4/30/2014

L. Ciampi, A. El Kayaty & D. Mulabi

**Market Match-Up**

**Using a Participatory Communication Platform to Increase Women’s Self-Efficacy**

# Personal Note

****

We are postgraduate students at the Graduate Institute of International Development and Applied Economics (GIIDAE) at Reading University in the UK. From left to right in the photo we are Luisa Ciampi, David Mulabi and Abeer El Kayaty. Luisa is a Zimbabwean with a Bsc in Geography, currently undertaking an MSc in Development Studies specialising in gender and agriculture. David is a Development Studies graduate from Uganda currently pursuing MSc Communication for Innovation and Development specialising in health communication. Abeer is an Economics graduate from Egypt also currently undertaking her Msc in Communications for Innovation and Development specialising in Social Entrepreneurship.

Our diverse background brings together many development issues and a wealth of experience in rural development. The drudgery and daily struggles of women we have witnessed in Africa have inspired us submit this proposal to contribute to finding a solution to one of the intractable problems in development – the marginalisation of women. Our shared African nationalities provide the rationale for the geographical focus of this proposal on the African continent.

# Summary

Rural farmers in subsistence economies are vastly marginalised in the agriculture value chain and women farmers are more marginalised. Our theoretical background review illustrates that they not only have to overcome subsistence market access barriers but even more compounding is the gender marginalisation involved.

We therefore propose ‘Market Match-Up’, a flexible communication platform built on Frontline SMS and taps into the immense potential of adapting affordable and accessible mobile phone technology to link rural women farmers to better urban markets. Unlike similar initiatives in Africa, Market Match-Up’s unique design is that it goes beyond providing market information, which alone can be useless given the transactional market access costs in subsistence economies. The platform has mechanisms which enable women smallholder farmers to overcome these barriers and sell to better buyers.

Market Match-Up uses collective action to build women’s bargaining power and social capital in the marketplace. Critically, the model uses a participatory approach and places the management of the platform in the hands of the women themselves, thus empowering them to harness its potential to build self–efficacy, agency and independent decision-making in the value chain. This project also addresses cultural and social constraints by engaging men, thereby creating equitable relations within the project which can then be transferred into their social setting.

# Table of Contents

[Personal Note 1](#_Toc386580070)

[Summary 2](#_Toc386580071)

[Table of Contents 3](#_Toc386580072)

[List of Figures and Tables 3](#_Toc386580073)

[1.1 Introduction 5](#_Toc386580074)

[1.2 Literature Overview and theoretical background 5](#_Toc386580075)

[1.2.1 Women in the Development Process 6](#_Toc386580076)

[1.2.2 Empowering Women 6](#_Toc386580077)

[1.2.3 Communication and Development 7](#_Toc386580078)

[1.2.4 How social support networks affect the empowerment of its members 8](#_Toc386580079)

[1.2.5 Women in Agriculture 9](#_Toc386580080)

[1. 10](#_Toc386580081)

[2.6 Information Asymmetry and Access Asymmetry Agriculture Markets 10](#_Toc386580082)

[3. Implementation Plan 13](#_Toc386580083)

[3.1 General project description 13](#_Toc386580084)

[3.2 Project objectives 14](#_Toc386580085)

[3.3 Target group, scope and ideal location 14](#_Toc386580086)

[3.4 SMS System Description 15](#_Toc386580087)

[3.5 Project Management Team 15](#_Toc386580088)

[3.6 Conceptual Framework 18](#_Toc386580089)

[3.7 Detailed Implementation Plan 19](#_Toc386580090)

[3.8 Marketing 22](#_Toc386580091)

[3.9 Monitoring and Evaluation 23](#_Toc386580092)

[3.10 Sustainability 25](#_Toc386580093)

[3.11 Risks and Mitigation 26](#_Toc386580094)

[4. Future Extension 27](#_Toc386580095)

[5. Conclusion 28](#_Toc386580096)

[References 28](#_Toc386580097)

# List of Figures and Tables

Figure 1: Organogram of the Management team 19

Figure 2: Diagrammatic Representation of the Market Match- Up Project 20

Table 1: Implementation Plan of the Market Match- Up Project 21

Table 2: Table 2: Table Showing the Monitoring Method 25

Table 3: Table Showing Evaluation Method 26

**1. Project Overview**

## 1.1 Introduction

This project is focuses on women’s access to agricultural markets for a number of reasons. Women are heavily marginalised within the agricultural sector and have been excluded from the development process until fairly recently (FAO, 2009; Potter et al, 2012). Women provide the majority of labour in agriculture and agriculture is their most immediate livelihood and arena for economic marginalisation (Boserup, 2013; Croppenstedt et al, 2012). Therefore, focusing on women’s agriculture market access is a strategic entry point for social and economic empowerment of women. Agriculture is also the largest employer and source of livelihoods and national income in developing countries (Ragasa, 2012). Thus, addressing women’s access to agriculture markets is of integral development importance.

The Market Match- Up project proposes a means of increasing women’s access to the market in a way that gives them agency, self-efficacy, economic empowerment and addresses social constraints using affordable and accessible mobile technology. As there is an urging need to empower women within the agricultural sector (Alsop et al, 2006; Boserup, 2013; Kabeer, 1999). We propose empowering women by building on communication and development theory and practice, which is being increasingly examined in international development (Kaul, 2011; Manyozo, 2012; Santucci, 2005).

This proposal provides a theoretical review on gender, women in agriculture, communication and information asymmetry to illustrate the marginalisation of women and the potential for empowerment. It then proceeds to detail the design of the project and how it builds on mobile telephony to create market linkages and information distribution. It is also important to mention that Market Match- Up as a project is about women but it also integrates men to address gender social relations. Finally, the proposal includes details of the overall implementation plan of the project.

