

Exploring the potential of household methodologies to strengthen gender equality and improve smallholder livelihoods: Research in Malawi in maize-based systems



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ABSTRACT

Household methodologies (HHM) intervene directly in intra-household gender relations to strengthen overall smallholder agency and efficacy as economic agents and development actors. Strengthening women's agency is one mechanism for progressing towards collaborative, systemic farm management. It is expected this will contribute to improved farm resilience in the face of climate change, strengthen food and nutrition security, and improve other development indicators.

HHM are built around a vision, gendered analysis of strengths, weaknesses, opportunities and threats (SWOT), an action plan, and indicators. Some HHM - including Gender Action Learning Systems (GALS), the focus of the research - use drawings making them easy to use for low-literate individuals. There is considerable evaluation report evidence of the efficacy of HHM in strengthening value chains, food security, and gender equality. However, this has yet to be complemented by a robust systematic evaluation of the methodology which includes non-intervention communities as controls. Here we report on the findings of a research study into GALS in Malawi where the National Smallholder Farmers' Association of Malawi (NASFAM) has been implementing GALS since 2013 with 4274 farmers (2821 women and 1453 men to May 2016). We held sex-disaggregated FGDs with 40 GALS households and 40 non-GALS households, all NASFAM members. Community profiles and a matrix activity focusing on task allocation, asset distribution, and expenditures by gender with 125 non-GALS and 135 GALS respondents were also conducted.

Our analyses indicate a significant shift towards sharing of on-farm tasks and household tasks, and joint realization of the benefits from agricultural produce in GALS households. They are building up portfolios of assets including livestock, houses, ox-carts, and land, unlike non-GALS households. Respondents in GALS households, particularly *de facto* women-headed households, report an increase in social standing and participation in community life. In both GALS and non-GALS households, men and women agree that men continue to dominate marketing and are final decision-makers. However, financial transparency and intra-household agreement on expenditures characterize households with GALS participants.

1. Introduction

The 'gender gap' in agriculture in developing countries, particularly in sub-Saharan Africa (SSA) has become something of a mantra over the past decade. Indeed, a robust literature indicates that women's agricultural productivity on women-managed plots remains lower than that of men on men-managed plots. This is attributed to women's continuing weaker access, in comparison to men *in the same household*, to stocks of

capitals necessary for production: social, financial, human, natural, political, cultural, and physical (Farnworth and Colverson, 2015; World Bank, 2012; Peterman et al., 2014; FAO, 2010; Flora and Flora, 2008; Udry, 1996). Probably more than any other document, the FAO's State of Food and Agriculture (SOFA) Report (FAO, 2010) argument that 'if women had the same access to productive resources as men, they could increase yields on their farms by 20 - 30 percent ...' has shaped contemporary approaches to working on gender inequalities in agriculture.

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Numerous development interventions continue to be based on Women-in-Development (WID) type interventions - in practice if not in word, whereby women are singled out for economic empowerment initiatives in order to close the gender gap (UNWomen, no date; OECD, 2011).

FAO's claim in the SOFA Report appears to be predicated on the assumption that women and men in male-headed households will continue to manage their plots more-or-less separately, at least in SSA. We take issue with this claim by providing research evidence that some plots are jointly managed. Based on this evidence, we consider that interventions built on *expectations* of lack of jointness are misplaced. Instead, we posit that initiatives which foster effective **partnership** between women and men, based on fostering more equal gender relations, are more likely to result in higher productivity and other gains (see Farnworth and Colverson, 2015 for an extended discussion). We do not agree with the apparent assumption behind FAO's and broader work on women's economic empowerment that male productivity will remain unchanged whilst female productivity will increase if women are supported effectively. Rather, we posit that jointness is likely to have synergetic effects contributing to a number of benefits across the farm and within the household. (We also hypothesize that gender inequalities contribute to low *male* productivity in smallholder systems though this has not been researched to our knowledge.)

We consider that improvements in female productivity on smallholder farms in SSA to the extent envisaged by FAO is not achievable unless there are changes on an enormous scale in gender *relations*. Achieving this means shifting away from understanding gender as a characteristic of individuals which can somehow be strengthened, to understanding gender as an iterative dynamic process in which gender is constantly being 'remade'. Shifts and reconfigurations which strengthen women's gender interests and women's voice are unlikely to succeed unless men consider themselves partners *and* beneficiaries of this process. In our view, too much gender analysis has historically been constructed around explicit and implicit dichotomies - his assets, her assets - thus failing to pick up sufficiently on collaborative decision-making processes around assets (Djoudi et al., 2016 for a summary of 41 papers in relation to how gender is framed in relation to climate change; Johnson et al., 2016 for details of GAAP agricultural research worldwide). Analytic simplicity is not helpful and it can also be dangerous to women if programmes are designed on this basis. A number of studies indicate that male violence against women can increase when women are targeted for economic empowerment, though findings are not unanimous (GDSRC, 2012 for a summary of the evidence). There is also evidence that joint decision-making reduces violence (GDSRC, 2012).

In this paper, we examine the potential of a relatively new family of behavioural change methodologies termed household methodologies (HHM) for promoting joint decision-making in the household. They have emerged independently of formal science-led 'research for development' initiatives and have been developed primarily by NGOs (particularly OxfamNovib) and fostered by bilateral and multilateral agencies (especially SIDA and IFAD) in close collaboration with farmer organizations (Farnworth et al., 2013). Private sector organizations (TWIN, Divine, Nestlé, International Coffee Partners, and others) are now implementing HHM in various projects. Whilst the operational details differ, all HHM work to change gender relations within the 'black box' of the household. They do not aim to empower women at the seeming expense of men. Rather, they work to promote the understanding that unequal power relations between women and men may result in failures to make the best decisions possible, and thus contribute to poverty. Improving the gender equity of intra-household decision-making processes is expected to lead to improvements in how households marshal and manage resources across the farm and in off-farm activities, and lead to a more equitable distribution of the benefits to household members.

