



Making Markets Work for the Poor (M4P) Approach and Smallholder Irrigation Farming

Solomon Mutambara*, Michael Bernard Kwesi Darkoh and Athhopheng JR

Department of Environmental Science, University of Botswana, Private Bag 0022, Gaborone, Botswana

Abstract

The aim of this article is to show what M4P is, how it came into being and how it has been used to guide intervention in different context and to weigh the extent to which it can be used to guide the study and interventions aimed at enhancing the sustainability of smallholder irrigation schemes. M4P is a holistic approach to development that offers agencies the route needed to achieve systemic and sustainable change, focusing on the identification and addressing of fundamental constraints that inhibit the beneficial participation of the poor in market systems as either consumers or producers. M4P historically evolved from diverse experiences in business promotion, private-sector policy development, the SL approach and the failure of economic structural adjustment programs and trade liberalization as development approaches to development and poverty eradication. This diverse background made it holistic and multi-dimensional. The M4P conceptualises market systems as consisting of core markets, supporting functions, and a set of rules. The smallholder farmers, as potential markets for different value chains are not well understood, hence the need to invest into an M4P guided holistic and multi-disciplinary research to identify the factors that prevent markets from working for the smallholder irrigation farmers in Zimbabwe.

Keywords: M4P; Sustainability; Systemic change; Collaboration; Market system

Introduction

This paper seeks to define Market for the Poor approach (M4P) popularly called Making Markets Work for the Poor (MMW4P) and how it can be applied to guide interventions and the study of smallholder irrigation schemes.

Definition of M4P

M4P is an all-encompassing means to development that offers development agencies with the route needed to achieve extensive and sustainable change, focusing on the fundamental constraints that inhibit the sustainable development of market systems for the poor people in different contexts [1-3]. The poor can participate in these markets as consumers, employees, producers or entrepreneurs and M4P strives to improve their outcomes in these roles [2,4]. It aids the analyses of the poor in different market systems and provides guidance to bring systemic change for their betterment [3]. The approach emphasizes the participation of the private sector to reinforce the strengths of market systems [1,5]. In the context of smallholder irrigation schemes, the MMW4P seeks to understand how an intervention such as the establishment or rehabilitation of smallholder irrigation schemes sits within a business context [6]. In this way, M4P is worried about how to meet the poor's needs through the use of market systems and how to effectively involve the private sector through market ways that bring about long lasting outcomes to smallholder irrigation farmers [2,7]. Markets are capable of helping the poor out of their poverty but often do not due to complex reasons, and the task of M4P is to understand this complexity [6,8]. The process of understanding the complexity involves recognizing and addressing the obstructions that inhibit markets from beneficially working for the poor.

Background of M4P

When markets work efficiently, they can be a means for coordination and exchange of resources for the lives of the poor and provide incentives for trade and investment [2]. Unfortunately, because markets may be too thin to sustain any meaningful business or risks and costs of participating in markets may be too high or due to social and economic barriers, the poor may be excluded from

markets [2]. In recognition of the fact that market outcomes may not be pro-poor, many NGOs and Governments have sought to intervene in markets—providing the goods and services themselves, leading to market distortion and crowding-out of the private sector in the process [2]. This strategy summarizes the Zimbabwean Government role in the market between 1980 and the early 1990s when farming and almost every public goods were heavily subsidized. But because of limited resources for Governments and donors, these direct interventions either generated intermittent and unsustainable supplies or have failed to meet the needs of the poor and at times the supplies becomes a form of patronage [2]. Consequently, 'the Washington consensus' emerged in the 1980s and 1990s, based around macroeconomic privatization, deregulation, stabilization and liberalisation, contending that state should stand back to allow markets to work efficiently and to allow the private sector to grow [2]. In Zimbabwe, this took place in the early 1990s under the Economic Structural Adjustment Program (ESAP). This phase was obsessed by the belief that perfectly competitive efficient markets can generate economic growth and optimum resource allocation for poverty reduction.

However, two main caveats were noted from this neo-classical economics thinking. One, that perfect markets are hardly found in the real world – especially in less developed countries and secondly that efficient markets can co-exist with pervasive poverty, as equity issues may not be directly dealt with by markets [2]. Economic Structural adjustment in some African countries like Zimbabwe attest to the fact that the poor are always losers and need to be helped to take advantage of new opportunities, otherwise they will remain locked

*Corresponding author: Solomon Mutambara, Department of Environmental Science, University of Botswana, Private Bag 0022, Gaborone, Botswana, Tel: 267-355-0000; Fax: 267-395-6591; E-mail: muhwahwati@yahoo.com

Received December 30, 2014; Accepted January 23, 2015; Published January 26, 2015

Citation: Mutambara S, Darkoh MBK, Athhopheng JR (2015) Making Markets Work for the Poor (M4P) Approach and Smallholder Irrigation Farming. Irrigat Drainage Sys Eng 4: 130. doi:10.4172/2168-9768.1000130

Copyright: © 2015 Mutambara S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

in poverty traps [2]. The experience of economic transition in Asia, from centralized planning to market-based economic systems proved that the blind implementation of privatization, liberalization and deregulation, without balancing government action, active private sector participation and deliberate market development efforts, can lead to increased poverty and dramatic falls in Gross Domestic Products [8]. Tripp [9] revealed that trade liberalization and structural adjustment have caused most African governments to renounce their major roles in the provision of fertilizer which led to decline in fertilizer use, and depressed productivity, as it became more expensive and unaffordable to the farmers. Therefore, it was recognized that macroeconomic stabilization, and greater dependence on free markets, is not enough to accelerate private sector-led growth and effect wide spread poverty reduction or support processes of agricultural innovation [2,9]. Based on such poor experiences in market liberalization, many governments and other development agents sought approaches that stimulate pro-poor development outcomes through well-functioning markets. M4P came out to be such an ideal approach owing to its focus on the transformation of market structures to increase participation by the poor and the private sector for sustainable development [2,10,11]. The origin of M4P can be traced from the work of the New Institutional Economics (NIE) which queried the basis of the notion of “a perfectly competitive market”, considering that risks and transaction cost are incurred to acquire market information which is often incomplete, asymmetrical, and costly to use [2,5,8]. NIE believes that Institutions should be instrumental in reducing transaction costs and risks [2]. Therefore, the M4P framework combined a poverty analysis based on the Sustainable Livelihoods (SL) model with an analysis of markets based on intuitions from NIE. The SL model emphasized the importance of poor people’s access to natural, social physical, financial and human assets, and the outcomes from those assets [10-12]. Through exchange, markets offer opportunities to acquire new assets or to obtain better returns from assets [10,11]. The NIE analysis, on the other hand, highlights the importance of transactions costs and institutions in determining economic behavior and pro-poor market development [8]. Some M4P branded interventions that were implemented in Bangladesh and other countries, in different contexts, inspired the market for the poor thinking as contained in the document titled ‘Making Markets Work Better for the Poor’ produced by DFID in the year 2000 [2,4]. Reflecting on these findings, genuine donor support for community and agricultural development has changed from direct outright relief support, to individuals or communities, to support for the market development for the poor [2].

