decrease

Appendix D: IGA hypothesized effects and categorization

Indicators	Survey Question	Hypothesized Effect From Intervention
Power within		
-Self-confidence (positive response to 4 or more)	<p>If you were at a meeting, how confident are you that you could raise your opinion?</p> <p>Do you feel you were adequately trained?</p> <p>Do you feel supported?</p> <p>Do you feel this program/ activity can empower you?</p> <p>What are the strengths?</p> <p>Weaknesses?</p> <p>Do you enjoy this activity?</p>	Increase
-Financial confidence (positive response to 5 or more)	<p>Do you feel confident this program will help you financially?</p> <p>How is your activity dealing with the common challenges of running a business in Malawi?</p> <p>What did you do before for money?</p> <p>Are you involved in any other income activities?</p> <p>Have you made any profit?</p> <p>Do you feel your lifestyle has improved because of this activity?</p> <p>Plans/ expectations for near future?</p> <p>What are the strengths?</p> <p>Weaknesses?</p> <p>Opportunities/ competition?</p>	Increase
-Challenges gender norms (disagree with all 6 statements)	<p>6 statements:</p> <p>Women should do most of the household chores, even if the husband is not working.</p> <p>Men should be the only one responsible for earning an income.</p> <p>Women are the only one responsible for raising and taking care of the children.</p> <p>It is more important for girls to get married than to finish school.</p> <p>If married, the husband should be the sole decision maker.</p> <p>Men should be the sole decider of how money is spent.</p>	Increase
-Perceived empowerment (positive response to all questions)	<p>What does women's empowerment mean to you?</p> <p>Do you feel like this activity can empower you?</p>	Increase

Power to:		
-Autonomy in decision making (has autonomy in half of decisions)	Who is the head of your household? Who is the primary decision maker? Do you make decisions on how money is spent? Has this activity made you more independent/ self reliant?	Increase
-Perceived contribution to household (contribution is recognized as important)	How does your husband view your contribution to the household income? Are you the primary contributor? Does he recognize you as that? Are men supportive of this activity? Do they recognize how this activity could benefit them or the whole family?	Increase
-Partner relationship (positive response to 1 or both)	Does your husband support your participation/ encourage you participation in this activity? Has your husband ever suggested you engage in a new activity for your own benefit? An income activity? Are men supportive of this activity?	Increase
Power with:		
-Social group membership (number of such groups)	Are you involved in any other formal or informal activities? How often do you meet? What is the group dynamic like? Social or work based relationships? What are the strengths of this group?	Increase
Experience of controlling behavior (positive response to any questions)	Has your husband ever prevented you from participating in this group? Have you ever experienced any resistance from men towards this activity?	Decrease