Before turning to the Malawi case study, we examine the concept of meaningful choice (Kabeer, 1999). We then provide an overview of

research into jointness in farm decision-making in sub-Saharan Africa. We return to these concepts in the conclusion to assess the extent to which the implementation of HHM in Malawi has promoted meaningful choice for women whilst stimulating jointness.

1.1. Intra-household decision-making and meaningful choice

In an attempt to clarify the concept of empowerment, Kabeer (1999) argues that one way of thinking about power is in terms of the ability to make choices: to be disempowered implies to be denied choice. The notion of empowerment is inescapably bound up with the condition of disempowerment and refers to the processes by which people who have been denied the ability to make choices acquire such an ability. Empowerment implies a process of discovering new ways to exercise choice, or new domains in which choice might be exercised.

Choice self-evidently requires options, the ability to choose otherwise (Kabeer, 1999). Some choices have greater significance than others in terms of their importance for people's lives. First order choices are strategic life choices, such as choice of livelihood, where to live, who and whether to marry, whether and how many children to have, and so on. These are critical for people to live the lives they want. First order choices help frame second order choices which may be important for one's quality of life, but do not constitute its defining parameters. The ability to exercise choice can be thought of in terms of three inter-related dimensions:

Resources (preconditions) → Agency (process) → Achievements (outcomes)

Resources include material, human and social resources which serve to enhance the ability to make choice. *Agency* is the ability to define one's goals and act upon them. Agency can take the form of decision-making, of bargaining and negotiation, deception and manipulation, subversion and resistance as well as the processes of reflection and analysis. Agency has positive and negative meanings in relation to power. In the positive sense of 'power to', it relates to people's capacity to define their own life choices and to pursue their own goals. 'Power over' refers to the capacity of people to override the agency of others. 'Power with' refers to the capacity to augment power through collective action. Power can also exist in the absence of any apparent agency. For example, the norms and rules governing social behaviour tend to ensure that certain outcomes are reproduced without obvious exercise of agency (Kabeer, 1999).

Over the past two decades or so, considerable attention has been paid to researching individual agency and how to strengthen it, to the extent that some researchers prefer to use the word *autonomy* rather than agency. For instance, Acharya et al. (2010) argue that women's *autonomy* in decision-making is a critical variable to securing beneficial outcomes. The Women's Empowerment in Agriculture Index (WEAI) is constructed around the agency aspect of Kabeer's definition of strategic choice. The WEAI is an aggregate index, reported at the country or regional level, which is based on individual-level data on men and women within the same households. It has two sub-indexes: (1) five domains of women's empowerment (5DE) and (2) gender parity index. The 5DE sub-index measures how empowered women are vis-a-vis men regarding: (1) decisions over agricultural production, (2) access to and decision-making power over productive resources, (3) control over use of income, (4) leadership in the community, and (5) time use (Malapit et al., 2015). The production domain measures women's input into agricultural decisions, and their *autonomy in production* [our italics], "for example, what inputs to buy, what crops to grow, what livestock to raise, and so on - [this] reflects the extent to which the respondent's motivation for decision-making reflects his or her values." (Alkire et al., 2013).

Explicit and implicit analytic and interpretative frameworks, such as the WEAI, are premised on male: female dichotomies, appear to assume

that women and men do not have interests - or values - in common, and they inevitably lead researchers to presume that higher levels of female autonomy in the domains of interest are intrinsically preferable and lead to better outcomes for women and children. However, in many societies there is a strong sense of family togetherness and individual identity is closely tied to that of the family; making decisions often involves complex negotiations (Alam, 2017; Mokomane, 2012; Belcher et al., 2011; Acharya et al., 2010). In such a situation, a singular focus on autonomy as an indicator of empowerment may lead researchers to overlook how women exercise agency in complex multi-dimensional relationships. Restoring the relational to gender provides a means of understanding of gender as a flow. Gender identities are in constant flux. They emerge from and are modulated through uncountable interactions with spouses, children, extended family members, wider society, and deep cultural norms.

1.2. Jointness and lack of jointness in intra-household decision-making on farm management in East and Southern Africa

In recent years two strands of research evidence have started to converge. They show that smallholder households in sub-Saharan Africa can simultaneously exhibit jointness, and lack of jointness, in intra-household decision-making. Lack of jointness refers to the observation that women and men in many households run more-or-less separate, individually-managed production, business, and consumption activities. This frequently includes managing and operating different agricultural plots on the same farm (Marenja et al., 2015; Doss, 2013, 1999).

Recent research points out, however, that there is jointness in some households on all or specific plots (Farnworth et al., 2017; Sheremenko and Magnum, 2015; Marenja et al., 2015; Kassie et al., 2015). A study conducted in Mozambique examined the differential fertilizer application rates on plots managed individually by men, women, and jointly in dual adult households (Marenja et al., 2015). It found that men manage the majority of plots: 62% of maize plots, 56% of fruit and vegetable plots, and 71% of non-staple cash crops plots. Twice as much inorganic fertilizer is applied to maize plots managed by men than by women. Men also apply considerably more fertilizer to their other crops than do women. Fascinatingly, however, fertilizer use is *highest* on jointly-managed maize and fruit and vegetable plots, and lower for non-staple cash crops than on individually managed fields-whether male or female managed. Jointly-managed plots also exhibit higher incidences of soil and water conservation structures, and are more likely to have maize-legume intercropping, use of manure, and improved agro-ecological practices more generally (Marenja et al., 2015). A study in Kenya (Ndiritu et al., 2014) using sex-disaggregated survey data at the plot level broadly confirms these findings. It found that women plot managers are less likely to adopt minimum tillage and manure for soil fertility management than men. This is attributed to women having weaker access to labour, knowledge - particularly the extension services - and resources such as livestock and credit. The researchers note that minimum tillage requires herbicides but due to liquidity constraints women are less likely to be able to finance this practice. Women also own fewer livestock which limits the amount of manure available to them. Gender does not affect the adoption of improved seed varieties, maize-legume rotations, maize-legume intercropping, soil and water conservation, and chemical fertilizer. However, compared to male-managed plots, jointly managed plots are *more likely* to adopt maize-legume intercropping, maize-legume rotations and improved seeds.

