Understanding the Market System - the components that make markets work

The hallmark of the MMW4P framework is that it treats *markets as systems* consisting of: i) an enabling environment; ii) rules of the game; iii) a set of support functions including market infrastructure, information and complementary markets; and iv) the structure of participation and capabilities of the core actors, producers and consumers. The market system is illustrated in figure 1.

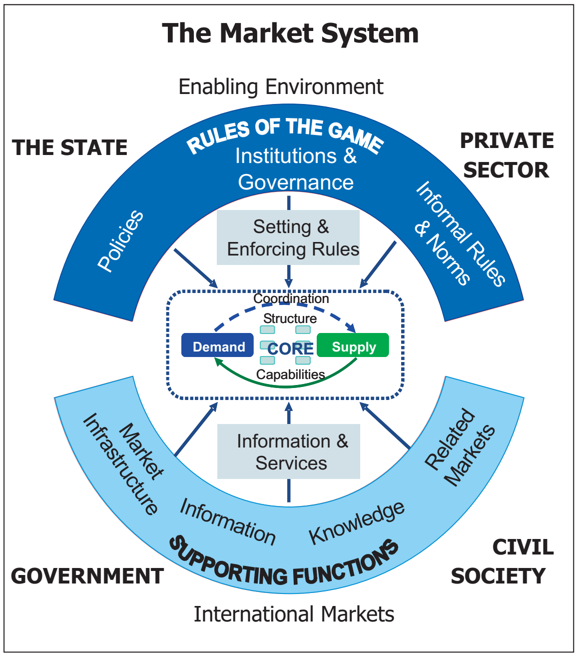

Figure 1.

1. Enabling Environment

Governments are responsible for providing an enabling environment so that markets can grow and deepen and function efficiently though competition. Such an environment includes: a) a growing economy with macro stability; b) ease of entry and exit and regulations that impose a low cost burden on business; c) secure property rights; d) security and low cost of enforcing contract to facilitate exchange; e) establishing workable arrangements to address monopoly power and unfair trade practices; f) instituting effective regimes of consumer protection so that consumers are not sold dangerous products or subjected to fraudulent practices. In addition, policies that enable the country to harness international linkages of trade and investment may help to access larger international markets and improve the country's competitiveness through the transfer of foreign technology and know-how.

If analysis shows that the lack of an enabling environment is constraining the functioning of markets in the country, then donors may need to engage with governments, providing the evidence for change and supporting reforms through developing and implementing growth strategies and investment climate reforms. Where there are reform programmes under way, the analysis of the functioning of markets may throw up valuable insights that can influence their priorities and content.

MMW4P Bolivia

The programme influenced the Bolivian Productivity and Competitiveness System to simplify the process of registration for small and informal businesses by introducing a business card (Tarjeta Empresarial) and changed the rules to enable them to take part in government procurement (Compro Boliviano).

2. The Rules of The Game

Government is also responsible for setting the rules of the game for individual markets to function. The policies that they pursue and the institutional arrangements they initiate may have a decisive influence on the way that private participants behave and the resulting market outcomes in three key ways: i) legislation or regulation may determine who is able to participate in the market and hence the level of competition within it. By setting entry requirements too high, they may limit participation and with it, undermine the forces driving efficiency and competition. ii) policies for trade and investment covering the sector of which the market is a part play an important role in determining the incentives for private actors to invest and hence market growth; iii) standards and enforcing weights and measures and health and safety regimes may or may not provide assurance of what is being bought and sold and so affect the growth of the market.

Policies towards markets and the governance over institutions responsible for their implementation therefore need to be scrutinised closely. Where they are inappropriate, specific interventions may be implemented to address them. Almost all the early MMW4P Programmes addressed aspects of policy through providing evidence of policy and institutional failures and brokering public-private dialogue. The box below shows what the promoting Pro-Poor Opportunities in Commodity and Service Markets (PrOpCom) is attempting in Nigeria.