Therefore, M4P historically evolved from diverse experiences in business promotion and private-sector policy development and the SL approach. It was particularly enthused by the overall dissatisfaction with the experience of economic structural adjustment programs and trade liberalization as approaches to development and poverty eradication [2,8]. Its systemic connection to economic, institutional and social dimensions as well as its use of a broad range of tools and practices, including work on business services, local economic development, value-chains, support for producer groups and policy initiatives, makes it holistic and multi-dimensional [2].

Defining Features of M4P

The key defining features of M4P include its focus on market systems or systemic change, the importance it attaches to sustainability and wide-spread impact, the catalytic role for agencies in development programs and M4P’s all-embracing nature as a model within which numerous analytical tools can be used [1]. This section attempts to

explain the key distinctive features of the M4P approach.

Systemic change

All M4P branded interventions should be premised on a sound understanding of why market systems are not currently working for the poor, and a realistic vision of how they might work more effectively for the poor in the future [1,13]. M4P is based around the identification of underlying causes rather than the symptoms [8]. Some practical examples can help to distinguish between causes and symptoms. Low productivity level in smallholder irrigation schemes investment can be symptoms whose initial cause might be lack of access to relevant financial services [1]. The underlying cause for this could be lack of formal title to landholdings acting as major barrier to bank finance [1]. Therefore, an intervention or an assessment of the farming system that ignores the link between land tenure, access to credit and productivity may fail to address the underlying constraints or miss considerable information for smallholder irrigation schemes.

Leveraging scale and impact

M4P strives to bring economic growth and poverty reduction together by establishing interventions that increase the participation of the poor in markets and unleash large-scale change [4]. Interventions may be small in themselves, but should have a scope to leverage the resources, actions and expertise of the private sector to bring about systemic and extensive impact [1]. Development agencies are therefore, required to identify specific aspects of market systems that they wish to change to make them more pro-poor. By focusing on systems, M4P goes beyond individual communities, organisations and groups, to consider how the “wider system” can be improved to benefit many people on a ‘large scale’ [1]. The word ‘large-scale’, does not necessarily imply that the interventions has a national threshold but depend on the market system in question. In some situations market barriers can be addressed at a national level (for instance, through policy change) while international action may be needed in other circumstances. Change can also be effected at a more localized level (for example through facilitation of information dissemination to farmer in different value chains) [1].

Meaning and priority to sustainability

M4P defines sustainability as “the market system capability to ensure that relevant, differentiated goods and services continue to be offered to and consumed by the poor beyond the period of an intervention” [1]. It does not only consider the existing orientation of market functions and stakeholder but their future prospect of working well for the poor based on the interests/incentives and capabilities of market players [1]. The approach believes that meaningful development is more than delivering a once-off aid but making sustainable change. According to Tschumi and Hagan [1] the M4P’s approach to sustainability requires that development agencies be as concerned with the means by which final outcomes or benefits are achieved, as much as they are concerned by benefits or outcomes of an intervention themselves [1,8]. Sustainability in M4P is seen to be entwined with scaling-up and capacity to transform. Functioning market systems are never static but are embedded with dynamic capabilities in terms of both the capacity and the incentive to change [1]. Owing to its systemic focus; M4P has an inherent desire to develop capacity in market system as a sustainability measure to ensure that benefits will continue to flow beyond the life of an intervention [1]. The M4P approach to sustainability is also unique in that it requires that sustainability be streamlined into every aspect of M4P activities. For example, M4P recommends that

sustainability be embedded when designing interventions, conducting program baseline assessments, program implementation and the post implementation management [8]. A baseline market assessments can identify stakeholder that are performing and paying for different market function in an irrigation scheme, in keeping with it sustainability provisions, the M4P considers who will play such role and pay for them in the future [1,8]. If ongoing agronomic training and market information dissemination as components of an intervention are critical, M4P requires the implementer of the intervention to consider who will perform such critical functions and pay for them in the future or after the intervention [1].

Facilitatory role

M4P requires that development agencies play a catalytic role [13]. The approach believes agencies (Gvt, NGOs) should only enable genuine market players to effectively perform market functions and avoid performing market roles directly [8]. The argument being that NGOs, and government at times, have no legitimate long-term role within a market, as doing so can promote debilitating dependency [8]. M4P branded interventions, therefore, seek to effect systemic change by 'crowding-in' other credible stakeholders to improve the functioning of market systems for the benefit of the poor [13,14]. For the facilitation to be effective, the process needs to be self-regulating and transient to circumvent the danger of creating debilitating dependency and market distortions [13]. In keeping with the priority given to sustainability, the facilitators need to embrace the idea of collective agency, where the role of different players has to be considered [14]. This is particularly important for most Governments, where given their limited resources, it is critical for them to focus on their areas of strength and leave the rest to be done by other players [1]. However, under certain situations, it may not be possible for governments to play temporary roles. For example, in areas of research and development, regulation and information provision, states may have to 'wear different hats' and perform different roles'- one for facilitation and the other concerned with delivering functions within the market [1,2]. In keeping with the facilitatory role and the need to leverage on the strength of other players, M4P has a strategic commitment to crowding-in and Tschumi and Hagan [1] proposed that the following three guiding principles be considered as multiple stakeholders are roped in. One is the need to ensure that ownership lies with stakeholders with the wherewithal to continue performing the functions beyond the life of the intervention. Secondly that transactional relationship between the facilitators and other market players is premised on trade exchanges rather than free hand-outs or outright relief aid, for it to elicit commitment and ownership. Thirdly, that care be taken to ensure that market intervention be appropriately resourced to make a difference without displacing market mechanisms or requiring a tripling of development assistance [15].