These findings demonstrate the effects lack of jointness can have upon women's potential productivity and income generation. They also imply that jointness in intra-household decision-making has the potential to strengthen input use, improve adoption of climate-smart technologies, and to underpin more equitable distribution of benefits within the household, including better food and nutrition security (Ndiritu et al., 2014; Meinzen-Dick et al., 2010). Rather than work

within dichotomies, improving synergies appears to be a useful way forward.

2. Materials and methods

2.1. Research value and hypothesis

Several studies, typically evaluations or mid-term reviews without controls, have been commissioned by the development partner to assess the impacts of HHM (IFAD, 2014; Farnworth, 2010; Bishop-Sambrook and Wonani, 2009). They suggest significant behavioural change in target groups has occurred, leading to improved value chains, improved smallholder farm management, and improved gender equality, among other indicators. However, to date there has been no systematic evaluation of HHM that involves comparing sites with and without the HHM intervention. The International Wheat and Maize Improvement Centre (CIMMYT) and the National Smallholder Farmers' Association of Malawi (NASFAM) therefore designed a research study to compare communities in Malawi with and without HHMs but otherwise similar agro-ecologies and socio-cultural conditions. NASFAM is the largest smallholder-owned membership organization in the country, with 164,000 members (56% women) in 2016.

With respect to overall development, Malawi scores low on the Human Development Index (HDI) globally - 173 from 189 countries - and low within sub-Saharan Africa (UNDP, 2015). The Gender Inequality Index (GII) reflects gender-based inequalities in reproductive health, empowerment, and economic activity. In 2014, Malawi was ranked 140 out of 155 countries meaning that gender inequalities are highly prevalent and impose significant development costs (UNDP, 2015). Women overwhelmingly bear responsibility for household tasks and caring roles. In Malawi, 88% of rural working men do not perform any domestic activities. Half of rural working women devote between 11 and 30 h per week to domestic activities, with 4 percent of men doing so (FAO, 2011). Women more than men are involved in a 'zero-sum game', a closed system in which time or energy devoted to any new effort must be diverted from another activity (De Schutter, 2012; Gyasi and Uitto, 1997). Women's labour becomes fragmented to handle existing and new work, often resulting in reduced efficiency and effectiveness across productive as well as care work.

The hypothesis of our study was that through increasing jointness in intra-household decision-making these households become more resilient and productive. We sought evidence in the form of measurable gains in terms of reducing women's labour burden in the household and on the farm, improving their access to and control over assets both individually and as a household, stronger participation by women in expenditure decisions, and we queried whether women's social standing in the community and in organizations had been strengthened. We wanted to know if women as well as men were setting out clear goals and working towards them successfully.

2.2. Gender Action Learning Systems (GALS) in Malawi

NASFAM was trained by TWIN, a Fair Trade organization specializing in cocoa, nuts and coffee, in a HHM called Gender Action Learning Systems (GALS) (OxfamNovib, 2014; Mayoux, 2013, 2012). The GALS starts with women and men as individuals and uses only pictorial tools making it suitable for low literate populations. Practitioners use visualization tools to enable them to map out a vision for change at a personal and household level. Once household members become familiar with applying the tools to their own lives, further tools are introduced to help build collective action at the community level and in producer groups, and for advocacy. The process as developed by NASFAM starts with an Inception and Planning workshop. Potential peer trainers from target communities are identified and trained in a 'Change Catalyst Workshop'. Termed GALS Champions, they are expected to train at least five other community members. Community

Action meetings are advised to meet fortnightly. These bring together participants to enable them to share their visions and to discuss their challenges and opportunities in order to obtain advice and support. After around six months a 'Gender Justice Review Workshop' is convened. One aim is to assess progress and provide assistance on tools as required. A second aim is to make sure that women are not being left behind. This can happen because men typically have stronger stocks of capitals than women to draw upon. Various tools to explain and promote the importance of achieving gender equality are used to facilitate this process.

2.3. Study sites

The fieldwork for this study was conducted with NASFAM Association members in Lilongwe North and in Lilongwe South. In Lilongwe North NASFAM two Associations were introduced to the GALS in 2013. NASFAM selected the two Associations for the GALS intervention because they had the lowest percentage of women leadership across all NASFAM Associations nationally. We combine the findings from the two sites since they are so similar and collectively call them the GALS Site in our paper. In Lilongwe South, where a new NASFAM Association was established in December 2014, GALS has not been introduced. This control site is termed the non-GALS Site.

The two study sites share key cultural characteristics which facilitate comparison. Each site is predominately ethnic Chewa, thus sharing language, beliefs and ways of organizing themselves. They are patrilineal with the woman moving to her husband's community upon marriage, and also patrilineal with inheritance passing through the male line. Polygamy is widespread and associated closely with 'being a man'. Men see themselves as key decision-makers including which crops to grow and where and when to sell them. Traditional Authorities (TAs) in the area generally support existing cultural norms which can be harmful to women. This includes asset stripping of widows and divorcees, which is common. TAs rarely challenge this practice because strong vested interests support it.

2.4. Key informant questionnaire

A structured questionnaire was used with key informants: TAs, teachers, nurses, and pastors in the study sites. Interviews were sex-disaggregated with a minimum of two interviewees of the same gender per session to help triangulation (twelve respondents in total, eight in the GALS sites and four in the non-GALS sites). These provided comprehensive gendered data on local governance structures, infrastructure, economic opportunities and challenges, food and nutrition security, and the impact of recent droughts in each study site.