PrOpCom, Nigeria

The programme is currently brokering dialogue between the private and public sectors to reduce the discretionary incentives given to large rice millers to import brown rice at concessionary tariffs on the promise that they support rice cultivation and processing in Nigeria, a quid pro quo that most have not fulfilled. Meanwhile, the discretionary incentives have seriously distorted the market enabling a few to capture rents, undermining the incentive for smaller businesses to invest in rice processing. PrOpCom has helped form a rice network of committed private sector businesses, large and small, to provide evidence for change and brokered dialogue with the public sector.

In the developing country context, informal rules and social norms play a vital role in influencing how markets function. Because there is no formal way of enforcing contract, trade often flows along ethnic lines, limiting the participation of members of other ethnic groups and, occasionally, leading to social conflict. Social norms regarding the ownership of land and participation in the labour market may disadvantage women in acquiring the assets they need to earn their livelihoods and obtain a fair return from them. Women may be particularly exposed to hazardous occupations or diseases such as HIV/AIDS which limit their productivity.

Gender and social cohesion have therefore been important factors in the design and implementation of all the early programmes. Programmes have worked with market participants to address the causes of exclusion and to promote gender equity. Notably, ComMark facilitated the formation of the Apparel Lesotho Alliance to Fight AIDS (ALAFA), an industry-wide and industry owned programme providing education and prevention, voluntary testing and counselling and management of AIDS to address the high rates of prevalence amongst the over 47,000 workers, 80% of whom are women. This is part of its effort to develop a more productive work force to enable the industry to become more robustly competitive internationally.

3. Support Functions

To function efficiently and fairly, markets need a number of support functions:

i) Market Infrastructure. This may cover the utilities (power, water, sanitation), transport (roads and railways), information communication technology (ICT) and mechanisms for exchange (physical markets, storage facilities, commodity exchanges or electronic media). The absence of such infrastructure may limit the ability of the market to increase efficiency by reducing the cost of production and exchange. Lack of access for the poor may seriously disadvantage them in participating in and benefit from markets. Where this represents a significant constraint, there may be a need to intervene, supporting government to address these constraints and/or stimulating the private sector to find innovative solutions such as use of mobile telephony or the internet.

For example, ComMark, established dialogue between the public and private sector in Lesotho on the need to improve the country's container terminal and the supply of water and sanitation services to the industrial estates to enable the apparel industry to grow and provide more jobs. The result was increased Government investment in infrastructure to serve the industry

ii) Knowledge and Information. Access to knowledge of better business practices and technologies is an important public good that can help to increase the efficiency of markets, promote competition and spur innovation. Information is a critical public good helping to inform market participants so that they can exercise informed choice. Lack of information is very often the reason why markets in the developing countries do not provide for the needs of the poor and thus fail to deepen by pushing forward the access frontier. Uneven access to information is frequently the cause of why the poor fail to benefit fully from markets.

Donors may facilitate better access to knowledge and information through the public or private sectors. The early MMW4P programmes have facilitated better access principally through the private sector. For example, Katalyst supported the piloting of a new business model for ICT centers that has proven that knowledge and information may be provided in a commercially sustainable manner, even in rural areas. The pilot is being scaled up with a view to cover over 60,000 villages. Other programmes have also shown that knowledge and information can be provided commercially.

iii) Complementary or Related Markets. For a market to function well and fairly, it needs a number of related markets to also function well. Hence, markets for agricultural products depend upon well functioning input markets, those for industrial products on raw material and labour markets and so on. All markets need access to business development services (BDS) to help business expand and meet the needs of the market. Access to affordable finance is cited by firms in developing countries to be a major constraint to their ability to grow and innovate, especially in Africa where it is reported to be the major constraint[1]. Suitable financial instruments (letters of credit, depository receipts etc.) are needed across the various stages of the value chain to enable efficient production and exchange. Where the related markets are themselves not working well, they can be a source of loss of efficiency, lack of competitiveness or disadvantage those excluded from them.

Enabling Micro Finance to Join Mainstream Financial Markets

DFID's Financial Deepening Challenge Fund (FDCF)supported Deutche Bank innovate a facility that helps sound micro finance institutions borrow from the commercial banks thus enabling their clients to access mainstream financial markets. The facility provides first loss cover in the event of default. Deutche Bank has now established a $ 75 million facility and other international banks are following its example by establishing a similar facilities.