Name	Self Confidence (8)								Financial Confidence (5)							
	Overall attitude about program (positive)	If you were at a meeting, how confident are you about sharing your opinion? (yes)	Getting advice? (yes)	Giving advice? (yes)	Training? (yes)	Supported? (yes)	Most difficult part? (No)	Do you feel more self-reliant/independent? (yes)	Total	What is the difference between receiving cash and livestock	are there benefits of cash	is it worth waiting?	Would you have preferred cash? (no)	Are you confident this program will benefit you financially? (yes)	Are you satisfied with this program? (yes)	Any improvements in wealth according to survey? (yes)
Chintchamba, Tozaless	Positive	Yes	Yes	Yes	Yes	Yes	goat died	Yes	7	No difference	solving immediate problems	Yes	Both	Yes	Yes	3
Fullwa, Leya	Positive	Yes	Yes	Yes	No	No	No	Yes	6	Both are good	No	Yes	No	Yes	Yes	4
Group responses* Harawa, Grace	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	Livestock is better sustainable	solving immediate problems	Yes	No	Yes	Yes	5
Kambotole, Wyness	Positive	Yes	Yes	Yes	No	No	goats getting sick caring for goats	No	4	sustainable	No	Yes	No	Yes	No	4
Kandawire, Esmeck	Positive	Yes	Yes	Yes	Yes	No		Yes	6	n/a	starting a business	Yes	No	Yes	Yes	5
Khomba, Telesya	Positive	Yes	Yes	Yes	Yes	No	No	Yes	5	n/a	solved easily compared to livestock	Yes	No	Yes	n/a	5
Kondowe, Nenty	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	sustainable	No	Yes	No	Yes	Yes	5
Kondowe, Ruth	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	livestock is larger worth	solving immediate problems	Yes	No	Yes	Yes	5
Luhanga, Grace	Positive	Yes	Partially	Yes	No	No	No	n/a	4	sustainable	solving immediate problems	Yes	No	Yes	Yes	5
Mathobola, Alice	Positive	Yes	Yes	Yes	Yes	Yes	waiting for goats	Yes	7	sustainable	solving immediate problems	Yes	No	Yes	Yes	5
Mfaisa, Jessie	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	sustainable	solving immediate problems	Yes	No	Yes	Yes	5
Mnthali, Dolicass	Positive	No	Yes	No	Yes	Yes	She is old and cannot care for them anymore	Yes	6	sustainable and greater profit	solving immediate problems	Yes	No	Yes	Yes	5
Mnthali, Tryfin	Positive	n/a	n/a	Yes	Yes	Yes	No	Yes	4	money can start a business	money can start a business	Yes	No	Yes	Yes	4
Msuku, Cornice	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	money is spent faster, livestock multiplies	solving immediate problems	Yes	No	Yes	Yes	5
Munthali, Gertrude	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	money is spent fast	solving immediate problems	Yes	No	Yes	Yes	4
Murinde, Daka	Positive	Yes	Yes	Yes	No	No	No	n/a	5	n/a	No	Yes	No	Yes	Yes	3
Nwatoniga, Christobell	Positive	Yes	Yes	Yes	No	No	No	Yes	7	No difference	No	Yes	No	Yes	Yes	4
Nwakwawa, Colliness	Positive	n/a	n/a	Yes	No	No	No	n/a	2	cash can start a business	cash can start a business	Yes	No	Yes	Yes	4
Nwakwawa, Dynna	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	livestock is more profitable	No	Yes	No	Yes	Yes	5
Nwakwawa, Kellness	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	livestock is more profitable	cash can start a business	Yes	No	Yes	Yes	5
Nwalele, Angus	Positive	Yes	Yes	Yes	No	No	No	Yes	6	livestock is more profitable	cash can start a business	No	No	Yes	Yes	3
Nyirenda, Kettina	Positive	Yes	Yes	Yes	Yes	No	No	Yes	6	livestock is better	solving immediate problems	Yes	No	Yes	Yes	5
Nyirenda, Janet	Positive	Yes	Yes	Yes	Yes	No	No	Yes	6	both are necessary	solving immediate problems	Yes	Yes	Yes	Yes	3
Nwakwawawa, Iris	Positive	Yes	Yes	Yes	Yes	Yes	No	n/a	5	livestock is more profitable	solving immediate problems	Yes	No	Yes	Yes	5
Nwakwawawa, Late	Positive	Yes	Yes	Yes	Yes	Yes	No	Yes	7	livestock is more profitable	solving immediate problems	Yes	n/a	Yes	Yes	4
Nyaluwe, Lilly	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	livestock is better	solving immediate problems	Yes	No	Yes	Yes	5
Nyamuzgezge Nkhuzi, Lisbet	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	difficult to handle a business	buy things for home	Yes	No	Yes	Yes	4
Nyasulu, Lincy	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	sustainable	start a business	Yes	No	Yes	Yes	5
Nyasulu, Triffin	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	money can be used immediately, but is hard to repay	No	Yes	Yes	Yes	Yes	4
Nyirenda, Chance	Positive	n/a	n/a	Yes	No	No	No	Yes	3	sustainable	solving immediate problems	Yes	No	Yes	Yes	5
Nyirenda, Malaya	Positive	Yes	Yes	No	No	No	No	No	4	n/a	n/a	n/a	No	Yes	Yes	3
Nyirenda, Nolwin	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	sustainable	solving immediate problems	Yes	No	Yes	Yes	5
Silwamba, Rose	Positive	Yes	Yes	Yes	Yes	Yes	waiting for goats	No	6	sustainable	No	Yes	No	Yes	Yes	5
Soko, Maggie	Positive	Yes	Yes	Yes	Yes	No	No	No	6	sustainable	No	Yes	No	Yes	Yes	5
Tchuwa, Loiness	Positive	Yes	Yes	Yes	Yes	No	No	Yes	7	More profit	No	Yes	No	Yes	Yes	5
Thindwa, Ruth	Positive	Yes	Yes	Yes	Yes	Yes	Hot season	Yes	7	sustainable	No	Yes	No	Yes	Yes	5
Total	37	33	34	32	34	26	30	28	224	25	n/a	34	33	37	36	165
Out of:	37	34	34	37	37	37	35	33	282	n/a	n/a	36	36	37	37	177
Average	100%	97%	100%	94%	92%	70%	86%	85%	79%	81%	n/a	94%	92%	100%	97%	93%
									6.054054054							4.459459459