2.5. Focus group discussions

Thirteen focus group discussions (FGDs) were held in sex-disaggregated groups with GALS and non-GALS participants with an average of 5–6 participants. Each participant represented a household. FGDs were segregated into married men, married women, and *de facto* women heads of households (which form around a third of all households in the study communities). More women were interviewed due to the supplementary FGD with women heads of household - no men are single. The majority of respondents, both women and men, were in their 30s and 40s, with a few being in their 20s, 50s and 60s. Of the men, roughly half had attended primary school (48%) and the remainder secondary school (52%). Of the women 14% had not attended school, 64% percent had attended primary schooling, and 22% had attended secondary school. In both cases, several respondents had not completed all levels of their respective schooling.

To aid discussion, a FGD Guide was developed. This posed questions around visions that people have of their future (*masomphenya* in Chichewa, the language spoken by all respondents), intra-household



Fig. 1. Simplified overview of the vision journey.

decision-making processes, the gender division of labour regarding care and household tasks and on the farm, responsibility for marketing and for expenditure, access to and control over assets, and on perceived social standing. Respondents were asked not only to report on these issues, but to provide proof. For example, if men said they cooked, they were asked how often. If women said the husband shared financial information with them, they were asked to give a detailed example.

Discussion of household level visions was key. It was selected for investigation because the word 'vision' in Chichewa is widely used and is clearly understood by non-GALS participants. However, in the GALS the term is operationalized and called the Vision Journey as shown in Fig. 1. Visions are accompanied by detailed plans with timelines for as little as three months, or as long as several years.

2.6. Gender balance tree questionnaire

The study team also developed an analytic matrix based on a GALS tool called the Gender Balance Tree (GBT). The GBT helps participants to understand the work men, women, boys and girls contribute to their household economy, the benefits they derive, and the assets they have. It highlights imbalances in the 'tree' and allows practitioners to develop their own ways to rebalance the tree. For research purposes, we developed three sets of questions regarding responsibility for task areas, benefits from each task, and access and ownership over assets and in relation to the three main crops in the area: maize, groundnut and tobacco. Ten enumerators used tablets to record the information. They interviewed a total of 260 individuals, none of whom participated in the FGDs. Wherever possible both the male and female heads of a household were interviewed together, but in some cases only one person was available from the household such that the final number of interviews totaled 135 (75 women and 60 men) for GALS and 125 (51 women and 74 men) for the non-GALS households. Data were analysed using Pearson's Chi-square (χ^2) tests with Yate's correction.

3. Results

The research findings are broadly summarized in Table 1 and discussed in detail below. The respondents' own words are used to illustrate the findings set out in more detail below. A single '+' means that the man or woman are typically responsible for this activity, or has good access to the asset. A '0' means that either the man or the woman lacks personal responsibility for it, or has weak access to it. Two '+ + ' means that there has been a marked positive change over the past three years or so.

Table 1
Summary of findings from Focus Group Discussions.

| | GALS sites | | Non-GALS site | |
|----------------------------|------------|-----|---------------|-----|
| | Women | Men | Women | Men |
| Vision (detailed, written) | + | + | 0 | 0 |
| Discussion with Spouse | + | ++ | + | + |
| Care and Household | + | ++ | + | 0 |
| Work on Farm | ++ | ++ | + | + |
| Marketing | 0 | + | 0 | + |
| Access to Assets | ++ | ++ | + | + |
| Social Standing | ++ | + | 0 | + |

3.1. Vision

In the non-GALS site, neither married men -bar one exception, see below - nor married women have visions beyond achieving a higher yield in farming. They do not have a detailed, specific vision, have not developed an action plan, nor set indicators. They rarely discuss ideas with children but have discussions with their spouse. However one man said he has set a five year timeline for his vision and has shared it with his wife, though he considers the vision to belong to him.

De facto single women in the non-GALS sites explain they all have visions. They have been given land by their parents to settle on, but want to build their own house or purchase more land. However, since they have insufficient money none have made plans to achieve these visions. They agreed that, "These are just things that we think about and wish that we will be able to achieve some day" and added they are relying on their children to help them. One woman explained, "Since they were little, they encourage and laugh with me and they tell me that when they grow up everything is going to be all right because they will find some money."

In the GALS sites, participants have developed individual as well as joint visions as shown in Table 2. The most popular visions are livestock (38%), housing (35%), and transport (19%). Individual women concentrate overwhelmingly on livestock. For example, 18 women were building stocks of livestock compared to 3 men. This is not surprising because livestock do not depend on holding land, are highly mobile, and their value can be realized quickly. This is of great value to women who do not own land in their own right. This preference for livestock appears to find its way into joint visions, with 38 joint visions prioritizing livestock. This suggests that women's voices are being heard in intra-household decision-making. Improved housing forms a clear second preference followed by transport. Land refers to 'neutral land' which can be rented or bought. The majority of land is still allocated by TAs, primarily to men under customary law. Participant reasoning behind the selection of visions is explored below.

With respect to achieving visions, women reported that the most important innovation is that spouses now help each other achieve their

Table 2
Overview of Visions in GALS Site (2015 visions).

| Vision | Individual visions | | Joint visions | Total Visions | % of total Visions |
|-----------------------------------------------|--------------------|---|---------------|---------------|--------------------|
| | F | M | | | |
| Transport (bicycle, car, minibus and ox-cart) | 3 | 5 | 21 | 29 | 19 |
| Livestock (goats, cows, pigs, chickens) | 18 | 3 | 38 | 59 | 38 |
| House (with iron sheets) | 11 | 8 | 36 | 55 | 35 |
| Land | 4 | 3 | 4 | 11 | 7 |
| Driving lessons | 0 | 1 | 0 | 1 | 1 |
| | | | | 155 | 100 |

individual visions. This did not happen before. However, several women remarked that men often expected help with achieving their vision 'first'.