Overarching framework for intervention strategy and assessment

As an overarching framework M4P, provides a holistic and multi-dimensional framework within which different tools and methodologies can be used to understand the poor within a market system, to ensure that the analysis process is deep enough to provide credible guidance for intervention [1,8]. The M4P approach uses systems analysis to diagnose and address the constraints that face poor in different markets [3]. M4P policy dialogues and research are aimed at aligning the opportunities and incentives markets offer to benefit the poor through shaping of program design, ascertaining sustainability prospects and guide program activities throughout life of the intervention.

Therefore, the approach requires that one be focused on gaining a deep understanding of the operations of a particular market system while keeping an informed awareness of other contextual issues like macro-economic performance, patterns of both local and international trade standards [8]. The way in which the poor participate in markets is also affected by socio-economic, cultural, political and non- market factors which should be combined any market analysis [2]. Therefore, any analysis of the position of the poor in market systems conducted in purely economic terms may miss considerable information.

Market system structure

The M4P conceptualizes market systems as consisting of core markets, supporting functions, and the formal and informal rules that affect how it works. As such, it analyses functions cultural and social norms, government organisation, private market actors and individuals, to understand how a system operates [3]. The core function provides a platform for the exchange of goods or services, whose functionality is influenced by formal and informal rules/ players (private and public), and a set of supporting functions. M4P regard this "multi-function, multiple player arrangement" as a market system [1]. The diagram below shows the structure of a market system in the eyes of M4P. The Figure 1 show that in any market system, there are three main sets of functions-core, rules and supporting functions and an attempt to explain these sets is made below. The Core represent the entire market systems of value chain goods and services are bought, processed and sold [8]. It aids the identification of outside influences of the intervention or market system and to show where the poor are in the market (whether they are producers, consumers or employee) as well as their level of participation in the market [3]. The functionality of markets is largely influenced by the strength of the rule -the formal and informal laws and norms and the mechanism of enforcing these rule within both the formal and the informal front [1]. In the institutional framework, the Government is usually the main actor in setting and enforcing the rules although the private sector, through membership association and trade/standards certifications is becoming more important and effective in this role [8]. Institutions are critical in creating conducive market environment and to show how different factor conspire to marginalize the poor, most developing countries that have highly regulated markets, the least favorable market environments and the highest risks and costs of conducting business [8]. Hence the need to ensure that institutions are smart to make markets work for the

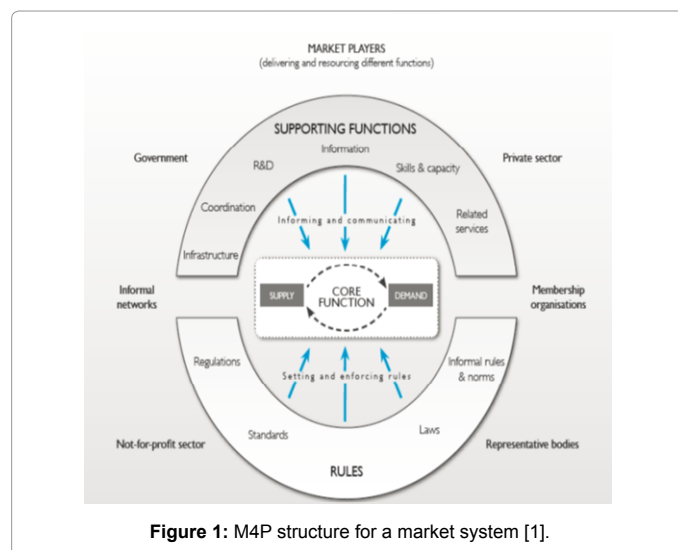


Figure 1: M4P structure for a market system [1].

poor. For the market to work, basic services and infrastructure need to be available and any M4P branded assessment and intervention need to show the service and service content available, the providers and the recipients of the service [1,8]. The service can either be free, fee based, embedded within products. Infrastructures include electricity, telephones, roads and water. These can be publicly or privately provided and M4P strives to show the extent to which these services are, or how they can be made to be, pro-poor [2,16].

Application of and experience with the M4P approach in different contexts

Markets are intricately linked and the performance of one market can impinge on another [1]. The actual cause of under-performance in one market may lie in another market. When identifying reasons for poor performance amongst the farmers and the market, M4P requires that this inter-linkage be recognized [8]. In an environment where there is effective land markets, farmers can use their pieces of land as collateral to access financial markets, other specialized business services like insurances and internal business protection may determine the manufacturing industry competitiveness, information flow through a well-functioning media market impact on almost every markets and improvements in telecommunication connect hitherto unconnected farmers the way to get update information about prices and different commodities in the market. Best practices were the M4P principle were successfully practiced are mainly drawn from Asia. Success in agricultural development interventions have been contingent upon farmers' level of organization, nature and level of collaboration in different value chains, ability by development agencies to assume a catalytic or facilitatory role, the ability to take advantage of and copying from changes in the Information Communication Technology (ICT) by market players, ability of the financial market to adapt to the needs of the poor and land tenure arrangements or land market.