## 1.2 Literature Overview and theoretical background

### 1.2.1 Women in the Development Process

It has come to the realisation that in order to reach the levels of poverty reduction which are hoped for, there is a need to include women in development initiatives and empower them (Kabeer, 1999). Attention to gender inequality began in the 1970s with an increasing recognition that women’s interests, experiences and views are important and needed to be included in development, and this led to the development of the first gender approach of Women in Development (WID) (Willis, 2005)). This was first noticed in the agricultural sector after the realisation that women work extensively and were not being recognized for their input (Boserup, 1970). It was argued then that women were highly economically active, but did not get recognised for it, and that they had less control over assets than men (Beneria et al, 1981). It is now widely understood that women make up a significant proportion of the agricultural labour force (Boserup, 2013). WID initiatives focused on ‘women’s issues’ in isolation of men. Although they created awareness of gender inequality many projects were unsuccessful because they did not tackle the way gender roles were socially constructed and the constraints around women (Potter et al, 2012). These criticisms led to a second wave of development thinking; Women and Development (WAD), which analysed how development itself shaped inequalities in women’s work (Desai et al, 2008). Both of these approaches were nevertheless criticised for homogenising women despite their considerable heterogeneity in terms of age, class, status, etc, and for not addressing the unequal relations between men and women (Willis, 2005). Gender and Development (GAD) thus focuses on the relationships and social constructs around which women work, and also takes into account the diversity of women as a group (Momsen, 2004). It is particularly important in this study to note that women should not be homogenised as a group (Deere et al, 1982).

Despite these large steps at the theoretical level, a large need remains towards empowering women on a practical level.

### 1.2.2 Empowering Women

Empowerment can be defined as ‘the process of enhancing an individual’s or group’s capacity to make purposive choices to transform those choices into desired actions and outcomes' (Alsop et al, 2006: page 9). This term has become familiar within development discourse, where it is believed that interventions to improve agency and enhance opportunity structures can increase people’s ability to make effective choices, leading to better development outcomes (Alsop et al, 2006). It is suggested that women in particular are locked into cultural frameworks and structures in which they perceive their disempowerment to be right and proper (Kabeer, 1999). To combat this, there is a need to promote ‘psychological assets’ such as increased agency and empowerment in order to give women the capacity to make choices to change the way they live (Alsop et al, 2006). This proposal presents a conceptual framework which aims at increasing the agency of women through increased access to knowledge and a self-managed mechanism for market access.

### 1.2.3 Communication and Development

Media plays an important role in the development world today. Over the last 30 years there has been fierce debate over development approaches, yet the fact remains that communication is the essence of human society (Santucci, 2005). There are extensive frameworks which organise communication systems, many of which recognise that the process includes neurological, psychological and physical functions (Santucci, 2005).

With the global rise of ICTs, there is ample opportunity to take hold of this development, utilise the existing tools and use them in new ways.  One of these tools is the cell phone, which has been at the heart of exciting developments in the field of communication studies across the African content.  The growth of cell phone usage has meant that this technology has provided opportunities for many service sectors (Brown et al, 2003). The use of cell phones has proven to be successful in many developmental projects such as mobile banking (Brown et al, 2003), the Grameen Phone Lady Project (Richardson et al, 2000) and various other information extension services (Aker, 2006). It has been argued that communication has not catered for women’s particular needs (Doss et al, 2000). Hence, Market Match- Up uses a participatory design which allows the women to use this technology in way which suits them.

### 1.2.4 How social support networks affect the empowerment of its members

The existence of a social support network that empowers women amidst their involvement in a project has a strong effect on their empowerment and self- efficacy. With such support, women will be empowered to take their own decisions and to take full responsibility for their actions. The involvement and participation of women in such networks builds their social capital. According to Durlauf and Eafchamps (2004), social capital is the shared values of trust and behavioral norms among an informal group. It creates an infrastructure for its members with access to more resources, engagement opportunities and information (Woolcock & Narayan, 2000; Ostrom & Ahn, 2002). Also, social capital has a multiplying effect in which the whole community will increasingly get empowered as time passes by (Jansens, 2009).

According to the ILO (2012), an entity like a cooperative, especially a women-only cooperative, empowers women and gives them a feeling of solidarity and unity and this in return gives them the strength and stamina to overcome cultural constraints and also encourages them to take actions they wouldn't have taken otherwise. This includes taking initiatives to become entrepreneurs or to engage in farming activities or any other activity which is commonly dominated by men.

This is further stressed by Kabeer (1999) and Narayan (2005) that when women engage in collective efforts with others, it gives them self-confidence, independence, a strong voice and ability to make life decisions, to make choices and to question cultural norms and gender structures. Schein (2003) has also found similar positive results on women’s self-confidence a result of joining micro-credit groups in Nicaragua.

Another example is mentioned by Karl (1995) about a case study of women cooperatives in Zimbabwe. This cooperative started as a knitting and sewing group but later on changed its activity to become the Zvichanaka farmer’s group. This farmer group is a very rich example as it reflects the importance of involvement of the local communities in decision making, as the women were able to change their main activity when they felt that agriculture would result in higher gains. In addition to that, Karl (1995) further states that the women had become more confident in their abilities and contributions to the household. Over time, they became more empowered and were able to approach the men and share part of the household responsibilities; therefore the women's position has changed to become partners to men within the household. Similarly, Market Match- Up will provide a mechanism for collective action which would contribute to female empowerment by providing a market network to increase access to relevant information.

### 1.2.5 Women in Agriculture

Although women produce between 60% and 80% of rural food in developing countries (FAO, 2009), they have less access to the market (Croppenstedt et al, 2012). By actively including women in development agendas, it will not only empower women but also has potential to improve overall economic produce (ibid). Women’s lower access to resources explains their low participation in commercial or export agricultural production, which in turn limits their ability to accumulate resources (Croppenstedt et al, 2012). Although women provide most of the labour in agriculture (Boserup, 2013), they are also generally more affiliated with food crops rather than cash crops, which tend to be subsistence crops as opposed to income generating crops (Quisumbing et al, 1995). All of these points reinforce the fact that women are marginalised and less empowered than men in the agricultural sector and market chain.