Married men report their visions are fundamentally about securing more money. They are typically 'larger' than women's visions because men have more assets to invest in the visioning process. At the same time, all men respondents argued that their visions are contributing to jointness in asset management and benefits. For example, one man said his vision was buying "livestock, ox-carts, a plot with houses on it, a TV, a computer and radio. These assets are for me and my wife jointly." Men ascribed success in acquiring assets to working together as a family.

The majority of women base their visions on building a livestock portfolio of different species as stepping stones to longer range visions such as building houses, buying a motorbike, etc. One woman explained, "My vision was to have many livestock and I bought 2 goats last year. Those goats had 2kids each so I now have 6 goats. This year I bought 2 pigs. My other vision was to properly educate my children. At first it was hard to train them but nowadays they help me on the farm so we are able to get better yields which enable me to pay their school fees My vision now is to continue educating them." The strengthened ability of women to command children's labour to work on the farm towards a vision, and help more in household chores, is a repeated finding; this work does not appear to compromise children's schooling.

De facto women heads face greater challenges than married couples to achieving their visions. This is because they have few assets to deploy in comparison to the access they enjoyed when married. They reported they are considered beggars and rarely receive support even from siblings. However, women in this category claimed that many of them are achieving their visions. These vary from achieving basic needs, particularly food security, to - in a few cases - building a house, acquiring livestock, and buying bicycles.

GALS respondents explained that the physical process of drawing the vision is central, including placing it where it can be seen every day. A woman explained, "There is a huge difference between having the vision drawn on paper and keeping it in your head because you know that there is a vision that is drawn that needs to be achieved whereas if it is not drawn, you can easily change their vision when you have cash after selling the produce [ALL AGREE]." Another woman added, "If you do not draw the steps to achieving the vision you can easily get carried away with other activities happening in the community such as wedding celebrations.." In other words, the physical picture prevents unplanned expenditures and continually refocuses attention on a long-term goal.

An important innovation is that, on NASFAM's advice, GALS households now sell the entire cash crop to enable them to realise elements of their vision immediately. For example, building a house may take three years, with bricks being bought in year one, the roof in year two, and the house constructed in year three. Previously, farmers sold their crop in small amounts. The money was spent on daily necessities and, according to respondents, 'vanished' meaning that larger goals could not be achieved. Selling crops in small amounts is still happening in the non-GALS Site. NASFAM warns households not to sell stocks of maize required for food security in order to achieve visions.

3.2. Development, access and control of assets

In the non-GALS site, women said the purchase of items like clothes, utensils, bicycles and other assets is usually discussed with the man. There is a strong sense that these are shared because the couple worked together for them. Women agreed that they do not own any assets other than kitchen utensils. In a breakdown situation - divorce, death or separation, the woman is expected to leave the house, the community and sometimes her children. In the case of divorce, her ability to take assets may depend somewhat on the husband's personality. In most cases, women said, they can take cooking utensils, clothes and select the children she wants to take with her. Men agreed with this analysis, though they stressed that since children are expected to inherit

customary land the man or his extended family may keep them in order to retain access to it. One man suggested that if a man is wealthy the wife may be able to take some large assets. Another man explained that you procure assets with wife and children in mind, but after death you cannot prevent your kin from taking those assets.

In the GALS Site, the findings show that although participants are taught to develop their own vision and encouraged to create joint visions, many respondents, particularly women, are reluctant to develop truly shared visions with respect to developing asset portfolios. They relate this explicitly to the fact that communities are patrilineal and patrilineal. Women who marry into the lineage access rights to various capitals through marriage, and they do not necessarily have claims beyond use rights upon capitals they have helped to build, such as a house. Should the marriage fail women are at risk of being expelled with only the assets they can carry. One woman explained that is precisely because of the potential danger of a breakdown situation that she has developed her own vision, to buy land and build a shop and house, and that her husband has agreed to help her do this. Another woman remarked she made a big mistake by building her house on land belonging to her husband's relatives and is concerned about what would happen if her relationship with her spouse should end. One man has ensured that his wife is named on the land purchase certificate in order to prevent his family from seizing it on his death.

However, despite women's concerns around developing assets, data from the Gender Balance Tree Matrix (Table 3) shows a significant increase in jointness for control of all assets except for oxcarts and cattle in the GALS households. Control does not imply ownership and the ability to dispose of the asset, but the results do show that women and men are now using all assets more equitably - apart from cattle and oxcarts.

3.3. Jointness in marketing and expenditure

In the non-GALS site, there is variation in experience with some married women indicating discussion with spouses. However, all women agreed that the husband is the ultimate decision-maker with respect to expenditures. Women repeatedly asserted that they plead for the purchase of inorganic fertilizer in order to boost productivity but are not necessarily successful. They cannot afford to make such purchases on their own. Taking out a loan to buy fertilizer, they explained, would enable them to improve productivity but then they would be stuck with paying back the loan upon selling the crop and thus be unable to buy fertilizer for the following year. More broadly, women considered that the main obstacle to improving productivity was men's personal spending habits. This includes eating out: "Sometimes he might even want to use the money for buying half a chicken at a restaurant although we have chickens at home". Women claimed they do not market crops. One man contested this regarding his own wife, but other men agreed that women are not involved.

Non-GALS men confirmed that they are the final decision-maker but that they consult with their wife. However, men take decisions on large

purchases such as land, ox-carts, etc. unilaterally. Both women and men hide income from each other. *De facto* women-headed households said they discuss their ideas with their children.