Farmer organisations

It was realized that the market power of individual smallholder farmers is highly limited and that collective inputs procurement and selling of farm produce can increase farmers' influence and linkage potential in the market [5,17]. Compelling evidence in Vietnam and East Asia attest to the fact that individual community groups are usually too small to effectively negotiate relationships with different stakeholders and that farmers' clusters can give the 'critical mass' for individual farmers' groups to be effective [18]. The clusters were not only providing a platform for collective bargaining with both private (including input supply companies, trade associations and supermarkets) and public sector service providers but also offer the opportunity for weaker groups to be assisted by stronger ones [17,18]. Farmers' groups were also critical in strengthening individual farmers' ability to sustain flow of information between them and critical stakeholder like private companies, government organizations and local service providers [18]. This will facilitate development of existing knowledge and learning about new innovations. Better access to information and knowledge is particularly critical for smallholder communal farmers, where lack of access to appropriate information knowledge is a major barrier to high productivity and earnings [13,14]. For smallholder farmers to work effectively in contract farming arrangement with the private sector, they need to be organised. Such farmers' organizations represent their interests, coordinate logistics, and at times enter into contracts on behalf of the subscribing farmers. Vietnam has numerous such farmers groups that regularly supply supermarkets with different agricultural products [18]. What enabled these farmers' groups to work with these supermarkets was the combination of functions they

offered to their farmer such as inputs provision, collective marketing, quality control, credit supply and labeling of products to enhance their traceability [18]. The new discipline to be mastered by agencies should be coordination, integration and harmonization [4,17]. Globally, it is no longer individual companies that are competing against each other in global market but network of firm [4]. There is a growing realization that even the most proficient company cannot continue to be effective, if serious inefficiencies along the supply chain cannot be conquered [4]. For example, an efficient producer of canned tomatoes or chilly can be lost if farmers, he/she gets the supplies from cannot comply with traceability issues needed for food safety [18]. Hence, the need for agricultural interventions to focus on interrelationships between stakeholders within the whole value chain. Therefore, analysis of small-scale community irrigation schemes need to be done within the context of current agricultural markets as they are also undergoing fundamental change and such transformations making the smallholder farmers more marginalized. More agricultural products are being sold through supermarkets and this can present new challenges for smallholder farmers [14]. For them to deliver in supermarkets, the needed products in right quantities at the right time and place, the smallholder farmers need to be highly organized [2,14]. They need to satisfy the sorting, grading and packaging requirement of new markets and if smallholder farmers cannot provide this service, the middlemen, who usually pay them low prices, will move in to fill the gap, rendering their efforts unsustainable [14]. In Kenya, the major challenges facing smallholder irrigation farmers was not only shortage of water, market availability, instability and unpredictability but the middlemen who often rip them off by offering rock bottom prices, even when market consumer prices are favorable. There is also an increasing need for agricultural products to be fully traceable and more companies are asking for certification in order to satisfy either consumer needs or food safety standards [14]. Usually, small farmers can only be certified if they are well-organised and certified as a producer group [14]. This level of organisation does not on reduce transaction costs of certification but may provide the only opportunity for smallholder farmers to participate in high-value niche markets with potential to earn them considerably higher incomes for their crops [14,19].

Collaboration in value chains

Because the smallholder farmers are working within market systems where change is continuous, their capacity to respond, adapt and transform to market trends (dynamic capabilities) determines the sustainability of intervention activities, market systems outcomes and impacts for beneficiary farmers [20]. Such dynamic capabilities are enhanced by the ability of the farmers to collaborate with other critical stakeholders in different value chains of the interventions. Established input supply companies can collaborate with farmer based small agro dealers to improve the availability of inputs to smallholder farmers. In East Africa and several countries in Asia, Coca-Cola Sabco makes door to door daily deliveries to small shops in low income societies owned by local people [20]. Such an arrangement did not only allow the supplier to access accurate information about the consumer needs but also reduced transaction cost and risks on the part of the shop owners, boosting their sales and allowing their businesses to grow and succeed [20]. The same business model can be followed by players in input supply chains working through rural based agro- dealers in Zimbabwe. India has a number of companies that realized additional business opportunities by organizing the value chain of different crops end-to-end. For example, Jain Irrigation Systems is the world's largest manufacturer of irrigation systems is also a leading processor of vegetables and fruits [14]. Jain gets 60% of its onion supply from

smallholder farmers in India through contract framing arrangements and sees contract farming as the future of its processing business as the arrangement produce mutual benefits to both the company and the farmers [20]. For Jain, the advantages of this arrangement include the direct control it has on the supply of the product and the quality of the agricultural product to satisfy world food safety standards [14]. Farmers benefit from the availability of high-quality seeds, access to irrigation systems, fertilizers, input finance, agronomic guidance, and a guaranteed price that earned them an additional \$300-\$400 per acre compared with previous growing practices [20]. More so, the farmer's relationship with Jain, a reputable organisation, enabled them to obtain credit from commercial banks [20]. Another example in India is GlaxoSmithKline which found it economically viable to organize the whole milk value chain for its flagship brand Horlicks [20]. Nevertheless, the cost associated with organizing a value chain end-to-end usually goes beyond the capacity of one stakeholder. Consequently, a common method is for companies to collaborate with other players who will perform the tasks that they cannot perform themselves. Such collaborators may include companies in complementary lines of business. For instance, microfinance company and business development service provider BASIX works with ICICI Lombard to offer crop insurance to the potato farmers in India [20]. Some collaboration in the supply chains can be informal. For example, in Bangladesh, the maize market has been driven by high demand from the poultry feed manufacturing industry [1]. However the lead manufacturers were comfortable dealing with large-scale commercial farmers, excluding smallholder farmers and the landless from the maize market [1]. In practice, the smallholder farmers benefited from 'informal, patron-client-based relationships' where the large contracted farmers informally, sub-contracted smallholder farmers through various income and risk sharing mechanisms [1]. Although such arrangements were not sanctioned by the lead poultry feed manufacturers, they helped the poor farmers to participate directly in the market system [1]. The sustainability of the relationship between the large-scale and smallholder farmers is guaranteed by the mutual benefit that accrues to both parties.