A way to empower women is through access to credit in order to allow them to hold more power over the decision making, as well as have more control over the finances of a household (Cheston et al, 2002). Although women’s access to credit has increased substantially over the last ten yen years through projects which specifically target women (D’espallier et al, 2011), their ability to access credit and micro finance services remains constrained by gender differences, including the fact that women generally suffer greater poverty as well as the inability of women’s businesses to absorb capital (Cheston et al, 2002). These limits suggest a broader social discrimination against women. Whilst micro finance has the potential to transform power relations and empower the poor (Cheston et al, 2002), there is a component missing within this framework.

Women are also less likely to have access to human capital, technologies and extension and other agricultural information outreach (Croppenstedt et al, 2012). Although these access problems are vast, this proposal aims to deal with the problem which women face in agricultural information outreach. Although agricultural extension and information outreach have been emphasized as a crucial part in agricultural development, poverty reduction and food security (Feder et al, 2011; Swanson et al, 2010; Davis, 2008), Ragasa (2012) suggests that there is little study which systematically addresses the access to these services in a gendered fashion. It has also been suggested that male headed households are more likely to have access to services than female headed households. Female farmers are less likely to get extension services through various channels, as well as being less likely to receive access to quality data than their male counterparts (Ragasa, 2012). However, differences between men and women in technology adoption have been highlighted (Ragasa, 2012). It is suggested that there is a need to reach both men and women in quality agricultural extension, but more importantly to stop the persistent bias against women and close the gender gap by creating initiatives which allow women to access agricultural information to improve their knowledge, productivity, social capital, income and thereby their life chances.

### 1.2.6 Information Asymmetry and Access Asymmetry Agriculture Markets

For the realms of this proposal, it is important to understand the issues which women face with access to markets in depth. This is said to be one of the main problems hindering development and improvement of livelihoods in agriculture in the developing countries (IFAD, 2003). This has been described as information asymmetry.

Information asymmetry in rural agriculture markets relates to buyer and seller awareness of produce prices. Normally the buyers have more accurate information about the current prices of the produce while the sellers have inaccurate price information (IFAD, 2003; Mitra et al, 2013). The price known by the sellers is normally lower than the actual prevailing price in urban or international markets of a given product. This is because change in prices is not quickly transmitted through to the farmers in the villages (although international price changes are reflected in national-international level transactions in good time) (Fafchamps and Hill, 2008). Lack of familiarity with the upstream market channels and accurate price information thus puts the poor rural farmers in a disadvantaged position in negotiations with more economically powerful and informed middlemen/women or market intermediaries who buy their produce in the villages (IFAD, 2003). This is strongly linked to the limited access of women to credit and land (Croppenstedt et al, 2012; Quisumbing et al, 1995) which was previously mentioned as access to market information is another form of the marginalisation of women.

As such the market intermediaries use their advantaged position in the market information asymmetry to exploit the farmers and extract large margins from agricultural produce at the expense of farmers. For example, a study among potato farmers in India has shown that middlemen can cream off net profits of between 50-60% and sometimes 100% of the actual price a farmer was given (Mitray et al, 2013). Thus, the problem of poor market access has been seen as one of information. And in this regard Jensen’s (2007) study among fishermen in India has found positive results on livelihood returns as a result of price/market information provision. Nakasone (2013) also has similar findings on selected crops in Peru.

However, Mitray et al (2013) argue, the positive impact of information on farmer prices occurs where farmers have more options; transactional costs to other buyers are low and are able to sell directly to wholesaler or to the final consumers. In the case of Sub Saharan Africa, it has been noted that although market liberalisation has opened up trade in agriculture produce, transaction costs (such as transportation, storage and poor roads) remain an obstacle to produce trade (Fafchamps and Hill, 2005; Alene et al, 2008). Indeed, it is noted that liberalisation has had a negative impact on the cost of trade due to the breakdown of producer cooperatives, a vastly important trading mechanism which is yet to be fully replaced (Fafchamps and Hill, 2005). Thus, under these circumstances, information alone cannot make a difference to farmer’s prices. That is why this proposal not only works on providing information, but also encompasses empowering women in order to challenge social norms, increasing social capacity of women thereby enlarging their safety nets and enhancing their skills and knowledge.

Mitray et al’s (2013) experimental study among potato farmers in West Bengal (India) reveals that provision of price and market information does not affect the prices or bargaining power of farmers. Another experimental study on the impact of providing farmers with information on price, weather, advisory services for value addition etc to farmers using an SMS based system by Fafchamps and Minten (2012) in Maharashtra (India) also found a positive but negligible and sometimes a negative impact of possession of price information and no incentive for value addition on crops. Both studies note the mediating impact of transactional costs but Mitray et al (2013:33) highlight another important issue stating that: ‘[w]hile farmers have the opportunity to sell to multiple traders within the village, tacit collusion amongst these traders limits intra-village competition’. This means that although farmers have information on higher prices, the available buyers in the village are offering the same price.

However, the role of middlemen/women is currently the subject of debate. Chamberlin and Jayne (2012) and Sitko and Jayne, (2014) for example argue that middlemen/women play an important role of providing remote farmers with a market mechanism, involving a diversity of actors, which is filling the gap left by the collapsed produce marketing boards during the market liberalisation reforms of the 1980s/90s. They thus argue for strategy which aims to harness the potential for market expansion provided by middlemen/women. But as the insight of Mitray et al (2013) shows; the issue of agriculture markets is more than the availability of efficient markets but also the issue of buyer collusion. Overall, there is a general consensus that one of the main problems of market access is the transactional barriers.

