Promise and Progress

MARKET-BASED SOLUTIONS TO POVERTY IN AFRICA

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MONITOR GROUP

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Executive Summary

DESPITE ENORMOUS INVESTMENT to combat global poverty in recent years, more than two billion people worldwide still struggle to subsist on less than $2 per day. The continuance of poverty on such a massive scale and its stubborn resistance to the traditional solutions — government expenditure, foreign aid, and private philanthropy — indicate need for alternative ways to move masses of people up the income scale. During the past fifteen years, interest in private sector alternatives has increased, especially in "market-based solutions", initiatives that use the market economy to engage low-income people as customers, offering them socially beneficial products at prices they can afford, or as business associates — suppliers, agents, or distributors — providing them with improved incomes.

Market-based solutions (MBSs) are still in their infancy, and there is much yet to learn about how they work and why many struggle and only some succeed. In 2009, Monitor Group reported on MBSs in India, concluding a year-long investigation of more than 270 initiatives and focusing on a critical factor in their effectiveness: a business model attuned to the exacting conditions of low-income markets.[1] When the business model is sound, an MBS can achieve self-sufficiency, thus weaning it from dependence on investors and donors, and operate at or near scale, thereby reaching enough people to make an impact on poverty rates.

Promise and Progress extends and deepens research into MBSs, culminating a 16-month Monitor study of MBSs in sub-Saharan Africa (SSA).[2] This investigation is particularly important because the poverty challenge in SSA is enormous. Half

FARMERS IN GHANA

Savanna Farmers Marketing Company aggregates the output of 12,000 smallholder farmers, broadening their access to markets and fetching them better prices.

a billion people in the subcontinent struggle to survive on less than $2 a day, and despite the volume of aid and philanthropy and the scale of development efforts, the number continues to rise.[3] Poverty persists partly because of the environment: Africa is more sparsely populated than most low- or middle- income regions in the world (63 per cent of its population lives in rural areas), and infrastructure is woefully inadequate, making many communities difficult to reach.[4]

Despite the obstacles, MBSs are proliferating in Africa. The Monitor team identified 439 initiatives in nine SSA countries, active in 14 sectors and aiming at the $2-a-day segment.[5] Most of these initiatives were struggling, but a significant number were making a difference in the campaign against poverty. These promising MBSs include:

- *Voltic Cool Pac.* In 2001, Voltic, Ghana's leading producer of bottled water for middle-income consumers, launched a new water sachet product, Cool Pac, tailored specifically to low-income consumers in what the venture regarded as a move to secure future growth. This proved challenging: hundreds of informal competitors were already serving the market, and getting the small-size, branded water sachets to the intended market from centralized manufacturing plants via traditional channels was simply not economical. Voltic made radical changes to its business model, decentralising production through joint ventures, establishing a separate brand, and optimising sales by using informal street hawkers to peddle the $0.03 500ml sachets. Following Voltic's success, private equity firm Aureos made two successful investments in Voltic beginning in 2004, and in 2009, Voltic was acquired by SABMiller. Today, an existing network of approximately 10,000 street hawkers sells nearly 480,000 Cool Pac sachets daily.

- *Jeppe College of Commerce and Computer Studies.* At least 700 private providers of vocational training in South Africa together serve

an estimated 700,000 students, typically unemployed high school graduates who want to enter the job market, but for whom access to high end academies or universities is out of reach. Jeppe achieves commercial success by offering a narrow, no-frills course portfolio across four cities focused on service industry subjects, builds in for payment default by serving a customer base that is broader than just the poorest segment, and competes by emphasising what their market demands: the business offers a range of job placement services, and claims that 90 per cent of students are placed with employers, with resulting income increases of more than 100 per cent.

- *Afro-Kai.* Incorporated in 1984, Afro-Kai engages more than 9,000 farmers across Uganda through the trade, aggregation, processing, and transport of sorghum, barley, cassava, groundnuts, and maize. The core business is commodity processing and trading, but Afro-Kai has also been contracted by Nile Breweries as its barley and sorghum handler, processor, and third-party extension service provider. This relationship, which guarantees a forward price and purchase of all outputs, enables Afro-Kai to contract with small farmers to increase productivity and volume of output by providing seeds at a subsidized rate, offering timely cash payment, and providing access to a guaranteed market. Afro-Kai has a significant impact on participating farmers, increasing their profit by an estimated 32 per cent.

- *Kilimo Salama.* Low-income farmers in Kenya typically don't trust—or understand—agricultural insurance products, which in any case tend to be too expensive to access. Syngenta Foundation's Kilimo Salama initiative overcomes these challenges by bundling agri-insurance with the sale of agri-inputs to farmers. The model is built on the use of mobile phones: there are no

forms, brokers, or eligibility criteria upon application, and there is an automatic claims and payment process, based on information transmitted from remote weather stations. The venture's early success, however, is due to the fact that it leverages agro-dealers, who are trusted by the farmer, to act as the contact point for the intangible insurance offering, and bundles insurance into the purchase of a larger item like fertiliser. Kilimo Salama currently reaches approximately 11,000 poor farmers in Kenya, targeting another 50,000 by end of 2011.

Monitor's study of African MBSs included field visits, with more than 500 customer, distributor, or farmer interviews, discussions with experts and other knowledgeable parties, and research in the public record. The investigation also included interviews with executives at 47 multinational and large national corporations on their engagement in low-income markets, and with 53 impact investors to understand the nature of their interests and involvements. The result is the most comprehensive study to date of MBSs and their role in combating poverty.

Promise and Progress affirms the conclusion of Monitor's research in India that, for MBSs to succeed, they must operate with business models suited to the extreme conditions of low-income markets. Seven business models first identified in India are also evident in Africa, where hundreds of ventures are putting them to work. Four successful business models related to microfinance and well known in the development community — mobile money transfer, microcredit, microsavings, and microinsurance — are also present at large scale. And Monitor encountered three additional successful business models that we had not studied previously (see table beginning on page 8).

- Aggregators (like Afro-Kai) collecting cash crops and staples from smallholder farmers to supply large, top-of-the-supply-chain buyers. To help guarantee stable supply, many aggregators

offer premium and forward pricing and provide the farmers with services such as credit, storage, and transport, as well as with low-cost seeds and fertiliser to help improve their yields.

- Companies organising and upgrading informal retail operations and working with vendors to sell socially beneficial products such as clean water, healthcare goods, and agricultural inputs. The vendors benefit from training and demand stimulation, while the goods improve the lives of consumers.

- Vocational colleges (like Jeppe) that provide high-quality, no-frills training to a range of individuals, including the very poor. These institutions also enhance employability by helping students to obtain internships and work experience.

Additionally, the research identified three other business models operating in Africa that, while not yet successful, show promise of delivering social benefit at scale if key issues are addressed. These include:

- Provision of non-financial services through mobile devices, including medical and healthcare services, agricultural data, and other information services.

- "Last-mile infrastructure" that brings power or clean water to impoverished and often isolated communities that lack these affordably. Micro-grid technologies deliver electricity to rural low-income households, while water kiosks in peri-urban slums may make clean water available at lower cost than alternatives such as sachets or tanker supplies.

- Dedicated direct sales agent networks that distribute socially beneficial goods to isolated communities. These provide training and more stable incomes for agents and help consumers by educating them about the value and utility of such goods while improving their availability.

BUSINESS MODEL	DESCRIPTION OF BUSINESS MODEL	AFRICAN EXAMPLES	INDIAN EXAMPLES
SMALLHOLDER FARMER AGGREGATORS	Aggregators collecting cash crops and staples from smallholder farmers to supply large, top-of-the-supply-chain buyers. To help guarantee stable supply, many aggregators provide the farmers with services such as credit, storage, and transport, as well as low-cost seeds and fertiliser to help improve their yields.	Savanna Farmers Marketing Company, Afro-Kai Ltd., Lesiolo Grain Handlers, Kilicafe, Lugari Cereal Farmers Growers' Group, Export Trading Company	-
DISTRIBUTION AND SALES THROUGH IMPROVED INFORMAL SHOPS	Efforts by enterprises to develop a route to market that leverages (and upgrades) existing informal distribution and sales channels to sell socially beneficial products through multiple fragmented or unorganised shops.	Bayer Green World, Agroseed, Flash, Channel Life Ubuntu Service Points, Standard Bank Community Banking, Kickstart, CFW Shops, Blue Star Network	First Care Health, ITC, Medicine Shoppe, Janani
PRIVATE VOCATIONAL TRAINING AT THE "SEAM" IN SOUTH AFRICA	Vocational colleges that offer a highly standardised and limited set of typically service-industry qualifications to low-income school leavers or job seekers, leveraging paraskilled teachers. The offer is sometimes complemented by job placement services.	Jeppe College of Commerce and Computer Studies, Silulo Ulutho Technologies, DT Nursing Institute, Edu-fix Training Institute	-
"LAST-MILE" INFRASTRUCTURE: RURAL MICRO-GRID ELECTRICITY GENERATION AND URBAN WATER KIOSKS	Community-level "last-mile" infrastructure directly addresses the infrastructure provision shortfall by providing end-users with access to a fixed utility asset. In the case of energy, low-income households in rural areas directly connect to a standalone local mini-grid powered by an independently generated power source. In the case of water, kiosks established in slum and peri-urban "off grid" areas provide poor customers with water from the mains at lower cost than alternatives such as sachets or tanker supplies. Also can include assets like pay toilets.	Energy: Kathamba Pico-Hydro, Project ERSEN, Ngoma Diesel Micro-grid Water: Ushirika wa Usafi, Nanyuki Water and Sewerage Company, Kafubu Water and Sewerage, Nkana Water, WSUP, Lusaka Water. Sanitation: WSP, Ikotact, DMT Toilets	Poorvi, SPARC, Sulabh
MOBILE-ENABLED NON-FINANCIAL SERVICES	Mobile-enabled business models are those that aim to leverage low-income ownership or use of mobile devices to provide essential information or transactions to low-income customers in a range of sectors including agriculture, health, or even livelihoods.	Kilimo Salama, Pesinet, Esoko, Google Suite, KenCall, National Farmers' Information Service, SMS for Life, Grameen's Community Knowledge Worker Initiative, MoTech	Neurosynaptic, SIFF, Thomson Reuters
DISTRIBUTION THROUGH DEDICATED DIRECT SALES FORCE	Dedicated direct sales force models recruit and train local agents to reach deep into communities to sell and distribute (socially beneficial) goods, bypassing shops and other channels, to make it easy for the (often rural) poor to have access they may not otherwise get.	Living Goods, HealthKeepers Network, Toyola Energy, SEF-ZAF, Grameen CKW initiative, Pesinet	Nest Solar Lanterns, Vision Spring, Tata-AIG Insurance Micro-agent Model, HUL Project Shakti, SKS, Spandana, other MFIs

See Chapter 3
See Chapter 4
See *Emerging Markets, Emerging Models*, 2009
Discussed elsewhere in the economic development literature

BUSINESS MODEL	DESCRIPTION OF BUSINESS MODEL	AFRICAN EXAMPLES	INDIAN EXAMPLES
PAY-PER-USE	An approach in which consumers pay lower costs for a single use product of a community-level facility, or individual product, or service, sometimes on a rental basis. This delivers better value than buying a household asset like a lantern or filtration device, and matches cash flows.	Omega Schools, Nanyuki Water and Sewerage Company, Iko Toilet, LUKU, Dissigno, NAAMSECO, Bara Jii, Aquasure	Byrraju Foundation, Naandi Foundation, Water Health International, Poorvi Enterprises, Piramal Foundation, Biogas Bank, S3IDF, Drishtee, n-Logue, Comat
NO FRILLS	A pared-down service that meets the basic needs of the poor at ultra-low prices and still generates positive cash flow and profits through high volume, high asset utilisation, and service specialisation.	Mzanzi (bank account), LiveWell Clinics, Bridge International Academies, Madulamoho Housing, Edu-Fix	LifeSpring Hospitals, Vaatsalya Hospitals, Dial 1298, Narayana Hrudayalaya Hospitals
PARASKILLING	Combines no frills services with a reengineering of complex services and processes into a set of disaggregated simple standardised tasks that can be undertaken by workers without specialised qualification.	D-Tree International, Unjani (RTT), Pesinet, LiveWell Clinics, Omega Schools, Silulo Ulutho Technologies	Gyan Shala Schools, Aravind Eye Care, Ambuja Cement Foundation, Spandana, Pratham
SHARED CHANNELS	Distribution networks that reach into remote markets via shared channels, piggybacking products and services through existing customer sales and distribution platforms, thus enabling poor people to afford and gain access to socially beneficial goods.	Hollard/ PEP Joint Venture, Ferlo, MicroEnsure, CIC	SERP (rice delivery), ITC e-Choupal insurance, Moksha Yug Access, PCOs, Access/ HUL water filters, Servals burners
CONTRACT PRODUCTION/ CONTRACT FARMING	A system of contract production that directly sources from large numbers of small-scale farmers or producers in (often rural) supply chains. The contractor organises the supply chain from the top, provides critical inputs, specifications, training, and credit to its suppliers, and the supplier provides assured quantities of specialty produce at fair and guaranteed prices.	GADCO, Frigoken, AAA Growers, Masara N'Arziki, SOCAS, La SOENA, Swahili Imports, Ugachick	Calypso Foods, KBRL, Mahagrapes, DFV, Agrocel, Suguna Poultry, Pradan, Shanthi, FabIndia, Frito Lay/Pepsi
DEEP PROCUREMENT	A variety of direct procurement setups that bypass traditional middlemen and reach into the base of the economic pyramid, enabling direct purchases from large networks of low-income producers and farmers in rural markets and often providing training for quality and other specifications.	Brookside Dairy, Homeveg Tanzania, La Pirogue Bleue, Ecom SMS, International Coffee Partners	Society for the Elimination of Poverty (SERP), Birla's More, ITC Choupal Fresh, Reliance Fresh, Metro, AMUL, Glaxo SmithKline Beecham
DEMAND-LED TRAINING	Demand-led training that applies a formal-sector "temp agency" model to down market opportunities, with enterprises paying a third-party to identify, train, and place employees for job openings at the edges of the formal and informal sectors.	The Workforce Group	TeamLease Services, TOPS Security, STRiVE, DesiCrew, Byrraju Foundation, EGMM

CONTINUED ON NEXT PAGE

BUSINESS MODEL	DESCRIPTION OF BUSINESS MODEL	AFRICAN EXAMPLES	INDIAN EXAMPLES
MOBILE MONEY	Models that enable the poor to access and transfer cash outside of traditional financial services channels, often via mobile devices or alternatives to bank branch infrastructure.	M-PESA, Wizzit, Chaka Group Money Express, Flash, Zap, Changamka, Standard Bank Community Banking	Fino, Western Union/SBI (from 2010)
MICROCREDIT	Extension of small amounts of credit, often via group lending, to the poor who are typically unable to access larger loans from formal banks due to a lack of collateral and formal credit histories.	KWFT, Faulu, Jamii Bora, EB-Accion, ABSA Micro Enterprise Finance, Microcred, Kilimo Faida (Orion East Africa), Bayport, BRAC, National Microfinance Bank, Capitec, Equity Bank	SKS, Spandana, Basix, Swadhaar, Ujiwan, Cashpor, Access
MICROSAVINGS	Small deposit account offered to low income individuals with low or no minimum balance requirements and service fees, and the ability to save small amounts of money.	Barclays Susu Collectors, SaveAct, KWFT, Jamii Bora, Centenary Bank, Standard Bank Community Banking	Shriram Chit Funds, Bank-linked SHGs
MICROINSURANCE	Small size insurance products offered along the lines of microcredit, designed to meet the needs and cash flows of those excluded from formal insurance networks. Typically sold via bundles or other non-agent based models.	MicroEnsure, CIC Insurance, Hollard, Old Mutual (Pay When You Can), Sanlam Sky ZCC Scheme, Star Microinsurance, Real People, Kilimo Salama, mutuelles (e.g. Senegal)	Yeshasvini, ITC/ICICI Prudential, Labournet

This review of MBSs in Africa is timely in three respects. First, in the wake of the global financial crisis, the ability of developed nations to provide overseas development assistance is constrained. As aid funding and the budgets of NGOs and philanthropists are squeezed, donors are looking for effective solutions that can deliver enduring positive impact and work with the flows of private funds. The experience of MBSs in Africa, as well as in India, illustrates they may be cost-effective and complementary to traditional aid in improving lives and livelihoods at the bottom of the economic pyramid.

Second, those directing flows of private investment capital toward reducing poverty may benefit from a more detailed understanding of promising market approaches. This report provides insight into investment opportunities in SSA and identifies the

kinds of enterprises that can expand inclusive markets while meeting the goals of impact investors looking to accelerate positive social change.

Finally, *Promise and Progress* provides insight into recent controversies surrounding private sector involvement and alleged profiteering in the campaign against poverty. Microfinance, for example, was once the poster child for using market mechanisms to help low-income people. Lately, however, the development impact of microfinance has been called into question. Noting the fortunes reaped from the initial public offerings of certain microfinance institutions, critics allege that such entities are doing more to help their owners than low-income people. Other critics point out that the benefit of microloans is often temporary, that funds are seldom invested in improving livelihoods, and that high interest rates may leave borrowers worse off. Like any other human activity, microfinance is subject to abuses that must be curtailed. However, *Promise and Progress* finds that MBSs—including those in microfinance—commonly can and do provide large and growing numbers of people with socially beneficial products and services and improved incomes. Based on the Monitor sample, the problem is not that entrepreneurs and business people are making too much money—but rather that they are engaged in a constant and difficult struggle to cover their costs.

Our Findings

In sub-Saharan Africa we found vibrant MBS activity, but the environment is complex and development uneven. The good news is that country and culture seem not to be critical variables—similar solutions succeed in countries of 13 million and 50 million, across Anglophone and Francophone Africa.[6] Monitor also found some pioneering innovations, especially in mobile-enabled services. Kenya's M-PESA, which facilitates money transfer, is the best-known example, but there are many others. The research also uncovered several very large-scale initiatives, particularly in agriculture, with some contract farming operations twice the size of comparable efforts in India, providing large income increases to participating small farmers.

Not all the news is good, however. Many MBSs struggle to break even or operate with razor-thin margins. Some initiatives, particularly in mobile-enabled services, are over-hyped, better illustrating what the technology can do than delivering tangible benefit to low-income people. "Microfranchising" suffers from a similar imbalance. Finally, while progress in sectors such as agriculture is encouraging, other sectors, including healthcare, are significantly underdeveloped.

Other observations and high-level findings from the research include the following:

- *A third of the initiatives in the sample were* ***"extreme SMEs"*** that face all the challenges of small businesses in Africa — difficulty in accessing finance, attracting and retaining human capital, achieving economies of scale, creating of recognisable and trusted brands. But they also take on a second set of challenges in selling to a customer base with severely limited resources, that is hard to reach, and about which too little is known. Or they engage suppliers with high volatility in production and — at times — low loyalty due to cash flow needs. These extreme SMEs offer goods and services that are often "push" categories like preventative healthcare, which require high levels of awareness building and education, as compared to "pull" categories like mobile phones that consumers at the bottom of the pyramid already know they want and are hoping to find at affordable prices. Meanwhile, the relative youth of many of these ventures means that the supporting ecosystem tends to be sparsely populated, while the competitive landscape may be hostile — many entities have to compete with informal or grey market operators, or with free or highly subsidised alternatives. Finally, these ventures operate in conditions — i.e. poor infrastructure, unfriendly and inefficient regulation, customers with tiny and volatile incomes, suppliers with limited capability — that

scare off many established players. Consequently, extreme SMEs tend to operate with low and volatile margins.

- *To serve the poor sustainably, it is often necessary to target a broader segment:* many enterprises achieved viability by adopting an expanded view of low-income consumers or business associates, engaging those both at the bottom of the pyramid, but also those in adjacent income groups. By so doing, MBSs can buffer the volatility and risk that enterprises have to assume when dealing with the very poor. Few ventures succeeded when selling to just the $1 per day and below segment.

- *MBSs can operate sustainably by selling "push" products and services.* Yet to do so, companies must engage in large-scale demand stimulation to educate their target customers about the benefits of their offerings. While this may be expensive, companies in sectors as diverse as mobile-enabled services and agriculture inputs successfully incorporate this cost into an economically viable business model, although it often requires higher gross margin to afford the "push".

- *Government can and does play a strong supporting role in the success of market-based solutions*, contrary to some perceptions that state involvement in enterprise is typically negative (e.g. onerous regulatory and compliance frameworks, unfriendly and inconsistent policies, inappropriate interference in markets). By acting as an anchor buyer, coordinating activities end-to-end, or providing support as an implementation partner, governments can often promote the viability and scale of MBS initiatives.

- *Market-based solutions can reach scale in at least three ways:*

    1. A traditional organic approach based on innovation, growth, and reinvestment, sometimes according to a "Silicon Valley" model in which outside parties make sustained investments in probable winners
    2. Replication, dissemination, and transplantation of proven business models; and
    3. Upgrading of ventures already at or near scale in the informal economy.

- *Achieving scale occurs more rapidly for "market joiners" than for "market makers".* As in India, MBSs that pioneer new products and services for low-income customers typically take a decade or more to attain scale. However, MBSs that pursue proven business models and do not try to attempt market creation may scale in just three or four years — faster than Monitor observed anywhere in India.

- *Corporations facilitate progress when they customise their approach to low-income markets.* For example, Coca-Cola , Safaricom, Sanlam, and Bayer successfully built sophisticated sales and distribution chains that engage low-income consumers. For many big companies, however, serving low-income customers is a relatively low priority, which they often attend to through traditional "corporate social responsibility" (CSR) initiatives or, in the case of South Africa, nominal compliance with Black Economic Empowerment legislation.

- *Impact investors are increasingly looking to deploy capital on behalf of the poor, but the need is evident for new vehicles, forms, and business models* based on understanding of the risk profile of small, early-stage

companies competing in harsh economic environments. An abundance of capital is increasingly chasing too few good investments, with an overemphasis on private equity funding models.

Implications and Recommendations

The analysis presented here has important implications for the founders and leaders of MBSs in Africa and elsewhere, as well as for constituencies in the larger ecosystem in which they operate. Many recommendations are interrelated and may require multiple parties acting together. For instance, we point in several places to the need for technical assistance (TA)—which could be provided by investors, donors, or donors via investors. Here are the principal recommendations for each of these parties:

Entrepreneurs and MBS Leaders

The preponderance of *Promise and Progress* consists of information and advice for those seeking to organise and operate MBSs to serve low-income markets. These findings are particularly directed at SMEs and social enterprises.

- Continue the hard work already underway to develop and perfect scalable business models that will be effective when dealing with low-income markets: customers difficult to access, with little purchasing power and lumpy cash flows; business associates most probably with limited education and understanding of priorities in operating a business. Wait until the business model is proven before franchising it. Do not underestimate the costs of serving this market and the need to organise a solution end-end. And if attempting market creation rather than market entry, expect scale to take a long time.

- Strive to balance social and business imperatives. Most proprietors of MBSs understandably tend to favour the former when the two come into conflict. However, the clash may originate in different time horizons as much as different objectives. Reaching scale and achieving an enduring positive impact on poverty reduction requires steady investment over a period of years. If an initiative is unable to generate funds to grow and increase its impact over the long term, then it will not provide a sustainable solution to the challenge of poverty.

- Pursuing a promising business model and operating an MBS successfully requires skill in management and finance — skill generally in short supply in low-income markets. Fortunately, many providers of TA are available on affordable terms across most of Africa. MBS leaders seeking seed money or capital for expansion may wish to include support for TA in their budgets.

Large and Multinational Corporations

C. K. Prahalad's influential book, *The Fortune at the Bottom of the Pyramid* (2004), highlighted the potential of low-income markets for large corporations — the billions of people living in poverty, in aggregate representing $5 trillion in purchasing power. Since 2004, many big companies have investigated serving or engaging the bottom of the pyramid although relatively few actually participate in the market. The major obstacle is the imperative for organisations (built to serve relatively affluent customers in locations with superior infrastructure) to develop wholly new business models. Executives at companies engaging, or attempting to engage, low-income customers and/or business associates cite additional important obstacles: the rudimentary state of development of the business environment in SSA; high costs to educate customers and train and equip suppliers and manage supplier net-

works; and difficulties in collaborating with public agencies, NGOs, donors, and other partners willing to help, due to mismatched objectives and divergent standards for timeliness, quality, and operations.

Despite these obstacles, big companies including Coca-Cola, SABMiller, Bayer, Unilever, Olam, and Yara are actively engaged in low-income markets. They have made specific adjustments to accommodate the implications of serving these markets. In particular, these companies:

- Think hard before entry, to evaluate profit opportunities in extremely harsh conditions, determine the nature and extent of existing demand and customer willingness to pay, identify the full costs (e.g., upgrading and training of distributors) of participation, and evaluate local competitive alternatives, including counterfeiting and informal competition.

- Assess frankly their willingness and ability to manage a high volume of low-value transactions in rudimentary market conditions and their patience before generating returns.

- Protect operations from bearing legacy and overhead costs associated with more affluent markets. This may even entail setting up separate units operating with different economics and time frames than traditional corporate units.

- Find ways to share costs such as industry-standard products and services and investment in customer education and demand stimulation and supplier education. Partners in such initiatives include competitors, donors, and NGOs. To make such partnerships more effective, some companies assign personnel conversant with the different objectives and mindsets of commercial and social enterprises.

Impact Investors

In recent years, impact investors have been increasingly active in SSA. The Global Impact Investing Network estimates that about $50 billion of impact capital had been invested globally by 2010. And the Food and Agriculture Organization of the United Nations estimates that 18 new agriculture investment funds focused on Africa were announced between 2007 and 2009 alone, some of which were impact investment vehicles. Many of these funds are structured like private equity funds in mature markets, promising returns, albeit modest, to investors, as well as annual fees to the fund managers.

The sudden surge of capital available on such terms constitutes both a hopeful sign and a source of new concerns. If the money is well deployed, it can advance innovative solutions to the challenge of poverty. However, achieving this outcome requires overcoming several barriers. First, there may not yet be enough promising MBSs engaging very low-income people in SSA to absorb this money effectively. Second, opportunities are unusually expensive to find and difficult to evaluate, given the lack of a supporting ecosystem for commercial investment—securities markets, analysts, credit reporting, deal brokers, lawyers, and other parties that inform and facilitate investing elsewhere. Third, the capital needs of most MBSs are not well suited to the private equity model. Most opportunities involve early-stage enterprises with limited capital needs. Of the firms contacted, almost 60 per cent of the ventures sought less than $1 million in capital and even the larger enterprises needed little more than $3 million. In addition, the enterprises may benefit more from debt or royalty arrangements than equity stakes. Finally, the deals are unusually risky in light of the extremely demanding conditions of low-income markets and narrow margins available. The average net margin for agricultural MBSs Monitor analysed, for example, is approximately 10 per cent.

This poses additional questions for impact investing in both near and medium terms: Will interest in investing to help people at the bottom of the economic pyramid be sustained? Will new models and vehicles for investing capital for social impact be developed in time to provide returns and maintain investor interest? Or will the funds shift their focus from achieving impact for those living at the bottom of the economic pyramid to invest behind enterprises serving primarily wealthier segments of the population?

While answers to these questions are taking shape, Monitor's research in SSA prompts the following implications and recommendations for impact investors:

- Increase availability of early-stage risk funding, with tempered expectations for returns (if any). The market need is for start-up capital and technical assistance for fledgling enterprises. Given the length of time required for successful MBSs to reach scale, investment risk will be unusually high, with payback slow to materialise.

- Offer more debt and less equity. The example of microfinance institutions is instructive: nearly 90 per cent of external investment into MFI funds consists of debt capital.[7] The nature of the product offering in microfinance, of course, is consistent with debt financing. In the SSA research sample, more than 80 per cent of MBSs express capital needs better served by mixed funding or debt than equity financing. The level of return generated by successful MBSs also is better suited to debt financing.

- Enhance the investment-readiness of early-stage enterprises. Most extreme SMEs require technical assistance as much as they require capital, indeed, often before they can use capital effectively. Impact investors may wish to create pools of capital for TA or to work with suppliers of TA to increase its availability and impact.

- Help build the ecosystem for impact investing. SSA needs better and more reliable mechanisms for sourcing deals and matching the requirements of MBSs with those of potential investors. Impact investors may wish to direct some funds toward building a more supportive ecosystem for deploying capital for social impact.

Donors

Donors — multilateral and bilateral agencies and philanthropic foundations — can play a significant role in promoting MBSs because of their convening power, interest in generating and disseminating relevant knowledge, flexible capital, and capacity to absorb risk. Indeed, some of these donors are among the best-placed to pull all of the actors together across the stakeholders considered here, and to integrate across these recommended activities. Embracing this role, however, may require modifying traditional approaches to helping low-income people via grants to governments or NGOs. Some donors have already embarked on change, offering challenge funds, supporting business networks, providing loan guarantees and TA, and participating in impact investment funds. Others remain sceptical that encouraging private sector initiatives can be consistent with their mission.

Traditional aid will always be important and necessary in impoverished countries but donors wishing also or primarily to support MBSs have much to contribute. Monitor's research in SSA indicates ample opportunities:

- Tie funding to campaigns in which MBSs are participating. Rather than funding a general "clean water awareness" initiative, for example, consider partnering with MBSs that offer clean water.

- Lower the costs of participating in low-income markets by supporting demand stimulation and underwriting provision of TA and training and development programmes and expenses.

- Provide basic and shared physical, social, and knowledge infrastructure. Donors have traditionally supported improvements to physical infrastructure, such as roads, water systems, and power grids. They may wish to expand the definition of infrastructure to include cooperatives or other aggregation platforms and knowledge about business and markets. In the latter category, supporting knowledge creation about effective practices in contract farming or distributing to low-income people would be extremely helpful. Donor support in this area may also extend to encouraging the development of the ecosystem for private investment (see above).

- Dampen volatility and risk. The conditions faced by extreme SMEs are themselves extreme: volatile food, energy, and commodity prices, financial shocks, droughts, and other crises and setbacks. Donors and aid agencies are well positioned to absorb and share risks by developing insurance and hedging capabilities for MBSs.

- Provide patient investment capital to MBSs, perhaps via participation in impact investing funds, that is clear-eyed about risks, especially in the early stage, time to scale, and measuring social impact. Challenge Funds have proven to be another vehicle that can play this role, when deployed well, but aimed more at SMEs than major corporations. These can sometimes also serve a "shared sourcing" purpose.

Governments and Policy Makers

Although leaders in the public and private sector occasionally find themselves at odds, they share a common objective and play complementary roles in increasing the prosperity of communities and nations. Within its traditional role, government can do much to encourage the development of responsible MBSs, by facilitating ease of entry and providing appropriate and timely regulation. Beyond this, Monitor's research has specific implications for governments wishing to support MBSs. Some steps echo the recommendations to donors: support demand-stimulation initiatives for socially beneficial goods and services; help underwrite TA and training and development; upgrade and expand infrastructure and promote sharing. Governments are uniquely positioned to help in other specific ways:

- Develop regulatory frameworks that allow for both private and public provision of goods and services. Currently, most governments enact measures that have countervailing impacts—encouraging private initiatives in education and healthcare, for example, while also operating heavily subsidised state systems. The point is not to achieve complete consistency in approach but to recognise and moderate the costs and effects of supporting conflicting alternatives, and think about the system across both public and private provision.

- Invest in aggregation platforms that make groups of low-income suppliers or customers more economically viable trading partners. Facilitate the formation of cooperatives and other organizations to combine numerous small units into a larger aggregation that can capitalise on economies of scale.

- Use purchasing power to create anchor demand. Government can not only purchase from MBSs but also use its purchasing power to hasten the route to scale.

- Provide "smart subsidies" to users of MBS services and products, such as bursaries and scholarships for students at training academies or contributions to the capital costs of private providers of water and energy.

1. African Markets, African Models

IN THE GREATER ACCRA REGION IN GHANA, parents send their children to government schools, primarily because there are few alternatives. A year of tuition costs between $4.00 and $160[8]—reasonably affordable, although extras such as textbooks, school meals and transport can raise the price significantly. If a family should fall on hard times, children may have to drop out at the start of a new term when school fees are due.

In September 2009, a privately-operated Omega school opened, offering an alternative low-cost education that proved to hold significant appeal in the local community. One week after the school opened, it was fully subscribed (with around 400 students), and within months its waiting list had soared to 380 prospective pupils. Three more Omega schools followed in other areas of the city, experiencing similar demand.

Omega schools are attractive to low-income families partly because they offer a daily payment system: for $0.70 (1 Ghanaian cedi) per day, a child can attend school, receive textbooks, a school uniform, transport to school and meals. Parents receive five coupons each term that each allow one free day of school. Should a family experience a cash crunch, children are not forced to drop out but simply miss days until cash flow is restored. These arrangements account for the importance of cash flow to low-income persons and help make the schooling affordable.

MARKETS AND THE POOR

The poor participate in markets and the private economy daily across Africa for everything from selling produce to buying medicine. Most of this participation is via informal markets, with products and services that are sub-standard. MBSs promise to bring formal quality at affordable prices and fair terms.

Meanwhile, Omega contains costs in several ways. In some cases, school buildings are built by the community, reducing the overall capital outlay. Teachers are secondary school graduates, rather than three-year college graduates employed in public and most other private schools, which affords a significant savings in wages. An expert developed standardised lesson plans and teaching materials, which makes learning less dependent on highly skilled and educated teachers.

So far, the outcomes seem promising. Results from the first set of students writing Omega exams are positive, and, as of this writing, the franchise had extended to six schools, with two more due to open in the near future.

Omega is an example of a market-based solution (MBS), an emerging phenomenon with high potential to counter the causes and consequences of global poverty. Such initiatives use the market economy to improve the lives and livelihoods of low-income people: *as customers*, by offering them socially beneficial products and services at prices they can afford; and *as business associates*, by engaging them as suppliers, agents, or distributors.

During the past fifteen years, interest in private sector approaches to poverty alleviation has been growing as more than two billion people worldwide—including half a billion in sub-Saharan Africa (SSA)—struggle to subsist on less than $2 per day. The continuance of poverty on such a massive scale and its stubborn resistance to the traditional solutions—government expenditure, official development assistance, and private philanthropy—indicate need for alternative ways to move masses of people up the income scale.