Facilitatory Roles of Development Agencies

It was realized that in Bangladesh's the horticultural sector, where knowledge sharing with farmers hinged upon the skills and attitudes of agricultural input retailers, the sustainability of such an embedded service required an ongoing training and supervision [21]. Instead of offering the training itself to the retailers, an NGO, Katalyst partnered with Syngenta and East-West Seeds who not only expressed willingness to take long-term responsibility for the trainings but were also capable of performing the functions [1,21]. Catalyst partly subsidized the initial training, as a temporary measure to give them a chance to deduce the business logic of investing in training their own distributors [1,21]. In Bangladesh, one NGO called LEAF-SAAKTINGOs facilitated workshops between farmers' groups and vegetable traders association, to give smallholder farmers access to viable markets for quality vegetables in Dhaka [1]. Such arrangements also enabled farmers and traders to negotiate mutually beneficial economic relationships. For such NGOs, the key to sustainable linkages between the farmers and the buyers stemmed from not getting too heavily and directly involved in the supply chain and ensuring that ownership of all the market processes lied in the hands of credible market actors [21]. Bringing small holder irrigation communities in contact with stable, reliable markets will help farmers to boost their incomes and livelihoods [22]. Considering that the management of sustainability is a process aimed at increasing the flow of sustainable benefits [9,23] the presence of reliable

and viable markets is critical in the enhancement of sustainability of smallholder irrigation schemes. Donors or NGOs have been important players in the development of agriculture in Africa but donor funded short-term project interventions have not been able to give way to longer-term strategies. Especially, the critically needed support to institutions, to embolden local organisational innovations such as formal policies, regulations, informal rules and procedures [24]. There have been some cases where rural development projects have been untimely terminated due to misunderstandings between donors and the program implementers which culminated in the collapse of some community projects [25]. This persuaded Rukuni [26] to propose that public funds and donor funds for agricultural development should take a more catalytic route, to stimulate private investment by agribusinesses, farmers and finance institutions. These catalyst investment are likely to be more sustainable if the dynamics in the financial economy and the smallholder farmers are well understood rather than assumed, hence the need for a holistic approach to study sustainability challenges of community irrigation schemes.

The ICT market

Idea Cellular, one of the best telecom service providers in India's major success factors for its rapid growth has been its ability to infiltrate into India's extensive rural market, its advertisement in local languages and its collection of products and services tailored to meet the needs of rural poor consumers [20]. These products included low-cost handsets, low denominations air time vouchers, and SMS-based religious offerings [20]. Consequently, Idea appealed to the hearts of over 44 million people and over 700,000 retail outlets, 300,000 of which serving the poor [20]. This reform has allowed the telecommunication market to work effectively for the poor. Poor smallholder farmers that live in communities where there are mobile phone networks are enjoying improved access to relevant information like market prices for input and outputs database for suppliers and buyers as well as market trends [20]. For example, in Bangladesh, farmers are well served by several input suppliers who provide not only seeds and fertilizers but information and advice as well which translated into high productivity [8]. Conversely, in Rwanda, although agriculture is intensive, farmers' lack access to information on best practices, quality seeds and other inputs kept their productivity level very low [1,27]. Tschumi and Hagan [1] argued that although the dramatic penetration of telecommunication services into rural markets in different countries is 'a victory of technology', the actual lesson to learn is one changing role for Governments from a provider of public service telephone communication to a regulator of private wireless communication services. Following this telecommunication example, services such as water and electricity hitherto, the domain of government, are now being delivered by private companies in a number of countries [8]. In Latin America such reforms have resulted in improved water and electricity supply to the poor people [8].

Financial market

Evidence from many different contexts, attests to the criticality of financial markets for the communal smallholder farmers [20,28]. Findings from the World Bank [28] research suggest that some types of rural finance mechanism like cooperatives, mutual benefits societies and solidarity groups have appealed to a sizable clientele in Southeast Asia and that they have had a good loan recovery record. Conversely, in some Africa countries, financial repression and unsustainable approaches to rural finance and economic development have been exacerbated by political disturbances [24]. In Indonesia, farmers with access to credit facilities had 3 times more than their counterpart that had no access to

loans. Poor farmers in Bangladesh took advantage of financial services in their communities to accumulate savings to enhance their resilience to natural disasters like droughts, floods and cyclones [29]. Jenkins and Ishikawa [20], drawing examples from Bangladesh, demonstrated that innovatively created financial products tailored to meet the need of the poor helped to break the long standing belief that the business with the poor people is not viable [20]. State owned banks in Bangladesh at one point categorized the poor communal farmers as unbankable after suffering very low loan recovery rates despite heavy subsidies [30]. Mohammed Yunus, one businessman, through the Grameen Bank, transformed this perception when he organised the poor farmers into saving groups which helped to reduce transaction costs to very low levels while the group solidarity acted as collateral to reduce the risk of defaulting [20,30]. Such arrangement did not only help the poor to access loans but also alerted the players in the financial market of the promising market amongst the communal poor farmers [20]. In India, ICICI bank worked with microfinance institution, cooperatives and self-help groups to promote financial inclusion for the poor farmers through access to credit crop insurance, market linkages and training [1,20]. This budding of services allowed farmers to secure cross scalar guarantees for other services whereby farmers' partnerships with reputable market players earned them a credibility status to partner with other service providers [31]. For example a contracted buyer of farm products makes the farmers bankable and credit worth, while the bank also need the service of the buyer to recover its loans from the farmers under stop order arrangement whereby the buyer would subtract repayment installments from the farmer's sales and transfer the money to the bank [20,30]. In Africa, Zimbabwe included, where most smallholder farmers are not eligible for the loans, financial institutions shun smallholder farmers because of the risks of poor repayment levels, lack of collateral and lack of trustworthiness on the part of the farmers, the financial market players can have something to learn from ICICI and Grameen Bank to tailor make their products to work effectively for the poor farmers [25,32]. Cloete [24] found that the introduction of well-designed and self-sustaining rural finance systems like village banks were highly successful in improving rural development in Indonesia and in the rural regions of China [24,33]. On the other hand, the traditional subsidized programs used by the South African government as a mechanism of finance to serve agricultural development in rural areas generally failed. Specifically most of the government's credit programs in the North West Province failed to yield the desired outcomes of getting farmers out of poverty [26,34] categorically stated that in Zimbabwe the financial markets for the smallholders and have not been given the attention it deserves, in terms of both research and what this category of farmers are getting from the financial markets. Rukuni [26] recommended that the Zimbabwean financial sector requires that breadth and depth to include micro-finance, commercial, merchant, investment and development banking, credit guarantee schemes, private equity funds, as well as social venture capital financing. Thirty years, after independence, most smallholder farmers in Zimbabwe still had no known record of borrowing from commercial banks or other financial institutions and the financial institution themselves have limited understanding of smallholder farmers as possible clients [26]. The resource-poor farmers have not been viewed as potential entrepreneurs, and therefore development investments have not been aimed at smallholder farmers in their role as customers of input markets, and suppliers of agricultural products [35-37]. Banks deal with large-scale formal businesses and in agriculture, they only serve large scale commercial farms, plantation entities and agri-business. This buttressed Perry's [19] argument that in the early post-independence years for most African countries,