In view of the all the above, we believe that information on prices and other market dynamics is important, as the information asymmetry thesis posits. However, the mediating barriers posed by transactional costs require a mechanism that enables farmers to bypass middlemen and link them directly with urban and other rural buyers. Having information on urban markets for a rural farmer when they do not know how to begin or where to start from in an urban or alternative market place is not helpful. That is why we are proposing a market linkage mechanism empowers women to ‘action’ the market information by being able to sell to the best buyer.

# 3. Implementation Plan

## 3.1 General project description

The project will provide a mobile phone based communication platform linking women from different rural communities in the target project area into a single market chain network with urban buyers. The aim is to connect rural smallholder women in different communities to form a block of organised suppliers. By pooling their stock, they will increase their bargaining power and attract better buyers. And to put power, tools and decision-making in the hands of women, the project will be run by a trained team of local women project participants.

The linkage will be built around the Frontline SMS systems. This will enable the women farmers to provide information about the stocks they have, and farm produce buyers to provide stock purchase requirements (which crop, quantity and price offer). The system will then match up the two. Because the farmers are smallholder, they will be marketing in groups; as such the system will aggregate the different stocks on offer from different communities and notify and link the concerned farmers to pool and supply together in one bulk. Each farmer gets paid according to the quantity they contributed. On the other hand, women farmers will also use the system in the same way to make farm input requirements. The system will then aggregate the input requirements and the Network Facilitator will procure for them in bulk at lower rates and from reliable suppliers. This will solve farmers’ problems of costly and poor/adulterated productivity-enhancing inputs (Krausova and Banful, 2010).

But information matching alone is not enough. Market Match-Up’s unique approach is that it provides scope for the Network Facilitator to coordinate with urban buyers to smooth out negotiations such that the poor rural farmers only pool their produced and send it with on track with trusted members to effect payments which are to be done via mobile money to each group member to avoid fraud.

The project will also have a component of capacity building. This will involve supporting women with pre-season planning, simple farm business management e.g. record keeping and profit calculations. Key in capacity building will be quality assurance. The success of the project will rely on having committed buyers offering good prices and this will depend on maintaining the reputation for quality supplies. There will be agreed quality standard across all project groups and each group of farmers will have a mobiliser whose role will include monitoring and enforcing quality standards. There will also be in-group agreed sanctions against poor quality standards.

## 3.2 Project objectives

1. Create a mobiles phone-based market link platform benefiting and managed by women farmers that overcomes market access barriers by connecting them buyers of produce and sellers of inputs
2. Create of a social and market support network to empower women through collective action aided by communication technology.
3. Empowerment and increase the self-efficacy of women through provision of trainings on agriculture business and market linkage management

## 3.3 Target group, scope and ideal location

The market chain platform will target women residing in rural areas and who are part of the agricultural production sector. Specifically, the project targets are mainly middle and low income rural women but who are active and productively engaged in the crops that will be selected. Although the project will mainly target women, it will allow men to participate but only as users/beneficiaries under women’s management; this is to avoid any male attempts of taking over the system. This is aimed at addressing the social relations that engender gender inequality[[1]](#footnote-1).

Before opening to all groups, the project will initially target areas which are producing large quantities of agricultural produce, to test the feasibility of the project. It will also target women who have the potential and capacity to make the maximum use of the platform and its services. This will be determined by preliminary research on women previous seasonal production. Once this project is established, it can then expand to more marginalized areas by building on initial successes and lessons learnt.

The project will initially be piloted on a limited scope, targeting one or two districts. It will start with two crops and between 8-15 farmer groups. It is ideal for rural and highly agricultural setting such as Sub Saharan Africa.

## 3.4 SMS System Description

The market chain platform is based on the usage of SMS, through a software called *Front Line SMS* (2014). Front line SMS is free and easy to use, with no need for internet access. It allows users to reach over 3 billion people with phone access at the same time; it has been successful among development projects and has been downloaded over 100,000 times.

To use the software, the network facilitator will need a computer, modem and any type of mobile phone. This software could also be used through the usage of internet; however, Market Match-Up platform will focus on using SMS to avoid marginalizing rural communities with rare internet access. This software also offers users a data collection and translation option; this would give users the option to use the software in the languages and dialects of the local communities (Frontline SMS, 2014).

With the market chain platform, members will be able to receive and send information of their demand and supply of agricultural produce or inquire about the prevailing market prices. This access to fast and cheap information will enable women to be active members of the market chain.

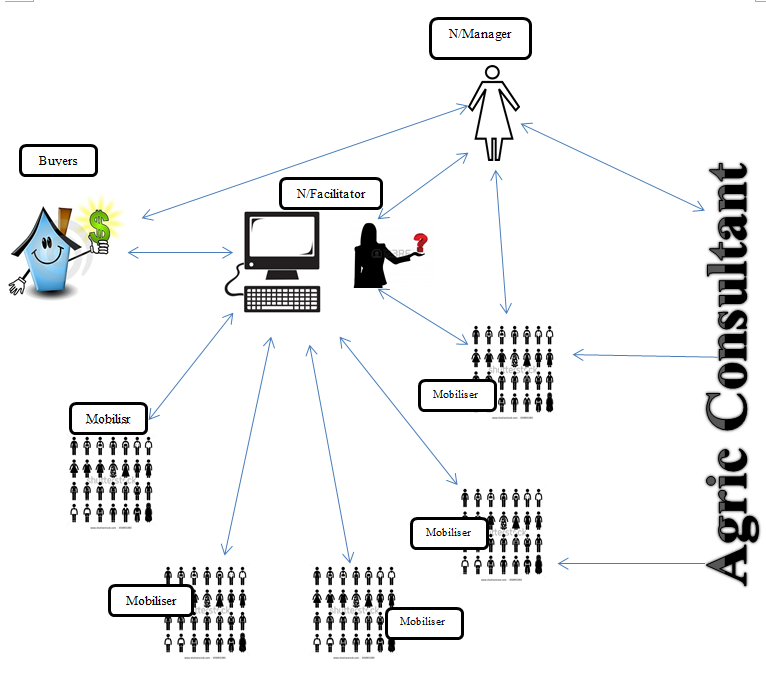
## 3.5 Project Management Team

As part of Market Match-Up’s women empowerment through putting power in their hands, the platform will, as much as possible, be managed entirely by women selected from among project participants from the local communities. Secondly, the model proposes a lean and less costly management structure. It will consist of the following:

* Network Manager: she will be in charge of the coordination of the project eg supervising the Network Facilitator, training and monitoring the Community Mobilisers, implementation of monthly activities and periodic monitoring and evaluation and acting as the external representative of the project.
* Network Facilitator: she will be the technical person in charge of managing the linkage platform, monitoring inbound/outbound SMSs, aggregating farmer inputs requests and produce stocks and coordinating pooling and bulk sale between farmers and buyers.
* Agricultural consultant and technical trainer: this will be out-sourced ad hoc on a needs-base to provide technical support to the network members mainly in areas of agronomy and quality assurance practices. Support given will depend on each community’s specific needs
* Community mobiliser: she will be the peer-leader for the women’s farmer groups participating in the project. She will be responsible for mobilising for meetings, periodic activity planning, quality monitoring, assisting members with SMSs system, coordinating pooling stock in the group and liaising with other Mobilisers also to pool and transport produce or procure inputs.
* Project participants: these will be the women farmers participating in the project through groups.

This is illustrated in Figure 1. This diagram also portrays the relationships between each team member.

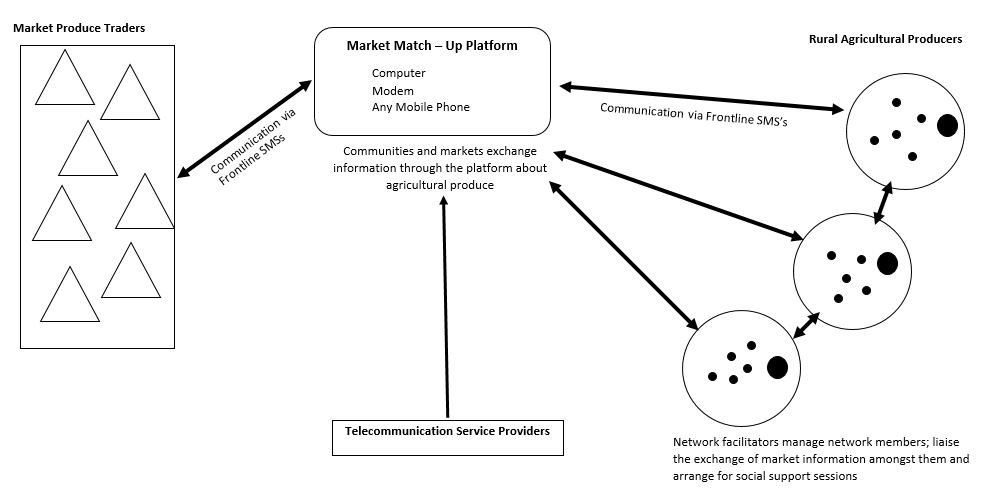
*Figure 1: Organogram of the Project Management Team*



## 3.6 Conceptual Framework

The following image (Figure 2) represents the Market Match- Up framework in a diagrammatic manner.

*Figure 2: Diagrammatical Framework of the Market Match- Up*



## 3.7 Detailed Implementation Plan

The following table (Table 1) shows the implementation plan of the Market Match- Up project. This gives an overview of the timeframe in which certain tasks should be carried out.

*Table 1: Implementation Plan*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Activity | Description, resources and responsibility | Output | Time frame |
| 1 | Organisational set up | Involves setting up the physical structure of the organisation including working space, the tools needed e.g. computers, office space where necessary and staff recruitment. It is necessary that staff should be recruited and involved to be part of the process right from the beginning. Other activities include:   * Negotiations with phone service provider * Installation of the system | The organisation is up and running | Month 1 -3 |
| 2 | Training and system trial | Training and orientation of the recruited staff; trialling the market linkage system. | Training and system trial report | Month 4 |
| 3 | Situation analysis and preliminary information gathering | This will be done by both the network facilitator and the senior network facilitator. The aim is to collect preliminary information on the most produced crops, most marketed crops, the marketing system, market players etc. It will involve observations and asking questions in a subtle way for example by engaging in casual conversations. Visiting marketing points etc.  Critically we need to know:   * What crops do women produce the most? * How do women participate in marketing their agricultural produce? * What challenges do they meet? * If not, why? * How best can women participate more effectively? * Which crop can work for women?   These same questions are also to be asked in the community consultation meetings.  NOTE: this activity must be timed to coincide with a marketing season so that information is collected on actual happenings. | Preliminary report on the marketing system | Month 5-7 |
| 4 | Introductory meeting with participating communities | This will be done by the network facilitator and the senior network facilitator. It will involve introducing the project and what is intended to be done in broad terms. The output should be a list of women who are interested in participating. | Familiarity with community including leaders, groups | Month 6-7 |
| 5 | Consultative meetings with network members (women and men), selection of target crops and village peer support persons | More detailed explanation of the project and how it is intended to work. It should serve as some sort of project appraisal. Discussion with participants (women and men) on how the design can best work for them to address the problem of agricultural market.  In these meetings there will also be collection of baseline data among the participants | Suggestions, ways forward, selected crops to work with, concerns, precautions, changes  Baseline data reports | Month 6-7 |
| 6 | Introduction and consultation with potential buyers | Introduction and consultation with the produce buyers may take a different form. They tend to operate in urban areas and it may be more feasible to talk to them individually. Since they also tend to be more tech savvy, when they agree to participate training on the use of the system may also be on an individual basis since it may take them a short learning period.  Critically we need to know:   * How buyers interact with women sellers * What challenges do they find with women sellers? * How can they best reach women sellers? | Developing a list of buyers to work with at the launch phase | Month 6-7 |
| 7 | Training of participants | * Training in production planning; this is necessary because the marketing system will work best if there is some form of planning ahead and foreseeing things. From our experience most rural farmers only begin looking for market only after harvesting. * This will also involve training in quality management and maintenance of the produce. * Training in collective marketing * Training in the use of Market Match-Up. Although training will be done for all the village participants, each group will choose a network facilitator (they may have to create criteria of who this will be e.g. approachable, trust worthy, tech savvy etc.) | Trained individuals to initiate network operations | Month 7-8 |
| 8 | Submission of produce to sell and purchase requests. | This will be the actual submission of information on the produce that participants are selling and the produce requests from buyers. For the initial season, farmers will be asked to predict ahead and try to submit information ahead of time basing on their prediction of harvesting, processing and packing of produce. | Information about produce for sale and request purchase | Month 9-12 |
| 9 | Monitoring and Evaluation | * Monitoring will be done on a monthly basis. The project staff will have a monthly meeting where they will plan monthly activities and targets. These will be adapted from the activities indicated in this schedule. The monthly monitoring will be based on the monthly activity work plan. However, flexibility will be needed in the management of the monthly activity planning. This is because the project model uses a participatory approach. Hence, it might differ from one network to another. Activities may change as a result of consultation or preference of the participants. * Evaluation and project review will be done after six months and after that annually. * Throughout the initial phases of the project, the monitoring will be more frequent than later stages. | Monthly and annual reports | Monitoring Monthly  Evaluation Annual |