Appendix E: Results of Revolving Goat Survey by Indicator Category

Name	Autonomy in Decision Making (5)					Perceived Contribution (2)			Partner relationship (2)			Social Group Membership (1)		Experience of controlling behavior (2)			
	Who is the head of your household? (herself)	Are you involved in decision making? (yes)	On money spending? (yes)	More or less since this program? (more)	Can you make decisions without asking your husband/other men? (yes)	How does your husband/men view your contribution to the income? some valued/ some not shared	Does he recognize this activity to help more than just you? (yes)	Does your husband support your participation in this program/ encourage you? (yes)	Has your husband ever suggested a new activity? (yes)	Any other activities? (#)	Has your husband ever prevented you from participating in this activity/ group? (no)	Ever experienced any resistance/ abuse? (no)	Total	Total	Total	Total	
Chintchmba, Tozaless	Husband	Yes	Yes	Less	No	some valued/ some not shared	some	some	No	0	No	No	1	1	No	2	
Fuliwa, Leya	Herself	Yes	Yes	No change	Yes	Supportive	Yes	Yes	No	1	No	No	1	1	No	2	
Group responses*	n/a	n/a	n/a	n/a	n/a	some valued/ some not shared	Yes	Yes	No	2	Yes	No	1	1	No	2	
Harawa, Grace	Herself	Yes	Yes	No change	Widow	No	No	No	Widow	0	No	No	0	1	No	1	
Kambotole, Wyness	Herself	Yes	Yes	no change	n/a	Yes	Yes	Yes	Widow	2	Yes	No	0	0	No	2	
Kandawire, Esmeck	Herself	Yes	Yes	No change	Yes	Yes	Yes	Yes	Yes	2	Yes	No	1	1	No	2	
Khomba, Telesya	Herself	Yes	Yes	no change	Yes	n/a	Yes	n/a	Yes	1	Yes	n/a	1	0	No	2	
Kondowe, Nancy	Herself	Yes	Yes	No change	Yes	Happy for her	Yes	Widow	Widow	2	Yes	Widow	0	1	No	2	
Kondowe, Ruth	Herself	Yes	Yes	no change	Yes	some valued/ some not shared	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Luhanga, Grace	Herself and Husband	Yes	Yes	More	No	Appreciative	Yes	Yes	Yes	2	Yes	No	1	1	No	2	
Mathobola, Alice	Herself	Yes	Yes	More	Yes	Valued	Yes	Widow	Widow	2	Yes	Widow	0	2	No	2	
Misisa, Jessie	Herself	Yes	Yes	No change	Yes	Valued	Yes	Widow	Widow	2	Yes	Widow	0	0	No	2	
Mnthali, Dolicass	Herself	Yes	Yes	No change	Yes	Valued	Yes	Widow	Widow	2	Yes	Widow	0	0	No	2	
Mnthali, Tryfin	Grandchildren	No	No	No change	No	n/a	Yes	Widow	Widow	1	Yes	Widow	0	0	No	2	
Msuku, Cornice	Husband	Yes	Yes	More	Yes	n/a	Yes	Yes	Yes	2	Yes	No	1	2	No	2	
Munthali, Gertrude	Herself	Yes	Yes	no change	n/a	n/a	Yes	Yes	No	2	No	No	0	1	No	2	
Murkeza, Daka	Husband	Yes	Yes	More	Yes	No	No	No	No	0	Yes	Yes	0	1	No	1	
Mwabongi, Christobell	Herself	Yes	Yes	no change	Yes	Valued	Yes	Widow	Widow	2	Yes	No	0	2	No	2	
Mwakwawa, Collinness	Herself	Yes	Yes	no change	Yes	Widow	Widow	Widow	Widow	0	Yes	No	0	0	No	2	
Mwakwawa, Dyana	Herself	Yes	Yes	no change	Yes	some valued/ some not shared	Yes	Yes	Yes	2	Yes	No	1	2	No	2	
Mwakwawa, Kellness	Herself	Yes	Yes	Less	Yes	No	No	No	No	0	No	No	0	0	No	2	
Mwale, Angus	Herself	Yes	Yes	More	Yes	Valued	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Nejenda, Kettina	n/a	n/a	n/a	n/a	Yes	Valued	Yes	Yes	Yes	2	Yes	No	1	n/a	No	2	
Ngwira, Janet	Herself	Yes	Yes	More	Yes	Valued	Yes	Yes	No	2	No	No	0	2	No	2	
Nwakhwawa, Iris	Herself	Yes	Yes	No change	Yes	Valued	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Nwakhwawa, Dyana	Herself	Yes	Yes	no change	Yes	shared	Yes	Yes	Yes	2	Yes	No	1	2	No	2	
Nwakhwawa, Late	Herself	Yes	Yes	No change	Yes	shared	No	No	No	0	No	No	0	0	No	2	
Nyalawe, Lilly	Her daughter	No	No	Less	No	shared	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Nyanuzgezbe Nkhuzi, Lisbet	Herself	Yes	Yes	No change	Yes	Excited	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Nyasulu, Lincy	Herself and Husband	Yes	Yes	Less	Yes	Excited	Yes	Yes	Yes	2	Yes	No	1	0	No	1	
Nyasulu, Triffin	Herself	Yes	Yes	No change	Yes	Value	Yes	Yes	No	2	No	Yes	0	0	No	1	
Nyirenda, Chance	Husband	No	No	No change	No	Happy	Yes	Yes	No	2	No	Yes	0	1	No	1	
Nyirenda, Malaya	Herself	Yes	Yes	No change	Yes	No reaction	No	No	No	0	No	No	0	0	No	2	
Nyirenda, Nolwin	Husband	Yes	Yes	No change	Yes	Happy	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Silwamba, Rose	Herself	Yes	Yes	More	Yes	some valued/ some not shared	Yes	Yes	Yes	2	Yes	No	1	1	No	2	
Soko, Maggie	Husband	Yes	Yes	More	No	Valued	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Tchuwa, Loiness	Husband	Yes	Yes	More	No	Valued	Yes	Yes	Yes	2	Yes	No	1	1	No	2	
Thindwa, Ruth	Herself	Yes	Yes	No change	Yes	Supportive	Yes	Yes	Yes	2	Yes	No	1	0	No	2	
Out of:	24	32	32	5	26	121	30	19	0	60	30	19	0	20	14	33	59
	35	35	35	35	36	176	37	37	37	74	37	37	37	74	37	37	74
	69%	91%	91%	14%	72%	69%	81%	51%	0%	81%	27%	38%	97%	89%	80%		