lending was firmly rooted in colonial interest in the field of mining and commercial agriculture. The situation of rural communal farmers is further worsened by poor infrastructure. It is estimated that, around 15% of agricultural production in Sub Saharan Africa is lost before they reach the final consumers, due to poor storage facilities and to poor access roads [25,38,39]. The UNDP [40] assessment concluded that agricultural markets in Sub-Saharan Africa are plagued by failures and inefficiencies with the poor smallholder farmers, only gaining access to the markets at prohibitive expense, excluding them from transactions important for their livelihood enhancement [41]. In most East African countries, over 50% of the population lives over 5 hours from a market centre [40]. In Uganda, 30% of the communities had no access to 'all-weather' roads and two-thirds had no bus or taxi connections [42]. In Kenya underdeveloped rural roads have reduced farmers' competitiveness led to high transport costs for agricultural products to the market and farm inputs to the farmers [42]. In Ugandan coffee exports fell both in volume (8 per cent) and value (23 per cent or USD 10 million) in January 2009 (compared with January 2008), due to transport and storage problems [42]. Therefore infrastructural and logistical constraints can be grave impediments to trading and sustainable agricultural development for smallholder farmers.

The land market

In rural areas generally, the importance of accessing productive land for agricultural production cannot be overemphasized. In Vietnam and China and the poor farmers were unable to take title of land and therefore lacked the ownership and incentives necessary to invest and the laws guiding land use and ownership elicited huge leaps in agricultural growth [1,8]. In China, policy changes on land use which altered incentive structures of smallholder farmers by allowing individual farmers to keep surplus output motivated the communal farmers to produce more than was ever achieved, before the new land tenure arrangement [8]. The introduction of land use certificates in Vietnam, conferred smallholder farmers the right to rent, mortgage and inherit-allowing farmers to take de facto title to their land [8]. Such changes triggered rapid agricultural growth and major increases in agricultural input and productivity of at least 7% per annum in both countries [1]. Traditional land tenure in most African countries offer very limited incentives for agricultural investment especially for women who usually use the land. In Kenya, the institutionalization of customary land ownership into formal land titling system has further weakened women farmers' right to the land they farm, compromising their ability and motivation to raise capital to invest in the farms- resulting in low levels of productivity [20]. Attempts to revolutionize the land market within the context of African traditional land ownership have produced promising results which can be up-scaled in other countries. For example, in South Africa, adaptations of customary institutions of communal land into commercially inspired arrangements impelled a hitherto waning land rental market to rise from 4% of households to 25% within a 4-year period [1]. The new arrangement now allowed those with land but without the means to utilize the land, to rent pieces of land from those without the land but have the ability, interest and resources to farm resulting in huge improvements in farm efficiency, profitability and sustainability [1,43]. In smallholder irrigation schemes, it was discovered that their rehabilitation is more sustainable where farmers to undertake farming as a business yet a combination of the insecure land rights and other market challenges like poor liquidity in the market has compromised the business clutch in these entities [26,37]. In some countries, the land is the only valuable asset that the poor have. So, if the land tenure arrangements does not permit the smallholder farmers to use their land to secure some credit

from finance institutions, this arrangement denies the majority of them access to high yielding hybrid seeds, fertilizers, and other basic equipment for agriculture [26,42]. This will ultimately lead to low agricultural productivity and unsustainable agricultural practices. In Zimbabwe, the fast track land reform program has changed the land ownership structure to make the state as the sole owner of the land without private ownership by farmer [32,38]. Although the impact of such changes on the smallholder irrigation farmers still needs to be empirically established, what that might mean is that the only asset for the poor, the land, is valueless in the financial market and cannot facilitate any trade links.

Conclusions Recommendations

The aim of this article was to show what M4P is, how it come into being and how it has been used to guide intervention in different context and to weigh the extent to which it can be used to guide the study and interventions aimed at enhancing the sustainability of smallholder irrigation schemes. M4P is a holistic approach to development that offers agencies the route needed to achieve systemic and sustainable change, focusing on the identification and addressing of fundamental constraints that inhibit the beneficial participation of the poor in market systems as either consumers or producers. The approach encourages collective agency and emphasises the participation of the private sector to reinforce the strengths of market systems for sustainable poverty alleviation. M4P historically evolved from diverse experiences in business promotion, private-sector policy development, the SL approach and the failure of economic structural adjustment programs and trade liberalisation as development approaches to development and poverty eradication [2,8]. This diverse background gave it a holistic and multi-dimensional outlook [2]. What is unique about M4P include its focus on systemic change, the high priority and importance it attaches to sustainability and large scale impact, its desire for catalytic or facilitatory role for agencies in development programs and its overarching nature, as a model within which numerous analytical tools can be used. The M4P conceptualises market systems as consisting of core markets, supporting functions, and the formal and informal rules that affect how it works. The functionality of market system in the eyes of M4P is influenced by formal and informal rules/players (private and public), and a set of supporting functions to give it a multi-function, multiple player arrangement that is typical of multiple stakeholders involved in smallholder irrigation schemes. Best practices where the M4P principles were successfully practiced are mainly drawn from Asia. Success in agricultural development interventions have been contingent upon farmers' level of organisation, nature and level of collaboration in different value chains, ability by development agencies to assume a catalytic or facilitatory role, the ability to take advantage of and copying from changes in the Information Communication Technology (ICT) by market players, ability of the financial market to adapt to the needs of the poor and pro-poor land tenure arrangements. Experiences from countries where M4P branded intervention were implemented, in Asia, have revealed that markets are intricately linked and the performance of one market can impinge on another and the underlying cause of underperformance may lie in another market [1]. In a country where there is effective land markets, farmers were using their pieces of land as collateral to access financial markets and other specialized business services like insurances and internal business protection which in turn determined the competitiveness of the processing industry. Efficient information flow through a well-functioning media market impacted on almost every market while improvements in telecommunication helped to connect hitherto unconnected farmers to the means of getting updated information