Most of the early MMW4P programmes have therefore tackled related markets for inputs, BDS and finance, but sought to intervene using a market based approach which provides commercial incentives to increase or improve supply, thereby strengthening those markets in a sustainable manner. For example, Katalyst has worked with Syngenta in Bangladesh to increase its dealer network to cover 200,000-300,000 farmers in Rangpur and trained dealers to improve the advice that they provide to farmers, a good example of how to increase the supply of embedded business services. The result has been a 13% increase in yields as well as strong increase in Syngenta's sales prompting other input suppliers to follow suit.

4. Structure & Capabilities of Core Participants

Abuse of Market Power

The structure of participation across the various functions the market performs, from production to exchange, is a vital determinant of the growth, efficiency, competitiveness and fairness of markets. Concentration of market power amongst a few participants sets up the incentive for them to earn rents by restricting supply to obtain more favourable prices. The result is the failure of the market to grow. Abuse of market power may also take the form of shutting out potential new participants thus restricting competition and denying access. Dominant player may also collude to set terms and conditions for their suppliers and buyers that are favourable to them resulting in unfair market outcomes.

When market power is being abused, donors may choose to: i) support governments in implementing effective competition regimes; ii) strengthen the capacity of the disadvantaged to counter balance the power of the dominant; iii) spur innovation that open ups new ways to do business that bypass the market power of the dominant players. The early MMW4P programmes have intervened in all three ways. For instance, ComMark brought to the attention of the South African Cabinet the failure of local suppliers to price raw materials on the basis of import parity thereby undermining the competitiveness of downstream domestic industries. The result was an immediate reduction in tariffs.

MMW4P programmes have also worked with private participants to overcome problems of adverse market power working with individual businesses, trade and business associations and the representatives of the poor. For example, PEMCE has supported the Association of Plantain and Banana producers in Rivas, Nicaragua (APLARI) to help small

[1] Making Finance Work For Africa, World Bank, 2007.

producers compete with large plantations across the border in Costa Rica by: i) providing business services; ii) market information; iii) technical assistance to improve quality; iv) access to credit through a revolving fund; v) seek new markets for plantain bananas and establish distribution systems direct from small producers to buyers; vi) influence policy processes in Nicaragua.

Co-ordination Failures

The structure of participation also impacts the ability to co-ordinate the multiple functions that the market needs to perform. In general, where there is a large number of small businesses involved, and information is not widely available, there is a risk that there will be lack of co-ordination between market participants and with suppliers in related markets. Such co-ordination failures can be costly leading to lost opportunities to add to growth or reducing the incomes market participants earn. For example, a failure to co-ordinate between farmers, marketing intermediaries and processors can result in a low quality, unprocessed product being exported that is discounted in the market, as is the case for many agricultural commodities exported from Africa.

Co-ordination failures are very common in the developing countries and many MMW4P programmes have addressed them by strengthening producer organisations and trade associations, providing large businesses with incentives to make their supply chains more inclusive of the poor and appointing facilitators to improve co-ordination. They have been particularly innovative in using commercial incentives to make the business models of large businesses more inclusive and supportive of the poor and disadvantaged as shown by the example of Katalyst in Bangladesh (box below).

Katalyst Bangladesh

To help farmers improve their incomes by taking advantage of the growing demand for maize, Katalyst engaged Winrock, an international NGO, to: i) work with anchor companies that were interested in expanding their contract growing schemes to provide better advice and inputs to maize farmers, including access to finance; ii) address the missing related market for the supply of short duration rice thus enabling farmers to grow both crops; iii) stimulate the supply of organic compost to improve maize yields sustainably. Maize production in Rangpur increased 140% with farmers reporting a 20% increase in yields through contract growing.

Innovation

The presence of large numbers of small businesses may also represent a constraint to the market in terms of efficiency and innovation to deepen the market and offer greater choice. The world over, small business has been proven to be the cradle of the new business models and technologies that drive efficiency and deepen the market, driving out old, inefficient businesses. However, where the investment climate is poor, knowledge of better business models and technologies is patchy and there are failures in related markets such as finance, the process of small businesses discovering[2] these opportunities is made more difficult. This is especially so in Africa where the quality of entrepreneurship is low: the vast majority of enterprises are 'survival businesses' borne of the necessity to earn a living rather than motivated to find new ways of doing business that increase wealth creation[3].