Market-based solutions are still in their infancy, and there is much yet to learn about how they work and why many struggle and only some succeed. In 2009, Monitor Group reported on MBSs in India, concluding a year-long investigation of more than 270 initiatives and focusing on a critical factor in their effectiveness: a business model attuned to the exacting conditions of low-income markets.[9] When the business model is sound, an MBS can achieve self-sufficiency, thus weaning it from dependence on investors and donors, and operate at or near scale, thereby reaching enough people to make an impact on poverty rates.

RESEARCH SPONSORS

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The research in India raised a natural follow-on question: whether MBSs might hold similar promise and play a similar role in Africa, where markets are both smaller and less developed. The short answer is "yes", based on a 16-month study of MBSs under the sponsorship of a syndicate of donors, development actors, and private firms (see box).

In all, Monitor profiled 439 enterprises across nine countries in SSA (see the appendix for discussion of the research methodology). These enterprises all sought to engage customers or business associates in the $2-a-day (or less) segment of the population. Although some enterprises also operated in other income segments, Monitor's objective was to investigate the effectiveness of MBSs at the bottom of the economic pyramid (BoP).

The research involved extensive field-work, including site visits and interviews with the enterprises and their customers, suppliers, agents, and investors, as well as with subject-matter experts. The research team also surveyed nearly 50 large African and multinational corporations to increase understanding of their approaches to low-income markets. Finally, the research team spoke to more than 50 impact investors in North America, Europe, and Africa to ascertain factors guiding their decisions to invest and the barriers they encounter when attempting to deploy capital to help reduce endemic poverty.

The original research in India identified seven business models MBS managers deploy and investors can support to increase the odds of success. These models were all in evidence in Africa. In addition, the research revealed three successful business models not studied previously, as well as three more that are not yet proven but show intriguing possibilities if ways can be found to make them more cost-effective and scalable. Added to four well known business models related to microfinance that we saw in Africa operating at scale — microcredit, microinsurance, microsav-

WHAT'S IN A NAME?

Readers will note this report contains hundreds of references to low-income persons or groups as "the poor", "poor people", "low-income segments", low-end markets", the "bottom of the pyramid" (BoP) and many other loosely synonymous variations. We recognise each of these terms may displease or dismay someone, somewhere, just as we recognise each term is thoroughly accepted: low-income people self-identify as "poor", economics professors expound on "low-income segments", economic and social NGOs refer to "impoverished peoples", "BoP" is becoming a common acronym, and so on.

But our intent isn't to satisfy a standard of political correctness. This report is keenly concerned to take low-income groups seriously as customers or business associates—suppliers, distributors, and agents—rather than as beneficiaries of someone else's largesse or assistance. Our hope throughout is to move away from typecasts toward a more nuanced consideration, based on data and actual conversations with potential customers and suppliers in low-end markets, of the lives and livelihoods of poor people and the ways in which these might be improved through market-based solutions.

ings, and mobile money transfer—there is a growing portfolio of MBS business models well suited to serving low-income markets (see table beginning on p. 8).

The intended audience of this report is the broad community of actors concerned with making a real and enduring improvement to the lives of the poor through the emerging approach of MBSs. The report is presented in the hope that entrepreneurs and business leaders will discover proven and promising business models and avoid common mistakes, that impact investors and donors will find new MBSs to support via direct investments, soft funding, and smart subsidies, and that govern-

ments will recognise the plusses and minuses of MBSs, and find suggestions on how to maximise the former while minimising the latter.

The remainder of this report is organised in five chapters.

- *Chapter 2* discusses the context of MBS activity in sub-Saharan Africa, highlights the characteristics of low-income markets, and makes the case for effective business models as a strong factor in the success or failure of MBS ventures.

- *Chapter 3* details three MBS business models first observed in SSA: smallholder farmer aggregation, which increases famer earnings by up to 40 per cent; enhanced informal shop distribution, which provides socially beneficial goods and services and improves lives and livelihoods of both customers and sellers; and private vocational training colleges, which bolster employability and long-term economic prospects for students.

- *Chapter 4* discusses three additional business models with potential to fulfil the promise of achieving financial self-sufficiency and scale, although these models are not yet proven: mobile-enabled information services in sectors beyond banking, such as agriculture and healthcare; last-mile infrastructure to bring power and clean water to low-income communities; and dedicated direct sales forces to distribute socially beneficial goods and services to isolated communities.

- *Chapter 5* draws on the empirical work underlying this report to derive themes and lessons from the business models about successful strategies, demand stimulation, and routes to scale.

- *Chapter 6* outlines implications, conclusions, and recommendations for the constituencies most interested in addressing challenges of global poverty through MBSs, including entrepreneurs and MBS leaders; large national and multinational corporations, impact investors, donors, and governments.

The appendix to *Promise and Progress* includes a detailed description of the research design and methodology.

2. Reaching into the Bottom of the Pyramid

SUB-SAHARAN AFRICA IS HOME to some of the poorest countries on earth. More than 300 million people live on less than $1 per day and another 250 million live on less than $2 per day.[10] These dismal statistics go hand-in-hand with depressing human development metrics. On the UNDP's 2010 Human Development Index, sub-Saharan Africa (SSA) includes 28 of the bottom 30 countries in the world.[11]

Alleviating poverty in the subcontinent remains a stubborn development challenge that has long defied government policies, official development assistance (ODA), and interventions by philanthropists and NGOs. The problems are well known and have seemed intractable: corruption and poor governance, a predominantly rural population subsisting in isolated and scattered communities, and grossly inadequate infrastructure, as well as shortages of educated personnel and financial resources to mount an effective response.

ODA, especially, has been singled out for criticism, with relatively little to show for the vast pools of money flowing into SSA since the 1960s.[12] Blanket criticisms are unduly harsh, however, in light of such important successes as, for instance, public health interventions that have saved millions of lives by eliminating smallpox, nearly eradicating polio, and making great inroads against river blindness, guinea worm, and diarrhoeal disorders.

The fact remains, however, that neither ODA nor other policies and interventions have stimulated economic growth — the only enduring solution to endemic

SERVING THE BOTTOM OF THE PYRAMID

Mobile phone carriers figured out years ago how to serve low-income markets and growth has been explosive. Now other MBSs are discovering business models required to do so in other sectors.

poverty — in SSA. The most telling criticism of traditional approaches to poverty relief has been their utter failure to contribute to sustained economic progress. Meanwhile, the economic challenge has become more daunting in recent years. Although SSA weathered the global financial crisis of 2008-2009 relatively well, many donor governments continue to face difficult budgetary choices, with foreign aid spending at risk.[13] Similarly, the endowments of most philanthropic foundations have been squeezed, resulting in less money to spend on campaigns against poverty.

In these circumstances, both public and private actors are searching for more effective ways to overcome poverty. Some government donors, for example, are looking for more effective ways to deliver assistance. Britain's Department for International Development, one of the leading lights in government-funded development, recently published a new strategy which focuses on "getting value for money from every pound of aid we spend" and ensuring that results claims are "backed up real evidence... from hard numbers".[14]

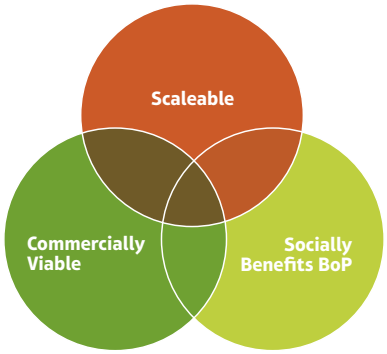
Among private sector approaches, microfinance has grown rapidly, although not without controversy (see sidebar). While microfinance is more widespread in Asia and Latin America than in Africa, new services such as mobile money transfer were pioneered in SSA. Impact investing, which seeks to create positive social, environmental, or governance impact in addition to achieving financial return, is also expanding in the subcontinent.[15] At least 37 new investment funds, both impact- and commercially-driven, have been launched in Africa in recent years. About 20 funds target the agricultural sector exclusively, while three high-profile impact investment vehicles focus on health: Acumen, Aureos Health in Africa, and PharmAccess Investment Fund for Health in Africa (IFHA). With the support and encouragement of international organisations, development banks, foundations, and NGOs, much of the new investment is aimed at small and medium enterprises as vehicles to deliver impact and job growth. In the same vein,

a number of commercial banks have also begun investing to support ventures operating at the bottom of the economic pyramid; for instance, Standard Bank has committed to the agriculture sector with its recent guarantee from AGRA.

Enter Market-Based Solutions

These challenges and trends — the persistence of poverty, the ineffectiveness of traditional approaches to alleviation, and the rise of new investment funds and activities — have prompted donors and investors to support solutions that address the causes, not just the consequences of endemic poverty. One promising approach is market-based solutions: ways of doing business that improve the lives and livelihoods of those living at the bottom of the economic pyramid.

Figure 2-1: The Characteristics of Market-Based Solutions to Poverty



In its research in India and SSA, Monitor formally defines a successful MBS to poverty as possessing three interlocking characteristics — two economic and one social in nature (see Figure 2-1). An initiative qualifies as a successful MBS if:

1. **It is financially self-sustaining,** if not profitable; otherwise it is simply an alternative form of aid and dependent on the continuing generosity of donors for its survival.

2. Given the magnitude of global poverty, **it is scalable** and able to reach significant numbers of low-income people.

3. **It provides tangible social benefit to low-income people.** This includes any product or service or employment opportunity that provides direct social benefit to the poor, typically in categories such as food and agricultural products, water and sanitation, education, healthcare, financial services, insurance, clean energy, and telecommunications.

MICROFINANCE IN THE SPOTLIGHT

The evolution of microfinance providers from NGOs to large, profitable entities has placed this growing industry — and poster child for market-based solutions — under the spotlight. Concerns relate to the ability of microfinance to alleviate poverty and the impact of profit-making on the microfinance mission to uplift the poor.

Extending small loans to those too poor to be part of the formal financial system, once believed to be one of the more promising business developments in modern times, is now in question as a means to financial inclusion. While access to credit has been opened up for customers with few financing alternatives, it is not clear that this has produced sustainably improved incomes or lower rates of poverty. Critics point out that most loans are not used to start small businesses (the premise of most MFI loans); rather they are typically used for extraordinary expenditure such as weddings and funerals or school and health fees. As a result, borrowers may find themselves caught in debt traps from which they cannot escape. And even when microloans are used to start or support small businesses, argue the critics, this does not often produce prosperous enterprises over the long run.*

While its efficacy is under fire, microfinance has also been accused of profiteering from the poor. In particular, SKS, India's largest MFI, which claims to have improved the lives of more than seven million members, has provoked sharp criticism from many quarters. In August 2010, the company floated on the Bombay Stock Exchange, raising $350 million and drawing such high-profile investors as billionaire George Soros, venture capitalist Vinod Khosla and Infosys Technologies founder N.R. Narayana Murthy. At the time, objections were raised to the high pricing (at the top end of the indicated price band) and the sale of shares by private equity investors who stand to make millions and will invariably lead to changes in operation that are unlikely to benefit its poor customer base.

SKS was not the first MFI to list — Banco Compartamos in Mexico had done the same in 2007 — but before criticism

of the IPO could die down SKS was embroiled in a scandal that threatened to undermine the whole sector. In December 2010, a spate of suicides by over 60 poor borrowers in the Indian state of Andhra Pradesh was blamed on "multiple lending, over-indebtedness, coercive recovery practices and unseemly enrichment by promoters and senior executives [of MFIs]".** Although only 17 of the victims were members of SKS, the bank was at the forefront of the criticism that MFIs had been extending loans to rural people without checking whether they had the capacity to repay, which several respected commentators blamed on "their quest to grow fast and to serve the insatiable appetite of private equity investors".† This led to demands for greater regulation of the industry and an end to usurious practices. This drama has yet to play out in full, but it has tarnished the reputation of microfinance and unfortunately MBSs more generally. But the need for credit has not diminished, and most MFIs continue to serve their customers well.‡

Like other forms of human activity, MBSs are subject to abuses which should not be tolerated. However, Monitor's research in Africa and India paints a much different picture than currently being drawn by critics of microfinance. The initiatives we observed—including microfinance—were all attempting to achieve significant positive social impact and those at scale were accomplishing it. At the same time, most of the ventures were struggling to break even and none was profiteering at the expense of the poor. Average operating margins for some of the most promising agricultural MBSs we saw lie in the range between 6 and 10 per cent. As noted in Chapter 5, the modest returns generated by even successful MBSs pose a challenge both to the venture and to investors.

* These criticisms are laid out at length in Milford Bateman and Ha-Joon Chang, *The Microfinance Illusion*, http://www.hajoon-chang.net/downloads/pdf/Microfinance.pdf (accessed 11 March 2011).

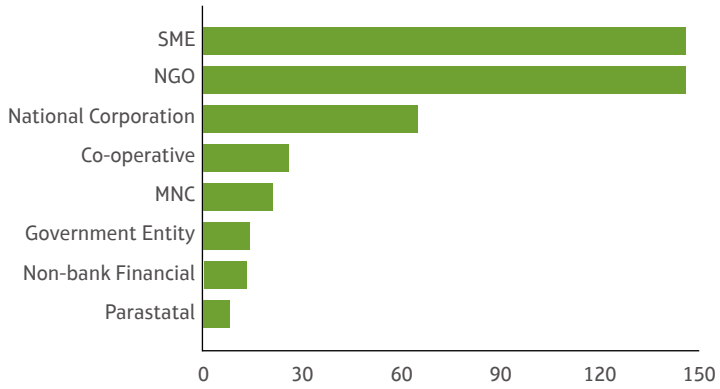
** Vijay Mahajan, chairman of India's Microfinance Institutions Network quoted in Soutik Biswas, "India's micro-finance suicide epidemic", *BBC News*, 16 December 2010, http://www.bbc.co.uk/news/world-south-asia-11997571 (accessed 11 March 2011).

† Kavaljit Singh, "Taming the 'Wild West' of Microfinance", *Financial Times*, 29 December 2010.

‡ See CGAP's 2010 Annual Report for a balanced treatment of the crisis in microfinance, including a call for more MFIs to adopt the model predominant in Africa, namely savings paired with credit.

Armed with this definition, Monitor identified and interviewed 439 MBSs across nine SSA countries and 14 sectors (see the appendix for additional details). Note that an MBS may take any legal form, not just a small or medium enterprise (SME). It may be a NGO, a cooperative, part of a large corporation, or even a government entity. The distribution of legal forms in the Monitor SSA sample is portrayed in Figure 2-2, which shows that a third are SMEs, another third are NGOs, and the remaining third split among other forms. In our view, what an MBS does to combat poverty matters more than its particular legal form.

Figure 2-2: MBS Initiatives by Legal Form in SSA from Monitor Research Sample (n=439)

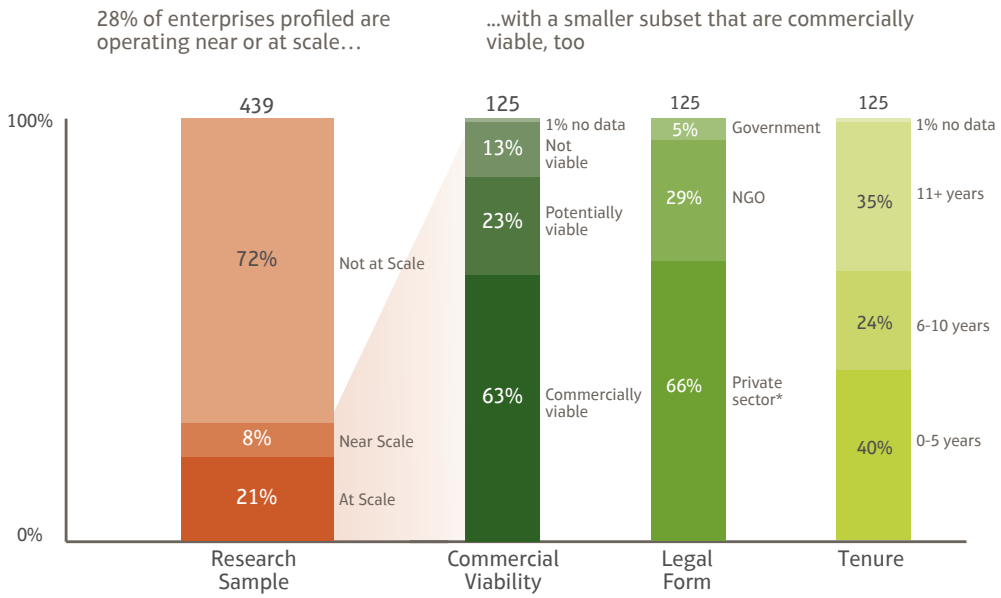


Source: In-country Interviews; Monitor Analysis

A word about the meaning of "scale", which is sensitive to national context. In this project, Monitor defined achieving scale as reaching 100,000 customers per year or engaging 10,000 suppliers or producers. These figures are significantly smaller than their counterparts in India (one million consumers or 30,000 suppliers), based on much smaller domestic markets. As these figures also suggest, scale is partly dependent on whether the business engages the BoP as customers or business as-

sociates, and even within customers, some MBSs see customers daily (e.g. water) and some once a year or less (e.g. childbirth). Most businesses have many more customers than employees, and MBSs are no exception. That said, there is no hard line between "at scale" and "not at scale". The metrics provided here are benchmarks, indicating MBSs that have attained them have made a notable impact on poverty, which, in turn, suggests that these ventures offer lessons about success. Of the MBSs in the Monitor SSA sample, nearly 30 per cent satisfied these scale benchmarks (see Figure 2-3).

Figure 2-3 Profiles of MBSs at Scale in SSA



Note: * Private Sector includes: multinational companies, national corporates, micro-small-medium enterprises, non-bank financial institutions and cooperatives

Source: In-country Interviews; Monitor Analysis

Developing a better understanding of MBSs is important because they possess a crucial advantage over traditional aid programmes in combating poverty. While aid can sometimes be effective, MBSs have the advantage of being self-financing and more sustainable over time. These solutions generate income to continue to provide beneficial goods and services or improve the livelihoods of those whom they engage. They also empower low-income persons to make their own choices and assume responsibility for their economic prospects, rather than becoming and remaining dependent on donors. When an MBS buys produce from smallholder farmers regularly at guaranteed prices, this normalises the farmers' cash flows and increases incomes in ways that aid almost never can. When the MBS helps the farmers understand the benefits of using fertiliser and improved seeds, it initiates a virtuous cycle toward rising incomes. When an MBS provides clean water to peri-urban slums more cheaply than bottles or tankers, this both provides a health benefit and frees up a portion of consumer income to deploy on other beneficial goods and services.

MBSs, of course, cannot address every hardship faced by the poor, but they do complement and extend other anti-poverty approaches. By addressing entrenched problems such as low agricultural productivity, the paucity of clean drinking water, and the limited range of electricity, MBSs have a unique ability to help individuals rise and remain above absolute poverty. As such, MBSs are best understood as components of an overarching strategy to combat poverty, along with traditional forms of domestic policy, ODA, philanthropy, and NGO activities and programmes.

Operating in Low-Income Markets

In SSA, the low-income market is vast, but it is a mistake to associate market size with a fortune waiting to be tapped. Low-income markets are extremely difficult to serve, and nowhere more difficult than in Africa. First, the population is still predominantly rural, with 63 per cent living outside urban areas. The dispersed nature of the population and the low quality of infrastructure seriously impair the ability

to engage the rural poor either as consumers or producers. Second, low-income segments are constrained by low and lumpy cash flows and tiny levels of saving, which make them highly risk averse.

As has been documented amply,[16] a number of factors contribute to the volatility of BoP cash flows, consumption, and production. Incomes, for example, tend to oscillate in the short term for reasons including:

- **Lack of steady and available work,** casual or otherwise, which means that BoP workers are often unemployed and especially cash-strapped periodically.
- **Fluctuating quality or quantity of produce,** which causes income of smallholder farmers or handicraft producers to fluctuate intermittently and, on a percentage basis, dramatically.
- **Need to purchase big-ticket items,** which may involve anything from a cow to emergency medical care or a family funeral that constrains purchasing power.

Similarly, output by low-income producers fluctuates because of:

- **Side-selling and low loyalty,** which are common in agriculture because poor farmers must meet immediate cash needs and lack understanding of potential alternatives.
- **Input diversion,** such as selling seeds or fertiliser, which is due either to a lack of knowledge or immediate need for cash. However it occurs, the effect is the same: lower output yields.
- **Personal or domestic use** of crop production, because many low-income farmers operate at or just above subsistence; so if crop yields drop, output is diverted to feed the family.

- **Variable purchase and application of inputs,** which occurs commonly because of irregular cash flows and risk of crop failure, which in turn postpones purchases that could increase output or prompts purchase of lower-quality substitutes.

- **Lack of resilience** to external shocks such as droughts or floods, which reduces crop yields or completely wipes out a crop. Such shocks affect smallholders disproportionately, a problem especially severe in SSA where government support or other safety nets are missing or unreliable.

No one should get carried away by the size of potential financial rewards in serving the African poor. Among the MBSs Monitor identified in SSA, a third were "extreme SMEs", facing all the challenges of small businesses in any environment — difficulty in accessing finance, attracting and retaining human capital, achieving economies of scale, and building recognisable and trusted brands — but also struggling to operate in a sometimes inaccessible market with severely constrained resources. The challenge is made more difficult for MBSs that offer goods and services or engage in activities in "push" categories like preventative healthcare, rather than in "pull" categories like credit or jewellry. Promoting "push" categories requires high levels of awareness building and education among potential customers.

Meanwhile, the ecosystems to support extreme SMEs are likely to be arid, with poor infrastructure and unfriendly and inefficient regulation. Competition may also be problematic, especially when the MBS seeks to offer products or services available for free or at low cost from the government or an NGO. Consequently, these businesses operate with low and volatile margins. For example, the profits of aggregators of smallholder farmers in the Monitor sample fluctuated wildly between -9 and +37 per cent annually.

Even large corporations generally labour to cover their costs while serving low-income markets. Every success story occurs in a context more generally of struggle and losses. Coca-Cola SABCO, for example, employs 3,000 community entrepreneurs in

Ghana, Tanzania, and Kenya as part of a tailored distribution strategy — for this market the manual distribution centre (MDC) — which has increased consumer reach by over a million people, mostly at the bottom of the pyramid. However, a more common experience among consumer products companies is finding little brand awareness amongst the dispersed rural poor, resulting in high business development costs that revenues do not cover. As a result, some big companies continue to target more accessible and attractive opportunities in higher-income segments. Even when companies persist in serving the BoP, many conclude that it is better to subsidise losses out of CSR motives rather than tailoring practices to find profit in the segment.

Business Models for the BoP

An enterprise seeking to reach into the bottom of the economic pyramid in SSA can only succeed if it first takes account of the exigencies of low-income markets and the behaviours of poor people as economic actors. An MBS also seeking to achieve financial self-sufficiency and scale can only thrive with a business model attuned to the ways poor people make purchase decisions and participate in the workforce.

The Poor as Customers

Low-income people in SSA actively participate in markets for fast-moving consumer goods (around 50 per cent — $215 billion — of total African BoP spending is on food), mobile telephony (313 million subscribers in 2009), healthcare,[17] and microfinance (eight million active borrowers in 2009). As activity in each sector demonstrates, customers with low and inconsistent cash flows require products and services to come in small sizes and offered at rock-bottom prices.

Beyond these four sectors, levels of BoP participation vary greatly and the segment's willingness to pay becomes more difficult to ascertain. Consider water, for example. Many consumers surveyed professed a willingness to increase their current spending, especially if they could get better quality water. However, consumers also

COMPARING AFRICA AND INDIA

Monitor's research in Africa confirmed many of the findings reported in *Emerging Markets, Emerging Models* (2009), based on the firm's initial study of MBSs in India. Again, we saw the poor as rational economic actors. All the business models observed in India were operating in Africa (sometimes at greater scale). We also saw a blending of business model elements to create innovative new business models tailored to the circumstances of African consumers and producers — as noted at Omega Schools. At the same time, we noted three new (or newly visible) business models in Africa and three more with intriguing potential.

Among the differences between the two regions, the relative prominence of low-income persons as distributors in SSA is noteworthy. Partly, this reflects the research team's increased awareness of the critical role of distribution in reaching impoverished people. In the India study we had encouraged enterprises to share channels, but in Africa we paid much greater attention to how that might be achieved in exceptionally challenging circumstances. Consequently, we found many enterprises selling socially beneficial goods (healthcare products, agricultural inputs) and services (mobile airtime, battery recharging) through sales agents or micro-entrepreneurs. Such activity produced two kinds of beneficial social impact — provision of goods and services to improve the lives of consumers; and better livelihoods for distributors and merchants, who also acquire and upgrade valuable skills.

The most significant difference between India and Africa, however, is that the business environment for MBSs in Africa is typically harsher than observed in India.

- Countries in Africa were frequently poorer than India. India's 2009 GDP per capita (PPP) is 70 per cent higher than that of our sample countries with the exception of South Africa, where income inequality is substantially greater than elsewhere. At the same time, other characteristics of the poor as consumers are similar in

the respective regions. In both Africa and India (and elsewhere, we suspect), many low-income people with whom we spoke are often more interested in purchasing status symbols, entertainment, and conveniences than some of the socially beneficial goods and services that MBS marketers hope could be more directly helpful to them in escaping poverty.

- Rural populations in Africa were more dispersed than those we surveyed in India—the population density of India is five times that of Kenya or Senegal—and were frequently less organised. In India we found large networks of self-help and community groups or cooperatives, which were largely lacking at any pre-existing scale in Africa. Consequently, MBSs commonly had to develop their own ways to aggregate customers and suppliers.

- African transport infrastructure was, on the whole, considerably worse than anything we encountered in India. Many roads were decrepit and poorly maintained, while some communities and locations can only be reached by rutted paths. As a result, bringing goods and services to the BoP in SSA is far more challenging than in India.

- In India, we came across numerous large local firms that MBSs could leverage for supply and distribution infrastructure. We found these firms were far less common in Africa and most enterprises we studied thus had to be more innovative around the distribution chain. This was one reason for the higher incidence of engaging BoP individuals as sales agents or distributors.

- Finally, the agricultural output of African farmers remains lower than their counterparts in India, suggesting constraints and systemic problems particular to Africa, and a wholly different state support system in India.

showed high sensitivity to prices, reducing expenditure or shifting to substitutes in response to price increases. This uncertainty about willingness to pay creates a pricing dilemma for MBSs already battling to cover costs.

The situation is perhaps even more challenging when a product or service provides no immediate pay-off or offers intangible benefits to the consumer. Research at 12 providers of mobile-enabled services for low-income customers revealed that only five were able to charge prices covering the full cost of the service. In Uganda, Google launched a range of information-based services aimed at the BoP, initially free of charge. Once prices were introduced, only Google Tips, a service offering health and agriculture information for which there was no real substitute, managed to retain a meaningful customer base, and even this declined by over a third, from more than 500,000 hits per month at its peak to 360,000.

How customers access goods and services also poses difficulties. Outside South Africa, the lack of formal channels means that the poor must obtain most goods and services via informal retail channels.[18] These channels take a wide range of forms, from hawkers and street markets to spaza shops, agro-dealers, and informal chemists. The channels, moreover, are typically fragmented and unorganised — there are no franchises or chains in the informal retail sector. There is also a wide variation in merchandising and owner capability, as well as constraints imposed by lack of space and infrastructure. As a result, enterprises that wish to reach poor customers often find themselves thwarted by the high costs of dealing with informal channels.

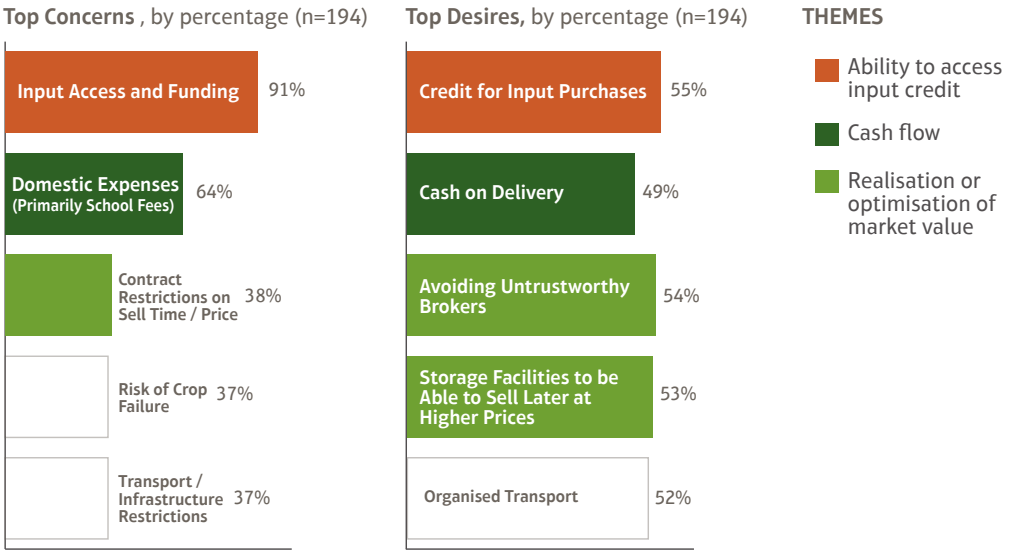
The Poor as Suppliers

Low-income Africans participate in existing supply chains most notably in agriculture. The sector still accounts for a sizeable portion of GDP (about 30 per cent) in most SSA countries, and small holdings are typical. Monitor found 119 examples of MBSs in which small farmers were being pulled into commercial value chains or where MBSs were selling productivity inputs to enable this supply. While the characteristics of low-income people as suppliers described here are based heavily on

agricultural examples, they also appear to apply to small suppliers that contribute to larger supply chains in such other sectors as handicrafts and manufacturing.

Smallholder farmers are typically widely dispersed and may be isolated because of Africa's poor transport infrastructure. As a result, aggregation or organisation of low-income farmers into cooperatives or other groups is relatively rare. This isolation often exacerbates problems of accessing markets and disconnects them from market signals. Consequently, although smallholder farmers often produce primarily for subsistence, when they do have surplus to sell, this often goes to local or farm-gate brokers who do not always pay fair prices, given that farmers typically lack knowledge of other options. A similar pattern plays out among handicraft suppliers, who are not always aware of market needs and standards beyond the local community. Even with access to market signals and a clear understanding of what this means, however, suppliers may be unable to act on these signals because of difficulties in obtaining access to distant, higher value markets.

Figure 2-4: Economic Concerns of Smallholder Farmers



Source: Monitor interviews with 194 smallholder farmers in 3 countries

These characteristics are important to understand for businesses seeking to engage the BoP (see Figure 2-4). For the low-income suppliers, the most pressing concern is the need for credit. Smallholder farmers often have high working capital needs, for purchasing inputs such as fertiliser and seed, but have limited access to formal sources of financing because of their low, irregular incomes and lack of credit history.

Another serious concern for smallholder farmers is being able to pay their domestic expenses—school fees, for example—because of irregular cash flows. Consequently, they sometimes sacrifice the promise of higher prices at a future point for immediate cash payment at a lower price point.

Low-income suppliers do seek to increase participation in the economy, but they are hampered by lack of information as well as, in some instances, an ability to interpret and make use of market information provided through extension agents or pricing services. These suppliers may be unsure of quality and volume requirements and even how to sell. In such cases, clear demonstration of benefits may be required to help shift production habits.

The Poor as Agents, Distributors, and Entrepreneurs

In SSA, and especially in South Africa, many initiatives engage low-income people as distributors or agents or set them up as entrepreneurs. Many social enterprises view the employment of BoP agents or distributors as a natural way to extend the social impact of the enterprise, and there is the additional benefit that agents or entrepreneurs drawn from local communities may act as trusted intermediaries to BoP customers. Indeed, 45 of the enterprises Monitor surveyed cited an existing activity or a plan to engage the poor as sales agents.

Several factors complicate such strategies, however. For low-income agents, distributors, and entrepreneurs, cash flow variability and consumption patterns often result in performance volatility, with their sales peaking in months in which big ticket items are needed for their households, or income from traditional sources

(such as farming) is limited. The extent of poverty in this segment also means the BoP agent, distributor, or entrepreneur has little to no working capital available to support business activity. Added to relatively low levels of knowledge and skill, this loads the investment in time, training, and capital required from any organising entity. And for most BoP sales agents, the product or service they are contracted to sell is typically only one of many income-generating activities they may pursue; most have two or more sources of income, especially in rural areas. So there are often competing, and sometimes higher value, uses of time — for instance, the harvest. As in most direct selling industries, churn rates tend to be high. BoP agents or distributors, like small producers, favour fast cash payment cycles that may not be achievable when selling socially beneficial goods or services.

Some businesses like txteagle, a U.S.-based opinion and market research firm that gathers data in emerging markets via mobile communications, have emerged to try to capitalise on these characteristics of the BoP as entrepreneurs, offering them occasional work that can be accomplished in several hours a day via mobile phone or at an internet cafe. Such work may entail basic data entry for business process outsourcing (BPO), or it may be location-specific, such as local price monitoring or survey enumeration. While txteagle's African workforce tends to be more urban and in the middle rather than at the base of the pyramid, the model engages workers in ways that acknowledge their constraints. Indeed, prospects for involving the BoP in the digital economy have improved in recent years, notably in Kenya's burgeoning BPO sector. In addition, emerging "impact sourcing" providers like Samasource, Paradigm, and Digital Divide Data seek to improve the lot of low-income people by contracting their time and labour. This approach, however, requires workers to have a baseline level of education and literacy that is easier to find in urban areas.

Despite the difficulties in serving the BoP as a market, many MBSs are succeeding. Nearly 60 of the 439 ventures in the Monitor sample are paying their way and and have reached or surpassed the benchmarks for scale while providing socially beneficial products and services to low-income people. Just how they do this is a function of effective business models customised to the demanding conditions of serving the BoP.

3. Three Models That Work

SUB-SAHARAN AFRICA BOASTS many exciting MBS businesses models that operate at a profit and measurably improve the lives of low-income people. Many African MBSs rely on models also known to work elsewhere, including all seven business models Monitor had encountered in India (see the table beginning on p. 8).