about market prices and different commodities in the market. In Vietnam, it was realized that the market power of individual smallholder farmers is inherently weak while collective action by farmers increase farmers' influence and linkage potential in the market. Agricultural markets are undergoing fundamental transformations and this have intensified the need for farmers to be organised, especially to satisfy the traceability sorting, grading and packaging requirement of new markets. Markets are never static, and the poor farmers' dynamic capability, helps them to adapt to market shocks and trends. Such dynamic capabilities are enhanced by the ability of the farmers to collaborate with genuine market players that have the right incentive and capacity to participate in the value chain in question. Examples drawn from East Africa and several countries in Asia, where Coca-Cola Sabco partnered with small shops in poor communities to provide goods for the low income and in India where Jain irrigation Jain Irrigation Systems organised the value chain of different crop end to end, involving making contract farming arrangement with smallholder farmers show that such collaboration are sustainable where both parties or stakeholder derive some mutual benefits from the arrangement. Such experiences also attest to the fact that sustainability is enhanced by increasing collective agency and by the strategic engagement of credible players. The role played by NGO in Bangladesh in linking farmers to markets by bringing together farmers and their buyers to enhance farmer's access to lucrative markets and enhancing their collective bargaining power and the roping-in of Syngenta and East-West Seeds to provide training to the farmers beyond the intervention, demonstrated the need by development agencies to take a catalytic or facilitatory role in interventions. Such an approach averted market distortions and debilitating dependency that is usually associated with heavy and direct involvement in market processes by agencies. Developments in ICT in Asia, especially in the field of wireless telecommunication has not only improved farmers' access to relevant market information helping market to work effectively for them but have also demonstrated the power assuming a facilitatory role or of changing roles for Governments from a provider of public service telephone communication to a regulator of private wireless communication services. A similar approach was used in Latin America for the provision of water and electricity, and has translated into improved service delivery to the poor communities. While most financial institutions in Africa are still to understand and realize the market potential lying in their majority poor population, experiences in Asian countries like Bangladesh, India, Indonesia and China attest to the criticality of financial markets in alleviating poverty among the poor rural farmers. The rural finance mechanisms in the countries range from bank backed cooperatives, mutual benefits societies, solidarity saving groups to straight forward loans from banks, as financial institution strive to tailor make their financial products to the needs of the rural smallholder farmers. Farmers in these countries are enjoying buddled financial services and their link to such services in the financial market opens up more opportunities for them, as they give them a credible, creditworthy frontage. In Africa, where the smallholder farmers are still viewed as unviable and unbankable, introduction of well-designed and self-sustaining rural finance systems- with lessons from Asia, has the potential to transform smallholder farming into a vibrant business and to break failure cycle in most agricultural interventions. This will provide the needed incentives to maintain and establish the relevant infrastructures for different agricultural value chains. In Vietnam and China, changes in land titling to more pro-poor ownership system conferring the rural farmers the rights to rent, mortgage and inherit land (Vietnam) and a system allowing the farmers to keep surplus produce (China) triggered massive growth in

agricultural investment and productivity in these poor rural communities. Such experience challenges most African countries to ensure that the land that the poor own in conferred the value needed to access different financial services as collateral or as a tradable asset to maintain a sustainable business foothold. This will provide the necessary incentives for farmers and different stakeholders to sustainably invest in smallholder farming. The experiences from Asia where government made strides to reduce poverty level, challenges Africa to adopt some of the M4P branded development model in smallholder agriculture. Since there is overwhelming evidence that the smallholder as potential markets for different value chain are not well understood, there is need to invest into an M4P guided holistic and multi-disciplinary research to identify the underlying factor that prevent markets from working effectively for the communal smallholder farmers in Zimbabwe.