## 3.8 Marketing

Market Match-Up will be promoted in the respective communities through a variety of marketing methods and channels. These will include;

* The Network Facilitator (with the support of other network staff members): the network facilitator will be hired with the necessary skills to promote the network. She will actively use different opportunities to promote the network for example in community meetings, other community gatherings such as group savings meetings in addition to door-to-door marketing.
* Local radio and any other affordable local media: the Network Facilitator will make regular appearances on local radio stations through talk show imitations or solicitation. She will also make use of other local media like community announcements loud hauliers to promote the network.

Use of bulk SMSs: the network will also advertise its services through sending SMSs to the local population using the Frontline SMS system.

## 3.9 Monitoring and Evaluation

As a new model for market access, it is emphasised that monitoring and evaluation should be a key part of the implementation process. Monitoring and evaluation is mainly to facilitate: (i) learning and quality management of the process where the process should provide ongoing lessons from the implementation on what works and what does not work. This can then be fed into decision making process to improve the system. (ii) It should also provide accountability to the stakeholders, especially the project beneficiaries and other users, and (iii) build enterprise planning capacity for project participants through periodic participatory monitoring and evaluation.

There will be monitoring of project progress, based on work plans developed for each monitoring period, which will be a month or a season as will be agreed between project management and female participants. These periodic work plans will be derived from the implementation activities schedule. The periodic work plan will have targets which will be used to assess the achievements of each monitoring period. The periodic work plan will be developed at the organisation level and then, with input from women participants, it will be reviewed, discussed and agreed to by all stakeholders. Each group/village will discuss and plan what they want to achieve for each period and with the support of the sub county liaison person develop a work plan accordingly. Planned activities must broadly be in line with the project objectives. Each activity will be allocated a responsible person(s), resources and assumptions for its achievement must be thought through consensus especially given that Market Matchup uses a participatory methodology. The use of a participatory methodology means that some planned activities may change due to changed priorities set by the project participants.

*Table 2: Table showing the monitoring method*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Activities per period | Concerns from last period | Output/outcome of each activity | Target | Comments and action needed |
| Activity 1 |  |  |  |  |
| Activity 2 |  |  |  |  |
| Activity 3 |  |  |  |  |

Evaluation will use a participatory approach, but will also use traditional evaluation methods including quantitative data collection. Achievement targets will be developed from the project objectives and represented on a table form. The targets will be developed at project management level and then discussed with participants guided by network facilitators.

*Table 3: Table Showing Evaluation Method*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Activity | Output/  outcome on each activity | Baseline | Target | Data source | Comments, action needed |
| Obj 1 | Activity 1 |  |  |  |  |  |
| Activity 2 |  |  |  |  |  |
| Activity 3 |  |  |  |  |  |
| Obj 2 | Activity 1 |  |  |  |  |  |
| Activity 2 |  |  |  |  |  |
| Activity 3 |  |  |  |  |  |
| Obj 3 | Activity 1 |  |  |  |  |  |
| Activity 2 |  |  |  |  |  |
| Activity 3 |  |  |  |  |  |

## 

## 3.10 Sustainability

The system will depend on a technology platform that is cheap i.e. a computer or laptop with a modem. There will be subscriptions from users (buyers and sellers). These user fees will be used to maintain this system. The rest of the operations will be organisational and among the farmers who have to come together and sell collectively in liaison with the buyers and transportation.

We recognise that service fees in rural settings are a problematic area, especially at the initial phase of the project implementation. However, recent research (Ozor et al, 2013) in Nigeria has shown that most farmers are willing to pay for extension services as long as it adds value to their enterprise. A study in Uganda by International Food Policy Research Institute (Ulimwengu and Sanyal, 2011) also shows that when farmers have access to produce market they are more willing to pay for services. All this shows that proven benefits make it possible for farmers to pay for services.

As such, because it will be a new system, it will be run on a promotional basis for free for one year. When the benefits are demonstrated, then users will be asked to pay a reasonable seasonal subscription fee after the promotional period. This will be made clear from the very start.