In addition, other business models, especially in financial services, clearly demonstrate scale, reach to the poor, and social impact. These models include mobile money transfer (for instance, Safaricom's M-PESA), microsavings — either alone or with microcredit (e.g., KWFT), and two kinds of microinsurance. The first insurance model provides stand-alone funeral cover (Hollard); the second offers bundled credit life cover (Microensure). All these models are successful and reach hundreds of thousands — and in some cases, millions — of low-income consumers. Given widespread coverage by entities such as Consultative Group to Assist the Poor (CGAP), FinMark Trust, Grameen Foundation, Gates Foundation, Mastercard Foundation, and others, the Monitor research team did not explore these examples in detail, focusing instead on business models not studied elsewhere.

This chapter outlines the characteristics of three business models succeeding in SSA. These include:

- **Smallholder famer aggregator** models increase farmer earnings by up to 40 per cent in a trading arrangement with significant potential to improve market participation and incomes for tens of thousands of farmers.

AN AGRO-DEALER IN KENYA

Africa's GDP is still predominantly agricultural, so improvements in this sector have high social impact. Successful MBSs equip farmers with training and better inputs while finding buyers and attractive prices for their outputs.

- **"Improved" informal shop distribution models** provide socially beneficial goods such as healthcare products and agricultural inputs in a tailored way, materially improving the lives of both seller and customer.

- **Private vocational training colleges** increase the employability and economic outlook of a range of unemployed students, including those living at the bottom of the pyramid, addressing skills shortages, and doing so profitably.

SMALLHOLDER FARMER AGGREGATION

CORE MODEL ELEMENTS

Smallholder farmer aggregation involves enterprises that collect cash crops and staples from large numbers of small-scale farmers and sell these in one transaction to large buyers at the top of the supply chain. Key elements of the model include:

- **Anchoring contracts with large buyers at the top of the supply chain.** Consistent, high demand is essential to the success of this model. In turn, forward commitments, premium pricing offers, and volume purchase agreements provided to their suppliers enable aggregators to acquire the output of numerous smallholder farmers at reduced risk and on acceptable terms.

- **Offering value-added services and inputs to smallholder farmers.** This helps aggregators ensure the reliability of supply. These services vary but include provision of agricultural inputs, sorting, drying and storage services, transport, and — sometimes — credit.

- **Leveraging or creating associations or clusters of farmers.** Doing so lowers costs when collecting from a large area and reduces the number of interactions an aggregator must facilitate. In some cases this approach brings together enough farmers and acreage to support shared purchase or rental of mechanised equipment.

Agriculture generates the majority of income in SSA, engaging up to 80 per cent of the labour force, over three-quarters of which are smallholder farmers (SHFs).[19] During the past decade, however, African farmers' incomes have not kept pace with global economic growth, stagnating at levels often below subsistence. On a per-acre basis, African farmers dramatically under-produce relative to their counterparts in other developing markets,[20] and poverty remains pervasive.

The international aid and development community invests substantial sums to improve the lives of SHFs —$1.2 billion in 2008 alone[21]— and recent G8 attention to food security suggests that such investments will increase.[22] This funding historically has supported three types of interventions:

- **Improving livelihoods at the bottom of the supply chain** through policies and measures to increase productivity; improve market knowledge; reduce transaction costs; and encouragement to plant new crops through training, credit, irrigation, and other services.

- **Third party-led organisation of the value chain,** in which an NGO or state agency organises the value chain and intervenes at points throughout the supply chain to improve SHF access to markets and more equitably distribute value. USAID's Pearl project in coffee and Technoserve's East Africa Coffee initiative are examples of this approach.[23]

- **End or intermediate buyer-led organisations of the value chain,** including contract farming, switching to higher-value export crops or organic and fair trade certification. This approach specifies inputs, improves productivity, provides intermediate or end markets, and often increases price realisation.

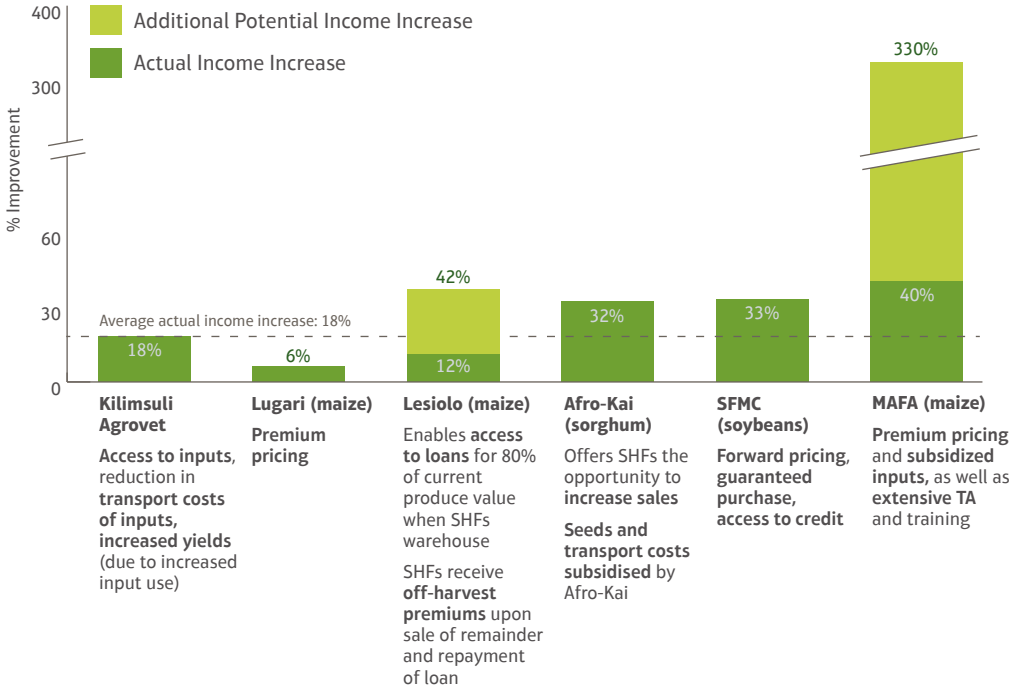
An example of the first type of intervention appears below in the discussion of distribution via informal stores. The second type has been examined in detail across

many value chain projects.[24] The SHF aggregation model described here illustrates a variant within the third type, interventions driven ultimately by buyers of agriculture produce.

SHF aggregators maintain critical relationships both with large numbers of SHF suppliers and top-of-the-supply-chain buyers. These aggregators collect cash crops and staples from large numbers of small-scale farmers and sell these in one transaction to large buyers at the top of the supply chain. Monitor examined five SHF aggregators that both purchased directly from SHFs and sought to upgrade the SHFs' capabilities.

Although these enterprises differ in some ways, each operates according to a business model that can trade with tens of thousands of SHFs, increase these farmers' incomes substantially, and allow the aggregator to earn a small profit consistent with other commodity trading businesses. Notably, most source not for exotic export markets, but for domestic markets. The model offers real income benefits for participating SHFs, often increasing their incomes by nearly 20 per cent.

Figure 3.1: Income Increase for Farmers, Measured Over Status Quo (last harvest)

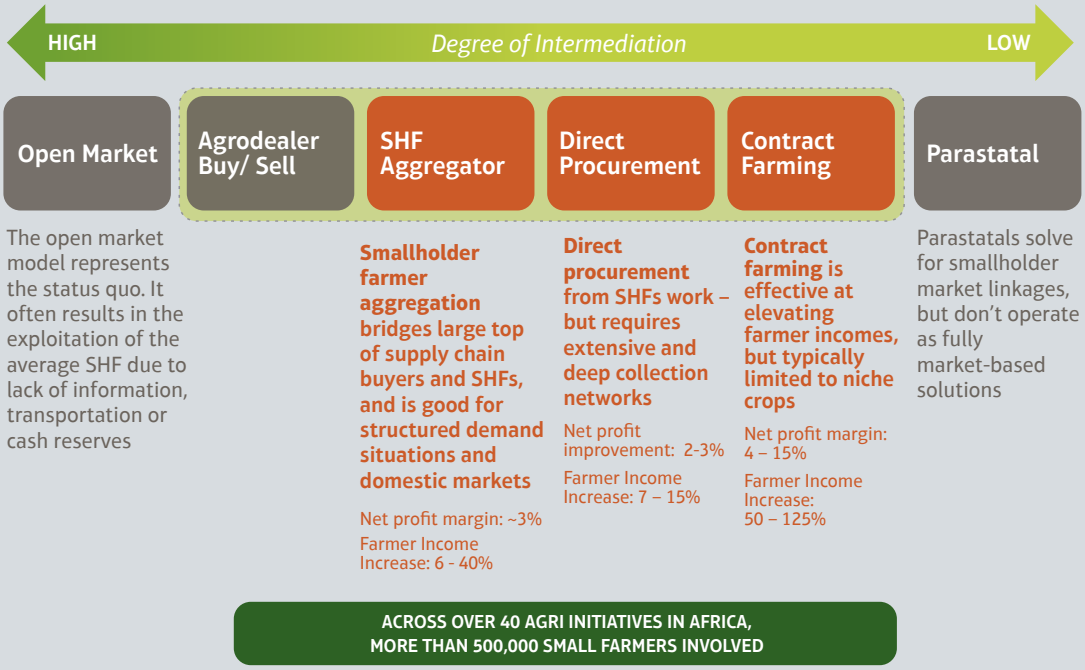


Source: Primary Research With Enterprises; Monitor Analysis

BUYER-LED MODELS TO IMPROVE SHF LIVELIHOODS

Across the spectrum of buyer-led models, as the figure below indicates, we identified at least six different ways in which SHFs engage in buyer-led market access schemes. The most prevalent model in Africa is the most intermediated—the open market model, in which no one organises the chain beyond vague pull-through demand which trickles down to farm-gate brokers, who purchase from SHFs, usually on terms unfavourable to the farmers. This is the base case for most African SHFs who have surplus to sell.

Our research found other buyer-led ways to engage BoP producers in the commercial supply chain. An approach receiving increasing attention involves small agro-dealers selling inputs to farmers and then buying back the outputs; the logic is that if farmers have a ready market on fair terms, they may re-invest to become



Source: Monitor analysis based on field work, enterprise interviews, and farmer interviews in India and Africa 2008-2010

more productive. The approach is not yet widespread and thus has little track record of success, but is intriguing because of its potential to increase returns. Two other models — contract farming and deep procurement — were discussed in our analysis of MBSs in India, so we chose not to explore them again, even though we found examples of each in SSA.* Indeed, we observed contract farming schemes that reached twice the number of farmers engaged in India.

The most integrated model is that of parastatals (government-owned entities), of which Africa is home to many involved in agriculture procurement and processing. Kenya Tea Development Agency and Ghana's Cocoa Board, for example, engage significant numbers of SHFs to supply commodities. However, we chose not to examine this approach closely because parastatals operate under rules and with privileges not accessible to private enterprises. However, some parastatals are highly successful and offer instructive lessons to MBSs.**

All these buyer-led models merit further investigation for the benefits they provide to low-income farmers. Monitor chose to focus on SHF aggregators, a model with great promise to engage large numbers of farmers and about which little was known.

* Karamachandani, et al., *Emerging Markets, Emerging Models*, pp. 77-94.

** Understanding parastatals as potential supply chain buyer/organisers is a topic requiring more research, given their ability to reach scale.

The sources of the increased income varied across the five enterprises. With a confirmed buyer, aggregators use savings from forward commitments, premium pricing offers, and volume purchase agreements to invest in their supply chains and provide value-added services to SHFs including:

- **Essential inputs** such as seeds and fertilisers (provided by Kilimsuli Agrovet, Lugari, Afro-Kai), which help SHFs improve productivity; in some cases (Afro Kai, Masara N'Arziki Farmers Association—MAFA) these are subsidised. Some aggregators also provided training and technical assistance (Savanna Farmers Marketing Company, or SFMC).

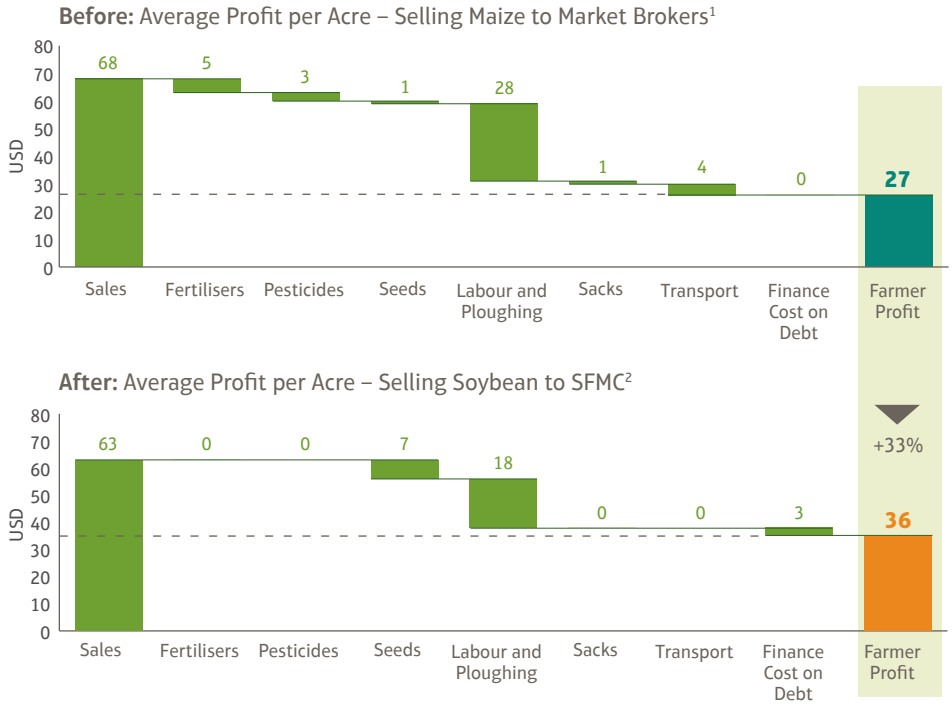
- **Produce services** such as sorting, drying and storing (Lesiolo Grain Handlers, Afro-Kai) that enable the SHFs to get a better price for their crops.

- **Transport services, to lower transport costs** which typically account for a large proportion of SHF expenses due to the generally poor road infrastructure in rural Africa. This forces SHFs to sell to (often unscrupulous) farm-gate brokers. Providing transport from the farm gate or a local collection centre substantially reduces SHF costs and allows them to spend more time working on their farms improving yields.

- **Credit,** which is often a real attraction for SHFs with inconsistent incomes and without credit ratings. By using the aggregator's service, farmers know that they may obtain short-term credit either through the MBS or through the MBS assisting with a bank loan. Loans may be used to buy inputs (Kilimsuli Agrovet), or to hire machinery like tractors that increase the farmers' efficiency (SFMC), or in some cases (MAFA) for start-up costs.

- **On-delivery payment in cash** to SHFs at a fair or guaranteed price, which in turn enables the farmer to pay household expenses, such as school fees, and reduce outstanding debts quickly.

Figure 3.2: Farmer Incomes Increase by Over 30per cent by Selling to SFMC



Notes: [1]Assumed that farmers grew maize on land subsequently used for soybeans; Yield per acre, price received, labour, seed, and ploughing costs for maize prior to joining SFMC are based on comparable data from MAFA's non-programme maize, fertilizer and pesticide use are based on half the usage for this maize; [2]15% finance costs on average debt of ~$18

Source: SFMC Management Interviews; SFMC Farmer Interviews (n = 15); SFMC Financial Information; Monitor Analysis

Finally, the SHFs can benefit from switching production from a low-value commodity like maize to a higher-value crop like soya that requires less fertiliser (and therefore less investment) to grow and for which domestic sources are cheaper than imports.

At first glance, this model seemed unlikely to be profitable. Rather it appeared to be an expensive procurement method, since the cost of aggregating from multiple SHFs is almost surely higher than buying from a few larger farmers or estates. The model also adds costs for services like grading, sorting, drying, and transport that larger suppliers handle themselves.

However, for some top-of-supply-chain buyers, like Nile Breweries in Uganda, a SHF aggregator like Afro-Kai can provide sorghum at prices a third lower than imports or open-market purchases. The cost advantage of local producers was one key reason why we found these models mainly serving domestic markets—given high transport costs in Africa, local producers enjoyed a distinct cost advantage over imports. For other large buyers, particularly in East Africa, it is difficult to assemble large enough quantities of crops to get the volume they need and, therefore, they rely on aggregators like Klimsuli Agrovet and Lesiolo Grain Handlers to source the necessary volume.

These models can be profitable, even at relatively large scale. However, they demonstrated extremely thin and volatile margins, fluctuating wildly one year to the next between -9 and +37 per cent, but averaging +2 to 3 per cent overall. Such results are not altogether surprising because a host of economic and environmental factors affect producers' margins in every part of the world. Even ADM, one of the world's largest commodity grain traders, achieved a five-year net margin of about 3 per cent despite the benefits of U.S. Government subsidies, large scale, and in-house processing and storage over the period 2006-2010.[25]

The buyer at the top is critical to the success of SHF aggregators, and without such a buyer none is likely to succeed. This relationship is so important to the aggregators that both Export Trading and Afro-Kai reported that they refuse to enter into maize trading with SHFs *unless* they have an agreement to supply a large buyer. Not only does this relationship enable aggregators to pass benefits on to SHFs to improve their incomes, but it also helps the aggregators themselves to be profitable. For example, 70

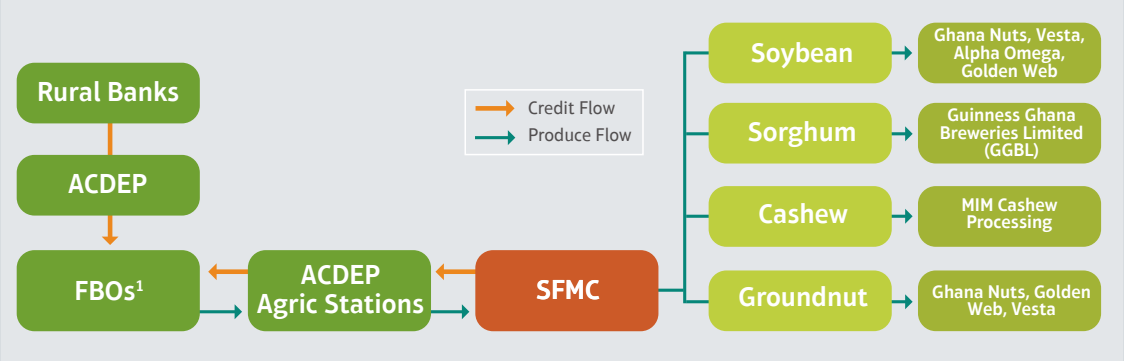
SMALLHOLDERS, SOYA, AND SAVANNA

Savanna Farmers Marketing Company

Savanna Farmers Marketing Company is marketing firm owned by the Association of Church Development Projects (ACDEP) a network of over 40, mostly church-sponsored, NGOs involved in development in northern Ghana. Savanna is a broker for crops, providing market access and attractive prices for 12,000 SHFs. Its buyers include the local Guinness brewery and Ghana Nuts, which exports 20,000 tons of soya, groundnuts, cashew, shea nuts, and sesame to Europe and Asia each year.

Savanna has been successful partly because it can leverage ACDEP's network, but operates on commercial principles. The charity has 11 agriculture stations in northern Ghana that dispense technical assistance to farmers and organise transport. Savanna also uses ACDEP's system of farmer-based organisations (FBOs) to aggregate SHFs at the bottom of the value

Savannah Farmers Marketing Company Business Model



Farmer Clusters

- 609 FBOs (~12,000 farmers)
- 80% receive an average ~$25 credit from rural banks (mediated by ACDEP) or direct credit from SFMC
- Credit terms: 28% interest per annum.[2]

Regional Clusters

- 11 ACDEP (charitable arm of SFMC parent organisation) agric stations collect produce, organise transport, and provide extension services to farmers
- SFMC pays a per bag fee for service used

Aggregator and Credit Provider

- Coordinates logistics and payments for – transport, warehousing, purchases (sacks), regional tax
- Credit to farmers through ACDEP's agric stations
- Marketing and price negotiations with buyers

Buyers - Processors

- Major industrial processors located in Kumasi and Techiman
- Prices set first through discussions on price and quantity with farmers, then buyers
- Buyers negotiate price based on cost build-up incurred by SFMC

Note: [1] Farmer Based Organisations; [2] Market rate is 32-35% p.a..
Source: Savanna Farmers Marketing Company; ACDEP

chain. Most importantly for the business, this allows Savanna to arrange credit for SHFs from rural banks at preferential rates (28 per cent as compared to 32-35 per cent from big commercial banks), and in cases in which the banks will not lend, Savanna may provide loans itself.

On the supply side, Savanna generates improved incomes for SHFs by as much as a third more than obtained by selling maize to farm gate brokers. Most of the farmers' savings come from reduced labour and ploughing costs, while transport costs are eliminated and absorbed by SFMC. Input use is increased, raising productivity and yields, a trend enhanced by the provision of technical assistance, support services, and transport. By organising or providing credit, Savanna allows farmers to purchase inputs or services to increase productivity, and enables them to set up bank accounts, thus building a credit history. Savanna also purchases crops at guaranteed prices, so SHFs can plan their household spending.

Savanna provides valuable services to its buyers up the supply chain. Ghana Nuts benefits from its relationships with Savanna because its soybeans are 12 per cent cheaper than from their alternative source in Brazil, and because SFMC provides storage facilities, negating the need for additional warehouses.

There are, however, some limitations on the Savanna model, primarily its reliance on the infrastructure provided by ACDEP (agric stations and FBOs) and on an ACDEP subsidy of $0.99 per 50kg bag of produce paid to the agric stations. Savanna's financial results reveal that if this subsidy were removed, the company, like many agriculture commodity trading firms, would barely break even. Nonetheless, ACDEP is looking to spin SFMC off into a private company that can attract outside private capital, with some portion of the firm ownership being retained by the participating farmer groups.

per cent of Lesiolo Grain Handlers' annual volume is bought by East African Breweries, for whom they are the exclusive barley handler. This relationship gives Lesiolo a guaranteed revenue stream, which allows it to borrow to improve its supply chain and provide value-added services to SHFs, with enough profit left over to sustain growth.

Another critical element of the buyer-aggregator relationship is that the buyers sometimes provide interest-free trade credit so that the aggregators can provide inputs of the required volume and standard. Afro-Kai's deal with Nile Breweries, for example, covers the lag time between purchasing the outputs from the farmers and payment by the buyers, which smooths the aggregator's cash flow and facilitates repayment of debt.

The revenue stability afforded by large buyers enables aggregators to provide an attractive selling proposition to SHFs. The aggregators thus attract enough producers to meet volume requirements. For instance, storage options offered by Lesiolo and Afro-Kai are valued by the SHFs, and sometimes enabled them to realise higher selling prices. Savanna Farmers and MAFA both offer transport, inputs, and credit—all of which are valued by the participants and help them to generate higher yields and price realisation. However, while value-added services have a positive impact on SHF incomes, there does not seem to be a direct correlation with the enterprise's profitability.[26] Providing value-added services probably depresses an aggregator's profitability, but without these, the aggregator would probably struggle to collect the necessary output. Hence the enterprises tailor value-added services to the needs and expectations of their target producer sector, and these vary across geographies.

As is true for many SMEs, the factor that most influenced profitability is the cost of capital. However, the capital cost is more acute in this instance because SHF aggregators are essentially agricultural trading businesses operating on thin margins, without hedging, and with high volatility. Analysis therefore suggests, not surprisingly, that reducing the cost of capital to terms more likely to come from impact investors would have a significant positive impact—from 1 per cent to 16 per cent—on net margins

and would improve the financial viability of all the enterprises studied. While it is unrealistic to expect that these aggregators could access capital at half of the prevailing commercial rate, it does suggest that these trading enterprises can be profitable even sustaining interest rates as high as 18 per cent in Ghana, pointing to a strong potential role for impact investment capital.

Finally, most of the models studied in detail either leveraged some form of existing SHF aggregation (even if it was just geographical proximity as in the case of the Lugari Cereal Farmers Growers Group in Kenya), or created farmers' groups, reducing costs by minimising the number of interactions and relationships they serviced and ensuring supplier loyalty. For example, Afro-Kai uses "lead farmers" in 26 districts across Uganda to organise seed distribution and collection of sorghum and barley outputs. Likewise, in Ghana, MAFA creates clusters of registered farmers, each comprising between five and ten individuals, who farm contiguous land and operate a group collateral system whereby if one member of the group defaults credit to MAFA, other members of the group are liable for the debt.

DISTRIBUTION AND SALES THROUGH IMPROVED INFORMAL SHOPS

CORE MODEL ELEMENTS

This business model involves efforts by enterprises to develop a route to market that leverages existing informal distribution and sales channels to sell socially beneficial products through multiple fragmented or unorganised shops. Key elements of the model include:

- **Leveraging an existing (usually informal or unorganised) retail channel** and accompanying distribution infrastructure to achieve scale and financial sustainability, as these outlets already have broad coverage and access to an established customer base.
- **Training and equipping channel participants** by way of shopkeeper training, branding, and standard setting. This is expensive but necessary to drive sales.
- **Delineating multiple, distinct roles in the route to market.** No models relied on relatively low capacity shopkeepers, agents, or kiosk operators to do everything. Sophisticated schemes provide additional capability and personnel throughout the route to market to handle distinct roles such as customer outreach, logistics, or customer training.
- **Selectively engaging existing retailers** for targeted improvement. This process is guided by past performance (sales, customer recommendations, etc.) to ensure that the outlet has a positive track record and occupies a strategic location with high traffic and a well-developed customer base.
- **Actively stimulating demand** both above and below the line. These enterprises typically sell "push" products and need to convey value and utility of these to low-income customers.

Selling and distributing goods to low-income consumers in SSA is extremely challenging. It is even harder for socially beneficial products in health, agricultural inputs, and other sectors.[27] As formal retail stores tend to serve only wealthy urban centres, enterprises need to find other channels through which to deliver critical products and services cost effectively to urban slums and rural communities. Using unorganised, often informal routes to market is frequently the only feasible option for businesses seeking to reach customers in these markets.

Although related, distribution and sales to the BoP often present distinct challenges in Africa. Many social enterprises focus simply on product availability and roll distribution and sales into the same function through a sales agent, usually from the BoP. In fact, more than 30 enterprises we encountered were trying some version of a combined direct distribution and sales model. But the best models de-couple the two functions and resolve the challenges separately. The distribution challenge primarily centres on moving product to small, fragmented, unorganised endpoints in an environment with many layers of distributors (and tolls along the way) and unreliable or poor infrastructure. The sales challenge, on the other hand, entails not just the small stockist at the customer interface, but additional support in several areas. First, shops typically need help with skills, credit, branding, and, of course, appropriate margins to motivate them. But another area is where many social enterprises fall short in supporting the front line: demand stimulation. As our India report showed in the case of solar lantern agent models, or as we found in Africa with clean water (see next chapter), investment in additional marketing is essential, and enterprises cannot rely on the point of sale agent or shop to handle all of these functions. Despite this complexity, and a number of social enterprises that have not cracked the code, in some cases this has been highly successful: mobile telecoms (MTN, Zain, Vodacom, Tigo, Glo), drinks (sachet water manufacturers, Coca-Cola), and consumer goods (Unilever, Procter & Gamble) all offer positive lessons.

The term "informal channels" refers to a wide spectrum of sales channels and related customer service systems, including microfinance institutions, spaza shops, unorganised chemists, and even street hawkers.[28] This business model pertains to informal shops or retailers with premises. As a group, these are generally small-scale with low sales volumes and limited capabilities; as a channel they are fragmented and unorganised; they frequently restock from multiple suppliers, often buying from wholesalers or local distributors and sometimes selling spurious products; some are outside the tax enforcement and payment system; and a lack of regulation makes contractual agreements difficult to enforce (see sidebar).

The research team examined nine enterprises that use existing shops as the sales channel, undertaking case studies that examined both distribution innovations (e.g., Coca-Cola SABCO's MDCs) and sales innovations (e.g., Bayer Green World). Across the examples, we found large-scale success—and promise for more—in distributing socially beneficial products and services. Achieving this required re-thinking conventional sales, marketing, and distribution models. Most enterprises improve or repurpose the shops to drive greater use of their products and bundle in value-added services such as technical advice. These steps are achieved by training shopkeepers in business and specialist knowledge, and occasionally by supplying company-led independent resources like technical trainers within the channel as well, so as not to overburden the retailer. This approach reduces fragmentation in the distribution system and creates a more efficient, commercially viable and knowledgeable supply infrastructure, which results in providing the BoP with greater access to life-enhancing products. The enterprises also work to increase consumer trust in the outlet by providing a "stamp of approval" for retailers, branding, or certifying product authenticity. Taken together, these activities constitute an effective alternative to establishing new channels or agent sales forces as a standalone solution.

CORPORATIONS LEADING THE WAY

Given the complexity of the task across the routes to market, we found that — more so than any other business model in the study — large national companies or MNCs were the main drivers of successful efforts; this was so whether led by mobile operators, agri input providers, CPG companies, health product distributors, or others. This element of the business model is the area where large companies, with their sophisticated understanding of the complexity of issues entailed in route to market, sales, marketing, and distribution, have the most to contribute to market-based solutions. This can be seen in well-known examples like Coca-Cola's MDC distribution scheme* or Safaricom's M-PESA model, and less well-known instances like Agroseed in Senegal. Sectorally, larger corporations like Syngenta were succeeding in providing superior agricultural inputs, enabling farmers to increase yields. We also saw significant experimentation with improving retail stores in financial services –Standard Bank in South Africa is modifying existing spaza shops to turn them into cash access points. Beyond M-PESA, several telecom players in South Africa, including Vodacom, have also successfully established large scale container-based quasi-formal retail outlets to distribute product and airtime, and reach their BoP consumers.** To better illustrate the model, many examples below draw from Bayer's Green World crop protection programme.

* Coca-Cola MDCs is a well documented case in which routes to market and roles in the channel are well defined. The example therefore offers learning for distributing socially beneficial products. This is not to say, however, that carbonated soft drinks and, say, primary health products offer similar social benefits.

** In 2003, Vodacom already had more than 4,000 container-based shops in South Africa.

Most of the products and services that these MBSs deliver to the BoP require a high degree of customer and stockist education and demand stimulation. In *Emerging Markets, Emerging Models* we pointed out that just because the BoP need a product or service, "doesn't mean they want it". In India, we came to the conclusion that a business trying to sell the poor something they didn't already want would never succeed.[29] And it remains the case that market entry—i.e. for goods where there is some existing demand, but perhaps underserved—is much easier than market creation.[30] However, in this model, businesses were succeeding, in part by effectively building in demand stimulation, thereby markedly improving the lives of the BoP in the process.

Figure 3.3: Bayer and the BoP: The Green World Model

Bayer Green World Crop Protection Products - Main Activities

While the mainstream distribution model remains unchanged, the Green World programme creates direct links to 200 stockists and their consumers, expanding the possibilities of the channel.

1
- Stockists receive **business and product/agronomics** training
- **7 Bayer area representatives supervise** and provide **technical assistance** to stockists
- **SMS tool** allows Bayer to contact all of its stockists with important messages

2
- Green World stores become **consultancy centres for local farmers**
- Full range of **Bayer's agricultural products available** with **lower rate of stock-outs** (vs. non-Green World shops)
- Stockists **distribute Bayer's marketing materials** and brochures to farmers

3
- **Demonstration days** attended by stockists, government extension officers and farmers
- **Radio advertisements** directing farmers to Green World shops
- **Promotion of Green World shops** by government extension officers and Technical Assistants

Source: Primary research in collaboration with Bayer; Monitor Analysis

It is a delicate balancing act to make a profit when the costs of reaching customers are relatively high but the price of goods must be kept low to match customer cash flows. As a result, and counter to the conventional imperative to offer low-margin products to the BoP in high volume, most of the products we saw succeeding in this model were higher margin products. The Bayer Green World case in Kenya illustrates a number of these lessons well, and exemplifies efforts to tackle the challenges of sales to BoP smallholder farmers. As illustrated in the figure above, Green World provides an extensive level of additional channel development and sales support to agrodealers, in the form of business and product training, better product availability, branding and marketing materials for the shops, radio advertisements, and demonstration day support. These efforts were combined with the introduction of a small pack of pesticide. The results have been promising: profitable to Bayer—at about $3,500 gross profit per shop—and large scale. Agrodealers in the Bayer Green World scheme saw their incomes increase by an average 40 per cent, and some reported that the foot traffic in their stores had doubled. Moreover, the programme facilitates an increased level of agricultural input usage by smallholder farmers who shop at Green World stores.

The Bayer case illustrates what we saw when looking across other examples as well. From these, we identified five key levers that drive this business model, and each must be balanced to ensure financial stability:

- **Retailer selection:** Existing retail outlets, even informal ones, have the advantage of a broad product mix, which helps improve returns for shopkeepers. Bayer has rigorous criteria for selecting its retailers, targeting areas in which its products are related to the crops grown. It only engages the top retailers by sales volume in a given district. These well-regarded, high-volume shops typically stock their products already, and shopkeepers therefore have at least some brand awareness and product knowledge. Bayer looks

for retailers who offer quality customer service, respectable premises, and relatively well-educated personnel, and who do not sell counterfeit goods. And it limits the programme to 200 retailers, which reduces complexity and improves targeting; Bayer can also cut off a retailer if he or she is found to be selling counterfeits. Because the scheme is profitable to the agrodealers, they tend to comply with Bayer's policies.

- **Training and equipping various participants in the channel** is essential for these products and to create value-added services — technical knowledge and advice — in the channel, but it is expensive. By comparison, in a separate programme CNFA spends nearly $2,500 per agrodealer to provide training in business management and in other related topics to certify the dealers to sell subsidised fertiliser in countries like Tanzania. Training stockists and maintaining each Green World store costs Bayer about $1,300 annually and dealer training is provided on a recurring basis. Safaricom has a similar function for its M-PESA sales network, but outsources the training to Top Image, a Nairobi-based marketing firm. Branding is also an important part of equipping the shops to ensure financial sustainability, as it builds trust with consumers and drives customer loyalty, foot traffic and thus sales volumes.