References

1. Tschumi P, Hagan H (2009) A synthesis of the Making Markets Work for the Poor (M4P) Approach, UK Department for International Development (DFID) and the Swiss Agency for Development and Cooperation (SDC).
2. Department of Foreign and International Development (2005) Making Market Systems Work Better for the Poor (M4P): An introduction to the concept, Discussion paper prepared for the ADB-DFID 'learning event. Manila, ADB Headquarters.
3. Dunn E C (2013) Individual Advanced Research Opportunities (IARO) Program. Final Research Report: Making Markets (Not) Work for the Poor: Market Ideology and Development Assistance in the Republic of Georgia, US Department of State's Title VIII Program, Washington DC.
4. Johnson A (2005) M4P week: Proceedings of a series of review and planning events held by Making Markets Work Better for the Poor (M4P) during the week 31 October to 4 November 2005, Asian Development Bank.
5. Matta NF, Ashkena RN (2003) Why good projects fail anyway. *Havard Business Review*.
6. World Economic Forum (2009) The Next Billions: Unleashing Business Potential in Untapped Markets. The Boston Consulting Group, Geneva.
7. Garrette B, Karnani A (2009) Challenges in Marketing Socially Useful Goods to the Poor, Working Paper No. 1135, Social Sciences Research Network, London.
8. Ferrand D, Gibson A, Scott H (2004) Making Markets Work for the Poor: An Objective and an Approach for Governments and Development Agencies. Woodmead, The ComMark Trust.
9. Tripp R (2003) The enabling environment for agricultural technology in sub-Saharan Africa and the potential role of donors: Natural Resource perspectives. The Overseas Development institute, London.
10. Osorio-Cortes LE (2009) Sustainable Livelihoods and Pro-Poor Market Development, Sustainable Livelihoods Highlights.
11. Osorio-Cortes LE (2011) Differences between SLA and Making Markets Work for the Poor: an optical illusion.
12. Scoones I (2005) The Sustainable Rural Livelihoods: A Framework for Analysis. Institute for Development Studies, University of Sussex, England.
13. Albu M, Schneider H (2008) Making Markets Work for Poor Comparing M4P and SLA frameworks: Complementarities, divergences and synergies. Bern, The Springfield Centre-Fauno consortium.
14. Heierli U (2013) Market Approaches that work for development, how the private sector can contribute to poverty reduction. Swiss Agency for Development and Cooperation, Berne.
15. Darkoh MBK (1998) The nature, causes and consequences of desertification in the drylands of Africa. *Land Degradation and Development* 9:1-20.
16. Rosen M (2012) Engineering and Sustainability: Attitudes and Actions, *Sustainability*, 5:372-386.
17. Markelova H, Meinzen-Dick R, Hellin J, Dohrn S (2009) Collective action for smallholder market access, *Food Policy*, 34:1-7.
18. Smith D (2005) M4P: Cross-cutting Issues in Agricultural Value Chains, M4P week 2005 Proceedings of a series of review and planning events held by Making Markets Work Better for the Poor. Asian Development Bank.
19. Perry E (1997) Low-cost irrigation technologies for food security in Sub-Saharan Africa FAO: Irrigation Technology Transfer in Support of Food Security, Rome.
20. Jenkins B, Ishikawa E (2009) Business Linkages: Enabling Access to Markets at the Base of the Pyramid, Report of a Roundtable Dialogue. Jaipur.
21. Employment and Income network (2010) The market development (M4P1) approach: Making Markets Work for the Poor: development of Rural Value Chains as a powerful approach to get results on the ground - From analysis to good practice in implementation. Springfield Centre for Business in development Ltd, London.
22. Ojo OD, Connaughton M, Kintomo AA, Olajide-Taiwo LO, Afolayan SO (2011) Assessment of irrigation systems for dry season vegetable production in urban and peri-urban zones of Ibadan and Lagos, South-western Nigeria. *African Journal of Agricultural Research* 6: 236-243.
23. Commonwealth of Australia (2000) Promoting Practical Sustainability, Common wealth Sydney.
24. Cloete P C (2013) Institutions and Agricultural Development: the case of the North West Province in South Africa, *African Journal of Agricultural Research* 8: 3495-3504.
25. Made J (2013) Financing Smallholder Farmers. Agricultural and Rural Development Authority, Harare.
26. Rukuni M (2013) Broadening and Deepening Rural Financial Services and Land Banking, Civic Action Support- Sokwanele Bulawayo.
27. Shah T, Keller J (2009) Micro-Irrigation and the Poor: A Marketing Challenge in Small-holder Irrigation Development. Agric marketing, Accra.
28. World Bank (2008) Mobilizing public-private partnerships to finance infrastructure amid crisis. World Bank, Washington DC.
29. Martin C, Tschumi P, Rahm A, Sahlen O (2011) M4P HUB Conference Proceedings, Developing Market Systems: Seizing the Opportunity for the Poor. Brighton, UK.
30. Polak P (2008) Out of Poverty: What Works When Traditional Approaches Fail. Out of Poverty, Berrett-Koehler Publishers, San Francisco.
31. Hamann R, Kambalame D, De Cleene S, Ndlovu N (2008) Towards collective business action and cross-sector collaboration in responsible competitiveness clusters in southern Africa, *Development Southern Africa* 25: 99-118.
32. Musemwa L, Mushunje A (2012) Land reform as a strategy of breaking the circles of poverty in former colonized states of developing countries: A review. *African Journal of Agricultural Research* 7: 4344-4351.
33. Kukenshoner C, Schenidt J, Chritiane Stroh de Martinez C (2012) Growing Business with Smallholders: A Guide to Inclusive Agribusiness, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)- Germany Federal Ministry of economic corporation and development, Berlin.
34. Belay T, Zewdie B, Abera G (2012) Role of action research in reducing farmers' livelihood vulnerability: A case of Gotu-Onema, central rift valley, Ethiopia, *Journal of Agricultural Extension and Rural Development* 4: 417-422.
35. Ofosu EA (2011) Sustainable Irrigation Development in the White Volta Sub-Basin, CRC Press, Balkema, Leiden.
36. Maliwichi LL, Oni SA, Obadire OS (2012) An investigation into the factors affecting food availability, choices and nutritional adequacy of smallholder farming households under irrigation and dryland farming in Vhembe district of Limpopo, province, South Africa. *African Journal of Agricultural Research* 7: 3653-3664.
37. Mwendera E, Chilonda P (2013) Conceptual framework for revitalisation of small-scale irrigation schemes in southern Africa. *Irrigation and drainage* 62: 208-220.
38. Nhundu K, Mushunje A (2010) Analysis of irrigation development post fast track land reform programme. A case study of Goromonzi district, Mashonaland East Province,. Cape Town: African Association of Agricultural Economists Zimbabwe.
39. TARU (1997) Market Potential for Affordable Micro-Irrigation Systems for Mulberry; TARU Research and Information Network, Bangalore.
40. UNDP (United Nations Development Program) (2012) Africa Human

- Development Report: Towards a Food Secure Future; United Nations Development Programme Regional Bureau for Africa (RBA), New York.
41. Shah T, van Koppen B, Merrey D, Lange M, Samad M (2002) Institutional alternatives in African smallholder irrigation: Lessons from international experience with irrigation management transfer. Research Report 60; International Water Management Institute, Colombo.
42. Salami A, Kamara A B, Brixiova Z (2010) Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities; African Development bank group, Working Paper No. 105, Avenue du Ghana.
43. Van Zyl J (2010) The farm size-efficiency relationship in South African commercial agriculture, Agrekon: Agricultural Economics Research, Policy and Practice in Southern Africa 34: 127-137.

Citation: Mutambara S, Darkoh MBK, Athlopheng JR (2015) Making Markets Work for the Poor (M4P) Approach and Smallholder Irrigation Farming. Irrigat Drainage Sys Eng 4: 130. doi:[10.4172/2168-9768.1000130](https://doi.org/10.4172/2168-9768.1000130)

Submit your next manuscript and get advantages of OMICS Group submissions

Unique features:

User friendly/feasible website-translation of your paper to 50 world's leading languages
Audio Version of published paper
Digital articles to share and explore

Special features:

400 Open Access Journals
30,000 editorial team
21 days rapid review process
Quality and quick editorial, review and publication processing
Indexing at PubMed (partial), Scopus, EBSCO, Index Copernicus, and Google Scholar etc
Sharing Option: Social Networking Enabled
Authors, Reviewers and Editors rewarded with online Scientific Credits
Better discount for your subsequent articles

Submit your manuscript at: <http://www.omicsonline.org/submission>