Further, the current rapid pace of technological change and associated high cost of research and development has meant that, in many industries, innovation depends on 'intrapreneurship' within large firms. MMW4P programmes have therefore attempted to promote innovation, through a process of cost discovery, amongst small businesses and the large, demonstrating new business models and supporting the dissemination of better technology.

For example, PrOpCom has sponsored research on technologies that can improve the efficiency and quality of rice processing amongst small processors and is

Transaction Services in UnBanked Areas

DFID's FDCF supported Vodafone to innovate a new, low cost and secure system of transferring money using the mobile phone network in Kenya that has proved popular in rural, un-banked areas to facilitate the development of markets. The system has, to date, benefited 700,000 users in Kenya and is being rolled out internationally.

[2] A process termed cost discovery. An assessment of the role of cost discovery in broadening and sustaining growth may be found in Industrial Policy for the 21st Century, Rodrik D, 2004.
[3] This finding is supported by numerous enterprise surveys in Africa.

disseminating its findings to influence the uptake of better technology. It is demonstrating the benefits of better technology by helping small processors acquire and install mill. FinMark has supported innovation amongst the banks and mobile phone companies to provide transaction baking services to the unbanked in South Africa through cell phones and new ways of providing micro housing loans.

Aligning Business Incentives to Development Objectives

There are many ways in which the incentives for business may not be aligned to development objectives. Business may have little commercial incentive to provide public goods such as market infrastructure that can help the poor access markets, share knowledge and information with the disadvantaged, reduce the abuse of market power, provide co-ordination services and innovate in ways that benefit the poor. MMW4P programmes have therefore sought to engage with business to better align business incentives to development objectives using a combination of: i) providing evidence in support of the attractiveness of bottom of the pyramid markets; ii) endorsement, through dissemination and communication, of the success of innovative, pro-poor business models and technologies; iii) sharing risk in innovative, pilot projects that can be scaled up to have large impacts on growth and the incomes of the poor.

For instance, FinMark's FinScope provides research that is used by the commercial banks in South Africa to design new products that will improve access for the unbanked. It also provides grants to spur innovation and disseminates information on business models that benefit the poor so they can be replicated.

Over the past five years, DFID has been piloting an innovative, light touch instrument that provides a transparent way for donors to engage with business, the challenge fund[4]. The instrument provides grant and non-recourse loans in support of projects whose public benefits (economic, social or environmental) are more assured or larger than their financial returns. It relies on the private sector's ability to generate new ideas and implement them and has proved particularly strong in spurring innovation. It can be used to align business incentives better to development objectives in a range of ways, setting out the causes of market failure and exclusion and asking the private sector to 'bid' for funding based on the public benefits their proposals would deliver at a project and, through possible replication, at the market (systemic) level.

A common market failure, in developed and developing countries, is the failure of markets to price in the external effects (externalities) of providing goods and services. Environmental consequences are a prime example of a negative externality whilst housing is a good example of a positive one (merit good). In the developed countries, externalities are often corrected by taxing those who generate negative consequences (taxing the polluter) and subsidising merit goods. In the developing countries, with weak tax systems and severe constraints on public expenditure, other means need to be found.

Great Lakes Cotton, Malawi

DFID's Business Linkage Challenge Fund supported a cotton trader, Great Lakes Cotton form a partnership with input suppliers Syngenta and Chemical and Marketing and the National Association of Small Holder Farmers to increase the quantity and quality of cotton exported from Malawi. By supplying pre-treated seeds, extension advice and offering a guaranteed market, exports increased 2 ½ times in two years with over 200,000 farmers benefiting from a 265% increase in productivity and 35,000 casual labourers enjoying greater demand for their labour.

The MMW4P programmes have attempted to solve this dilemma by promoting agricultural practices and manufacturing technologies that combine positive environmental benefits with a commercial incentive for their use. For example, the technology that PrOpCom is promoting for rice par boiling reduces the use of firewood by using boilers instead of open drums. There is a commercial pay back to the user as well as reducing the destruction of forest cover.