  Equally important, however, is the adjunct investment Bayer makes in the channel beyond the stockists, especially the technical assistants who handle demonstrations, develop relationships with government extension agents, and provide training to store owners.[31]

- **Demand stimulation:** Products that succeeded in informal channels all had some form of demand stimulation that recognised that availability alone was not enough to ensure market uptake. Nor was

the demand stimulation the sole responsibility of the channel agent or store owner at the end of the channel. Mobile operators invest enormous sums in advertising and branding—around 15 per cent of revenues, even though they sell "pull" products. As illustrated in Figure 3.3, Bayer's model included radio advertising and training of government extension agents on the benefits of Bayer crop protection products, as well as deployment of a force of "technical assistants" to hold demonstration days and conduct other below-the-line marketing. The stockists themselves are also responsible for stimulating demand for a wider range of products through technical advice and recommendations to solve customer problems.

- **Small pack size:** To provide BoP customers with quality products at low prices, pack sizes normally must be small. This approach is well suited for agricultural inputs, for example, because of the small size of most landholdings in regions like East Africa. Nonetheless, small packs tend to mean higher unit prices to BoP customers who cannot afford larger size purchases, and may not be enough to cover the optimal requirements for attaining maximum yields.

- **Position in the value chain:** The model's success depends on the ability of both the retailer and the corporate entity organising the channel or selling the goods to operate profitably. Shopkeepers must feel that they are receiving financial and non-financial benefits to participate. Given the required investment in the route to market it should not be surprising that the businesses recording the best financial performance originate with product manufacturers rather than wholesalers. These manufacturers generate enough margin to support investments in the channel. In fact, among the biggest commercial consumer products companies worldwide—Coca-Cola or Unilever, for example—the manufac-

ADVANCING THE AGRODEALER AGENDA: BAYER GREEN WORLD RETAILERS

Mundia, 38, is a father of two from Nanyuki in Kenya. He has a certificate in agriculture and has been an agrodealer for 10 years selling agrochemicals, seeds and fertiliser.

Mundia procures his products directly from three manufacturers and through 10 dealers, getting double the margins from buying directly from the manufacturer than he does from dealers. All his suppliers give him 30 days of credit, which takes pressure off his working capital requirements.

Mundia joined the Green World programme in 2006 and received training, as well as Green World branding, for his store. Mundia believes that since he became a Green World retailer his customers have become more loyal—many farmers come from up to 10 kilometres away and he sees many familiar faces on a daily basis. He also has more customer traffic. Before becoming a Green World stockist, he had around 40 customers a day, but in the last four years that has risen to about 50. This combination of increased customer loyalty and more customers has increased Mundia's annual turnover by 20 per cent to just over $100,000, the majority of which is driven by an increase in sales of Bayer products.

Josephine, 37, is from Kagio in Kenya, a small town with a population of around 40,000. She has a BSc. in agriculture and has been an agrodealer for 12 years, the income from which supports her three children.

Josephine's business is in the centre of Kagio Town, and she has built a strong customer base of farmers in the area. She procures from four key dealers who give her credit of 30 days which she considers to be good payment terms. From her store, Josephine sells seeds, pesticides, fertilisers and animal feed. Although there is a suggested retail price on most products, Josephine often lowers prices slightly based on competitor price-points.

Josephine also joined Green World in 2006. She received training on keeping records as well as detecting counterfeit products. Josephine feels that this training has made her more knowledgeable about her stock and believes she is a trusted advisor to her customers. Traffic has doubled in her store to approximately 100 customers per day, and her annual turnover has increased to $80,000.

Although margins are smaller than on other products, Josephine tends to recommend Bayer products above others, and will occasionally encourage her customers to switch. Currently, about 20 per cent of her sales are Bayer products, which she keeps in a prominent, dedicated shelf that displays the small packs her customers prefer.

turer typically invests to educate consumers and activate demand through advertising campaigns and trade promotion.

Despite their success and promise, informal shop-based models still present numerous challenges to enterprises using them. The model may be limited by the costs of upgrading shops, if these costs are too high relative to product margins. Second, because the product manufacturer is best placed to organise such activity, it is often difficult to achieve positive results for a basket of goods from a range of producers. This challenge stems from two factors: first, manufacturers working with the same retailers typically demand exclusivity, at least in a given category; and second, even for a basket of complementary goods (which would be desirable, for instance, in health or agriculture inputs), the different manufacturers involved in the supply chain will often have different margins and levels of interest in developing their routes to market.

A final important consideration may be more relevant to donors and development agencies than to manufacturers themselves: reach. Bayer limited the size of the Green World programme to 200 stockists (about 4 per cent of all agrodealers in Kenya), which accounted for at least 40 per cent of the company's sales to its "mainstream market" in 2009 (~$1.2million). From a purely financial perspective, it simply does not make sense for Bayer to expand the programme. However, this limits Green World's social impact to a relatively narrow set of stores and, ultimately, farmers. Yet the selectivity of the top 200 shops is essential to the programme's success. In contrast, a donor or government interested in increasing access to, say, agricultural inputs, will probably want to expand a similar programme well past 200 outlets to maximise coverage and reach to the poor. This sets up a tradeoff: as long as a programme remains relatively narrowly focused, it can be profitable and provide sufficient incentives for all participants on a standalone basis. But given that the model has high potential to increase reach and impact, donors and other mission-led actors will need to consider providing incentives to firms like Bayer to expand beyond their initial target list, or find ways to replicate the model without being led by the manufacturer.

PRIVATE VOCATIONAL TRAINING AT THE "SEAM" IN SOUTH AFRICA

CORE MODEL ELEMENTS

This model is employed by private vocational colleges and institutes that provide low-cost, no-frills, quality further education courses. Key elements of the model include:

- **Minimising costs:** This is achieved in several ways, through instructors prepared via paraskilling; standardised courses; specialisation in one or a small number of disciplines; location in basic, out-of-town premises; and use of bootstrap capital at start up.
- **Matching payment terms to student cash flow:** payment terms are regular but flexible to match inconsistent cash flows.
- **Diversifying the customer base:** Catering to students from a range of income groups uses almost certain payment from relatively affluent students to subsidise the poorest students, who pose higher risk of default. This practice smooths revenue streams and helps to ensure the college will cover its costs.
- **Offering value-added services:** To enhance students' employability, the colleges provide work experience, work placement, training, and even driving lessons.

This model extends understanding of high throughput/no-frills service delivery models and illustrates successful competition in a low-cost services ecosystem in which the state plays a substantial role. South Africa is the only SSA country in the research sample that provides a social safety net. In fact, it is one of the few countries on the entire continent that features high-quality infrastructure, strong

regulatory enforcement, and extensive social services and benefits. Consequently, in many sectors social enterprises and even larger firms find themselves competing with low-cost or free government services for certain populations.

Government capacity and resources are ultimately limited, however, which means the state provides for the neediest but excludes other segments that could also benefit from public services. In many countries in Africa and elsewhere, these people just above the very poorest—the "top of the bottom" of the pyramid—is the most attractive and easy to serve segment of the BoP. However, South Africa's large, established private sector has yet to fully capitalise on the opportunities left by the gaps in state services. The formal private sector has historically focused on the "first economy"—wealthy and middle-class segments in South African society—and is either unaware of market opportunities at the lower end, or is content to leverage "easy" growth in more affluent markets.[32] In its efforts to promote equity, moreover, the government has created a regulatory framework that often inhibits social enterprises from pursuing opportunities overlooked or dismissed by the formal private sector.[33]

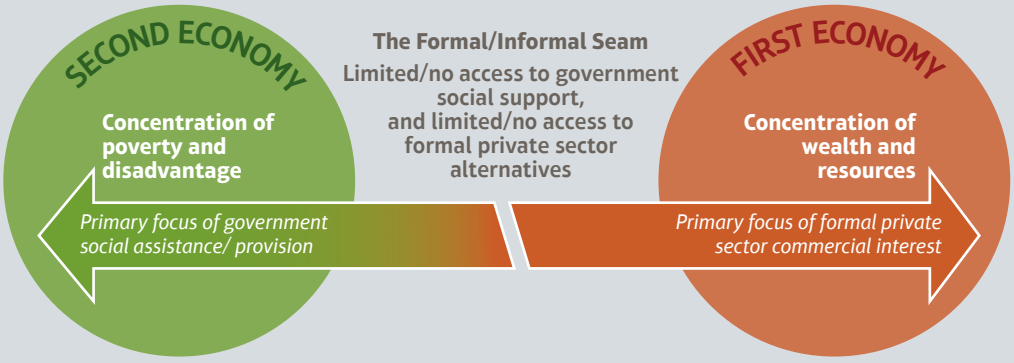
Although South Africa supports public vocational training institutions, private alternatives are thriving. "Further education and training" colleges (FETs) are one of the few South African examples in which private entities deliver social benefits profitably and at scale to low-income markets. More than 700 FETs offer learning opportunities for approximately 700,000 students [34] in a market estimated at R1.2-R3.7 billion ($170-530 million), or about the same size as the nation's commercial fishing industry. No single FET is especially large although in combination they reach many students with a business model that enables most colleges to operate with healthy margins. Students who find formal employment afterwards typically more than double their incomes compared to previous earnings or earning potential without the qualification.

THE MARKET AT THE "SEAM"

We apply the term "seam" (or "gap" market, or "missing middle") to describe those consumers who are neither covered by government provision nor find themselves the primary target of formal private sector offerings.

As levels of government coverage and private sector interest vary across sectors, there is no single demographic definition of the seam market, which tends to be largely informal in character and employment. This informality triggers certain behaviours and makes it difficult for the formal economy to serve the segment. In housing there is a large seam market between those with monthly incomes under R3,500 ($500), who are eligible to receive government-subsidised housing, and those earning up to R9,000 ($1,300), who struggle to afford private housing, particularly in urban areas. In education, we identified the seam as those individuals and families who would prefer private education to the public alternative but cannot afford high-end academies or universities. In this segment, average household incomes range between R3,900 and R4,600 ($560-$660) per month.

SOUTH AFRICA'S ECONOMIC SPECTRUM



Source: Tips, *Second Economy Strategy: Addressing Inequality and Economic Marginalisation. A summary Overview*. January 2009

The sector has enormous potential to expand: in 2007, 2.8 million South Africans between the ages of 18 and 24 were neither employed nor in school.[35] In no small part, the colleges' success reflects an insufficient number of government institutions, which, despite their price advantages, have poor reputations. In 2008, there were only 45 public FETs serving about 420,000 students,[36] and despite a three-year, $270 million recapitalisation programme, it is unlikely that they will grow to reach a goal of serving a million students by 2014. Public FETs also tend to offer longer courses that require full time attendance, and with a wider catalogue of options.

To understand the dynamics of this market, Monitor focused on five FETs that are financially sustainable, with a range of operating margins, from 2 to 48 per cent.

	CENTRAL BUSINESS ACADEMY[37]	DT NURSING INSTITUTE	EDU-FIX TRAINING INSTITUTE	JEPPE COLLEGE OF COMMERCE AND COMPUTER STUDIES	SILULO ULUTHO TECHNOLOGIES
Location	Bloemfontein	Durban	Mafikeng	Johannesburg, Polokwane, Pretoria, Vereeniging	Khayelitsha (Cape Town)
Tenure (Years)	10	7	2	13	3
Course Offering	Business Studies; NQF[38] 2-4	Nursing; NQF 3-4	IT, HR, Tourism, Design; NQF 2-4	IT, Media, Tourism, Finance, Business Studies; NQF 2-5	Basic Computer Literacy
Method of Instruction	Contact	Contact	Contact	Contact	Contact
Learner Type	Full-time	Full-time	Full-time and part-time	Full-time and part-time	Full-time and part-time
Accreditation	Multiple SETAs	SA Nursing Council	ISETT SETA	Multiple SETAs	ISETT SETA
Marketing Initiatives	B2B	SA Nursing Council Website	Radio, bundled value-adds	Radio, print, exhibitions, school visits	Radio

	CENTRAL BUSINESS ACADEMY[37]	DT NURSING INSTITUTE	EDU-FIX TRAINING INSTITUTE	JEPPE COLLEGE OF COMMERCE AND COMPUTER STUDIES	SILULO ULUTHO TECHNOLOGIES
Job Placement Programme	Learnerships (SETA funded)	Career counselling, interview training	Memoranda of understanding with employers	Dedicated advice and placement programme	3-day work readiness programme
Average Fee/ Course	$1,100	$3,400	$670	$4,300	$460
Number of Learners	150	300	395	2,795	700
Operating Margin	2%	11%	34%	5%	48%

The research reveals these FETs to be components of a vibrant SME space in which providers create jobs, compete, and offer a product to customers in the seam that substantially improves incomes and is highly valued. The FETs have a sophisticated understanding of the target segment that enables them to offer a flexible and highly customised service addressing critical needs in the market. The business model also shows that absolute volume is actually less important than a diversified mix of customers that ensures the lowest-possible level of default (which, by formal sector standards, may still be quite high). Furthermore, despite significant compliance costs, the regulatory environment has been relatively benign and open until recently, and competition has stimulated important innovations.[39]

Low-Cost, No-Frills Provision

Minimising costs is essential for the business model to operate successfully, not least because it enables the colleges to keep their fees low. Looking across the institutions, similarities in how they contain costs are evident. The result is a quality no-frills service, much like schools such as Gyan Shala in India.

HELPING TO ADDRESS THE SKILLS GAP

Jeppe College of Commerce and Computer Studies

Jeppe College is the biggest and most established among FETs in the research sample. Founded in 1997 in Johannesburg, the college now has nearly 2,800 students across four campuses: Johannesburg, Tshwane (Pretoria), Polokwane and Vereeniging. The college concentrates on training individuals who have left school recently, offering school completion, National Senior Certificate (matric) rewrites, and further education and training courses in commercial and information technology subjects.* These offers fit together as an end-to-end, tailored solution for students looking to complete high school and enter the job market with a vocational qualification.

Most FETs use some form of paraskilling to reduce staff costs, but Jeppe uses a different approach. Many of its staff possess university degrees, enabling them to teach multiple subjects, increasing staffing efficiencies and utilisation rates. Jeppe also invests heavily in its teachers' professional development, which reduces churn (and thus training and recruitment costs) and improves internal capabilities, which reduces the need to use expensive external service providers.

An important part of Jeppe's appeal to students is the promise to help graduates find a job at the end of their course. The college offers career advice, a job placement programme (students' CVs are stored on a database and sent to employers at their request), and actively cultivates relationships with employers, such as Nedbank, First National Bank, Hyatt Hotels, and Bytes Technology Group. In some cases, the college helps students arrange three-months of on-the-job training experience as part of their course. For many young people at the seam, this is the first experience of formal employment and a valuable lesson in how to operate in the formal sector. All of these activities pay off in the high percentage of students who find employment after graduation.

* Courses include: Systems Development, Systems Support, Journalism, Advertising, Tourism, Professional Cookery, Finance, Office Administration, Business Management, Marketing, and Human Resources.

- **Low-cost platforms:** Across the colleges, staff and facilities costs generally comprise a large proportion of overall expenses. To keep control of these, the colleges economise in specific ways:

  - *Staff:* Staff costs are generally kept down by paraskilling of teachers, many of whom do not possess a university degree, and large class sizes. At Silulo, some teachers are trained as assessors, but most are former students who fared well in the programme — also true at Edu-fix Training Institute. This approach works because certification in practical computer technology equips instructors to teach a subject that can be taught competently from a relatively modest base of knowledge.

  - *Facilities:* FETs typically locate outside metropolitan areas where rents are lower and maintain small campuses with only basic, multi-purpose classrooms. Based in the Cape Town township of Khayelitsha, Silulo has per student facilities costs of just R165 ($24), compared to over R1,300 ($186) for Jeppe, whose campuses are located in cities like Johannesburg and Pretoria. This location strategy also positions Silulo close to potential students. Its township-based students pay an estimated $320 less in transport costs over their six-month course than it would cost them to commute the 35 kilometres to Cape Town.

- **Specialisation:** FETs tend to offer courses with low capital cost requirements — business studies, office administration, human resource management, marketing, journalism, graphic design, systems development, and network maintenance — rather than engineering, construction or other traditional trades that require workshops, laboratories, and expensive classroom equipment. Class portfolios are also relatively restricted. The DT Nursing Institute only offers nursing qualifications, while Silulo (the most

profitable entity) only offers a single programme in computer technology. Such focused offerings contrast sharply with public vocational colleges, which typically offer courses ranging from commerce to construction, engineering and agriculture, and programmes upwards of nine months.

- **Standardisation:** Most courses offered by FETs are designed to meet the government's National Qualification Framework standards and must be amended each time the guidelines are revised. FETs usually outsource the process of creating courses that comply with the government guidelines, rather than investing in proprietary development. There is little evidence that FETs customise their courses or offer anything beyond what is required to meet minimum standards.

- **Patient (bootstrap) capital:** Like many SMEs, private FETs in our sample all accessed different forms of patient capital to launch their operations — mostly loans from family and friends — rather than seeking commercial financing. This saved them amounts between $4,300 to $33,000 annually in interest payments. Jeppe is the only FET that used conventional bank financing to augment loans provided by patient capital.

Matching Payments to Student Cash Flows

Holding down costs to achieve a low price point for courses is essential to ensure that they are affordable to potential students. Course costs in our sample ranged from R3,200 ($460) for a six month course in computing at Silulo to R29,750 ($4,300) for a two-year course in marketing at Jeppe. As student focus group participants told us, however, absolute costs may be less important than payment

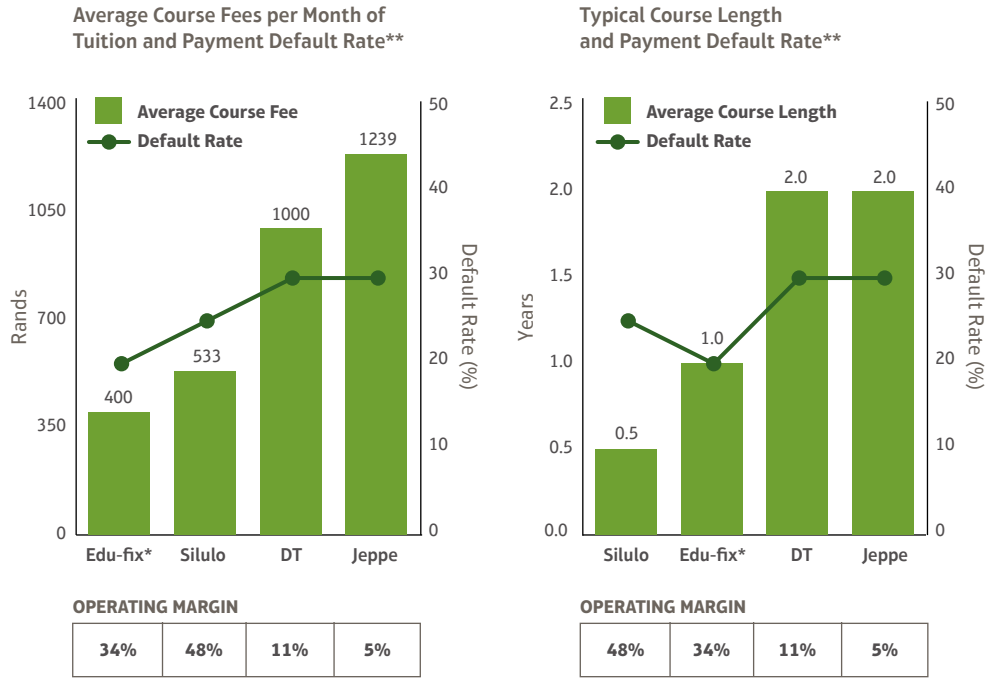
terms—preferably a small sum at a time. Each institution gives students flexible terms for monthly payments that match their cash flow. FETs also help students by offering shorter courses than public colleges. This accommodates students who cannot leave employment for long periods, as well as those who need to gain extra qualifications quickly.

Low price points and flexible payment terms are well suited to the seam market, but they also introduce extra risk into the business model. We found that FETs have built an expectation of certain levels of default into their business models.

Diversifying the Customer Base

At the heart of the model is catering to a mix of students from higher- and lower-income households to balance the risk of non-payment. At Jeppe, for example, students' monthly incomes can be as low as R1,500 ($210), with the majority of students coming from households with incomes between R5,000 and R9,000 ($710-$1,300). These students are primarily female and African, and they range from school leavers looking to improve their education and employability to those in full-time employment seeking better jobs or career changes. However, most students are matriculants whose parents pay the fees, which represent a significant investment, often accounting for more than 10 per cent of their income.

Figure 3.4: FET Revenue Drivers



Note: *Provisional, unaudited results; **CBA not shown as course fees are not charged to learners
Source: Company financial statements; Monitor Analysis

At most institutions, maintaining a mix of students from different income levels is critical because failure to pay is not tightly managed. The FETs all embrace a mission to deliver a social benefit to the BoP that often overrides commercial considerations. Silulo tries to manage defaults by encouraging teachers to collect fees from students, but its default rate remains above 20 per cent.

Value-Added Services

Many FETs provide ancillary services that enable them to compete more effectively. Employability is central to students at the seam because they are spending

a significant portion of income to obtain a qualification. They can only afford to spend time and money on further education if there is a strong likelihood that the qualification will lead to a (better) job. FETs respond by creating job placement or job readiness programmes that link students with potential employers. Jeppe creates such links by providing job placement services, including training in interview skills and work etiquette, with formal sector employers. As a result, Jeppe's CEO estimates that around 90 per cent of graduates find employment.

While no FET, state, or research organisation has authoritatively tracked placement success,[40] by helping their students find employment, private FETs have created a perception that they are better than public colleges. Management and student interviews reveal optimism about the increased likelihood of finding jobs with a certificate or degree. Edu-fix believes this to be such an important component of its offer that it hired a consultant to facilitate relationships with local employers. Edu-fix also offers free driving lessons to students because a valid driver's licence is often a prerequisite for jobs in South Africa.

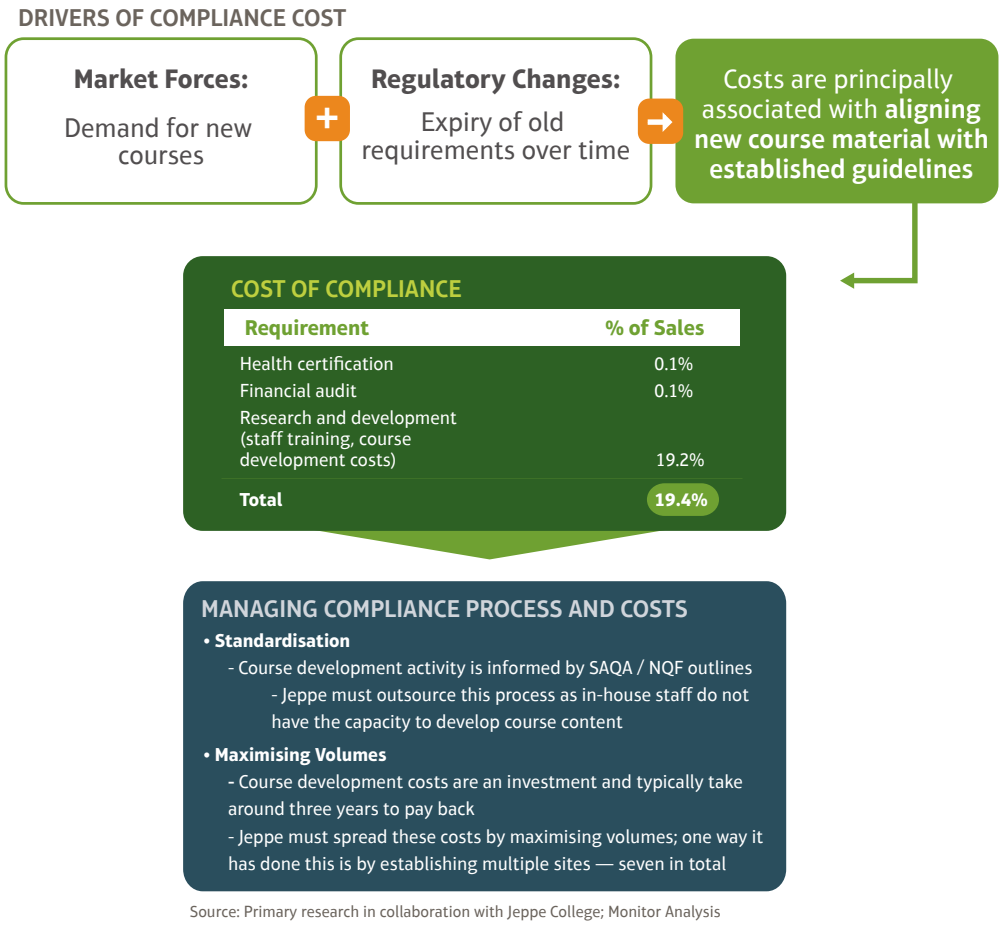
FETs play an important social role in reducing unemployment, a critical challenge in South Africa where official unemployment is around 25 per cent. [41] With FETs' help, graduates typically more than double their earning potential; many students believe that they may earn more than $700 a month when they complete their studies and find jobs as receptionists, personal assistants, call centre operators, or nurses.

Compliance and Other Costs

Regulatory compliance is unusually onerous for FETs. The institutions must register with the Department of Education and meet the accreditation requirements of relevant Sector Education and Training Authorities (SETAs). Registration involves compliance on a number of points, with the biggest investment accompanying the

initial application. Accreditation by SETAs is a regular and ongoing compliance exercise and primarily involves aligning course offerings with updated guidelines. A provider's sustainability is affected by its ability to manage both the processes and costs involved in compliance (see figure below). Even for a large established entity like Jeppe, this translates into an imperative to standardise course content and maximise the number of students who enroll.

Figure 3.5: Costs to the Business Model



Source: Primary research in collaboration with Jeppe College; Monitor Analysis

The FETs are operating with a business model well suited to the seam market. However, they confront challenges that may hinder expansion. These include the business owners' primary focus on social development, which may impair business decision-making; the reliance on patient capital can limit growth at the inception stage; and the lack of student aid undoubtedly deters some of the poorest potential students. At the five FETs in the research sample, the number of students with bursaries falls far behind global leaders like Anhanguera in Brazil, which has more than 100,000 students on some form of financial support.[42] Another emerging problem is perception of the regulatory environment. When most FETs launched, this environment had seemed benign but now enterprise leaders worry that it has become fraught with inefficiencies. Finally, the market suffers from lack of reliable information about placement rates, learner advancement in jobs, and programme suitability in terms of labour market demands. Such information should be gathered and disseminated to increase the FETs' long-term sustainability and impact.

4. Three Models to Watch

DESIGNING BUSINESS MODELS effective for market-based solutions in SSA is a precise art. Success requires a sophisticated understanding so products and services are customised to the circumstances, wants, and behaviours in the target segment, and contact channels (distribution, sales, produce collection) are both economical and able to reach BoP consumers and producers at scale.

While the three models discussed in the previous chapter have achieved this delicate balancing act, we found others that had yet to produce results viably and at scale. Some models will never prove effective. Monitor's research in India examined models that ultimately failed to reach significant scale or impact. So, too, in Africa. Most models encountered are not at scale, and, unfortunately, some are doomed to fail. Some models, however, occupy an in-between stage, not yet commercially viable or at scale, but producing some positive social impact. Some of these in-betweeners may require only tweaks to become effective, while others, especially those involving mobile telephony, may require more time and experimentation, given the novelty of the platform and hype surrounding it. In still other cases, fundamental changes will be required to achieve success. Finally, although some models may never succeed, they may provide partial cost recovery or enough social impact to merit further investigation and support, if only as better alternatives to traditional approaches and interventions.

A CLEAN WATER KIOSK IN ZAMBIA

Kiosks make potable water available to the teeming populations of peri-urban settlements in SSA at prices even the poorest can afford.

The research team identified three in-between models to watch for their potential sustainability and impact:

- Provision of non-financial services through mobile devices, including medical and healthcare services, agricultural data, and other information services.
- "Last-mile infrastructure" that brings power or clean water to impoverished and often isolated communities that lack these affordably. Micro-grid technologies deliver electricity to rural low-income households, while water kiosks in peri-urban slums may make clean water available at lower cost than alternatives such as sachets or tanker supplies.
- Dedicated direct sales agent networks that distribute socially beneficial goods to isolated communities. These provide training and more stable incomes for agents and help consumers by educating them about the value and utility of such goods and improving their availability.

MOBILE-ENABLED BUSINESS MODELS
FOR NON-FINANCIAL SERVICES

CORE MODEL ELEMENTS

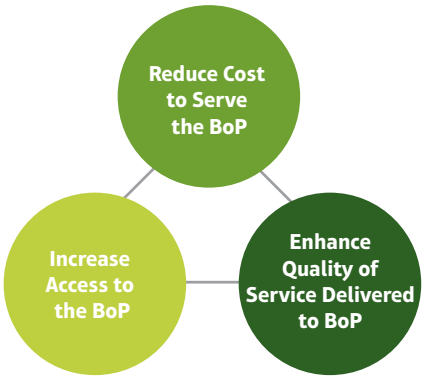
Mobile-enabled business models aim to leverage BoP access to mobile devices to provide essential information or transactions directly to low-income customers in sectors beyond financial services, including agriculture, health, and water. Key elements of the model include:

- **Remote delivery of information or transactions via mobile applications** — SMS or voice.
- **Multiple payment platforms,** including monthly subscriptions, per-transaction charges, or bundling with other services.
- **Direct marketing** to the BoP to encourage adoption.
- **Involvement of trusted intermediaries** such as community health workers, agrodealers, or agents.

Mobile telephony has revolutionised how people around the world communicate, including how much they communicate and what and how they pay for it. The technology has especially benefited Africa, where telecommunications is one of the fastest growing sectors. Mobile cellular subscriptions skyrocketed to 333 million in 2010, up from 11 million ten years earlier.[43] Penetration is extensive, with nearly half of all African villages already covered by mobile networks. In 2009, according to the International Telecommunication Union, every 100 people in Tanzania included 40 mobile subscribers but just 33 people with access to improved sanitation facilities.[43] And the mobile revolution is not restricted to higher income groups; in our sample of BoP mobile users, more than 60 per cent owned their own handset.

Africa has led the world in the adoption and penetration of mobile-based money transfer solutions — M-PESA, Zap, Wizzit, and others have charted innovations in mobile applications to extend access to financial services. We observed far more mobile-enabled activity in Africa than in India.[45] On the heels of this phenomenon, social enterprises, companies,[46] NGOs, donors, and academic institutions are exploring ways to use mobile technology to cut the costs of serving the BoP. The hope is that mobiles can overcome the obstacle of sparse populations, permit two-way communication at low cost, and facilitate provision of high-quality services. As illustrated below, M-PESA and others have accomplished all three objectives in the financial services sector.

Figure 4.1: The Promise of Mobile-Enabled Business Models



Source: Monitor Analysis

Increase Access to the BoP

- MBS can serve **a large proportion of the BoP** due to high mobile penetration in Africa
- **Acquisition of a sizable volume of BoP customers** can occur rapidly through mobile-based marketing

Reduce Cost to Serve the BoP

- Text and mobile data enable **low cost information transfer** between MBS and consumer/field worker
- Ability to process information real-time allows for **increased automation** of business processes
- **Reduced marketing costs** through mass 'push' advertising via text

Enhance Quality of Service Delivered to BoP

- **Convenience and security** features of mobile can lead to improved service levels (e.g., more secure money transfer)
- **Real-time information processing** capabilities result in **superior storage and accessibility** of information (e.g., electronic patient records)

The research team identified more than 40 "m-enabled" initiatives, but nearly all the business models are still in their infancy and none outside of financial services appears yet commercially viable. It is still unclear whether consumers will pay for m-enabled services in the future, or if there are ways to attract sustainable third-party sources of funding to pay for what consumers will not. The applications are all in early stages of testing, and few have generated sufficient track record to determine which will succeed or fail.

THE IMPACT OF M-PESA

The growth of M-PESA, the m-enabled banking service for low-income individuals in Kenya, is one of the most-chronicled stories in the world of market-based solutions. M-PESA accounts for almost 9 per cent of Safaricom's revenues in Kenya.* It exemplifies how the power of mobile technology may be harnessed to improve the lives of the BoP. To accomplish this, M-PESA brought together several business model elements successful in other MBSs.

Unlike other services, particularly those profiled in this chapter, M-PESA's service requires little customer education. The value proposition is self-evident as it provides a lower cost and more secure process of sending money to relatives, replacing either expensive formal services like Western Union (M-PESA is about half the price), or the risky approach of sending cash via public transportation on Kenya's creaking roads. Additionally, a well-known and trusted bank and mobile operator backed the venture, enhancing credibility with BoP customers. In a recent survey around 98 per cent of respondents said they believed M-PESA to be faster, safer, cheaper, and more convenient than alternative ways to transfer money.

Less obviously, a second key to M-PESA's success is the use of personal contacts. The venture relies on a network of 18,000 agents across Kenya to sell its product. Customers interviewed by Monitor place great importance on these agents as trusted parties who can confirm that a virtual transaction actually occurs.

The agents are also important in marketing. In M-PESA's case, the face-to-face interaction between agents and customers proved critical to inspiring uptake. Safaricom, M-PESA's parent, also invested heavily in initial and ongoing above-the-line marketing to raise awareness of the service.

The final piece of the puzzle for M-PESA has been the use of an outside company to manage and train agents. This reduces costs because Safaricom does not have to build this capability in-house. Top Image, a Kenyan marketing company trains agents on how to operate M-PESA and on related subjects, such as preventing money laundering. The agents provide and install marketing materials in M-PESA shops and ensure enough money in the float to enable transactions to be funded. Finally, they supervise and manage all M-PESA account activations, ensuring that all accounts function properly and provide a high-quality service to consumers.

* For a good account of M-PESA, see Ignacio Mas and Amolo Ng'weno, "Three Keys to M-PESA's Success: Branding, Channel Management, and Pricing", draft working paper, Bill & Melinda Gates Foundation, 15 December 2009, available at www.bankablefrontier.com (accessed 28 April 2011).

Analysis focused on direct-to-BoP-consumer business models in agriculture and health. If m-enabled ventures in these sectors succeed, they may have substantial social impact, given the BoP mobile-phone subscriber base in Africa and elsewhere. In all, the research team examined 12 m-enabled MBSs in detail, half of which were service-based and half information-based.