In the GALS Site, married men likewise insisted they retain ultimate decision-making power in all areas, particularly in relation to the purchase of land. This is due to the prevalence of the social norms in this area which insist that land is owned and controlled by men and their lineage. However, women can now discuss "any issue" with them. Women agreed. Despite this openness, men continue to dominate marketing. They expressed concern about being stripped of their role as managers of money and as head of the family more broadly. Even if a woman grows her own crop men often market it for them. However, there is much more transparency, according to both women and men. One woman said, "In the past I heard from other people that my husband had sold the tobacco but I did not know. I also did not know what a sale sheet is but my husband shows it to me nowadays."

3.4. Jointness in the gender division of labour and associated benefits

In the non-GALS site, married women conduct almost all home and care work, though one woman said her husband cooks once a week. A typical response was "All household chores are for me. As far as my husband's work is concerned, I do not help him either." The men agree house and care work are entirely women's responsibility. Married women work with men in agricultural production tasks. They do not help men with culturally ascribed male fieldwork such as ploughing or building the kraal.

In the GALS sites, married women and men reported significant changes. Men and boys engage daily or several times a week with household chores including cooking, washing children, cleaning the house, and collecting firewood and water. This enables women to get up later, reduces tiredness and strain in relationships, facilitates their participation in community events, and increases happiness. Importantly, children are helping more than hitherto. A consequence is that women are able to manage time more effectively: "People used to say I was not organized and I wasn't smart but now that I share tasks with my husband, everything is always clean and in order." Furthermore, the gender division of labour in the field has loosened. Women take on men's work which means that if the man is ill, or absent, the work still gets done. Women said this was partly a token of their appreciation for his help in the home. One business woman who refused to help her husband on the farm now does so and claimed as a consequence they are now food secure. Women also reported new income generation opportunities, for example on road construction and school building, which were previously considered men only.

In both the GALS and non-GALS sites most respondents agreed they were not fully food secure. However, several GALS households reported improved yields which they ascribed to cooperation across the farm and across crops. "Instead of getting 4 bales we get up to 12 bales of tobacco, from 1 ox-cart full of maize to about 5, from 2 buckets of groundnuts to about 20 buckets and from no soya at all to about one and a half bags. The

Table 3

Summary of Pearson Chi-square analysis of who controls different farm assets. Numbers are the totals observed for each category: joint; man; women together with respective percentages (in parentheses) in GALS and non-GALS households. Pvalue is the level of significance.

| Asset | GALS:joint | GALS:man | GALS:woman | non-GALS:joint | non-GALS:man | non-GALS:woman | Pvalue |
|--------------------------|------------|-----------|------------|----------------|--------------|----------------|--------|
| Land | 42 (31.3) | 82 (61.2) | 10 (7.5) | 11 (8.8) | 91 (72.8) | 23 (18.4) | 0 |
| Plough | 40 (63.5) | 23 (36.5) | 0 (0) | 10 (40) | 13 (52) | 2 (8) | 0.0251 |
| Other Agricultural Tools | 54 (44.6) | 64 (52.9) | 3 (2.5) | 30 (27) | 70 (63.1) | 11 (9.9) | 0.0035 |
| Oxcarts | 28 (52.8) | 25 (47.2) | 0 (0) | 6 (31.6) | 13 (68.4) | 0 (0) | 0.1799 |
| Household Utensils | 19 (14.5) | 3 (2.3) | 109 (83.2) | 5 (4) | 4 (3.2) | 115 (92.7) | 0.0119 |
| Cattle | 29 (50.9) | 23 (40.4) | 5 (8.8) | 8 (34.8) | 12 (52.2) | 3 (13) | 0.4203 |
| Goats | 44 (53) | 29 (34.9) | 10 (12) | 16 (28.6) | 29 (51.8) | 11 (19.6) | 0.0168 |
| Poultry | 53 (53.5) | 10 (10.1) | 36 (36.4) | 22 (29.7) | 26 (35.1) | 26 (35.1) | 1e-04 |
| Pigs | 36 (63.2) | 16 (28.1) | 5 (8.8) | 9 (25.7) | 21 (60) | 5 (14.3) | 0.0016 |

Table 4

Summary of Pearson Chi-square analysis of who has responsibility for various tasks associated with maize, groundnut and tobacco production. Numbers are the totals observed for each category: joint; man; women together with respective percentages (in parentheses) in GALS and non-GALS households. Pvalue is the level of significance.