We believe once the system is up and running the need for project management will be minimal. At this level, only someone to manage the computer link will be necessary and this person can run the system and collect the fees for the system from members. The Market Match- Up senior network facilitator will still have a business interest in ensuring that groups remain organised and maintain the necessary quality standards of their produce, to ensure that they’re sold.

## 3.11 Risks and Mitigation

1) Product Quality and Network Reputation:

There is a risk that the project participants may provide farm produce which is below the expected quality. This could easily lead to failure because buyers would lose interest in purchasing through the system. To mitigate this risk the Market Matchup model includes training and capacity building on quality management and assurance through good harvesting, post-harvest handling and processing practices. These benchmarks will be enforced through peer monitoring. Peer monitoring is necessary to ensure that the network produces high quality products and hence buyers are encouraged to deal with the sellers of the network. The network members can collectively decide on a method to prevent members from offering poor quality produce. By this, the reputation of Market Match-Up will be maintained.

2) The Middle Men within in the Agricultural market chain:

By its very nature the Market Match-Up model could potentially work to eliminate the middlemen in rural agriculture marketing and this might lead to a frictional situation between the middle men and the women. As noted above, they have the capacity to collude and create repercussions against farmers. However, the system will be open to all participants. Even middlemen will be free to use the system if they feel they can benefit. But more strategically the aim of the Market Matchup system is to create a plurality of market options for farmers. As such, the aim is not eliminate any group of buyers.

# 4. Future Extension

This platform has potential for expansion and development in the future in the following area.

1. With the success of the project, future steps would involve introducing the option of voice notes (an audio message instead of an SMS text) in addition to the SMSs to cater for illiterate women.
2. The platform will also extend to offer its solution to non- agricultural sectors for example livelihoods such as crafts or other income earning ventures which can also be found in urban settings.
3. This project could extend to the involvement of the private sector; for example the network will approach large corporations to make use of our network of small farmers, in return this will encourage farmers to expand their farming venture to higher quality levels.

# 5. Conclusion

As can be seen, there is a need to address women’s lack of effective access to agri-food market chains. This proposal suggests an innovative way of combating this global problem, and has the potential for future developments especially within subsistence agriculture, as well as the flexibility to be utilised in different countries, in both rural and urban settings. By making the most of the rise in cell phone usage and IT services in developing countries, this proposal creates an initiative to help women has harness this potential. The proposal uses participatory methodology and puts the management and maintenance of the platform in the hands of women users. This increases self –efficacy and agency of the on independent decision making.

# References

Aker, J. and Mbiti, M., 2010 . Mobile Phones and Economic Development in Africa. *Centre for Global Development Working Paper 211.*

Aker, J., 2008. Does Digital Divide or Provide? The Impact of Cell Phones on Grain Markets in Niger. *BREAD Working Paper no. 177*.

Alene, D.A., Manyong, V.M., Omanya, G., Mignouna, H.D., Bokanga, M. and and Odhiambo, G., 2008. Smallholder market participation under transactions costs: maize supply and fertilizer demand in Kenya. *Food Policy* 33, pp. 318–328.

Alsop, R., Bertelsen, M. and Holland, J., 2006. *Empowerment in Practice: From Analysis to Implementation*. USA, The World Bank.

Beneria, L. and Sen, G., 1981. Accumulation, Reproduction, and ‘Women’s Role in Economic Development’: Boserup Revisited. *Signs: Journal of Women in Culture and Society*, 7 (2) pp. 279- 298.

Boserup, 2013. *Women’s Role in Economic Development*. UK: Earthscan.

Boserup, E., 1970. *Women’s Role in Economic Development*. London: George Allen & Unwin.

Brown, I., Cajee, Z., Davies, D. and Stoebel, S., 2003. Cell Phone Banking: Predictors of Adoption in South Africa – An Exploratory Study. *International Journal of Information Management*, 23 (5) pp. 381- 394.

Chamberlin, J and Jayne, T.S., 2012. Unpacking the meaning of ‘market access’: evidence from rural Kenya. *World Development*, 41, pp. 245–264.

Cheston, S. and Kuhn, L., 2002. Empowering Women Through Microfinance. Opportunity International [online] Available at : < <http://storage.globalcitizen.net/data/topic/knowledge/uploads/201101311419705.pdf> > [Accessed on 30 March 2014].

Croppenstedt, A., Goldstein, M. and Rosas, N., 2012. Gender and Agriculture: Inefficiencies, Segregation, and Low Productivity Traps. *Policy Research Working Paper 6370*.

Davis, K. 2008. Extension in Sub-Saharan Africa: Overview and Assessment of Past and Current Models, and Future Prospects. *Journal of International Agricultural Education and Extension* 15 (3): 15–28.

Deane, J., 2005. Media, Democracy and the public sphere. In: Tufte, T. & Hemer, O. (eds) *Media and Global Change*. Goteborg: Nordicom.

Deere, C. and Leon de Leal, M., 1982. Women in Andean Agriculture: Peasant Production and Rural Wage Employment in Columbia and Peru. *Women, Work and Development*, 4.

Desai, V. and Potter, R. (Eds) 2008. *The Companion to Development Studies* (2nd Ed). Great Britain: Hodder Education.

Dol, J., Odame, H., 2013. Stitching toward empowerment: A case study of Tabiro Ladies' Club. *Journal of co-operative organization and management*, 1(2), pp. 70-80.

Durlauf, S., Fafchamps, M., 2004. Social capital. *NBER Working Paper 10485*. Cambridge, MA: NBER.

Fafchamps M. and Hill, R., 2008. Price Transmission and trader entry in domestic commodity markets. *Economic Development and Cultural Change*, 56(4), pp.724-766.

Fafchamps, M and Hill, V.R., 2005. Selling at the farmgate or travelling to market. *Amer. J. Agr. Econ.* 87(3) (August) pp. 717–734

Fafchamps, M and Minten, B., 2012. Impact of SMS-based agricultural information on Indian farmers. *The World Bank Economic Review*, Feb 2012.