The example of M-PESA in mobile money transfer (see sidebar) illustrates four key issues pertinent to m-enabled business models: affordability and ability to charge; ease of use; alternative revenue streams; and, perhaps most importantly, the involvement of intermediaries.

Affordability and Ability to Charge

On average, the households of BoP users in our sample spent $4.75 per week — nearly 20 per cent of their income — on mobile services. Because this spending already is proportionately high, the BoP are discerning users, and their willingness to pay for additional services cannot be taken for granted. It is difficult to get them to pay for any m-enabled service. Even the cost of a call or an SMS raised concerns for some consumers we interviewed. Consequently some operators like KenCall's Farmers' Helpline rely on "call back" (a service in which agricultural experts call customers back with answers to questions rather than looking for answers in real time during a call initiated by the farmer) as the primary means of contact, to reduce customer airtime costs. Given cash flow constraints, not surprisingly, BoP customers require a high burden of proof that a service is worth paying for regularly, and will often independently verify in the early days whether the information received on their mobile is correct. Several farmers in Ghana described testing price information by calling relatives with access to the markets for confirmation. Introducing a service for free, with a goal of charging for it later, once it become

established, is also perilous. As noted elsewhere in this report, Google's SMS Suite and Google Trader services attracted hundreds of thousands of users in Uganda when introduced as a free service. Once Google began to charge for the service, however, usage dropped to near zero.

Only five of the 12 enterprises we interviewed were able to successfully charge the consumer for the service, and in most cases pricing did not cover the full cost. As with all successful MBSs targeting BoP customers, payments have to be small and frequent to match the inconsistency of the user's cash flow. To increase the value proposition, some providers bundled m-enabled services with other offerings. Syngenta's Kilimo Salama pilot in Kenya, for example, sells affordable agricultural inputs (seeds, chemicals and fertiliser) bundled with insurance against drought and excess rain at a cost of 5 per cent of the inputs purchased; the service also provides three SMSs per season offering the customer agricultural tips and farming advice.

Alternative Revenue Streams

Given difficulty in pricing for full cost recovery, mobile-based service providers engaging the BoP in Africa face the same challenge as those selling to wealthy consumers in OECD countries: it is nearly impossible to recoup the full cost of selling just information. This problem is more critical, of course, when selling to the cash-constrained BoP in Africa. As a result, many enterprises are exploring alternative and supplemental revenue streams to achieve financial sustainability, although none has as yet successfully introduced a third-party revenue source.[47] The alternatives take a number of forms, including having intermediaries administer surveys for others, licensing or selling proprietary technological innovations, and even opening the service to advertisers for relevant products like agriculture inputs. In higher-income health markets, alternative revenue streams are available from third parties (insurers or drug manufacturers) with an economic incentive to manage the health of the insured party. However, given the paucity of affordable

A PILOT WITH PROMISE: PESINET'S M-HEALTH SERVICE IN MALI

Pesinet is an NGO providing early detection and treatment of early childhood diseases via home health monitoring and remote diagnosis by personnel attached to local community healthcare centres in and beyond Bamako. The organisation partners with community-run health clinics, to which it pays a monthly fee for discounted use of the facilities and 15 hours of a doctor's time each week — about 35 per cent of the doctor's total weekly hours.

Subscribing mothers living within a kilometre of the clinic pay a monthly fee of about $1 to receive weekly health monitoring of their infants, free medical examinations when needed, and half-price discounts on some essential medications sold at the healthcare centres. Agents visit the children and collect five basic data points — weight, cough, fever, diarrhoea and general wellbeing — which are indicators for malaria, respiratory, and diarrhoeal diseases — the three main causes of infant mortality in Mali. The agent then uploads the data via mobile for a doctor at the clinic to review in real time. If any of these indicators suggest cause for concern, the doctor instructs the agent to issue a ticket for a clinic visit and appointment within 24 hours.

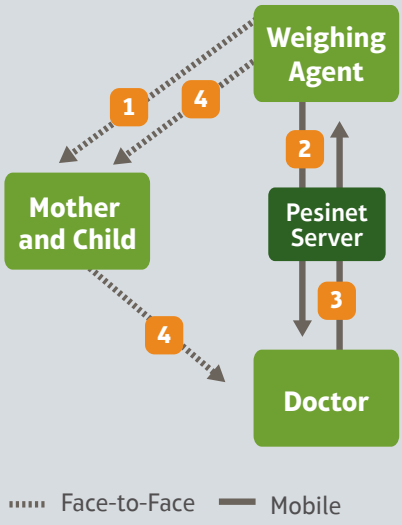
The agents are local women that Pesinet trains in the use of the mobile technology and in evaluating the required data. This approach provides the organisation with trusted intermediaries to interact with and educate the customers: there is no direct mobile interaction with the customers. The extension workers play a vital role in raising awareness, as they have a constant presence in the local area and work with customers to build strong relationships with the local communities.

Pesinet currently has 620 children enrolled, but, to become financially self-sustaining at current pricing, it must reach 1,120 subscriptions or approximately 65 per cent of the total eligible population living within a kilometre.

Although this is a high adoption rate, it is potentially feasible because local alternatives are limited, local health centres are more expensive, and customers believe that mutual insurance systems offer a lower quality of service. The small radius of reach is necessary as transport links are poor in Mali, and neither customers nor agents can travel easily.

Like most m-enabled models, it is too early to say if Pesinet will succeed, but the combination of mobile-based diagnosis, face-to-face customer interaction with community workers, and a compelling value proposition—charging a modest fee for low-cost healthcare—holds significant promise.

Pesinet's Business Model



1. As part of the Pesinet subscription, agent visits weekly (twice weekly for children <1) to **weigh the child** and ask the mother about **symptoms**
2. Data on child's condition entered into Java app. on agent's mobile and **transmitted live via GPRS** to Pesinet server
3. Doctor **reviews data** on system for cases potentially requiring consultations, issuing a ticket for clinical visit if needed **within a day**
4. Agent informs mother that child needs to visit the doctor; the cost of **doctor consultation and 50% of required medication**[1] **are covered by the Pesinet subscription**

Note: [1]For target diseases like diarrhoea, malaria and respiratory infections
Source: Primary research in collaboration with Pesinet; Monitor Analysis

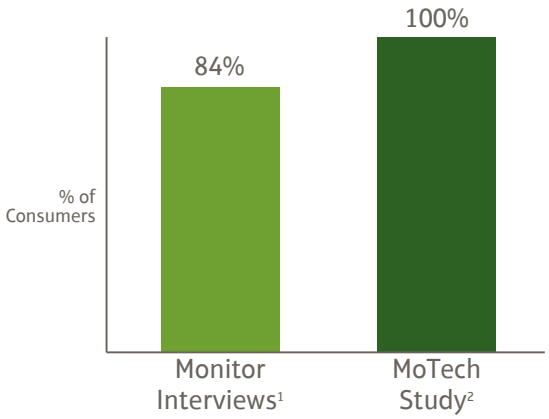
health insurance schemes available to the BoP in Africa, this is unlikely to become a major alternative revenue source for MBSs anytime soon.

Access to the BoP has real value to other enterprises eager to engage with this market, but there are also quandaries around consumer confidentiality and encouraging additional spending that need to be considered when an MBS thinks of expanding to alternative sources of revenue. This is ultimately why transactional models or other models that bundle information with another service are likelier to succeed in the long run. Pesinet's subscription price, for example, includes the visit from the health worker with the mobile to track data, but also discounted drug and clinical services at the local clinic (see sidebar).

Ease of Use

Most rural BoP consumers the research team encountered possess low technological proficiency and are comfortable using only basic voice applications, despite the low cost of text and SMS services. Interviews with customers in multiple countries suggested that 84 per cent of rural consumers preferred voice to text, and other surveys have found close to 100 per cent preference for voice services.[48] At least for older, more rural African BoP customers, the simpler the service offering (and the simpler the technology being used), the easier it is to drive uptake.

Figure 4.2: Percentage of Consumers Preferring Voice to Text Messages



Note: [1]Conducted in Kenya, Tanzania, Uganda, and Mali (n=32); [2]Conducted in Ghana (n=217)
Source: Consumer Interviews; MoTech Study – 'PP App Rapid Prototyping Report'; Monitor Analysis

Simple m-enabled solutions are not only more attractive to the BoP, but also cost less to develop and operate. Pesinet, for example, collects a limited set of data points on child health and weight, so there are almost no development costs for the platform. Even MBSs that concentrate on voice services alone can still go awry, however. The National Farmers' Information Service (NAFIS) in Kenya, developed complex interactive voice response (IVR) software that provides a "phone tree" for questions about seeds, soils, pests, fertiliser, irrigation, or multiple other factors across nine different commodities and crops. But this service is expensive to develop and time consuming for the BoP to use, because it must take into account climactic regions, soil types, equipment used, and local pests, and offer advice in both English and kiSwahili. Creating such an application is costly, especially in setup, and it must still overcome other barriers like trust, distribution, and willingness to pay voice call rates while navigating through the system.

Trusted Intermediaries

The most surprising finding is cited by all of the enterprises: many m-enabled enterprises cannot reach the BoP directly via their handsets and need to engage "trusted agents" to get the product or service to BoP customers. This is in part because the technology is new, and in part because any information coming remotely is difficult to verify or assess. M-PESA agents handle most customer contact and even perform the transactions. Farmers' Helpline operators go to occasional events to meet the farmers they are advising remotely so as to create a personal relationship and trust. Personnel at m-enabled enterprises often spoke of the need for health information to come via community-based health workers, rather than on the phone. NAFIS distributes its services via government agricultural extension officers, and

"INDIRECT" MOBILE APPS

Although Monitor's analysis concentrated on B2C mobile-based models, it was hard to ignore a category of very successful models involving less direct contact with the BoP but still offer impact. Models that leverage IT, and specifically mobiles, to improve supply chains better to serve BoP needs have shown substantial promise and in some ways are well along toward commercialisation. The impulse to use IT to improve operations is a tried and true strategy, and hardly new in either Africa or even in BoP-oriented activities. Nonetheless, these models have demonstrated potential to create longer-term impact through cost reduction and extended reach for existing development enterprises and government agencies.

SMS for Life in Tanzania is an example of several initiatives that use mobiles for tracking health product availability. These mobile-enabled inventory management systems monitor the availability of malaria drugs at hospitals to minimise the occurrence of stockouts and improve communication with distribution agents and marketers. Voxiva provides this kind of service in various settings, for instance, in support of a PSI effort that provides airtime incentives for stockists to keep condoms in supply.* And there is enormous potential in combining mobile applications with paraskilling to improve government provision of critical services. This approach could be especially powerful in the combination of a platform like NAFIS with paraskilled agriculture extension officers to enable agriculture ministries to expand their effective service footprint.

A third category of enterprises is also beginning to emerge to leverage mobiles for livelihood generation for the BoP. Mobenzi in South Africa and txteagle more globally are engaging BoP mobile phone owners in part-time tasks such as data analysis and survey enumeration. Mobenzi is piloting an initiative to collate brand data on social media sites such as Twitter and Facebook. It sends data via SMSs to agents (largely unemployed young people in urban and rural areas) to analyse using basic forms and send back, also via SMS. Mobenzi workers are paid for each piece of data they correctly submit in a variety of forms, which can include payment in airtime.**

* Voxiva's main efforts with PSI in this area have been in Rajasthan, India.

** http://www.mobenzi.com/index.php/about/(accessed 28 April 2011); and Business Trust/SGCF eBulletin (accessed 18 November 2010).

Syngenta doesn't sell input insurance directly to the BoP customer but relies on the agrodealers with whom customers have long trading histories.[49] Consequently, customer acquisition costs of m-enabled enterprises tend to be high, particularly at the inception stage, which tempers the promise of mobile apps as an ultra-low cost, deep-reach platform. Pesinet, for example, predicted that for the first 300 or so children on their books, marketing costs accounted for approximately 20 per cent of revenues.

"Last-Mile" Infrastructure: Micro-Grid Electricity Generation and Urban Water Kiosks

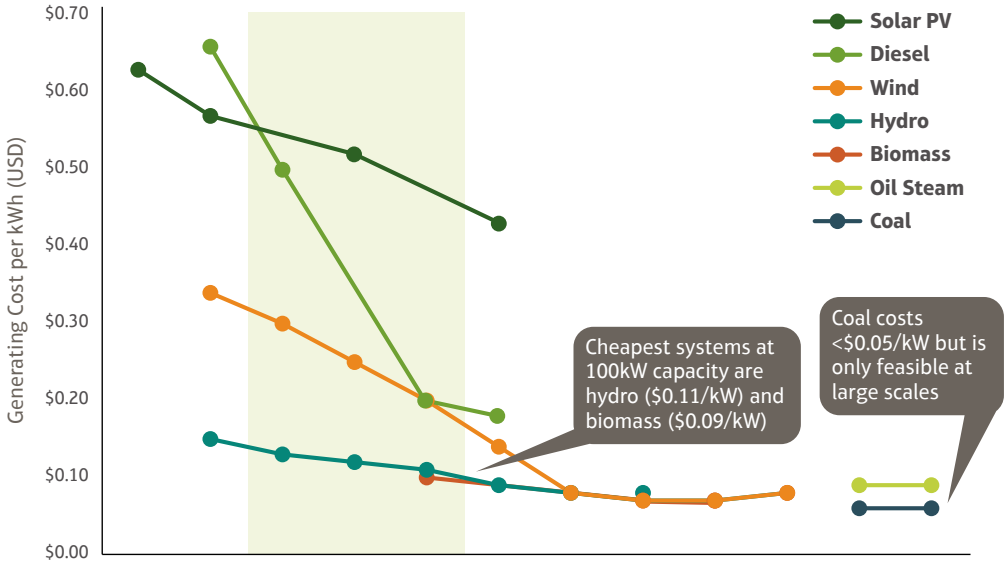
There is a massive infrastructure shortfall in sub-Saharan Africa. Research conducted across 24 countries estimated that the annual cost of redressing the region's infrastructure deficit is $38 billion of investment and $37 billion in operations and maintenance: a total of $75 billion or 12 per cent of the region's annual GDP. Over half the required total investment is in the power sector: the entire subcontinent generates about the same amount of electricity as Spain, which has barely six per cent of SSA's population.[50]

Inadequate infrastructure disproportionately affects the BoP, the majority of whom live in small rural villages dispersed across huge areas. Utility networks are expensive to install over long distances,[51] and the potential customers are typically low-volume users, whose usage is difficult to meter and charge for. Moreover, poor or non-existent land tenure structures make installation challenging. Consequently, the rural BoP are rarely, if ever, connected to national power grids.

Small-scale power generation tends to be expensive, with some options costing twice more per kilowatt than a large coal-fired plant. Although hydro is the cheapest small-scale generation option, opportunities in SSA are limited by geography. The

most applicable option — solar-diesel grids — is the most expensive and beyond the reach of the intended customers. As a result, utility providers often concentrate on extending access to easier segments — Africa's rapidly growing urban areas, and those employed in the formal sector with steady incomes. The LUKU system in Tanzania is a case in point. Targeting low-income customers, TANESCO, the local electricity company, provides pay-as-you-go electricity coupons at ATMs and through the M-PESA system, but service is only applicable in urban areas with an existing electricity supply.

Figure 4.3: Costs of Electricity Generation by Scale and Generating Technology



PEAK HOUSEHOLD CONNECTIONS BY GEN. CAPACITY INSTALLED[1]

50W	300W	1kW	25kW	100kW	5MW	10MW	20MW	50MW	34%	300MW	500MW
2	9	31	769	3077	0.15M	0.31M	0.62M	1.54M	3.08M	9.23M	15M

60% of non-electrified villages in Senegal have less than 75 households

Note: 2005 figures shown; Oil and gas prices have changed considerably since the study was performed so projections that were made for 2010 and 2015 were not borne out in reality; 1Number of connections calculated under assumption that each connection is 32.5W

Source: PERACOD Project ERSEN documentation, Technical and Economic Assessment of Off-grid, Mini-grid and Grid Electrification Technologies, ESMAP (2007)

Similarly, only 56 per cent of SSA's population has access to safe water. The availability of piped water has declined over the past 20 years, particularly in urban areas where rapid population growth and urbanisation have over-strained utilities. Most population growth has occurred in un-piped, peri-urban slum neighbourhoods, and few utilities have been able to extend their networks fast enough to keep up.[52]

Thus, without access to utility networks, the BoP typically rely on a variety of more expensive informal redistributors and substitutes of unknown quality or reliability. Modest success in providing quality consumer goods — such as solar lanterns, chlorination tablets, or sachet water[53] — has offset some of the disadvantages of the lack of utility provision, but these items are not a long-term substitute for a reliable infrastructure network. They also frequently cost users more on a per unit basis.[54]

In light of SSA's infrastructure challenges, the research team investigated MBSs providing community-level, "last-mile" solutions to power and water access.

MICRO-GRID ELECTRICITY GENERATION

CORE MODEL ELEMENTS

In this model, BoP households in rural areas directly connect to a standalone, local mini-grid powered by a small, independently generated source. Key elements of the model include:

- **Community-level assets,** relying on small-scale energy generation — solar, diesel, hydro, and hybrids — and equipment with limited connection capacity.
- **Direct, individual household distribution and metering,** requiring direct-to-home connections to the grid.
- **Differential pricing,** with multiple package offerings for different usage levels.
- **Community-run/privately operated,** with regulators in some countries requiring that only community groups can operate facilities.
- **Soft funding** to cover at least part of the capital expenditure and some connection costs.
- **Regulated operations,** with differing levels of regulation on price and operations by country.

The research team focused on schemes bringing electricity to isolated rural villages (1,000-5,000 residents); other activity is under way to serve larger rural villages and towns. For example, the Rural Electrification Programme in Senegal funded by the IFC and the World Bank is aiming to connect more than 20,000 rural households to the national grid. But these types of projects typically bypass smaller, more remote villages too expensive to connect. The team examined seven enterprises across four countries that serve the rural BoP with independent small-scale electricity-generation (diesel, pico-hydro, solar-diesel hybrid) and distribution grids, and undertook more detailed case studies of three examples: Kathamba Pico-Hydro

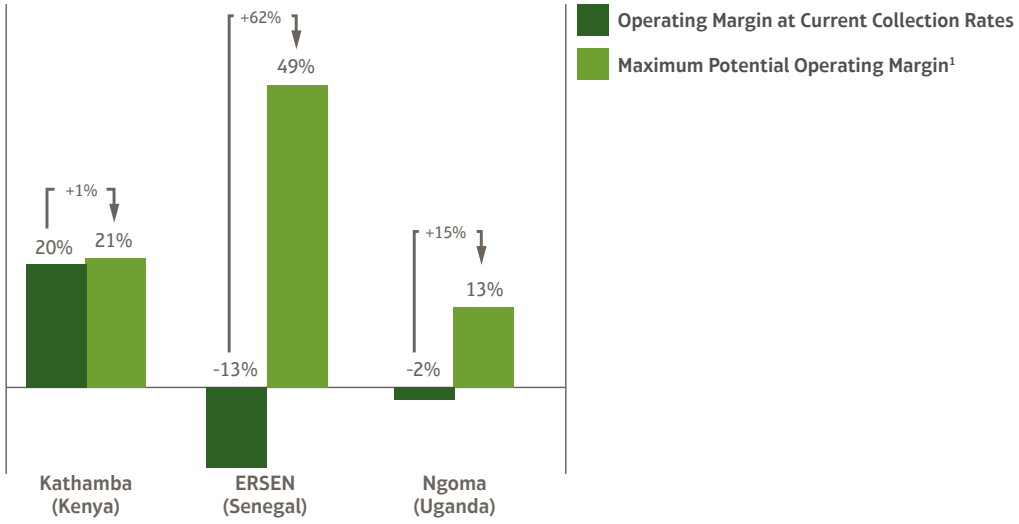
in Kenya; Project ERSEN in Senegal; and Ngoma Diesel Micro-Grid in Uganda. Basic service costs ranged from $0.61/month to $7.50/month, village penetration rates varied between 25 per cent and 60 per cent, and operators provided between 45 and 144 connections per site.

Village micro-grid enterprises substantially improve the lives of subscribers, and there is strong demand for electricity connections. Nevertheless, three major problems inhibit the business model: as with many small-scale infrastructure projects, none of the enterprises recoups its capital expenditure; uptake is limited by up-front lump sum connection fees; and collection rates require close management. In addition, regulation tends to pose management challenges and raise operating costs.

Enterprise Economics and Viability

Although none of the ventures covered its capital expenditures, some did generate positive operating margins. Pricing was generally determined by the community group or the private operator, and typically set at an affordable level that could cover operating costs — assuming high collection rates — but tariffs are also regulated in Senegal and Uganda (although not in Kenya or Tanzania).[55]

Figure 4.4: Collection Rates Drive Operating Margins



Note: [1]Maximum potential operating margin assuming full payment for services rendered
Source: Monitor Analysis

KATHAMBA PICO-HYDRO PROJECT, KENYA

A community-managed micro-grid was established at Kathamba in Kenya's Central Province in 1992. After an unsuccessful bid by the village to get a connection to the national grid in the late 1990s, in 2001, Practical Action, a Kenyan NGO, provided $5,000 from the European Union to test a "pico-hydro" concept. The Micro Hydro Centre at Nottingham Trent University implemented the project. Today, a Pelton turbine powered by a local stream is directly-coupled to an induction generator with an electrical output of 1.1kW and provides electricity to 58 of the 182 households in the village.

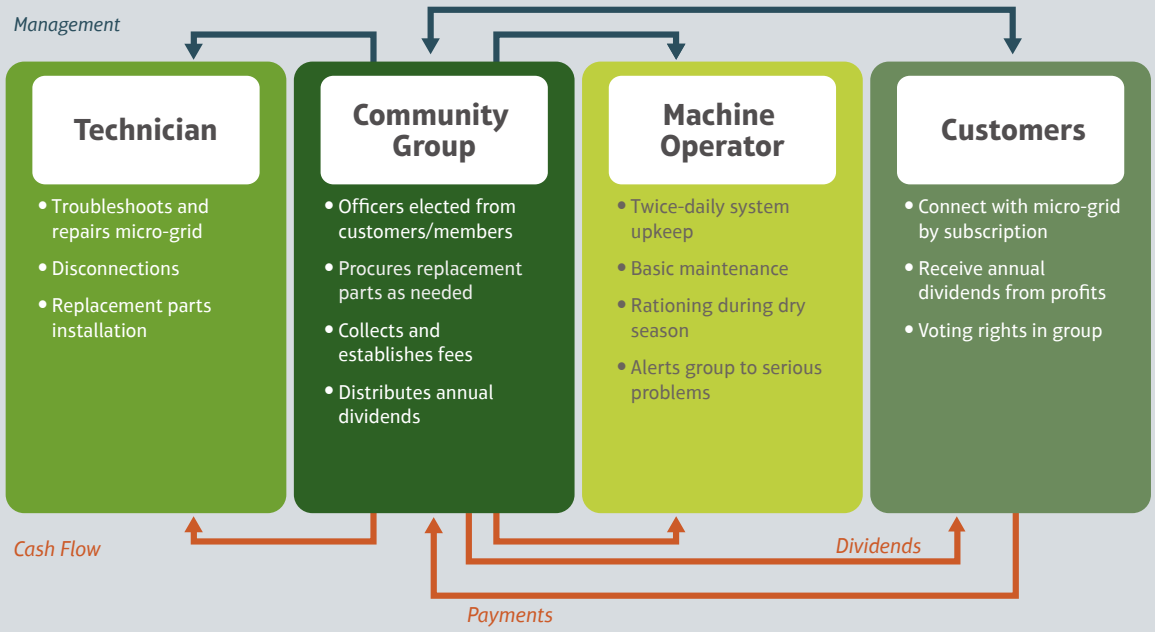
The business model in Kathamba is centred on the community group that runs the day-to-day operations of the project, such as maintenance and collecting fees.

The project covers its operating costs, with a 20 per cent margin after salaries, maintenance and marketing. It offers two packages: for a monthly payment of $0.62 a customer can use about 15 watts of power for an energy-saving lamp and a socket for a radio; alternatively for $1.02 per month, the customer can use 25 watts of electricity, which powers two energy-saving lamps and a higher-power socket for a television. Customers also pay an annual membership of $1.27 and one-time connection fees of $32 for Package 1 and $50 for Package 2. While Package 2 only accounts for a third of subscriptions (19 of 58), it generates 50 per cent more revenue than Package 1.

A striking characteristic of the Kathamba enterprise is the exceptionally high collection rate: 98 per cent of fees are paid. This appears to be a function of the community-owned nature of the project. The price is set by the community group, which has a good idea of what the community can pay for electricity and reduces the likelihood of default. Moreover, as the asset is community-owned, customers may feel a sense of ownership and may be more likely to pay.

However, although the project covers ongoing expenses, it is unlikely that it will ever cover its capital expenditure, despite the fact that the village contributed all the labour for construction. For the capex to be covered, a breakeven analysis suggests that prices would need to rise about 50 per cent. However, prices in this sector, even if not regulated, tend to be "sticky". Charges have remained static since the project's launch a decade ago. Although operating costs have climbed, the community group has opposed higher prices out of a concern that it might increase default rates and thus negate the benefits derived from any price increase.

Kathamba Pico-Hydro Project Business Model



Ensuring payment is a difficult challenge. Given low incomes in the villages, some projects had problems collecting fees and consequently did not achieve enough revenue to make the project operationally sustainable. Models with community management of the asset enjoyed higher collection rates: collection levels for Kathamba and Ngoma, community-managed models, were 98 per cent and 85 per cent respectively, compared to Project ERSEN. The latter, a solar-diesel grid in Senegal, is operated by a private firm and collects only 38 per cent of fees. This inability to collect — albeit in the initial stages of operation — results in a 13 per cent operating loss, whereas at full collection it should earn margins of almost 50 per cent. Nonetheless, relying on relatively low capacity community-based groups to operate these assets and the related systems poses a potential long-term constraint on growth of the model.

Given the inherent lack of scale in village micro-grids and the limited ability of the rural poor to pay, electrification will require either government subsidy or donor interventions (such as large infrastructure grants or output-based aid schemes) to support capital costs for new projects or capacity additions to existing schemes. Such donor or government money is well spent, given the benefits of electrification, the relatively low capital costs of micro-grids, and the lack of alternatives. But full cost recovery is unlikely for small rural villages, and models must still address other key issues.

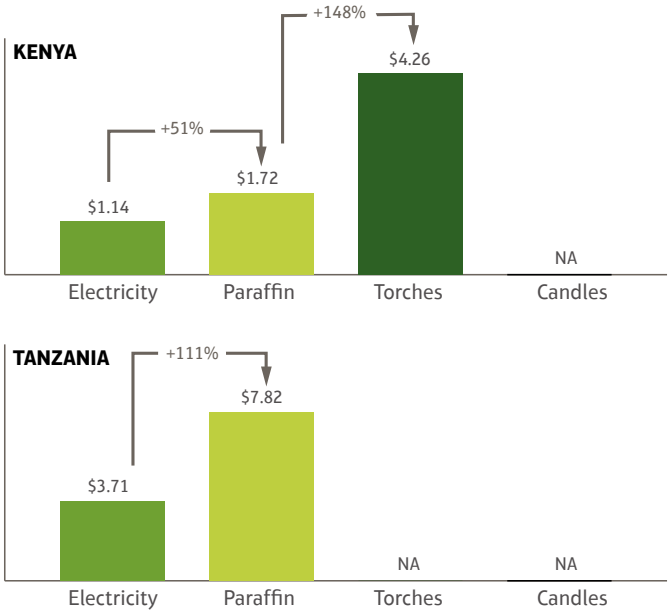
Ability and Willingness to Pay

Once capital expenditure is accounted for, the model shows significant promise. Unlike water, service provided by a village-level facility is much less expensive than

available alternatives. Rural BoP customers want electricity and many are willing to pay: on average, current users of electricity micro-grids say they are willing to more than double their current spending on power; those without connections in micro-grid villages say they would pay the existing tariff levels, and potentially more. In fact, the average cost of micro-grid electricity represented about half that of their current spending on alternative energy sources.

Users and non-users who showed interest and willingness to pay were not just the wealthy village members — average annual household income ranged from $660 to $1,212.[56] Several villages have even adopted two-tier pricing to allow wealthier members to pay higher charges for multiple connections, and improve the economics of pricing service to the poorer members who can afford only one connection with limited usage.

Figure4.5: Microgrid Electricity Cost Compared to Nearest Substitutes: Average Monthly Spend on Energy



Note: Consumers interviewed in Tanzania only used paraffin as an alternative lighting source; Those in Kenya did not use candles

Source: Monitor energy customer interviews in mini-grid villages

However, substantial upfront connection fees present a major obstacle to using mini-grid electricity. While all interviewees stated a willingness to pay current monthly tariffs, the connection fee raises the cost by between $38 and $215 per household, representing between 6 per cent and 36 per cent of annual household income, depending on the country. This makes mini -grid electricity too expensive for many BoP customers. No-one has solved this problem systematically, but some countries, such as Tanzania, have begun to experiment with MFI financing of connections. In the future, clever deployment of impact investment funds for debt may help overcome this obstacle.

URBAN WATER KIOSKS

CORE MODEL ELEMENTS

This model supports water kiosks established in slum and peri-urban areas to fill BoP customers' 20-litre jerry cans with water from the mains for a low, per-can fee. Key elements of the model include:

- **Pay per use and small size products** that customers pick up at a central site.
- **Community-level infrastructure**, available to all residents of a nearby catchment area.
- **Private company operated.** The water company manages repairs, meter reading, revenue collection, water quality and "sub-concessions" for an attendant or community group to operate on commission incentives.
- **Cross-subsidies**, with revenues from other (regulated) higher paying customers to make water affordable.
- **Regulated pricing** to set price ceilings and wholesale prices, via block tariff structure. Operators have little discretion to adjust prices.
- **Soft funding** covers the capital expenditure to build kiosks, which are basic, no-frills assets.

Inadequate access to safe drinking water has an enormous impact on populations of developing countries, contributing to the staggering burden of diarrheal diseases and reducing "personal productive time", with widespread economic effects. Drinking dirty water has a disproportionate impact on vulnerable groups such as women, children, the rural poor and slum dwellers.[57] While such countries as Burkina Faso, the Gambia, Ghana, and Malawi have already met the Millenium Development Goal for water access to the BoP, many other countries still fall short.[58] Requiring people to pay enough for clean water to cover the costs of provision has long been controversial. Ultimately, however, increasing access will require multiple approaches, including, potentially, charges for water use. The good news is that BoP customers, on the whole, recognise the benefit of clean water and are willing to pay for it.

Small-scale water kiosks offer an example of pay-per-use models that operate at scale and on affordable terms. Such models are evident in India[59] as well as in urban areas of SSA, where the environment is more complex and diverse, more regulated, and has the advantage of populations who are generally better educated on the benefits of clean water.

Water companies[60] in several African countries have recently introduced water kiosks selling water from the main supply. These kiosks are typically at the "edge" of the network, located near or in a slum or peri-urban area, and operated by a local entrepreneur on contract to the water company. This entrepreneur sells water to local customers for collection in their own 20-litre jerry cans at regulated prices. Water companies typically establish kiosks to promote formal service provision and, in so doing, to reduce "unaccounted-for water".[61] Urban water companies are highly regulated and are mandated to provide quality services to all residents, including the BoP. Consequently, tariffs set prices that are substantially lower — sometimes by over 90 per cent– than any other commercial models providing water (sachet water, trucked-in water, or other informal solutions). In some areas, like Kafubu, Zambia,

CASE STUDY: NANYUKI WATER AND SEWERAGE COMPANY (NAWASCO), KENYA

NAWASCO provides treated water from a local river to peri-urban residents through informal and formal kiosks. This initiative is still at a relatively small scale — it currently has one working kiosk, one that has fallen into disuse, and six under construction. Thus the project only accounts for a tiny fraction of the total water sold in Nanyuki. NAWASCO executives support the kiosks as a corporate social responsibility activity to alleviate poverty, rather than a profit-generating enterprise.

The kiosks are built and maintained by the company (with technical assistance from SNV, a Dutch NGO), at a cost of around $5,300 each, with about half of that cost attributed to extending the main's pipes to unserviced areas. This is considerably cheaper than other approaches: Kafubu Water kiosks in Zambia cost nearly $13,500 because they are farther from main water pipes. NAWASCO kiosks are run by community groups, which select attendants to operate them. The arrangement is designed to ensure that the community has a vested interest in the kiosks and will use and maintain them.

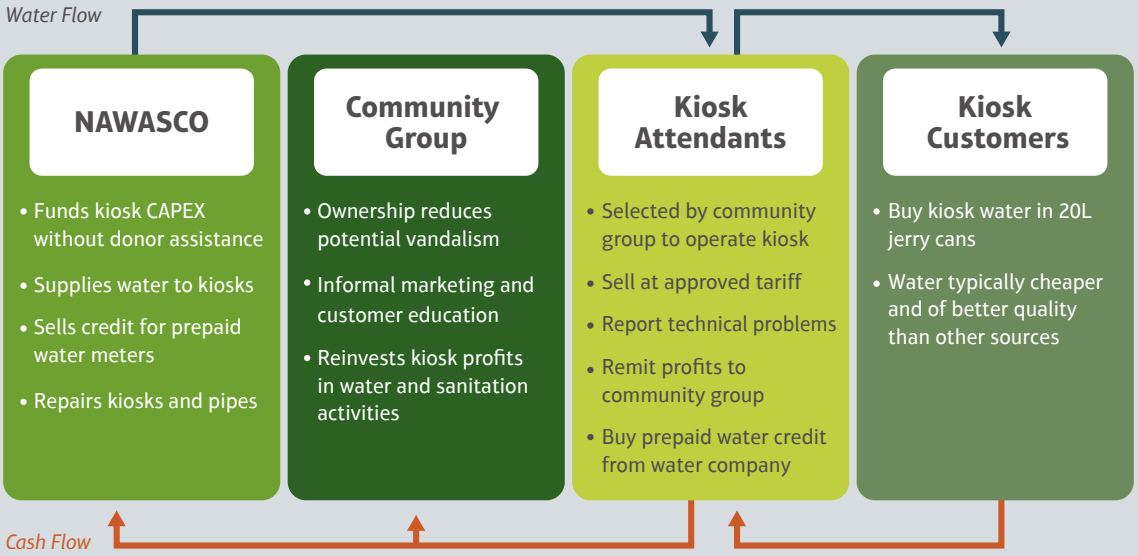
NAWASCO water kiosks generate a 34 per cent operating margin after water costs, attendant wages, and other fixed costs; the land is usually donated by the community group. Revenues are driven by a price of KSh 2 ($0.024) per 20 litre can, which is considerably cheaper than alternatives like sachet water and trucked-in water, but costs more than kiosk water in other countries or elsewhere in Kenya.