| Variable | GALS:joint | GALS:man | GALS:woman | non-GALS:joint | non-GALS:man | non-GALS:woman | Pvalue |
|----------------------------------|------------|-----------|------------|----------------|--------------|----------------|--------|
| Maize | | | | | | | |
| Land Preparation | 86 (63.7) | 31 (23) | 18 (13.3) | 59 (47.2) | 38 (30.4) | 28 (22.4) | 0.0231 |
| Planting | 104 (78.8) | 10 (7.6) | 18 (13.6) | 89 (71.8) | 10 (8.1) | 25 (20.2) | 0.3575 |
| Weeding | 104 (77.6) | 13 (9.7) | 17 (12.7) | 81 (64.8) | 18 (14.4) | 26 (20.8) | 0.0727 |
| Inorganic Fertilizer Application | 117 (86.7) | 8 (5.9) | 10 (7.4) | 88 (72.7) | 15 (12.4) | 18 (14.9) | 0.0205 |
| Organic Fertilizer Application | 80 (60.6) | 41 (31.1) | 11 (8.3) | 68 (59.1) | 31 (27) | 16 (13.9) | 0.3451 |
| Harvesting | 88 (66.7) | 7 (5.3) | 37 (28) | 86 (70.5) | 3 (2.5) | 33 (27) | 0.519 |
| Processing | 32 (24.1) | 5 (3.8) | 96 (72.2) | 29 (23.2) | 20 (16) | 76 (60.8) | 0.0036 |
| Residues | 84 (62.7) | 28 (20.9) | 22 (16.4) | 62 (51.2) | 25 (20.7) | 34 (28.1) | 0.067 |
| Selling | 61 (47.3) | 31 (24) | 37 (28.7) | 30 (27) | 71 (64) | 10 (9) | 0 |
| Groundnuts | | | | | | | |
| Land Preparation | 94 (70.7) | 10 (7.5) | 29 (21.8) | 66 (53.7) | 23 (18.7) | 34 (27.6) | 0.0066 |
| Planting | 96 (72.2) | 4 (3) | 33 (24.8) | 84 (68.3) | 7 (5.7) | 32 (26) | 0.5366 |
| Weeding | 105 (78.9) | 2 (1.5) | 26 (19.5) | 80 (65) | 13 (10.6) | 30 (24.4) | 0.0034 |
| Harvesting | 88 (66.2) | 9 (6.8) | 36 (27.1) | 74 (60.7) | 7 (5.7) | 41 (33.6) | 0.5188 |
| Processing | 62 (46.6) | 2 (1.5) | 69 (51.9) | 46 (38.3) | 5 (4.2) | 69 (57.5) | 0.2472 |
| Residues | 86 (65.2) | 26 (19.7) | 20 (15.2) | 56 (46.7) | 24 (20) | 40 (33.3) | 0.0019 |
| Selling | 62 (48.4) | 15 (11.7) | 51 (39.8) | 26 (22) | 63 (53.4) | 29 (24.6) | 0 |
| Tobacco | | | | | | | |
| Land Preparation | 78 (66.1) | 33 (28) | 7 (5.9) | 42 (57.5) | 18 (24.7) | 13 (17.8) | 0.0336 |
| Planting | 92 (78.6) | 17 (14.5) | 8 (6.8) | 51 (69.9) | 12 (16.4) | 10 (13.7) | 0.2466 |
| Weeding | 95 (81.2) | 15 (12.8) | 7 (6) | 57 (78.1) | 4 (5.5) | 12 (16.4) | 0.0248 |
| Harvesting | 93 (80.9) | 12 (10.4) | 10 (8.7) | 48 (66.7) | 10 (13.9) | 14 (19.4) | 0.0602 |
| Processing | 52 (45.2) | 54 (47) | 9 (7.8) | 28 (46.7) | 22 (36.7) | 10 (16.7) | 0.1483 |
| Residues | 64 (55.7) | 25 (21.7) | 26 (22.6) | 30 (41.7) | 22 (30.6) | 20 (27.8) | 0.1675 |
| Selling | 35 (30.4) | 70 (60.9) | 10 (8.7) | 13 (18.1) | 52 (72.2) | 7 (9.7) | 0.1678 |

problem in the past was that we never had enough fertilizer." A woman added, 'When I grew groundnuts on my own I sold thirty pails. Now I sell 100 pails, because my husband is helping me.' A man explained that co-operation enabled the household to increase tobacco yields from 300 kg in 2013 to 700 kg in 2014. Some men respondents connected reductions in gender-based violence to improved productivity because lower GBV, they explained, contributes to improved cooperation between household members.

Several respondents said that productivity was the same between GALS and non-GALS participants, but that paying attention to realizing the vision meant that the GALS participants invested their money well and that they started to develop more quickly. It is not clear how many households experience improved yields, nor to independently verify respondent statements in the present study.

The gender balance tree matrix analysis supports many of the FGD findings. Table 4 shows that in relation to productive tasks there are large shifts in GALS households towards jointness. The most significant observations are:

- Maize. There is a significant increase in 'jointness' with GALS regarding land preparation ($p = 0.0231$); fertilizer use ($p = 0.0205$); processing ($p = 0.0036$) and selling ($p = 0.00$)
- Groundnut. A significant increase in 'jointness' with GALS for land preparation ($p = 0.0066$); weeding ($p = 0.0034$); residue management ($p = 0.0019$) and selling ($p = 0.00$)
- Tobacco. Significant increase in 'jointness' with GALS for land preparation ($p = 0.0336$); planting ($p = 0.0205$) and weeding ($p = 0.0248$)

Table 5

Women in leadership roles in NASFAM associations between 2012 and 2016. Source: NASFAM internal data

| Association | Percent Women 2012 | Percent Women 2016 |
|---------------|--------------------|--------------------|
| GALS Site | 5.25 | 53.5 |
| Non-GALS Site | Not applicable | 49.7 |

Interestingly, in the case of selling maize and groundnut, the increased jointness in GALS households was also associated with more woman taking on this responsibility on their own. This hints at a willingness in men to allow women access to pricing and sales information. This in turn is likely to strengthen women's voice in intra-household decision-making around expenditures, which in itself may reflect an increase in empowerment in terms of access to and control of earned income.

3.5. Social standing

In the non-GALS site, all women reported low social standing and do not have any leadership roles, either in traditional decision-making bodies, in community groups, or institutions like the school or church. The women chorused together that, "we have never contributed in any discussion processes in the community." This said, they feel valued as friends and as sources of advice by other women. Conversely, the men said they were leaders in the church, village school committees, and trainer of trainers. None of the single women has a leadership position though they participate in school construction through drawing water. One explained she tries to participate in discussions but the others said they are not called upon because "if one does not have money, most people think that you cannot have any good ideas or give advice."

NASFAM data on women in leadership roles (chairperson and vice, secretary and vice, treasurer and committee members) in NASFAM Association governance committees is shown in Table 5. This shows the proportions of women in leadership between 2012 and 2016 in the GALS Site and non-GALS Site. Women's participation improved from 5.2% to 53.5% in the GALS Site. However, women's participation in leadership in the non-GALS Site in 2016 was almost 50%. According to NASFAM this is because the Association (a new member) deals only with groundnuts and soya bean, both traditionally considered women crops. Associations in the GALS Sites deal with tobacco and maize and therefore experience strong male participation.