5. Understanding the Poor

Though market deepening to provide for more of the needs of potential participants is an indicator of well functioning markets, at any given stage, a sizeable proportion of the poor may be excluded or disadvantaged from participating in markets. For development practitioners, access to and outcomes

[4] See www.challengefunds.org

of markets is of critical importance to growth and improving livelihoods. This is especially so in two instances: i) in poorer countries where a large proportion of the population may be poor. Here, lack of access to markets and ability to benefit from the opportunities they provide may undermine growth and its effectiveness in reducing poverty; and ii) in countries suffering high rates of inequality where lack of access and disadvantage in markets may be a causal factor in perpetuating inequality making growth less effective in reducing poverty.

It is a distinctive feature of the MMW4P framework that the way that the poor participate in markets and the extent to which they are able to benefit from markets is an explicit criteria in examining the functioning and fairness of markets, setting up an agenda of action to improve outcomes. Three key factors affect the ability of the poor to participate and benefit from markets:

i) **Access** shaped by formal and informal rules of the game, infrastructure and other transaction costs. In some instances, transaction costs may be so high markets are no longer viable. For example, in Africa, farmers served by unpaved roads are often cut off from wider markets because the cost of transport is so high;

ii) **Assets.** The poor may lack or be disadvantaged in accessing the assets they need to participate[5] beneficially in markets. So, poor access to financial capital may affect the ability to produce goods and services and human capital in the form of health and education disadvantage them as producers and employees;

Iii) **Risk and vulnerability[6].** The vulnerability of the poor to any down turn in income has been known to discourage them from taking up new (and hence more risky) opportunities that could provide better livelihoods. The failure of farmers in dry areas to switch completely out of crops to livestock, even though the potential returns may be higher, and the fact that the extreme poor are less likely to migrate to urban areas are examples of how risk and vulnerability undermine beneficial participation in markets.

Faced with these challenges, MMW4P interventions have three options: i) they may try and accelerate market deepening to improve access to markets and assets (factor markets) and address risk and vulnerability (weather and livestock insurance). The examples from the early MMW4P programme show that market deepening, through innovation, can help markets to serve the poor; ii) influence and support government to change the rules of the game, invest in infrastructure and assets for the poor and provide social protection to address risk and vulnerability; iii) as the above two options are not mutually exclusive, use a combination of the two. It is likely that, at any one time, only some of the poor may be reached through market deepening setting up an agenda for policy interventions to reach those that are likely to remain disadvantaged or excluded.

Policy interventions should, however, serve to deepen rather than undermine the market. Measures that undermine market functioning and so should be avoided include: governments attempting to supply the good or service as this frequently results in higher cost of production and exchange requiring an unsustainable levels of subsidy from the pubic purse to make them affordable to the poor; subsidising a small part of supply and relying on administered systems of allocation to reach the poor as this often leads to allocation on the basis of political patronage rather than need; regulating prices to make goods and services affordable as this reduces the incentive to increase supply: compulsory purchasing of land or other assets for redistribution to the poor as it undermines property rights.

It is preferable that government support comprises: i) investment in infrastructure and information to increase access for targeted groups of the poor; ii) building assets through market based redistribution and 'smart transfers' (based on outcomes)[7]. For example, households receive money when they use health and education facilities to build human capital; and iii) social protection is provided through food for work schemes or cash transfers to help households overcome poverty traps. In addition, the way that smart and cash transfers are implemented can serve as a method for increasing access to finance. For instance, recent initiatives that make social protection payments through the banking sector have enabled many of the poor to gain access to formal financial markets.

[5] The Sustainable Livelihoods framework shows how a combination of natural, social, financial, human, and physical capital helps the poor to earn their livelihoods. See Carney et al, 2001.

[6] For a discussion of the role risk and vulnerability plays in undermining the poor's ability to escape poverty see Promoting Pro-Poor Growth, OECD DAC, 2006. Also, Poverty Traps and Development: The Equity Efficiency Trade-Off Revisited, Dercon S, 2003.

[7] Progress in Mexico and Bolsa Faimilia in Brazil are well known examples of smart transfers.