Because this enterprise is a CSR initiative, most of the revenues are donated to the community group to support water and sanitation activities. Analysis indicates that at current pricing levels, the enterprise could break even (includ-

ing covering capital expenditure) if it sold 3,350 20-litre cans a month; this would require an 81 per cent increase on current sales. Although this benchmark appears daunting, progress towards it could be made with marketing to drive demand and better positioning of the kiosks relative to alternative water sources.

As expected of early stage initiatives, paid consumption is small, representing only 5 per cent of potential users, so there is ample opportunity to increase sales and stimulate demand.

NAWASCO Water Kiosk Business Model



Source: NAWASCO Water Management Interview, Devolution Trust Fund Interview, Monitor Analysis

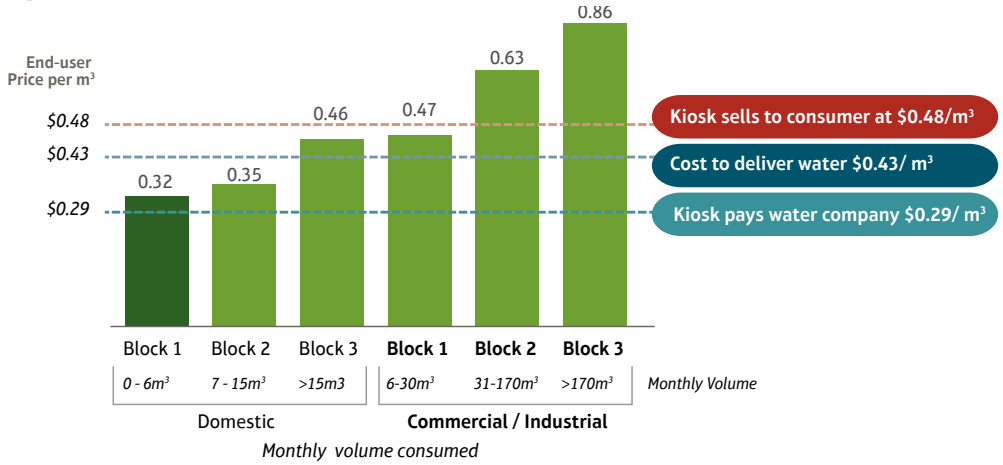
this practice yields prices to the consumer of about $0.01 per jerry can and markedly improves BoP access to municipal water.

Several non-regulated utility options have emerged in recent years to complement existing informal (and relatively expensive) models. Pureflow in Kenya, for example, manufactures water purification systems for non-piped communities, usually in partnership with an NGO, at the cost of $6,000. The New Energy Wells programme in Northern Ghana has funded the creation or renovation of 28 wells across the region and now serves more than 5,000 households (100-200 per day per well). However, none of these models is as prevalent as the kiosk model.

Monitor studied five kiosk enterprises run by water companies and two (Water and Sanitation for the Urban Poor, and Ushirika wa Usafi in Kenya) by charities. The research team built detailed case studies of two ventures: Nanyuki Water and Sewerage Company (NAWASCO) in Kenya and Kafubu Water and Sewerage in Ndola, Zambia. Kiosk capital costs ranged from about $5,300 to about $13,500 each, and prices charged varied from $0.005/jerry can to $0.024/jerry can. Utilisation rates spread from 5 per cent to 50 per cent, and operating margins showed huge variance, from -122 per cent to +42 per cent. In short, although all models were essentially the same operationally, performance and results varied greatly.

Differences in results reflect factors including management models, pricing schemes and regulation, and availability of alternatives. Most of the capital expenditure is funded by donors, or by the water companies themselves, which cross-subsidise kiosk operations with revenues from other higher-paying customers to make water affordable. Nonetheless, in a surprising — and undoubtedly unintentional — appearance of the "BoP Penalty", the final per-litre price to the consumer is usually higher than the price to all but large industrial users, and 37 per cent more per cubic metre than to a mid-use domestic customer with a home water-main connection.

Figure 4.6: Kafubu Tariff Structure (Zambia)



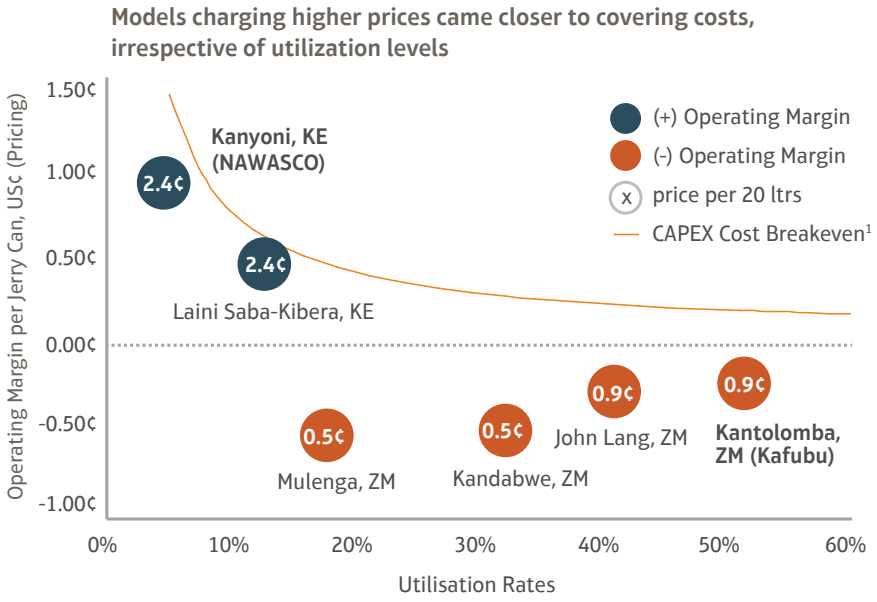
Note: Retail sales price at kiosk of $0.48 per cubic meter is $0.01 per jerry can.
Source: Monitor Analysis; Management interviews; Kafubu Water and Sewerage Company Tariff Structure

Enterprise Economics and Viability

Most kiosk enterprises are led by water companies acting in regulated markets. They do not consider BoP customers a business opportunity but perceive provision as a social responsibility or as a means of reducing unaccounted-for water costs. Across all the operators, we found efforts to drive use and financial sustainability with only two levers: price, and prevention of the use of alternatives. In one extreme case, Lusaka Water in Zambia capped nearby wells as an alternative source of water. Consequently, kiosk operators rarely invest in anything that would increase use of existing kiosk assets, such as improving the quality at point of use, driving demand through marketing, or attracting new users (beyond adding new kiosks). Only 5 per cent of the local population used NAWASCO's kiosk — in part because potential customers did not believe it supplied clean water. As with micro-grid power models, no regulated kiosk model in the sample is currently fully sustainable on a standalone basis. Some models covered their operating costs (e.g., NAWASCO) but not their (relatively modest) capital costs.[62] The Kafubu water company in Zambia has built

88 water kiosks using donor funding to serve peri-urban residents of Ndola and is operating at scale. Because Kafubu does not view this activity as a commercial proposition, and the regulator is focused on affordability, the company supplies water to kiosk customers at a 30 per cent subsidy ($0.01 per jerry can). This ensures a high level of use and affordability — at 53 per cent penetration, the highest in the sample — but also prevents any sustainability at the kiosk or company level. This practice also stifles the impulse to invest in improving water quality, even though at $0.016/jerry can, pricing could cover both capital and operational costs.

Figure 4.7: Water Kiosk Commercial Sustainability



Notes: [1]CAPEX Costs for a kiosk estimated at $5,000, amortized over 25 years and divided across relevant volume of jerry cans. Kiosk

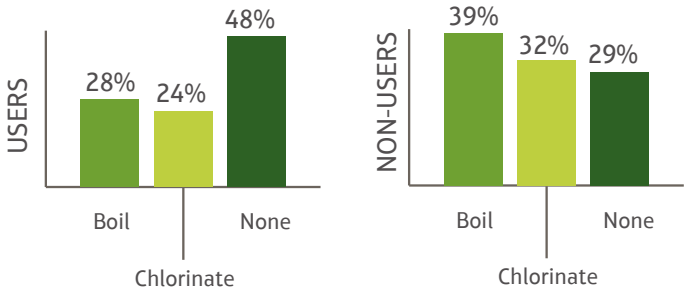
Listening to Customers: Ability and Willingness to Pay

On the whole, as with electricity, urban BoP customers in SSA manifest strong demand for clean water. Levels of awareness are high, and over half of kiosk users

already treat their water and know the importance of treatment. This awareness thus drives consumer behaviour and preferences. Kiosk users and non-users claim willingness to pay two to three times as much as current expenditures to access clean water. Few people choose to drink untreated river or borehole water if they have access to (or can afford) clean water. Acting on this expressed willingness to pay is nearly impossible for the kiosk operators, however. Because the prices are regulated, and water companies lose money on every litre sold to the BoP, there is no incentive to invest either in filtration equipment to improve quality, or in stimulating demand to improve utilisation. These circumstances contrast sharply with private models catalogued elsewhere (e.g., Bara Jii sachets in Senegal, rural filtration plants in India, New Energy Wells in Ghana), which need to drive up utilisation to break even.

Figure4.8: Treatment Methods

Across users and non-users of kiosk water, 59% of customers surveyed treat their water due to health concerns



Source: Monitor interviews with water customers in Zambia, Kenya (n = 73)

The relationship between pricing and use in the water sector seems strong, and a difference of even $0.01/jerry can appears to drive significant differences in adoption rates. Consumer data also suggest price sensitivity: many consumers would

reduce expenditure or shift to substitutes (where possible) in response to price increases, which could undermine the financial viability of the kiosk model and contradict the stated "willingness to pay" for clean water. Consequently, for many water companies, price increases alone are insufficient to achieve full profitability and must be part of a more holistic strategy for increasing kiosk use.

Replication and Scale

This model succeeds in many ways in increasing access to water in urban areas at affordable prices and achieving improved capacity utilisation levels. Nonetheless, several obstacles block the effectiveness of the model, and its future will depend on regulatory considerations. The model could scale with more capital injected into water companies, but fundamental problems would remain, especially as pertains to long-term concerns about water quality and increasing demand and use.[63]

Prospects for scaling up this model depends on regulation to allow more flexibility on prices, motivate better filtration at the kiosks, and offer more flexibility on allowing private operators to supply water services. Based on successful rural water models, the evidence suggests that it is indeed possible to succeed with a privately-operated model that charges a bit more than regulation currently allows — as long as the quality of the water is appropriately high.

DISTRIBUTION THROUGH DEDICATED DIRECT SALES FORCES

CORE MODEL ELEMENTS

Dedicated direct sales force models recruit and train local agents to reach deep into communities to sell and distribute socially beneficial goods, bypassing shops and other channels, to make it easy for the (often rural) poor to obtain access. Key elements of the model include:

- **Dedicated, "all in one" direct sales agents,** usually drawn from the local BoP population, to sell, market, and distribute goods.
- **Wholesale purchase of goods** from manufacturers.
- **A mixed basket of products,** relying on certain products to cross-subsidise others, open doors, and drive volumes.
- **Extensive coaching, supervision, and training** to ensure sales and social impact.
- **Doorstep delivery** to promote trust and enable privacy.

Some models:

- **Provide credit** to buyers

Spurred by high-profile successes in commercial micro-franchising, the widespread distribution capabilities of independent mobile airtime agents, success stories in other markets, and — most important — an interest in delivering socially beneficial products[64] to the rural poor, a number of MBSs are experimenting with direct agent-based distribution. The Monitor sample of 285 enterprises attempting to serve the BoP as customers includes 29 using some form of dedicated direct distribution networks.

CASE STUDY: LIVING GOODS, UGANDA

Living Goods' primary aim is to educate communities about proper healthcare and disease prevention and to make basic prevention and treatment products more affordable. The enterprise employs a network of 600 female agents (community health promoters or CHPs) to provide doorstep delivery and sales of a basket of health products to the BoP in rural areas of Uganda, which has the fifth-lowest life expectancy in the world.

The CHPs are carefully selected and fully trained on an ongoing basis to enable them to provide basic healthcare advice and education to their customers. CHPs receive three weeks of intensive induction training plus monthly refreshers and regular coaching. This is expensive, but is vital to the success of the model. There is an initial cost of $120 and an on-going cost of $84 per year per agent, which accounts for about half the total cost of each CHP.

The model has powerful benefits for micro-entrepreneurs, and is particularly attractive to women. Not only do they receive training, but they also make a margin of around 20 per cent on their sales, with top agents selling up to $500 per month. The model is localised so all CHPs live within 7-8 km of their local branch, which they visit twice a week to restock from the micro-warehouse. They also have flexible schedules, which allow them to balance selling with household responsibilities.

The product mix is tailored to customers and includes fortified foods to fight malnutrition, ACTs, condoms, rehydration solutions, de-worming tablets, mosquito nets, malaria treatment, water purification tablets and birthing kits. These goods are sold at a 10-40 per cent discount vs. urban retailers to stimulate demand in a segment that spends just $2.80 per capita each month on healthcare and has very low awareness. However, Living Goods goes beyond the typical product mix by also supply-

ing agents with a broad assortment of consumer items such as soap, diapers, lotions, and sanitary pads that increase sales and bolster the agents' financial sustainability so they remain effective.

Although individual agents earn positive returns, the annual cost of maintaining agents is high and difficult to cover, partly because many health goods are "push products" requiring extensive customer education and demand stimulation, which takes time and reduces the volume CHPs can sell. Moreover, Living Goods, like many agent networks, suffers from high agent churn, which eats into margins. However, the venture is still in an early stage. Initially, it operated in partnership with the Bangladesh Rural Advancement Committee (BRAC), but has recently started its own network of branches to control developments and give CHPs more flexibility. Living Goods is currently experimenting with the model, testing different approaches to product mix, training methods, recruiting, markets, and geographies to help make the business more sustainable.

The aspiration of dedicated direct distribution is to open a new, commercially viable channel to cover gaps in state provision and the existing distribution networks of commercial businesses. Some MBSs also state another objective: creating livelihoods in rural areas. These business models use micro-entrepreneurs to sell goods and services direct to the BoP in small, remote villages where there is no retail distribution network, no advertising coverage, and inadequate transportation.[65]

In theory, these direct distribution networks allow enterprises to delve deep into the BoP, providing a responsible and trusted medium through which to sell socially beneficial goods to hard-to-reach customers, especially rural women and children. Door-to-door selling enables direct sales agents to build personal relationships with customers and educate them about the benefits of items that they might not have known existed. In addition, doorstep sales are potentially helpful in reaching women who may never leave their village to shop.[66] By building social capital, this business model has enormous potential to increase the use of health and other products and services that can improve customers' lives and to develop market demand through direct education. Moreover, agents receive basic training in business and selling beneficial products and services, thereby acquiring skills that increase and stabilise their incomes.

The research team studied in depth four social enterprises using dedicated sales agents to distribute their goods and undertook detailed field-based case studies of three to understand the benefits, limitations, and applicability of this model.

To Microfranchise or Not to Microfranchise?

As the Living Goods sidebar suggests, it is difficult to make a profit when the costs associated with distribution and reaching customers are relatively high while the ticket price for goods is low enough to match customer cash flows and ensure adoption.

Agent networks in the health sector — Living Goods and HealthKeepers, for example — have posed themselves a daunting challenge. Selling a basket of relatively basic health products is time consuming and requires expensive, high-capability channels. Because of the emphasis on social impact, they sell their goods at a discount relative to nearby shops. A typical agent must, therefore, be highly productive to support costs, and agent churn needs to be minimised to keep recruiting and training costs as low as possible.[67]

Due to a variety of factors — enterprise immaturity, fluctuation in donor support, and strategic choices made in the operating model — neither Living Goods nor Health Keepers has reached breakeven. The only profitable agent network in the Monitor sample is operated by Toyola Energy, which has the advantage of manufacturing its own cook stoves and specialising, which gives it an edge over those enterprises acting as wholesalers and dealing in baskets of goods.

Analysis of enterprises using the dedicated direct distribution model indicates key obstacles that must be overcome to attain financial viability: training and equipping agents; and pricing, margins, product mix, and demand stimulation. These obstacles typically originate in choices around maintaining a balance between social impact and financial sustainability, but other factors play a role as well.

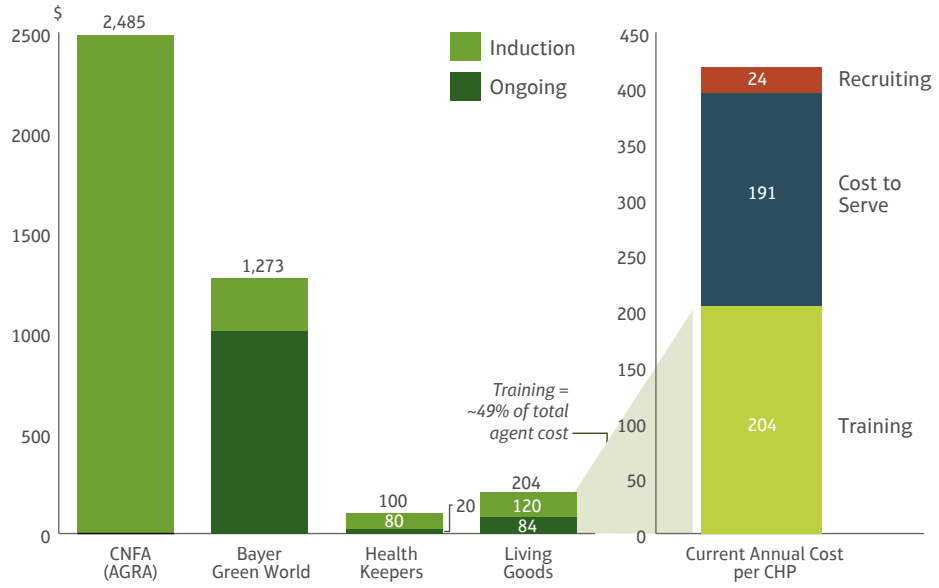
Training and Equipping Agents

Although purely commercial businesses using BoP agent networks train their staffs, this tends to be one-time, basic intervention if the goods themselves are typically "pull products" which require little explanation. Safaricom's M-PESA is a some-

what complicated product but even its agents receive only one day of induction training, followed by further field visits and associated ongoing training.[68]

Many social enterprises, however, undertake extensive, on-going and usually expensive training for agents. This practice partly reflects decisions to employ local BoP individuals who may have social capital in the community but almost surely lack sales skills. Another factor is the choice to sell "push" products and new items that require explanation. This is particularly important for health products, for which customers may rely on the agents' advice to make important decisions for their families. Such training adds significant costs into the business model. In the case of the health agent networks, more than half of annual expenses associated with each agent relate to continued support and training. At current low levels of sales, these operations are therefore unprofitable. For example, HealthKeepers' gross profit on sales in 2009 covered less than 7 per cent of total expenses.[69]

Figure 4.9: Cost of Training and Equipping Agents and Retailers



Notes: Does not include costs at headquarters (fixed costs); Training costs include: Cost of induction training, salary and incentives of community health assistants, monthly training, training for CHP replacements due to churn / cost to serve include branch office furniture and equipment, inventory, depreciation of start-up kits and fixed assets, assistant, office rent, maintenance, utilities, office supplies and transport costs / recruiting expenses, start-up kits, surplus from loan capital and loan capital

Source: Primary research in collaboration with Living Goods, HealthKeepers, Bayer, Monitor Research and Analysis

MBSs that operate agent networks face an imperative to manage agent churn. Although most individual direct sales agents we spoke with are profitable, agents typically leave such inclusive business networks for reasons ranging from a lack of expected income opportunities to competing demands for time. [70]

MBSs typically find it difficult to recruit and keep qualified numbers of agents at scale. Usually the first cohort is rigorously screened and often fulfils its objectives. Subsequent recruits, however, prove harder to find and retain. For example, whereas 70 per cent of agents who joined HealthKeepers network in 2008 were still active in 2009, only 23 per cent of those who joined in 2009 were still active in 2010. Such churn reduces the size of the agent network and increases training costs.[71] Not surprisingly, the models with the lowest sales volume per agent tended to have the highest churn rates: Health Keepers agents sell about $35/month of goods, leaving an average of $4/month of profit, but about one in two agent tends to leave as a result.

In contrast, Toyola does not need to invest as much in training its cook stove sales agents as it specialises in a single product, one that benefitted from significant (donor-funded) external demand stimulation. This campaign and its residual effects are a key driver of success, as is the ability of agents to offer credit to some buyers. Toyola agents earn a profit of more than $220/month; churn is a low (five per cent) as a consequence. Yet Toyola faces a different challenge: the size and weight of its products requires it to provide expensive trucks to sales agents with significant depreciation costs, in some cases exceeding $1,000 per agent annually.

Pricing, Margins, Product Mix, and Demand Stimulation

The contrast between enterprises that have achieved financial sustainability and those that have not is clear when it comes to pricing. Despite rising costs due to competition for scrap metal, Toyola adds a premium of about 20 per cent for stoves sold on credit and recently began using carbon credits to help support growth

and keep prices competitive. Conversely, HealthKeepers' and Living Goods' sales agents sell products at prices that are generally at or below local market prices and by design make no effort to capture a potential "doorstep premium". This outcome results from the desire to keep prices low to maintain affordability, but such prices mean that the enterprise cannot cover its costs. Pricing flexibility for the health product distributors is further constrained by their relatively low volumes, so they cannot command large trade promotion discounts from manufacturers to pass on to their customers. Circumstances may change as the organisations grow, but they will continue to be reliant on product manufacturers to find additional margin cushion or promotion support.

For those agents selling a single product — airtime sellers, for example, or Toyola — product mix is not a real issue.[72] However, it is a key lever for agent networks like Living Goods and HealthKeepers. For instance, in March 2010, Living Goods introduced improved cook stoves in their portfolio of products (which have a subsidy of $5 per stove due to carbon credits) and in creased its penetration in target villages to 20 per cent. After HealthKeepers lost a funding partner, it altered its product mix and replaced branded items, which typically feature very low margins (below 10 per cent), with lesser-known brands and generics from manufacturers with lower bargaining power. To maintain perceptions of quality, HealthKeepers developed a sticker to brand condoms, which allows it to source products opportunistically and turn condoms into a margin champion. But social goals require that such enterprises sell products that do not necessarily have the best margins, again leaving less flexibility to cover other costs, especially demand stimulation.

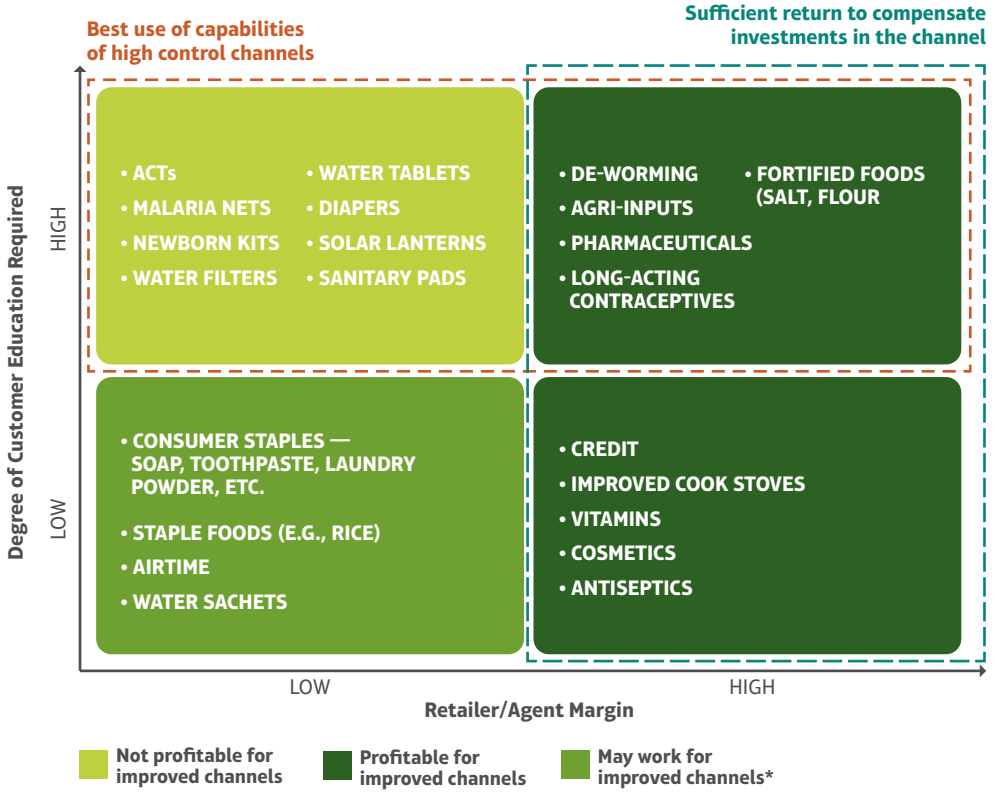
THE ROMANCE OF THE MICRO-ENTREPRENEUR?

"Micro-franchising" holds great appeal as a means of providing a "business in a box" to otherwise struggling BoP entrepreneurs or agents. Many MBSs trying direct sales models are doing so, at least in part, out of a concern for livelihoods for the BoP in a given area. Is it really possible to get a "twofer" — that is, can an MBS both deliver a product to its BoP customers inexpensively and effectively, and provide a livelihood dividend for agents and entrepreneurs? Although some initiatives are premised on this objective, based on Monitor's research, evidence of success is negligible. Successful models tend to rely on a range of players with some specialisation of skills. Coca-Cola SABCO, for example, has developed a sophisticated division of labour within its distribution channel of MDCs in several African countries, which reduces training requirements. The BoP MDC owner handles only basic tasks — logistics, fulfilment, and physical distribution — while higher-skilled functions, such as marketing, are left to better-educated employees from higher-income segments.* When Voltic looked to franchise its sachet water production, they found experienced — and wealthier — entrepreneur partners, not unproven local BoP entrepreneurs. Agents have been essential to growth of MFIs, but they sell a relatively simple set of pull products — namely credit and savings. Success may be possible, but so far the data suggest that the idea of vesting all sales, education, and distribution functions in a single BoP direct sales agent is not a winning formula, and a look underneath most of the accomplished examples usually reveals a variety of roles and functions, only one of which is being fulfilled by the BoP entrepreneur or direct agent.

* IFC Case Study on Coca-Cola SABCO, http://wwwifc.org/ifcext/advisoryservices.nsf/AttachmentsByTitle/SABCO_Case_Study/$FILE/Coca-Cola+SABCO.pdf (accessed 11 February 2011).

A consequence of both the product mix and a position at the end of the supply chain is insufficient margin to pay for demand stimulation. Most enterprises offering push products (and even many selling pull products) spend substantial amounts on above-the-line marketing: MTN spends 13 per cent of revenues on "Selling, Distribution and Marketing" expenses (see Chapter 5). Coca-Cola SABCO invests in additional below-the line marketing in addition to ATL marketing it does more broadly. The venture deploys dedicated Resident Account Developers, part-time SABCO employees based in local neighbourhoods, who develop retail accounts, monitor and manage shops' beverage placement and productivity, and generate required orders.[73]

Figure 4.10: Agent Models Require the Right Combination of Product Basket, Margin, and Channel Capability



Note: *Must be considered on a case-by-case basis, based on Volume x Margin expected
Source: Monitor Analysis

In contrast, most networks for health (as well as other direct agent models, for instance, in solar lanterns) typically embed all demand stimulation in the direct sales agents, with little investment in additional support, even for products that need education or explanation. This policy, in turn, requires more effort and time in below-the-line communications from the sales agents themselves — and thus lowers sales potential.

Can Direct Sales Agent Networks Succeed?

This mixed experience of direct sales agent networks in low-income markets suggests caution when considering such models and careful thought about the roles that agents play.

In general, as figure 4.10 suggests, it only makes financial sense to carry products that require high levels of consumer education and agent time when they offer margins that compensate for the expense, are accompanied by significant ATL marketing, or are explicitly subsidised. From an economic perspective, direct sales agent networks in SSA appear to function best for simple products for which demand already exists and hence lower cost for agent and customer education. In all cases, the manufacturer is typically the best-placed entity in the value chain to be able to make the required investments for a successful agent-based distribution strategy, but such networks are not appropriate for all products, or for products that are better distributed in multi-product baskets.

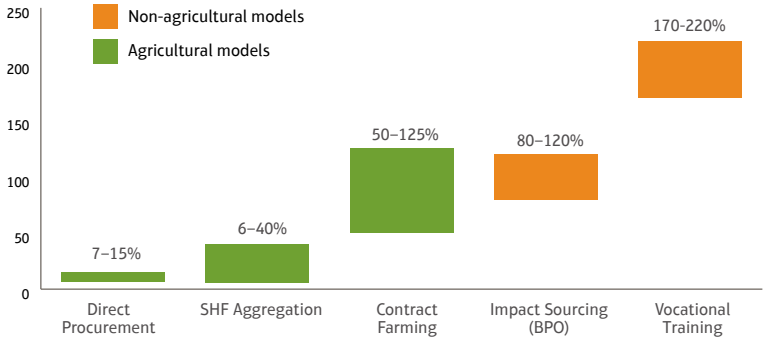
If one strips out the requirement for financial viability, however, a strong case can be made for the efficacy of direct sales models for "push products" for the BoP. Such models may not pay their way, but they may still succeed in increasing use of socially beneficial goods and services. In time, research may eventually show that such networks are more cost-effective than government schemes, say, in reaching rural women.

5. Lessons from Success and Struggle

THE PERFORMANCE OF MARKET-BASED SOLUTIONS in sub-Saharan Africa broadly resembles that of their counterparts elsewhere. As Monitor pointed out in 2009, "a great product idea married to a noble mission is rarely enough to make meaningful progress in the face of the massive social challenges faced by vast numbers of impoverished people".[74] For MBSs, success requires heeding business fundamentals that apply to commercial enterprises everywhere, with the added imperative to tailor business models to the particular circumstances of the BoP.

The major finding of this report is that MBSs can achieve commercial viability and deliver social impact at scale. Figure 5.1 illustrates the social benefit. Some business models in agriculture can increase incomes by more than 100 per cent, and both the impact BPO models and vocational training models show significant income increases for those who participate. The lives and livelihoods of hundreds of thousands, and probably millions, of poor people cumulatively are improved.

Figure 5.1: Income Increase for BoP Participants in Selected Business Models



Source: Business model income effects from Monitor Group primary research in India and Africa study countries; Vocational training income impact reflects the effect a diploma/certificate qualification has on earnings in comparison to having incomplete schooling, as referenced in "Responding to the Educational Needs of Post-school Youth: Determining the Scope of the Problem and Developing a Capacity-Building Model," Edited by Nico Cloete, 2009 (pg 4) – this data is for South Africa.

A FARMER FOCUS GROUP IN KENYA

Farmers discuss their use of inputs and their preferences for selling outputs between market-based solutions and farm-gate brokers.

Nonetheless, success stories like these are still too rare, and looking across all the business models, we can identify a set of lessons and obstacles that actors in the field have been learning. Of all these lessons, three lessons are particularly evident in SSA:

- **Improving the route to market is essential.** Even if channels can be shared, it may be necessary or advisable to train and invest in agents; develop local intermediaries that risk-averse BoP customers trust; recognise and manage distinct roles in the channel across sales, physical delivery, order-taking, and other functions; and provide branding and retailer support. Moreover, many products require significant investment in customer education and demand stimulation — which further squeezes narrow operating margins.

- **Managing financial risk and income volatility is paramount.** Because MBSs serve high-risk consumers or engage small and sometimes volatile suppliers, they must mitigate the risk elsewhere in the business model to protect their revenues and prospects for profitability. Because they must deal with the possibility of slow sales and uptake, they must develop creative approaches to increasing and smoothing revenues.

- **Scale may be achieved through multiple routes.** MBSs may get to scale quickly and in any of three ways:

    1. A traditional organic approach based on innovation, growth, and reinvestment and/or a "Silicon Valley approach involving sustained investments in probable winners;
    2. Replication, dissemination, and transplantation of proven business models; and

3. Upgrading of ventures already at or near scale in the informal economy.

The route an MBS should follow will vary depending on the environment in which it finds itself and the product or service it is providing, and the different routes offer differing options to investors, donors, and others seeking to increase social impact.

This chapter also identifies and comments on the obstacles and challenges MBSs face at three levels: the macro environment, the BoP market, and the enterprise itself.

Improving the Route to Market

Leverage Informality

In *Emerging Markets, Emerging Models*, we warned MBSs against building a proprietary distribution channel because this approach is time-consuming and expensive. We suggested instead that ventures exploit existing channels. Research in SSA suggests this can be taken a step farther, but it requires enterprises, in many cases, to build on existing informal and often fragmented channels. Because the informal economy is so large (informal economic activity accounts for over 40 per cent of GNP of the region, and in some countries, like Kenya, accounts for 95 per cent of overall retail trade)[75] and populations dispersed, few formal distribution and logistics channels reach the BoP. That leaves MBSs intending to serve low-income people with limited options, of which the best often proves to be working within the informal channel.

When awareness and demand already exist among BoP customers for a product or service, MBSs have been able to scale up this way with relative ease. Some examples:

- **Voltic Cool Pac** in Ghana uses over 10,000 street hawkers to sell 480,000 water sachets daily.

- **Flash** in South Africa leverages over 18,000 home spaza shops as mobile money transaction points.
- **Barclays** in Ghana works with 4,000 *susu* collectors,[76] each serving 200-850 clients per day.
- **Coca-Cola** employs 3,000 community entrepreneurs in Ghana, Tanzania, and Kenya in their MDCs and has extended its reach by over a million customers, mostly low-income.
- **Vodacom** uses 260 township franchisees in South Africa to operate community cell phone container shops, creating 20,000 low-income jobs.