In the GALS sites, single women reported increased independence, increased respect, and increased participation in community life. "People no longer disrespect me. I am now able to provide for my basic needs and do

not beg. In the past when I was very poor, people such as some relatives and the chief treated me as a child and would send me on many errands." Another said, "Nowadays, we participate in many programmes and we are included in assistance programmes. For instance, our names now appear on beneficiary lists to receive some things whereas in the past this never used to happen." They attribute improved social standing to their increased asset portfolio through the GALS. Fascinatingly, married and single women have seized the chance to take up technical training roles (GALS and other) in the GALS Site. The number of female trainers increased from 14 in 2012 - prior to the GALS intervention - to 138 in 2015.

This reported increase in women's leadership roles in NASFAM Associations during the FGD and by NASFAM was not supported by the Gender Balance Matrix which showed no significant increase in leadership roles for women in GALS households. This discrepancy in findings is most likely due to weaknesses in phrasing of the leadership questions in the Gender Balance Matrix exercise with respondents assuming the questions related to leadership positions in the wider community rather than more specifically NASFAM Associations. We also do not have any data on women who are 'well regarded' and may be considered informal leaders.

4. Discussion and conclusion

The Chichewa word for vision is used in both the GALS and non-GALS sites; no new words have been coined for this concept in relation to the GALS. However, in the non-GALS sites the word, much as in English, expresses an aspiration and hope for the future. In the GALS sites, due to the training, respondents have reduced the abstract character of the concept by linking it closely to a specific time-bound goal together with a staged plan to get there. A key effect of the GALS has been to strengthen financial planning at the household level and to reduce expenditure on 'moneysuckers' such as beer, girlfriends, hairstyles, and snacks. The use of gendered analytic tools such as the Gender Balance Tree, and others, is important. Households come to realise that inequitable gender relations hobble their livelihood planning. Realizing the vision necessarily requires identifying and overcoming gender-based constraints.

Many women involved in the GALS still prefer to concentrate on building assets that indisputably belong to them. It can, therefore, be argued that lack of jointness is continuing due to the weak position of women in these patrilineal, patrilocal communities. Improved jointness in intra-household decision-making is difficult to achieve when community institutions do not support it.

At the same time married women are demonstrably more able to articulate and realise their own visions and plans, and they expect their spouses and children to support them. They, likewise, support their partners. At this level, jointness is improved. Taken together, two conflicting forces seem to be in operation. The process of developing visions strengthens the individual agency of both men and women while at the same time it is having a transformative effect on household relationships, increasing co-operation, optimism and resilience. This is contributing towards assets being managed together.

Moves towards dissolving the gender division of labour in farm tasks, and in the designation of crops as women's or men's, are taking place. Respondents trace causal links between jointness and improved yields. Adult men, and boys, are taking on domestic tasks. This is in a context where it is culturally almost unheard of for men to do so.

The GALS methodology allows household members to 'practice jointness' in the company of other GALS households. Safe spaces in which to debate, to identify and challenge social constraints and vulnerabilities and model alternative behaviours, visions, and trade-offs help to anchor behavioural change over the longer term (Kegan, 2000; Kreber, 2012; Brookfield, 2012).

We can now return to Kabeer's (1999) empowerment framework. As a reminder, she posited that the ability to exercise choice can be thought of in terms of three inter-related dimensions: Resources

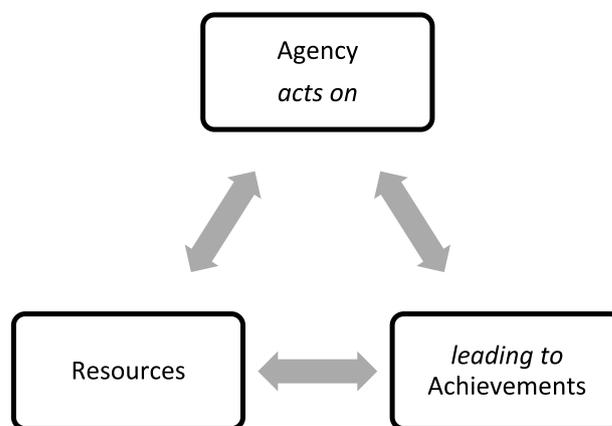


Fig. 2. Iterative model of change prioritizing women's agency.

(preconditions) → Agency (process) → Achievements (outcomes). She also placed particular importance on the ability of women to make meaningful, life-changing choices. Our research shows that the GALS is indeed a methodology which promotes the processes by which people who have been denied the ability to make choices acquire such an ability.

The visioning process and accompanying tools facilitate women (and men) to define choices that can be life-changing, first-order choices (houses, land are first order choices in the study communities) or choices which are lodged somewhere along the way between first and second order choices (such as livestock - particularly larger livestock). Our findings suggest that resources as conventionally understood - particularly productive assets - take a *secondary* rather than primary function. The GALS enables poor people, including very poor people, to change their lives in significant ways, and in so doing stimulate changes in how they are viewed in wider society. This in turn provokes positive feedback loops with a variety of effects. We can therefore modify Kabeer's simple linear model with a more complex version (Fig. 2). Fig. 2 prioritizes agency as the primary condition for change and suggests that even in circumstances of extremely low resource allocation women's agency can be a very powerful force for change. The two-way arrows symbolize what will become increasingly systemic iterations between agency - resource - achievement as feedback loops are set in motion.

The findings draw attention to the extraordinary intrinsic power poor people can have to change their lives. Household methodologies represent a mechanism whereby poor people gain control over empowerment and defines what it means to them in their particular life and particular situation. In so doing, they are very much following Sen's (1990:44) conceptualization of empowerment as "replacing the domination of circumstances and chance by the domination of individuals over chance and circumstances."

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