Feder, G., Birner, R., and J. Anderson. 2011. The private sector’s role in agricultural extension systems: potential and limitations. *Journal of Agribusiness in Developing and Emerging Economies* 1 (1): 31–54.

IFAD., 2003. Promoting market access for the rural poor in order to achieve the millennium development goals. *Roundtable discussion paper for the twenty-fifth anniversary session of IFAD’s governing council.*

Frontline SMS, 2014. Frontline SMS. [Website] Available at < <http://www.frontlinesms.com/>>

Accessed 15 April 2014.

International Labor Organization (ILO), 2012,. *Empower rural women – End poverty and hunger: The potential of African cooperatives.* Retrieved from [http://www.ilo.org/public/english/employment/ent/coop/africa/download/coopafrica\_leafle- t\_iwd2012.pdf](http://www.ilo.org/public/english/employment/ent/coop/africa/download/coopafrica_leafle-%20t_iwd2012.pdf).

Janssens, W., 2009. Women's empowerment and the creation of social capital in Indian villages. *World Development.* Vol 38, No. 7, pp. 974–988.

Kabeer, N., 1999. Resources, Agencies, Achievements: Reflections on Measurements of Womens Empowerment. *Development and Change*, 30 pp 435 – 464.

Kabeer, N., 1999. *The conditions and consequences of choice: Reflections on the measurement of women’s empowerment.* UNRISD Discussion Paper No. 108. Switzerland: United Nations Research Institute for Social Development.

Karl, M., 1995. *Women and development: Participation and decision making*. London: Zed Books.

Kaul, V., 2011. Globalisation and Media. *Journal of Mass communication Journalism*, 1 (105).

Krausova, M and Banful, A.B (2010) Overview of the agricultural input sector in Ghana. IFPRI Discussion Paper 01024

Manyozo, L., 2012. *Media, Communication and Development*. London, Sage

Mitray, S., Mookherjeez, D., Toreroxand, M. and Visaria, S., 2013. *Asymmetric information and middleman margins: an experiment with West Bengal potato farmers*. IFPRI/ICG(LSE), Washington.

Nakasone, E., 2013. The role of price information in agricultural markets: experimental evidence from rural Peru. IFPRI, Washington (upcoming)

Narayan, D. (Ed.)., 2005. *Measuring empowerment: Cross-disciplinary perspectives*. Washington, DC: World Bank.

Ostrom, E., Ahn, T., 2002. *A social science perspective on social capital: Social capital and collective action.* In E. Ostrom, et al. (Eds.),Social capital: Conceptual exploration (pp. 8–56). Exeter: University of Exeter.

Ozor, N., Garforth, C. and Madukwe, M., 2013. Farmers’ willingness to pay for agricultural extension service: evidence from Nigeria. *J. Int. Dev.* 25(2013), pp.382–392

Potter, R., Conway, D., Evans, R. and Lloyd- Evans, S., 2012. *Key Concepts in Development Geography.* Sage Publications, London.

Quisumbing, A., Brown, L., Feldstien, H., Haddad, L. and Pena, C., 1995. Women: The Key to Food Security. Washington DC, Food Policy Report: The International Food Policy Research Institute.

Ragasa, C., Berhane, G., Tadesse, F. and Taffesse, A., 2012. Gender Differences in Access to Extension Services and Agricultural Productivity. *Etheopia Stratgey Support Program 11, Working Paper 46.* [pdf] Availiable at <http://www.ifpri.org/sites/default/files/publications/esspwp49.pdf> [Accessed 8 April 2014].

Richardson Don, Ricardo Ramirez, and Moinul Haq. 2000. “Grameen Telecom’s Village

Phone Program in Rural Bangladesh: A Multi-Media Case Study.” TeleCommons Development Group. URL: <http://www.telecommons.com/villagephone/index.html>

Doss, C. and Morris, M., 2000. How Does Gender Affect the Adoption of Agricultural Innovations? *Agricultural Economics*, 25 (1) pp. 27- 39.

Schein, V., 2003. The functions of work-related group participation for poor women in developing countries: An exploratory look. *Psychology and Developing Societies*, 15(2), pp. 123–142.

See D’espallier, B., Gue´rin, I. and Mersland, R., 2011. Women and repayment in microfinance: a global analysis. *World Development*, 39(5), pp. 758–772

Sitko, J. and Jayne, T., 2014. Exploitative Briefcase Businessmen, Parasites, and Other Myths and Legends: Assembly Traders and the Performance of Maize Markets in Eastern and Southern Africa. *World Development*, 54(2014), pp. 56–67.

Steinmueller, W., 2001. ICTs and the Possibilities for Leapfrogging by Developing Countries. *International Labour Review*, 140 (2) pp. 193 – 2010.

Swanson, B., and R. Rajalahti. 2010. Strengthening Agricultural Extension and Advisory Systems: Procedures for Assessing, Transforming, and Evaluating Extension Systems. *Agriculture and Rural Development Discussion Paper 45*. Washington, DC: World Bank.

Ulimwengu, J. and Sanyal, P., 2011. Joint estimation of farmers’ stated willingness to pay for agricultural services. *IFPRI Discussion Paper* 01070, March 2011

Willis, K., 2005. *Theories and Practices of Development* (2nd ed). Oxen: Routledge.

Woolcock, M., Narayan, D., 2000. Social capital: Implications for development theory, research and policy. *World Bank Research Observer*, 15(2), pp. 225–249.

1. As noted in the literature, gender inequality emanates from social relations between men and women therefore these is a need to address both sexes. Allowing men to participate and benefit from this platform, we hope than women will involve their male counterparts in the system, and men will feel that they can allow their wives to participate in something which benefits them both. This will allow the project to contribute to changing men’s perceptions of women’s gender norms. [↑](#footnote-ref-1)