These examples may suggest that using informal channels is straightforward. Difficulties should not be underestimated, however. As described in Chapter 3, the most successful examples—e.g., Coca-Cola's MDCs, Safaricom's M-PESA—observe explicit divisions of labour throughout their routes to market. These efforts also succeed because the big companies behind them never confuse need with demand—or availability with marketing—and they benefit from offering products that have considerable pull.

For many socially beneficial products, particularly in the health sector, successfully leveraging informal distribution and sales channels requires a substantial investment of time and money. To succeed, the MBSs behind these products and services must train their agents (either informal shopkeepers or door-to-door sales agents) in commercial skills (sales techniques, bookkeeping etc.) and the benefits of their offerings, which in turn need to be communicated effectively to the end consumer. Moreover, as the product mix changes, sales agents' knowledge must be updated, requiring ongoing investment, especially given low education levels of many informal retailers.

LESSONS FROM INDIA

The principal findings from Monitor's research on MBSs in India also apply in SSA. These include:

- **'Cash flow is king':** Cash flow remains the most important determinant of buying and selling decisions in the BoP. As affordability is almost always a constraint, any product and service must cater to the fluctuating and inconsistent availiabilty of cash, whether engaging the BoP as customers or suppliers.
- **Tailor products:** Selling the same or only slightly modified product to the BoP as those designed for middle-income markets almost never works. This does not mean selling "lower quality" or sub-standard products or services to the BoP; rather businesses must build products around the needs of this market.
- **Share channels:** Few products can support the operational costs of a dedicated channel, especially durables and low-margin consumer goods purchased infrequently.
- **Don't confuse need with demand:** This is one of the most critical and fundamental issues. Just because a product or service serves a critical need (health, clean water) does not automatically mean that consumers want it.
- **Organise solutions end-to-end:** Taking responsibility for organising the value chain end-to-end as a full "ecosystem" is often a critical element of success and a key driver of scale and operating cost.
- **Manage switching costs:** Most low-income people are risk-averse, which shows up in a disinclination to switch products or change buyers. Overcoming this obstacle requires investment in demand stimulation and supplier training to reduce the perceived opportunity costs of change.
- **Ensure retention:** Engaging many, often expensive, and hard-to-reach small suppliers, agents, or distributors is costly, as is training and technical assistance—especially relative to the price of goods for sale. Steps to reduce churn help hold down these costs.
- **Provide credit:** Even the smallest suppliers and buyers in the BoP need credit. There still is a significant shortage of credit to the BoP and MFI coverage overall in Africa is relatively thin.
- **Aggregate BoP demand and supply:** Most BoP customers and suppliers are dispersed, and thus have relatively higher costs to serve and engage with as individuals. Forming them into groups and collectives is a step toward more favourable economics.

The effectiveness of using informal channels varied depending on the type of channel, the point in the supply chain an enterprise occupies, and the amount of margin available. Avon and Natura, for instance, sell high margin cosmetics in the emerging world with direct sales forces, and earn an average gross margin of 62 per cent and 68 per cent respectively,[77] which leaves them plenty of leeway to invest in the route to market. Similarly, manufacturers such as Toyola Energy and Bayer Green World appear best placed to make this work because margins are big enough to support investment in promotion and building out other capabilities.

Enterprises like Bayer and Flash have more flexibility in selling through shops because these shops feature a product mix broad enough to drive revenues, offer a larger installed base through which to run promotions and raise awareness, and operate from an established position of trust in the community.

In many instances, the idea of leveraging informal channels made sense for an MBS but its execution failed. This often occurs when MBSs try to leverage or adapt channel structures originally intended for higher income customer groups.

Use Trusted Intermediaries

Any purchase decision for the BoP is risky due to the extreme volatility of incomes and cash flows, particularly for intangible goods such as insurance and m-enabled services for which it is difficult to demonstrate benefits. Intangibility reinforces risk aversion and scepticism, which makes trusted intermediaries important in establishing personal contact with BoP customers. For those products and services that require education, such intermediaries also help drive adoption and are a critical element of successful business models.

Many MBSs successfully employ intermediaries in their business models, usually in the service of gathering or providing information remotely (via mobiles):

- Pesinet in Mali, D-Tree in Tanzania, and MoTech in Ghana all use established community health workers to collect and disseminate information and health reminders;

- Kenyan MBS Kilimo Salama leverages agrodealers to sell inputs and (traditionally hard to sell) input insurance to smallholder farmers;

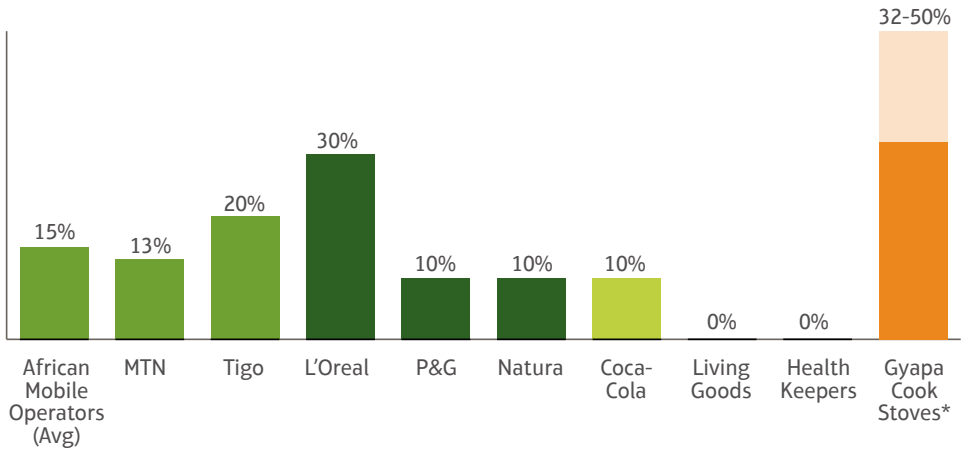
- M-PESA (Kenya) established a network of 18,000 agents to sell M-PESA money transfer services, and Standard Bank's Community Banking offer operates via known community spaza shop agents.

Stimulate Demand

A common error MBSs, particularly those selling push products and services, make is assuming that availability alone will be sufficient to raise customer awareness and drive demand. However, deep channel reach and unfulfilled need are insufficient to ensure customer uptake.

Many MBSs allocate substantial funds for below-the-line (BTL) marketing—directly to consumers, typically executed by their field force and retail presence—due to the difficulty of reaching the BoP. But a number of the most successful, large-scale MBSs often also had an above-the-line (ATL) marketing campaign in support of their business model. These enterprises demonstrated that demand stimulation through advertising the benefits of products, available offers, and testimonials (in addition to general awareness campaigns) is an essential for marketing many socially beneficial products. The telecommunications companies, for example, spend heavily—on average about 15 percent of revenues—on marketing to create awareness and demand within the BoP.

Figure 5.2: Average Advertising and Marketing Spend as Percentage of Sales[78]



Note: *MTN: 13% "Selling, Distribution and Marketing" Expenses, Tigo: 20% "Sales and Marketing" Expenses
Source: Monitor analysis based on company reports (see endnote 78)

Even midsize companies like Western Seed in Kenya use a mix of below- and above-the line marketing to reach the BoP. Like Bayer, they employ tactics ranging from demonstration days and field days, to radio and mass market/newspaper advertising.[79] ATL marketing to low-income people appears to be particularly important when an enterprise requires high sales volume to break even. ATL marketing also tends to be more cost-effective than relying solely on agents and one-on-one interactions with customers.

The critical balancing act in demand stimulation is to figure out how to afford the increased cost without raising prices beyond the reach of the BoP. This is a problem faced by many enterprises. The average price of a consultation at LiveWell Clinics in Nairobi is about $2, which does not leave much margin to support marketing. In some cases, like the Gyapa cook stoves in Ghana, donors like USAID and Shell Foundation supported the required category campaign. Other enterprises

SELLING PUSH PRODUCTS

In *Emerging Markets, Emerging Models* we advocated providing tailored products the poor genuinely wanted, and that confusing need with demand was a "trap for the benevolent and a classic blunder of development assistance". However, in Africa, we saw a lot of MBSs that were flouting this advice and in a few cases were actually successful doing so. Were we wrong?

The answer is more complex than a simple "yes or no". In truth, it is very difficult to sell the BoP products they don't want or know nothing about, and in most cases it is best avoided if there isn't a healthy injection of soft funding. Yet, the social mission of MBSs may indeed require persuading BoP consumers that healthcare products, clean water, insurance, or information services they have previously gone without (or not paid for) can change their lives for the better, and that this can be money well spent.

At least part of the secret is investing in the route to market. Whether the model uses formal or informal channels, customer education and both ATL and BTL marketing are vital. Even those MBSs seeking to deliver low-cost services to the BoP on an m-enabled platform must invest in face-to-face marketing by local agents; marketing by call or SMS just does not work with the rural poor.

Of course, this level of marketing is expensive and, given that the "low-cost provider" is the only viable strategic position when selling to the BoP, it is difficult to cover the additional costs, especially in low margin products. MBSs try to overcome this in a number of ways, but the most successful was to follow the example of Bayer and sell small-sized products at a premium, but still at a price point that matches customer cash flows. We also believe that MBSs using dedicated direct sales networks could follow this example, charging a small premium for the convenience of doorstep delivery, and reinvesting it back into channel activation by parties who are not the agents. However, none of the agent networks encountered in the social sector believes this is a tradeoff they can make in light of their social mission.

with higher margins, such as Silulo Ulutho in Khayelitsha, Cape Town, have more leeway to spend on ATL marketing, but they have undertaken unique bartering arrangements in exchange for the needed airtime. All of which suggests that ATL marketing and other demand stimulation activities are more feasible in high-margin environments, and suggests further that for socially beneficial products to succeed commercially in low-income markets, MBSs may need to reject the typical formula of high volume/low margin products in favour of a formula based on high volume/high margin products.

Managing BoP Transport Costs

Transport costs are a major factor in BoP decisions to participate in market-based activity. These costs represent as much as 40 per cent of smallholder farmer profits, and commuting costs to access educational services in city centres in South Africa may account for more than 20 per cent of monthly household income for township residents. Hence managing transport costs is a critical challenge for MBSs, which tend to use one of two solutions:

- **"Meet them where they are".** Simply put, MBSs may locate operations close to customers or suppliers to reduce high travel expenses. In Zambia and Kenya, and other countries, providers situate water kiosks near the peri-urban populations they serve. The FET Silulo Ulutho located in Khayelitsha township rather than requiring its students to pay high travel costs to take classes in Cape Town's city centre. Many direct, deep procurement schemes economise by placing collection centres close to the SHFs from whom they collect. This is most typical in dairy farming—but even in these examples, USAID research indicates that farmers still milk cows at 4 a.m. to ensure they have sufficient time to walk long distances to "catch up with the transport".[80]

- **Cover transport costs.** Some buyers using the BoP as suppliers, such as Afro-Kai, Savanna and MAFA, elect to cover the transport cost directly, which both helps SHFs and ensures consistent supply. This approach only appeared in sourcing arrangements. Most MBSs using BoP as distributors required these agents to pay their own transport costs.

Managing Financial Risk and Income Volatility

However laudable its intentions, an MBS that focuses exclusively on the BoP risks constraining its long-term financial viability and thus its desired social impact.

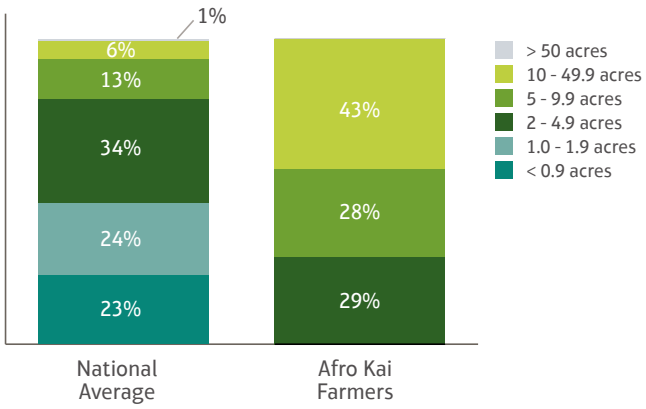
Abundant research[81] agrees that the BoP is not a monolith — there are distinct segments of both consumers and suppliers differentiated by everything from income level to family status (e.g. nuclear vs. extended family). Most enterprises intuitively understand this, but some, out of a sense of social mission or driven by donor targets, tend to then focus exclusively on (usually) the lower income stratas within the BoP. For some initiatives, such as sachet or kiosk water, it is feasible to reach the dollar-a-day and below population. But for many services or products, this segment cannot afford many socially beneficial goods and services such as budget private schools, agricultural inputs, or quality clinical health services. Moreover, as noted elsewhere, the BoP are volatile customers and suppliers, exposing enterprises to additional challenges beyond normal SME risks. As in India, in Africa very few offers succeeded in operating at full cost recovery while serving those living on less than a dollar a day.[82]

In Africa, the most successful enterprises reach the poorest customers sustainably through diversification. Many expanded the served segment to include those just above the target income group, which proved to be a powerful risk mitigation tool for engaging both customers and suppliers. Doing so can enable MBSs to counter

high default rates and periodic inability to purchase, which can severely impact revenue flow and financial reserves. Diversification is used to great effect by some BoP-oriented private vocational training providers in South Africa. Edu-Fix Institute in Mafikeng, for example, operates with default rates on course fees up to 30 per cent among the poorest students by also serving students from higher income brackets who are more likely to pay. MBSs in other sectors—from financial services, to health services, education, and agriculture, also successfully expand their customer bases to cover the costs of including people in the lowest income strata.

Diversification is equally important on the sourcing side. As noted, the BoP are volatile suppliers, both because output volumes and quality are inconsistent and their priority is subsistence rather than surplus for sale. SHF output of maize can vary by 50-80 per cent, potentially leading to significant problems for aggregating buyers and agro-processors farther up the supply chain. Sourcing diversification is critical to the success of many aggregators. This applies to both the range of crops and commodities sourced and the SHF base from which they purchase. Afro-Kai in Uganda sources maize (61 per cent), sorghum (25 per cent), and barley (14 per cent), and while SHFs produce about 60 per cent of the sorghum, the remainder comes from farmers with more than 10 acres in production. This shifts the burden of collection and helps make volumes more predictable for long-term contracts with big customers like Nile Breweries.[83] Other traders, like Export Trading Co. in Tanzania, diversify their sourcing in maize by going direct to SHFs in addition to their usual sources when they have a big forward contract from an entity like WFP.[84]

Figure 5.3: Landholding - National Average v. Afro Kai



Source: Management Interviews; Farmer Interviews; MAFA Zonal Manager Interview; Company financial statements; Monitor Analysis. Afro-Kai landholding data covers land owned and does not include land rented for use or rented out to others

Sell services and bundles…not products (where possible)

As in India, durables like solar lanterns, cook stoves, irrigation pumps, and water filters tend to be difficult goods to sell to the BoP. Even when customers understand the value, the lump sums of cash required and lack of credit available limit purchases. Consequently, selling to the BoP often requires re-thinking how product and service offers are presented and priced.

A way to overcome this problem involves offering a pay-per-use service rather than a product. For example, water kiosks providing clean water eliminate the need to buy household water filters or individual chlorination tablets. Similarly, in Rwanda, Nuru Lights sells durable rechargeable-battery-powered lights, but has also developed a charging service by way of a pedal-powered generator. This service enables customers to have devices charged by a local micro-entrepreneur, thus accommodating available cash flows. One of the signal insights of SC Johnson's Community Cleaning Services in Kenya was the decision not to try to sell the sanitation and

cleaning products directly to the BoP; rather, they formed local SMEs from community members who sell cleaning services and become the main customers for the products to use in their service provision. While it is time consuming and often beyond the remit of an MNC to build small enterprise partners in the slums, it is often an effective route to selling socially-beneficial products to the BoP.

Another potentially effective approach is bundling of service offerings. Among the most difficult products to sell to the BoP are intangibles like insurance and agricultural information or once free services now on offer for pay. Some MBSs have succeeded by adapting their business models to group such services with other offerings. This strengthens the proof of benefit, increases focus on portions of the bundle with near-term benefits, and lowers aversion to larger purchases. Kilimo Salama in Kenya for example, successfully combines agricultural inputs with input insurance so that the total cost of insurance is no more than five per cent of the overall sale. Likewise, Pesinet in Mali bundles health monitoring and the cost of doctor consultations with a 50 per cent discount on medication into a $1 per month subscription fee. Several other insurers, like CIC and Microensure, achieve large-scale distribution of credit life by bundling it into MFI loans. Other financial services offers, like microcredit itself, are mandatorily bundled as well; most MFIs in Africa, like Faulu in Kenya or PRIDE in Tanzania, require savings accounts in order to borrow.

Secure Anchor Buyers

Contracting with anchor buyers is especially important for enterprises trading with the BoP, given the volatility inherent in this segment. In agriculture, which provides the vast majority of low-income livelihoods, the research team did not find a single successful aggregation business model without at least one large anchor buyer. Business models in this field seem to require some portion of guaranteed demand

to dampen volatility. In addition, anchor buyers set high quality standards and provide stability and premium price points that benefit the SHFs. The Tedcor example (described below) offers a variant, using a government concession as anchor buyer.

Engage in Partnerships

Partnerships offer an important means of organising processes and systems end-to-end, without having to implement everything directly, and can be very valuable in sharing costs and risks. In principle, such sharing and joint asset use also allows sharing of product development. The research team identified multiple instances of the value of partnerships.

- **Shared channels.** In South Africa, Hollard Life Assurance cooperates with PEP, a chain of low-cost general stores, to sell off-the-shelf funeral insurance at PEP checkouts. Other MBSs also follow this practice. Cellular Systems International in Senegal partners with entities like the national Post Office, commercial banks and TOTAL petrol stations to extend the reach of their money transfer network. Tanesco's Luku model in Dar es Salaam allows customers to prepay their electricity at a network of petrol stations as well as at bank ATMs, via M-PESA, or Zain's equivalent Zap service. And Kickstart works with more than 200 existing agrodealers to build and sell its "Money Maker" and other irrigation pumps in bundles with hoses and spare parts.

- **Shared cost and risk of product development:** Fundisa, a fund that rewards people for saving towards a child's education, was developed by the South African investment industry to extend access to education and illustrates a collective effort to create investment products for low-income markets. Similarly, Novartis, IBM and

Vodacom partnered to develop SMS services that track and control the stock of anti-malarial drugs, supporting SMS for Life in Tanzania. And the Mzanzi bank account (a basic, low-cost entry level transaction product jointly developed and brought to market by South Africa's four big banks and Post Bank) while not profitable for South African banks, offers an example of an industry acting together to meet both a consumer market and a regulatory obligation, thereby reducing the cost to individual firms.

Build Categories and Sectors, While Dividing Roles

SOCAS in Senegal, Credit Agricole, and various farmer cooperatives partnered to develop technical requirements, pricing, and supplier relationship rules with SHFs for tomatoes and created a fully integrated and profitable supply chain that involves 15,000 SHFs for the domestic processed tomato market. La SOENA is attempting to do the same in rice in Senegal. Samasource is a US-based NGO that acts as an intermediary to 16 BPO service providers in five countries across the globe, including Kenya. It is responsible for marketing and selling "impact sourcing" work that employs the BoP by branding it "fair trade", and focuses mainly on clients in the United States and United Kingdom. Once work has been acquired, it is split into "micro work" which is then distributed to smaller impact sourcing service providers (ISSPs) in different countries, with these ISSPs managing the day-to-day execution of tasks. These independent, on the ground partners like Horizon Contact Centres, Ken-Tech, or Daproim in Kenya, have excellent local access to workers and training sources.[85]

Enlist Government Support

Although government may inhibit MBSs through hostile or ineffective measures, it may also help MBSs succeed. Monitor's research shows numerous examples of MBSs partnering with the state in constructive ways. Across SSA, the government facilitated MBSs by playing roles such as:

- **Anchor buyer.** In South Africa Tedcor works off of a government contract to manage waste removal in BoP communities. Similarly, Silulumanzi and IWASCO successfully deliver water to low-income communities under government concessions. In Kenya, Ikotoilet has a five-year build-operate-transfer business model with the government to deliver pay toilet services to the BoP.

- **Implementation partner.** In Mali, Pesinet uses government clinics to provide access to doctors, medicines, and infrastructure. CIC Insurance in Kenya partners with the National Health Insurance Fund to market additional BoP-oriented health insurance services.

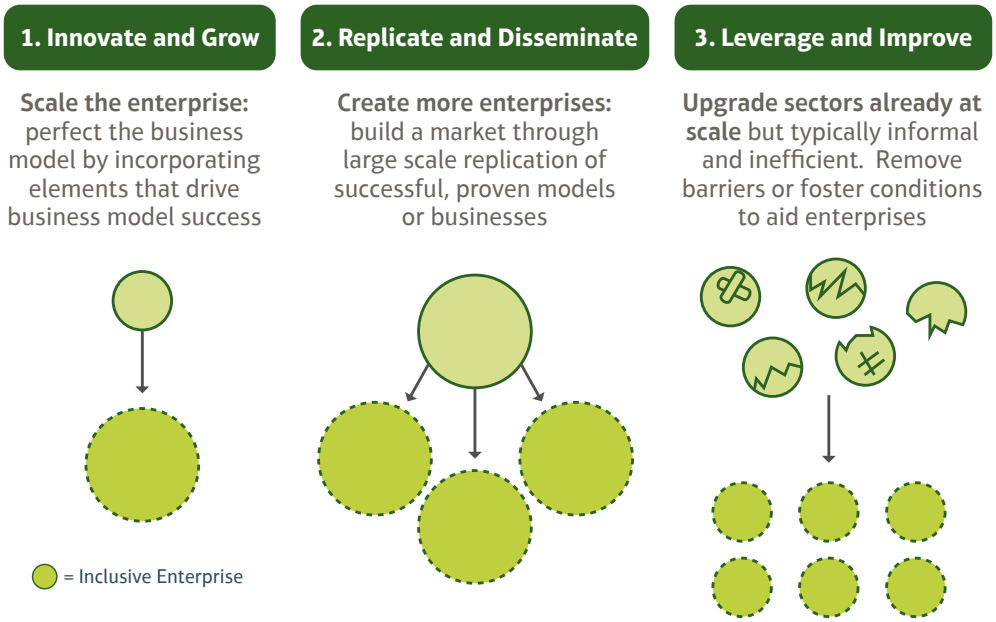
  In South Africa, the government, along with the Business Trust and BPeSA, have organized the Monyetla programme to train unemployed high school graduates to work in the thriving business process outsourcing and offshoring (BPO) sector emerging in Gauteng and Western Cape. This programme has succeeded in creating nearly 24,000 good-paying jobs and attracted—and works with—leading international BPO providers. The key to success thus far in reaching the upper ends of the BoP in South Africa, is the approximately $3,450 per student that the government underwrites for a 40-week course to train the students up to the standards required by the outsourcing companies.

- **Value chain coordinator.** In Senegal, the government's SOCAS programme successfully took on a full coordination role from processing all the way to retailing for SHF tomato production. Similarly, in Tanzania, the ADDO programme promotes certification of informal chemists (pharmacies) into accredited prescription outlets for the BoP.

Three Routes to Scale

Conventional thinking about scaling MBSs tends to reflect a Silicon Valley paradigm of continued investment in, and growth of, a single entity addressing a key market or challenge. Beyond this dominant model, scale discussions tend to be fuzzy and without metrics, and often stop at the vague pronouncement of the all-important scale objective. And although most of the conversations reflect a continued "one-size-fits-all view", not all the scaled enterprises in the sample had scaled in the same way. The research team observed three different routes.[86] These may be followed in a straightforward manner, or elements of different routes may be combined. The approach of a single entity scaling was used by some MBSs operating at scale, such as Voltic in Ghana, Coca-Cola SABCO's MDCs across the region, Microensure in several countries, and CIC Life in Kenya.

Figure 5.4: Delivering Social Impact at Scale

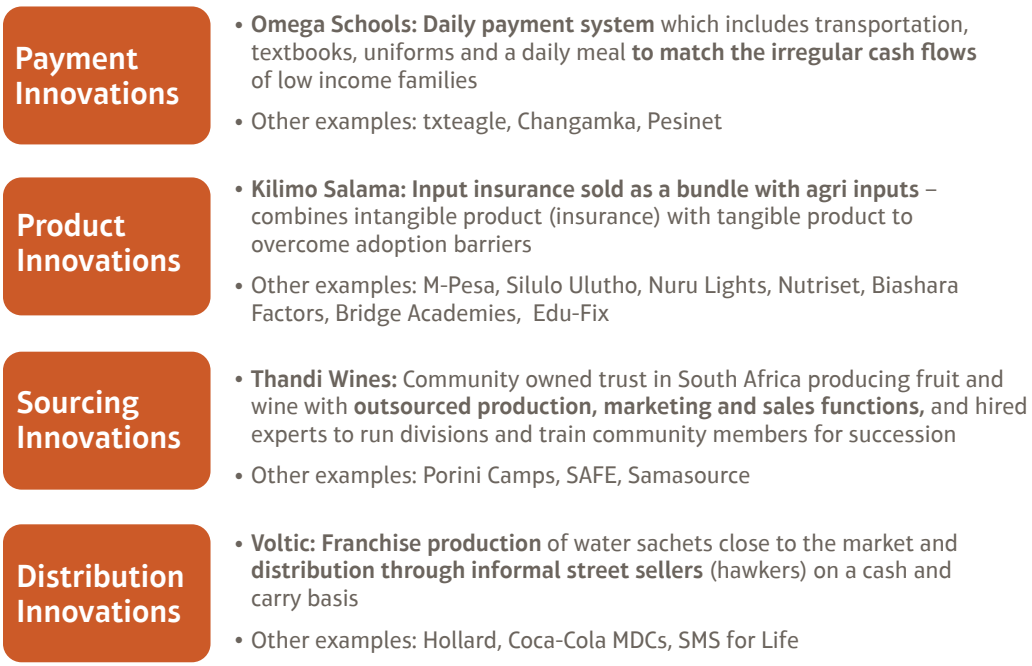


Route 1: Innovate and Grow

This route is characterised by the expectation that a single enterprise will develop a successful business model and then increase the size and scope of its activities. This route and assumptions hold for enterprises engaging the BoP as both customers and suppliers; the key assumption is that the single entity must grow its own operations, albeit sometimes with outside support in a "Silicon Valley" venture capital model.

To enable such growth, several factors must be at work. First, there must be innovation in the product, service, and business model itself to serve or engage the BoP. That innovation may take several forms in terms of pricing and payment, product offering, sourcing arrangements, route to market, training of skilled workers, and so on. Second, the enterprise must have access both to initial capital and growth capital. Many impact investors see their role as being essential at this very point, where they commonly intervene with the needed investments.

Figure5.5: A Range of Business Model Innovations Along Route #1



This route to scale is the most common in the Monitor sample as well as the most common expectation for entrepreneurs anticipating earning a return on their efforts at some point. Generally, this approach is most relevant where there is an active private sector, but existing business models are not yet financially sustainable and/or not proven at the BoP level. It is also a relevant approach in cases in which the effectiveness of an enterprise's business model has been demonstrated but it lacks capital to expand.

Route 2: Replicate, Disseminate, and Transplant

In some countries and sectors, there is relatively little indigenous innovation in which to invest. For example, the research team found little evidence of innovative large scale models in handicraft production; none appeared to have the potential to scale to the extent of FabIndia, a private Indian retailer of products that are made in traditional ways by groups of rural artisans.[87] In some SSA countries, moreover, activity may be constrained by political conditions, the regulatory environment, the scarcity of local capital, or a lack of social or commercial entrepreneurship. In these situations, the second route becomes important for donors, policymakers, and—in some cases—investors to support already proven business models.

In this route, the key task is to replicate successful models from other locations—which is how microfinance and mobile money transfer have spread from the markets in which they began. Another case in point is the humble low-cost, fuel-efficient bucket cook stove, which started off life in Thailand in the 1970s and has successfully been introduced across SSA, as the Jiko cook stove in Kenya and Tanzania or the *gyapa* cook stove in Ghana.[88]

This route to scale may be achieved in one of three ways:

- **Expansion into new markets.** After pioneering a successful microcredit model over many years in Bangladesh, BRAC expanded its reach to other countries, including Uganda in 2006. By 2010, with 101,000 borrowers, it had rapidly grown to become the second largest MFI in Uganda.[89]

- **Imitation of innovative business models.** Several enterprises have sought to replicate M-PESA's success. South Africa-based Flash Mobile Cash, a SIM-based Savings and Credit cooperative (SACCO), allows members to access a number of different financial services, and creates an electronic transactional platform for spaza shop owners. After only one year of operation, Flash reported that it had amassed a customer base of 15,000 members and provided services to 18,000 home-shop owners.

- **Transplantation.** This form of geographic expansion is spearheaded not by an enterprise but by a different entity, usually a donor. Common in microfinance and contract farming, this approach can also work with other socially beneficial products. In 2003, USAID and Shell Foundation funded Enterprise Works to bring a proven cook stove technology to Ghana (branded as the Gyapa stove). By 2010, following the seeding of over 80 local manufacturers and the introduction of an effective awareness campaign, over 150,000 units had been sold.

The continuing ability to pursue scale through replication depends on the willingness of business model pioneers to share their insights and collaboration among entrepreneurs, investors, and other parties. By providing open source IP on the business model or a given technology and granting license to copy, successful enterprises can play a significant role in helping other organisations to grow and achieve scale and social impact.

Route 3: Leverage and Improve

Research uncovered large numbers of fragmented and informal economic entities that, collectively, operate at scale — the FETs in South Africa, for example, or agrodealers across rural Africa. Few scale operations controlling many outlets of anything, however, are to be found in healthcare, agriculture, or education. While the reach of individual entities is limited, as a cluster of small operators using the same basic business model, these initiatives can serve the BoP at scale. Especially in SSA, these enterprises represent a large "installed base" of service to the BoP, albeit often on informal, poor quality, or high-priced terms. There is thus a significant opportunity to build on existing small entities but following this route requires particular decisions and actions.

Bayer's Green World programme offers a good example of an approach to aggregating informal shops, although it is limited to a specific set of products. Vehicles that provide both small amounts of (usually credit) financing, along with technical assistance and training, to small providers can be a highly effective means of upgrading a cluster of entities. Examples of this approach include PharmAccess' Medical Credit Facility, which targets small clinic doctors with small loans, and USAID's loan guarantees to Diamond Bank in Nigeria. IFC partners with several banks in East and West Africa to allow on-lending to budget private schools in Ghana, Rwanda and Kenya.[90]

Interventions to support scaling and upgrading of the installed at-scale base must work at two levels: macro policy and firm level. At the first level, government can make it simpler and less costly for informal enterprises to formalise and register. Other steps by governments and other constituencies to promote this route to scale are discussed in the next chapter but a few steps are worth highlighting here:

- Providing certification, as CNFA does for agrodealers in Tanzania, which enables these enterprises to sell subsidised fertiliser.

- Developing aggregation platforms like NAAMSECO does in Ghana for small, independent farm mechanisation dealers.
- Issuing umbrella contracts like the South African municipal arrangements with Tedcor for waste removal services (see table below).
- Encouraging member-owned, for-profit networks like SHOPNET in South Africa, which handles bulk purchasing for small spaza shop owners.

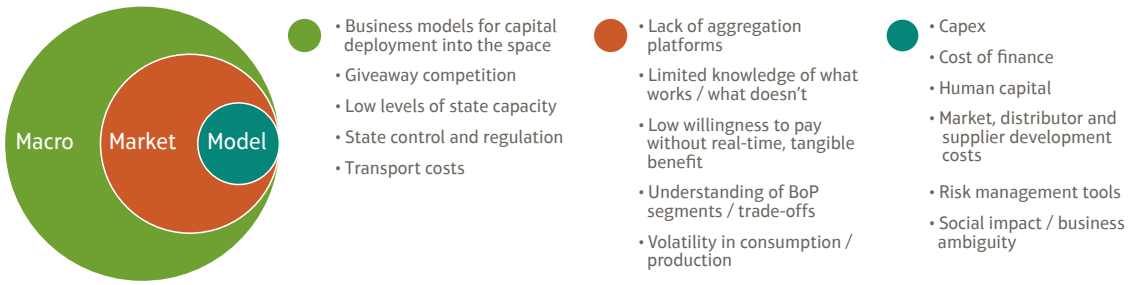
BoP AS CUSTOMERS: FORMALISATION The Accreditted Drug Dispensing Outlets (ADDO)	**BoP AS SUPPLIERS: UMBRELLA CONTRACTS** The Entrepreneurial Development Corporation (Tedcor)
The ADDO initiative in Tanzania trains and provides licences to small, privately-owned chemists in rural and poor areas to sell essential medicines, including selected prescription drugs. This has successfully formalised the network of private retail outlets into an official sales channel and increased the availability of medicines in these areas. There are currently 900 ADDOs serving four regions in Tanzania.	Tedcor in South Africa secures solid-waste management contracts from municipalities ranging from Mafikeng to Nelspruit in low-income areas. It then sub-contracts service provision to individual entrepreneurs from the community through a franchising model. Tedcor's role provides mutual benefits to the parties involved: it simplifies the process of engaging with BoP suppliers for the municipality and provides sustainable livelihoods for local entrepreneurs. Beyond jobs, Tedcor also provides formal, accredited training and mentorship to its entrepreneurs. At an economic level, the MBS also provides surety for the entrepreneurs to be able to buy their own trucks and equipment, as well as guaranteed demand for their services over the life of the contract. The venture currently involves 700 subcontractors serving 400,000 customers.

Obstacles and Challenges

Interest in MBSs has grown rapidly in recent years, drawing in a rising number of entrepreneurs, investors, and other parties. More is becoming known every day about the target consumers and suppliers, the elements of business models that cause enterprises to succeed or fail, and the challenges for MBSs to achieve scale and financial viability. That said, this approach to economic development is still young, and there is much yet to learn to build on momentum and set realistic expectations for the future. Many obstacles and challenges to the growth of MBSs remain. While these may appear daunting, it is important to remember that obstacles often trigger entrepreneurial innovation, and challenges highlight necessary policy or regulatory changes. Indeed, there is as at least as much to learn from struggle as from success.