Name	Challenging gender norms (6)							Perceived Empowerment (2)	
	Women should do chores. (disagree)	Men should earn income. (disagree)	Women should raise children. (disagree)	Girls should get married. (disagree)	Men should make decisions. (disagree)	Men should decide how money is spent. (disagree)	Total	What does women's empowerment mean to you?	Do you feel this activity can do it? (yes)
Chintchmba, Tozaless	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Fuliwa, Leya	agree	disagree	disagree	disagree	disagree	disagree	5	Standing on your own	Yes
Group responses*	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Harawa, Grace	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Kambotole, Wyness	disagree	disagree	disagree	disagree	disagree	disagree	6	encouraging other women to take care of	Yes
Kandawire, Esmeck	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Khomba, Telesya	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Kondowe, Nancy	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Kondowe, Ruth	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Luhanga, Grace	disagree	disagree	disagree	disagree	disagree	disagree	6	women taking care of family	Yes
Mathobola, Alice	agree	disagree	disagree	disagree	disagree	disagree	5	Women can be head of household	Yes
Misisa, Jessie	agree	disagree	disagree	disagree	disagree	disagree	5	Stand on her own, independence, being involved in business	Yes
Mnthali, Dolicass	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Mnthali, Tryfin	agree	disagree	disagree	disagree	disagree	disagree	5	women being involved in business	Yes
Msuku, Cornice	agree	disagree	disagree	disagree	disagree	disagree	5	standing on their own	Yes
Munthali, Gertrude	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Murkea, Daka	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Mwabonga, Christobell	agree	disagree	disagree	disagree	disagree	disagree	5	standing on their own	yes
Mwakwawa, Colliness	agree	disagree	disagree	disagree	disagree	disagree	5	didn't understand	n/a
Mwakwawa, Dyana	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Mwakwawa, Kellness	agree	disagree	disagree	disagree	disagree	disagree	5	energy to run developments	Yes
Mwale, Angus	agree	disagree	disagree	disagree	disagree	disagree	5	standing on their own,	Yes
Nejenda, Kettina	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Ngwira, Janet	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Nwakhuwawa, Iris	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Nwakhwawa, Late	agree	disagree	disagree	disagree	disagree	disagree	5	Active, stand on their own and not face problems	Yes
Nyaluwe, Lilly	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Nyamuzgezge Nkhuzi, Lisbet	agree	disagree	disagree	disagree	disagree	disagree	5	can't explain it	Yes
Nyasulu, Lincy	disagree	disagree	disagree	disagree	disagree	disagree	6	standing on her own, starting business	Yes
Nyasulu, Triffin	agree	disagree	disagree	disagree	disagree	disagree	5	taking part in income activities	Yes
Nyirenda, Chance	agree	disagree	disagree	disagree	disagree	disagree	5	standing on your own, independence	Yes
Nyirenda, Malaya	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Nyirenda, Nolwin	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Silwamba, Rose	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Soko, Maggie	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
Tchuwa, Loiness	disagree	disagree	disagree	disagree	disagree	disagree	6	having their own business, be at a better place	Yes
Thindwa, Ruth	agree	disagree	disagree	disagree	disagree	disagree	5	n/a	n/a
	4	37	37	37	37	37	189	17	16
Out of:	37	37	37	37	37	37	222	17	16
	11%	100%	100%	100%	100%	100%	85%	100%	100%
							5.1081		