The major obstacles MBSs face can be grouped at three levels: the macro environment, the market, and the business model itself.

Fifure 5.6: Obstacles and Challenges to Market-Based Solutions



Although enterprises have limited influence over policies and concerns at the macro level, external factors such as government regulation and the state of supporting infrastructure affect the ability of an MBS to create impact at scale.

Market-level obstacles are specific to low-income markets. The particular characteristics of such markets create many difficulties for those attempting to serve the BoP. Perhaps the biggest challenge is the lack of a sophisticated understanding of this segment.

MBSs must guard against many difficulties at the level of the business model. Across countries and sectors, obstacles ranging from the lack of risk management tools, to human capital availability limitations, to managing the tension between pursuing social impact and financial viability, are common.

Many of the obstacles to MBS success in Africa are similar to those observed in India and addressed in *Emerging Markets, Emerging Models*. The following analysis focuses on a subset of issues notably salient in Africa.

Macro Level Challenges

The national regulatory framework and a government's ability to deliver public goods and services have a huge effect on the cost structure of an MBS. The dispersed nature of the BoP and the poor state of transport, for example, increase MBS costs. A further macro challenge is a mindset, often prevailing in government and NGO spheres, that the BoP should not be engaged by commercial parties. On the one hand, acting on this belief means that attempts to deliver socially beneficial goods and services to the BoP are designed with little consideration of operational viability, which strains finite resources. On the other hand, this belief leads to scepticism about, or hostility toward, commercial attempts to reach the BoP. Neither result helps low-income people in the long term.

Macro		
STATE ROLE	**State control and regulation**	Regulation that stifles ability of MBSs to attain lowest cost position, innovate or grow
	Low levels of state capacity	No/ poor delivery of specific public goods (agri extension services, public health messaging) necessitates enterprises to build this into models, adding cost
	Transport costs	Poor infrastructure (usually roads) adds cost to reaching BoP markets
STATE AND DONOR CHOICES	**Giveaway competition**	Prevalence of free giveaways (health products, water, agri-inputs) makes it hard for enterprises to compete or channels to develop — even when offering a better quality product
CAPITAL MODELS	**Business models for deployment of capital into the <$2/day space**	Disconnect between MBS investment needs and investment offered: transactions small, many not "equity-ready", little early stage capital available — suggest current equity-based models will have difficulty scaling. Lack of clarity on returns — significant data gap. Unlike MFI sector, rest of investment ecosystem is often missing (see Chapter 6)

Giveaway Competition

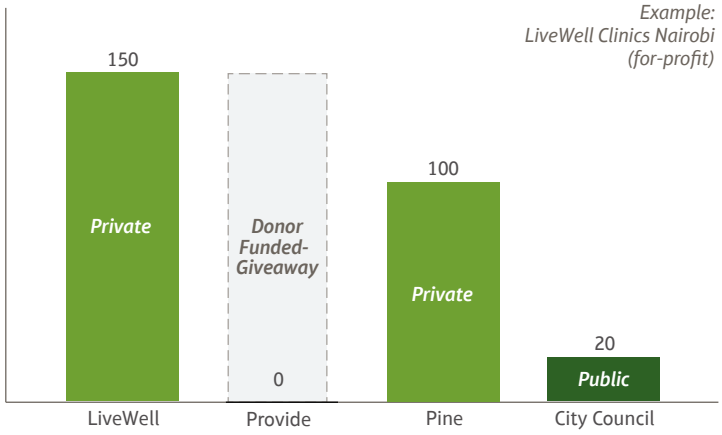
A major obstacle to MBSs in Africa is giveaway competition. The research team found more than 20 organisations (representing only the tip of this iceberg[91]) with business models based on free distribution of goods and services, in sectors ranging from healthcare, to water and energy, to agricultural inputs. Not surprisingly, many operate at scale but clearly do not generate revenues to cover their costs.

Whether to give or to sell socially beneficial goods and services to the BoP is the focus of much debate. In healthcare, for example, there is a clear moral imperative to provide access to critical items like condoms, bed nets, oral rehydration, vaccines, and even clinical services to large populations who cannot pay for them. Indeed,

respected authorities like MIT's Poverty Action Lab recommend unequivocally that if the objective is to increase access, the poor should not be required to pay.[92] As we have argued elsewhere, for a range of goods and services, free or nearly free provision by governments or NGOs is a social imperative that outweighs the interest in creating commercial enterprises.[93]

Nonetheless, a number of MBSs have entered the health, water and agricultural sectors under the premise that they can increase access or improve quality for a similar or sometimes lower cost of provision than traditional giveaway approaches. The challenge presented to MBSs by giveaways is twofold. First, it changes competitive dynamics dramatically, creating market distortions that often make it almost impossible for MBSs to compete. Second, risk-averse and price-sensitive BoP consumers will frequently take free substitutes where they are available, even if they claim to be willing to pay for a superior product. As a result, an MBS contemplating entry into a market served by giveways must take care in its positioning.

Figure 5.7: Prices for Consultation in Kayole (KSH)



Source: Monitor Research and Analysis

LiveWell Clinics in the Kayole section of Nairobi, Kenya, charges $1.85 (KSh 150) for a private consultation with a medical professional. However, within a 7 km radius, it not only has to compete with a comparable offer by Pine Clinic which is a third cheaper, but also with completely free and donor-funded giveaway consultations by Provide, a NGO clinic funded by donors, and a government clinic run by the city council. LiveWell competes effectively with government clinics because some customers value the prompt service, availability of a doctor, and other elements of the primary care services that they can obtain more easily from a private provider, even if it costs them money. But competing with Provide, which offers high quality services for free, is trickier. LiveWell differentiates itself further with services and unique attributes like bundled, subscription-like pricing for a package of reproductive health services, but the situation slows its trajectory to commercial viability.

The consequences and trade-offs of giveaways are not yet fully understood. If an enterprise hands out free mosquito nets, but in the process undermines the commercial distribution network, what is the longer-term impact? Product giveaways often impede the development of distribution channels, leaving less capacity in place for other goods for which it is appropriate to charge or where there is a willingness to pay. Explaining why Kickstart does not give away its irrigation pumps, president Martin Fisher points out, "you have to set up a whole distribution network to give things away. It completely kills local initiative. It kills the local private sector. And people don't really appreciate things that they get given. They don't use them fully".[94]

Few people dispute that giving away or subsidising essential goods and services is an important and often necessary approach to increasing access and usage in areas like public health, but where is the line?[95] These choices involve clear tradeoffs, and more explicit consideration of such tradeoffs is essential. In the meantime, the prevalence of giveaways in the short run can make it possible for an enterprise like

A to Z Textile Mills to reach scale quickly and offer local employment, and good investment returns for investors like Acumen Fund[96]. But it does make it more difficult for private providers in healthcare and other sectors to compete effectively to provide goods or services to the poor.

When donors and NGOs actively pursue engaging the BoP in markets on one hand, while supporting giveaways on the other, they send confusing signals to other actors in the field. These constituencies would do well to have a considered view of the circumstances in which it makes sense to give something away, versus alternatives such as partial subsidies or market-based approaches. Otherwise, they risk cannibalising one set of initiatives by another. This dilemma calls out for further research and clarification.

Market Challenges

Many market conditions and the challenges they engender revolve around BoP economic circumstances and capabilities, and others around the need to leverage better-organised ways to reach and aggregate both suppliers and customers. Three challenges are particularly relevant to the African context: limited knowledge of best practice when engaging this segment, volatility in BoP consumption and production, and low willingness to pay.

Market		
KNOWLEDGE/ DATA	**Limited knowledge of what works/ what doesn't**	Conversations about inclusive business still happening at too generic a level — to advance the field, focus needs to shift to business-model specific discussion. Limited bodies of industry knowledge, inadequate sharing of models that work. Still low understanding of impact and tendency to skip key metrics
	Understanding of BoP segments/ tradeoffs	Lack of consumer insights prevent enterprises from (a) designing appealing offers, (b) properly pricing offers, (c) improving payment systems or terms, (d) communicating key selling points, (e) developing segments, (f) leveraging customer or supplier diversification as a risk mitigation/ sustainability tool, (g) planning for growth
PLATFORMS	**Lack of aggregation platforms**	Expensive to aggregate suppliers and — unlike India — fewer platforms available and in place to work with (e.g., MFIs, co-ops, networks all small in Africa)
BOP CHAR-ACTERISTICS	**Volatility (in consumption/ production)**	BoP cash flows, consumption and production can be highly volatile for multiple reasons, e.g., lack of casual work, illness/ incapacity, side selling, etc.
	Low willingness to pay (without real-time, tangible benefit)	Difficulty to market products that do not have short or zero payback periods, very little ability to raise prices despite professed "willingness to pay"

Limited Knowledge

Despite the extensive dialogue and growth of the inclusive business field beyond microfinance, there is limited knowledge of the real impact of MBS activity or what drives success or failure. Many discussions occur at a high level, about "inclusive business" generically, with a tendency to skip details and key metrics on such matters as benchmarks for scale. Very few investors publish IRR or returns data, driven mainly by lack of exits but also by proprietary concerns. There is still very little published quantitative analysis of business models in terms of growth, profits, markets, or distribution channel economics. Yet there are numerous stories in the media and the development literature about relatively small enterprises with noble

ambitions that fail to consider whether they cover their costs or provide proof that their business model is viable. In fact, 53 per cent of the enterprises we examined were still not financially self-sustaining. In short, there is still a "love of the example" rather than tough-minded thinking about the harsh business realities most MBSs actually face.

Many heralded examples and ideas — pastoral herders using mobile technology and GPS to improve the economics of their business, or micro wind and solar off-grid energy solutions in remote villages — fall flat when analysed at depth with an eye to the business fundamentals. Case studies and examples have an important place in the promotion of new ideas, especially stories that demonstrate the compatibility of social impact and commercial return. However, among MBSs in the SSA research sample, close to 70 per cent could not provide a reliable picture of their financial performance. Equally on the social side, despite the deep commitment to driving social change and improving lives and livelihoods, a minority out of the entire set had reliable, let alone rigorous data on the social impact of their efforts.[97] Much of this is understandable — developing good outcome and impact data takes significant time, and even generating a development impact (leaving aside the measurement thereof) may take years.

Overall however, the discourse needs to be turned away from the promising examples that make feel-good photographs, and also away from what one USAID senior staffer refers to as "pilot-itis", and towards realistic evaluation of the commercial aspects of MBSs. Missing are associations and networks by business model to fill the role played by Consultative Group to Assist the Poor (CGAP) in microfinance, or what Global Impact Investing Network (GIIN) is beginning to do in impact investing. Progress will occur much faster once discussion begins to narrow in on specific business issues and challenges. Because the field is still young and the conversation at the level of inclusive business rather than of specific business models, however, few industry bodies or entrepreneurial networks have formed to share and disseminate knowledge. This needs to change.

Volatility

Many discussions of the BoP focus on the absolute poverty of these segments, but recent compelling scholarship centres on the volatility of life for the poor, and thus for enterprises seeking to engage them.[98] In several cases, enterprises successfully hedge volatility in BoP consumption and production by expanding and diversifying their customer or supplier bases. In practice, however, poor people have few effective risk management tools beyond the very successful funeral insurance products available in many SSA countries. The risk from volatility is particularly pronounced where the BoP are producers and exposed to shocks like droughts or cash crunches such as occur when school fees are due. Some MBSs employing SHFs, for example, manage this volatility by using nucleus estates, combining inputs into purchase agreements, and partnering with other organisations or the state to help reduce fluctuations. Others provide insurance as a part of the bundle of services that come with participation in a contract farming scheme, to ensure SHF supply and increase loyalty.

Recently multiple efforts have been made to reduce agricultural volatility through the provision of weather index insurance, albeit with limited success so far. Such insurance has high potential to help BoP producers but it is vexing to make work commercially. A 2010 IFAD/WFP study inventoried five private weather index insurance efforts across Ethiopia, Kenya, Tanzania, and Rwanda. Some were young and in the pilot stage, but none had more than 500 participants, and all five programmes together reached only 1,400 beneficiaries. By way of comparison, the largest such programme in the world is an IFFCO insurance product that reaches 70,000 customers in India.[99]

The effect of production volatility on those farther up the value chain is significant. or example, MAFA reported output variations of up to five bags of maize per acre

in Tamale, Ghana, challenging its ability to meet its contractual obligations with its buyer. Moreover, when credit defaults due to side-selling and input diversions were also taken into account, the enterprise had to write off more than 15 per cent of its total sales value.

Volatility issues are likely to increase in the medium term for the low-income population in SSA, given current trends in food security and food prices, fuel prices, and climate change impacts.

(Un)Willingness to Pay

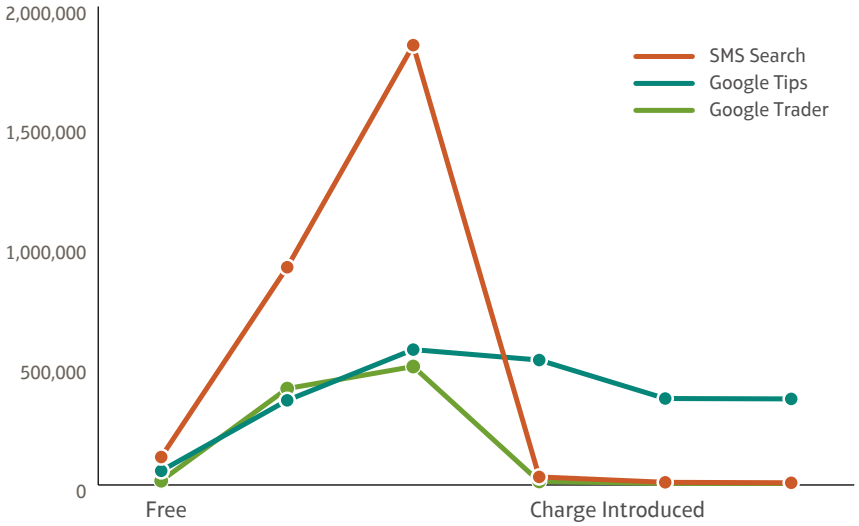
There is abundant research on BoP willingness to pay, and numerous emerging-market-focused companies have expended significant effort to understand this as it relates to water, health, sanitation, education, and other fundamental necessities. Procter & Gamble extensively researched its PUR water filtration packets before launch, and established a price it believed consumers said they would willingly pay ($0.10/packet for 10 litres of clean water). But after three years, P&G conceded defeat due to low uptake by consumers. This occurred even in markets like Pakistan, where consumers had initially shown uptake rates of 25 per cent. Consequently, P&G shifted responsibility for the product from the commercial to the philanthropic side of the house.[100]

This illustrates the fact that despite the BoP often professing a willingness to pay, it is difficult to market products and services to them unless these have immediate and tangible benefits. Low-income consumers de facto will pay for certain "pull" products, including credit, money transfer, education, and certain medicines, but not for others such as doctor's consultations. BoP consumers in interviews indicate willingness to pay for clean water or agricultural inputs, but this may not translate into large-scale demand. Asked about water kiosks, consumers in Kenya and Zam-

bia say they would pay up to 325 per cent more to have access to treated water, but no water kiosk operator had been able to raise prices, and in general the kiosks that charged higher prices had lower utilisation rates.[101]

For a third category of products—mostly intangibles like agricultural information services—low-income consumers were reluctant to state willingness to pay. Even when they show enthusiasm, it may be temporary—as illustrated by Google's experience with services that proved popular when available free but not after charges were introduced.

Figure 5.8: Information Services, Uganda (Google Suite Number of Hits Per Month)



Source: Primary research in collaboration with MTN AppLab; Monitor Analysis

Model Challenges

At the business model level, obstacles and challenges that undermine the economic sustainability of MBSs include the cost of finance, investment in customer education and development, and supplier support, capex, risk management and human capital. The relatively high cost of finance in SSA countries is considered here, while the other issues are addressed below in Chapter 6.

	Model	
CAPITAL	**Cost of finance**	As in India, the availability of credit is often a barrier. But the issue is more nuanced that just availability. In fact, it appears as if there is often a vast range of capital sources — but this is not always a. Accessible b. Affordable c. Sufficient/ right stage Some funding can also be too conditional for MBS models to absorb
	Capex	The high fixed capital costs associated with some BoP engagement models (particularly infrastructure models) makes full cost recovery difficult
BUSINESS COSTS	**Risk management tools**	Requirements for hedging, diversifying of customer and supplier base — but few risk management tools or instruments available for small enterprises targeting this space
	Human capital	MBSs report that it is difficult to find the calibre of human resources needed given the wage limitations in the field
DOUBLE BOTTOM LINE	**Social impact/ business ambiguity**	Enterprise inability to balance social impact/ business trade-offs

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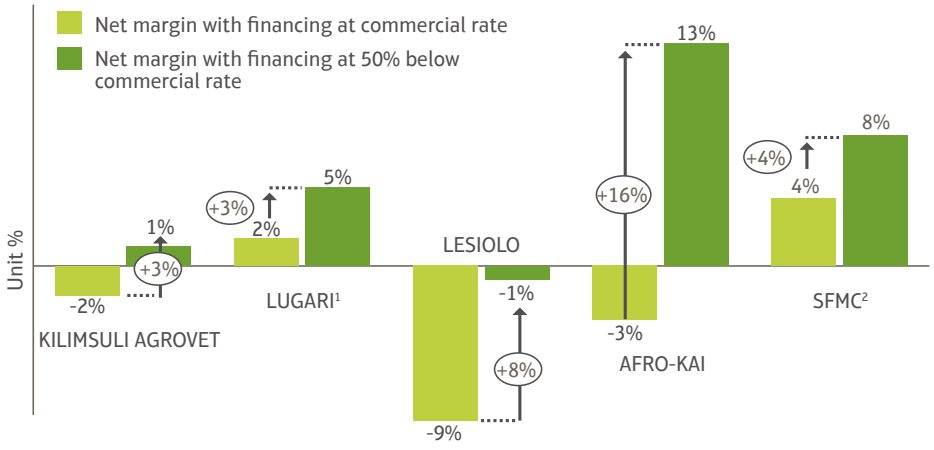
Cost of Finance

Difficulty in accessing finance is among the most commonly lamented topics in development.[102] Obstacles in Africa are well documented and often acute, particularly requirements for collateral and security from commercial banks. As such, this report will not dwell long on the topic, except to note its persistence across the MBS sample in most countries.

Figure 5.9; Net Margin Impact of Below Market Rate Funding (FY 2009): SHF Aggregators[103]

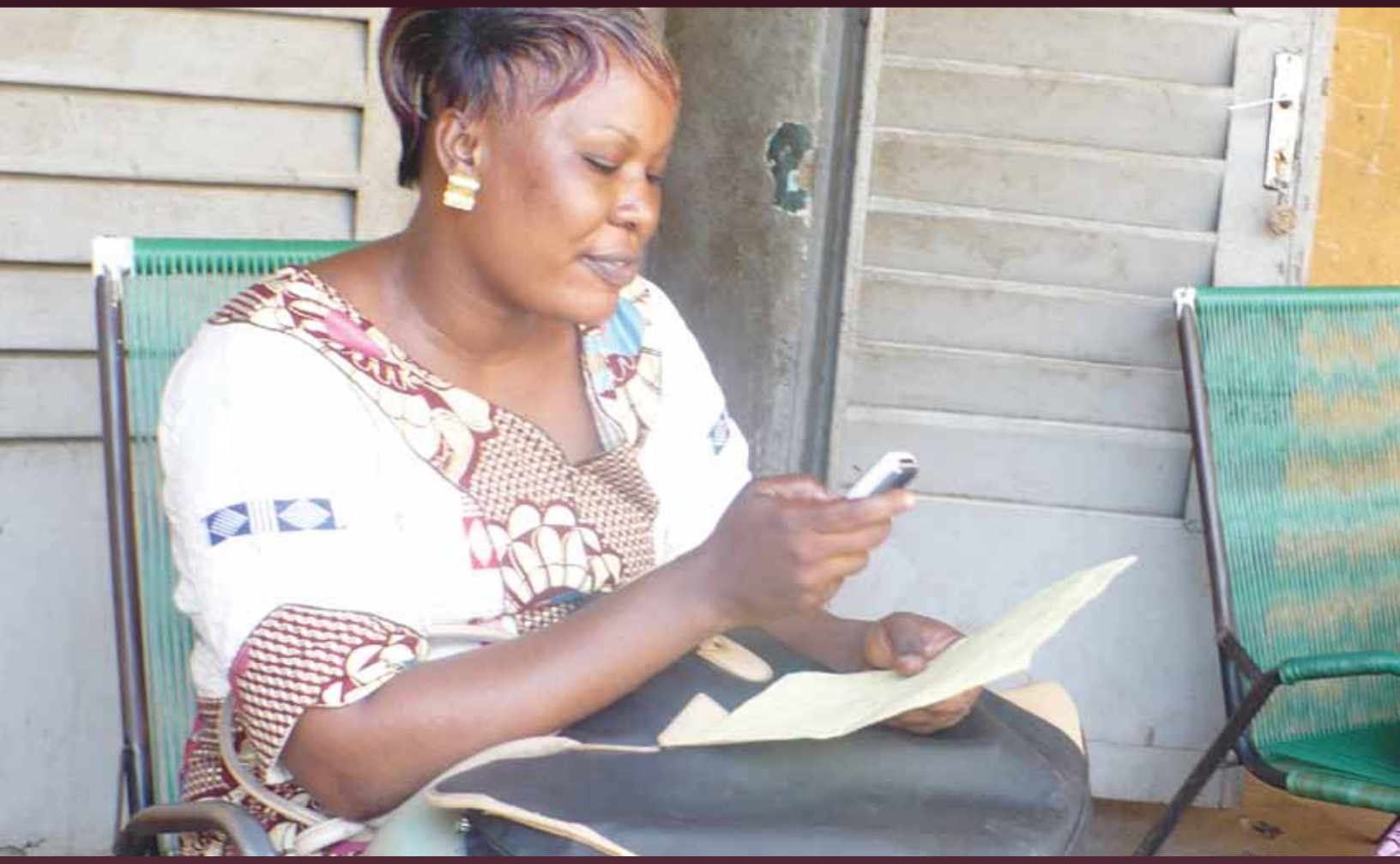


Source: Lugari P&L Statement; Lesiolo P&L Statement; Afro-Kai P&L Statement; SFMC P&L Statement 1Q-3Q FY 2009; Kilimsuli Agrovet Financial Information; Monitor Analysis (see endnote referenced in fiure title)

While enterprises in some African countries have avenues to explore for funding, the cost of capital is a major stumbling block and can make the difference between operating at a loss or profit. This is particularly acute in markets like Ghana where credit costs 35 per cent, or Kenya where it costs at least 20 per cent. Analysis shows that for SHF aggregators using financing priced at half the commercial rate can result in margin changes of between 3 and 16 per cent, significantly altering business economics and in some cases pushing the enterprise into the black. Indeed, for enterprises in sectors like agriculture, with relatively thin operating margins, the relatively high cost of capital can swing profitability downwards quite easily.

In South Africa, all the private vocational training providers (i.e., FETs) in the research sample had used a form of patient (bootstrap) capital for start-up (mostly loans from family and friends), rather than seeking commercial financing. This saved them anywhere from between R30,000 ($4,300) to R230,000 ($33,000) annually in interest payments and is a major factor in enabling these providers to operate sustainably.

6. From Promise to Progress



MARKET-BASED SOLUTIONS TO GLOBAL POVERTY remains a field in its infancy and multiple constituencies need to act, separately and in concert, to help tranform promise into progress. Supporters of MBSs must advance the debate beyond whether private sector involvement is appropriate or desirable in the campaign against poverty and focus instead on demonstrating and increasing impact. This will entail grappling with data and details and developing deeper insights into business models that work in the extreme conditions of low-income markets.

This chapter draws on Monitor's extensive interviews with large corporations and impact investors, as well as other research conducted for this project, to consider cross-cutting implications for the critical constituencies with the motivation and means to help MBSs advance. These constituencies include:

- Entrepreneurs and MBS leaders who are establishing and growing MBSs from SMEs and social enterprises toward larger scale and bigger impact.
- Large and multinational corporations that are seeking effective ways to engage low-income customers and business associates.
- Impact investors who are eager to put their money to work and searching for instruments and organisations to support in the campaign against global poverty.

AFTER THE MOBILE REVOLUTION

Africa led the way in developing new mobile-based financial services for the poor. It has a similar opportunity to lead in developing other market-based solutions, with innovation hotbeds in Ghana, Kenya, and other countries.

- Donors who not only have financial resources but also convening power, interest in generating and disseminating relevant knowledge, and capacity to absorb risk.

- Governments and policy makers, who can play supportive roles beyond improving infrastructure and facilitating business registration and regulation—they also can encourage aggregation platforms, stimulate demand, and take other steps.

The chapter outlines implications of the early history of MBSs in sub-Saharan Africa for these constituencies and recommends ways they may help accelerate progress. Although each of these constituencies is discussed separately, their interests overlap and their actions may be interrelated. Implementation of some recommendations offered below will prove more effective if the constituencies act in concert rather than in isolation.

Implications for Entrepreneurs and MBS Leaders

The front line in combating poverty through MBSs consists of enterprises offering goods, services, and opportunities to poor people while attempting to cover costs and increase impact. For the entrepreneurs and leaders who guide these predominantly SME and social enterprises, the critical challenge highlighted in this report involves identifying and upgrading business models that work in the harsh environment of low-income markets. No-one knows this better than the entrepreneurs themselves, who are on the front lines and working to try, refine, or restart such business models daily. In addition to this task, Monitor's review of the MBSs across SSA underscores two other issues for this constituency.

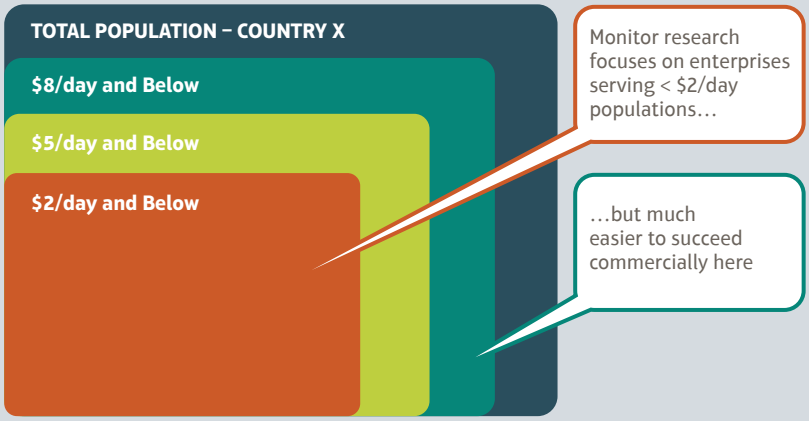
Balancing Social and Business Imperatives

As noted throughout this report, MBSs operate in difficult circumstances. In the Monitor sample, relatively few make money and nearly a third are "extreme SMEs" struggling to eke out survival. Every MBS, however, has a strong social mission.

THE BASIS OF OUR CONCLUSIONS: FOCUS ON THE $2-A-DAY SEGMENTS

The implications and conclusions in this chapter and indeed, throughout this whole report, are based on an important boundary. Monitor's objective in the project is to discover what works and what does not for enterprises engaging the $2-a-day (or below) segments. The set of 439 enterprises naturally included some also serving slightly more affluent segments. Undoubtedly many MBSs covered in these pages trade with $3-a-day or even $4-a-day members of the BoP. Nonetheless, readers should bear in mind that conclusions about, say, impact investing, or corporations serving these markets, are based on the focal $2-a-day segment. Drawing the boundaries elsewhere, targeting the $5-a-day segment, for example, may well lead to some different conclusions.

Illustrative Country: Population and Purchasing Power



Not surprisingly, when trade-offs between extending social impact or ensuring financial sustainability come up (as they invariably do), many enterprises tend to favour the former. Ironically, however, the choice to expand impact at the expense of commercial viability may imperil an MBS's financial sustainability, thus thwarting its ability to increase its social impact over time. This clash of social and financial objectives may originate in different time horizons as much as different values. Reaching scale and achieving an enduring positive impact on poverty reduction requires steady investment over a period of years. If an enterprise is unable to generate funds to grow and increase its impact over the long term, then it will not provide a sustainable solution to the challenge of poverty.

Basic Business Skills and Attracting Finance

Many MBSs are small enterprises and at an early stage in their development. At this point, they must focus on the basics of doing business. This may seem obvious, but many MBSs get into trouble as a direct consequence of failing to observe business fundamentals. Some enterprises struggle to achieve scale, for example, simply because they did not plan for growth and found themselves constrained by their initial decisions. Impact investors point out that before they can support most of the enterprises that ask for funding, these enterprises first require technical assistance and business advice to make them investable. What is missing includes not only effective governance and strategic management of marketing and revenue models but also basics like bookkeeping. And numerous enterprises told us of plans to franchise their business before they had figured out how to cover their costs sustainably.

Another common challenge is a lack of market understanding: many MBSs regard the BoP as a single homogenous group, or know that it needs to be differentiated, but cannot afford the research required to draw meaningful segments. This increases their exposure to risk and volatility in their operations. Relatively few

MBSs — mostly those affiliated with large corporations and MNCs — possess a sophisticated understanding of segments of the BoP that enables them to mitigate such problems.

Implications for Large and Multinational Corporations

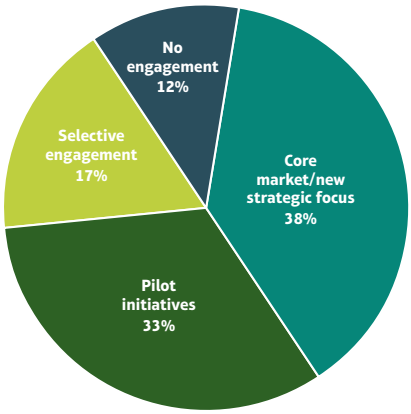
Corporate Engagement with the BoP

During the past 15 years, the development community has altered its thinking dramatically on the role of large companies in economic development. Many big companies have embraced corporate social responsibility (CSR) and sustainability initiatives that go beyond lip service, as seen in the food and coffee, consumer packaged goods, and other sectors. Donors like DfID, UNDP, and others, meanwhile, have contributed to the creation of a virtual alphabet soup of organisations that focus on cooperating with corporations to address a wide range of social issues, including global poverty[104].

The publication of C.K. Prahalad's landmark book, *The Fortune at the Bottom of the Pyramid*, in 2004[105], sparked further interest by large companies in engaging in low-income markets. Academic literature on this topic is mushrooming, and a strong signal that the topic is moving into the mainstream is a 2011 article in *Harvard Business Review* by Michael Porter and Mark Kramer that develops the concept of "shared value"[106]— the notion that corporations have a vested interest in creating social as well as economic value. Executives increasingly accept the premise that their corporations can and should address social challenges including endemic poverty. In SSA, a number of giant food, beverage, and agricultural products businesses get a double benefit from such measures as engaging smallholder farmers in supply chains[107] — local, and potentially low-cost, supply as well as improved livelihoods and purchasing power for the farmers.

Monitor's research in SSA included interviews with 47 large corporations to increase understanding of the costs and benefits of engaging with BoP customers and suppliers. Companies participating included U.S. and European-based MNCs, large South African corporations with multi-country presence, and large domestic companies in particular nations. South Africa provided an especially fertile labouratory for corporate experiments due both to regulations and the companies' own perceptions of market opportunities and social obligation. Every large South African company we contacted had several initiatives aimed at engaging the BoP in some way.

Figure 6.1: How Large and Multinational Corporations in SSA Engage with the BoP



SOURCE: Monitor interviews with 47 large corporations

Among the companies in the research sample, about 40 per cent had at least one business line that seriously engaged the BoP and perceived this group as either a core market (and thus regarded the BoP market in the same light as other customer markets) or part of a new strategic thrust. Safaricom's M-PESA, Hollard's funeral insurance, and Coca-Cola's MDCs are good examples in the latter category.

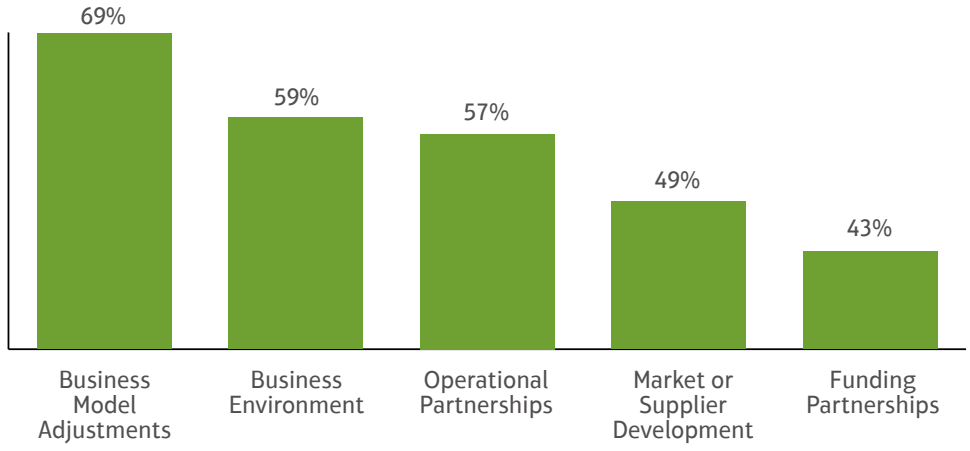
Many of these companies have pioneered innovative routes to market and distribution strategies. In addition, about 10 per cent of the sample has built at least one supply chain to source output from smallholders. Ecom, for example, trades with

12,000 smallholder coffee farmers in Kenya, and Export Trading has extensive direct maize collection operations in East Africa. Another 30 per cent of the sample had run small or substantial pilot stage activities to test the waters for participating in low-income markets. Barclays *susu* collector efforts and P&G's initial foray into PUR water purification sachets are cases in point.

In short, big companies are hardly overlooking or avoiding opportunities to work with low-income consumers and producers. This is not to say, however, that they are all making significant headway. An overwhelming message throughout the interviews is that for all of the apparent experimentation and activity, most companies continue to struggle to engage in low income markets, and this engagement, by necessity, ends up being selective and limited[108].

In our interviews, companies noted five significant issues that complicate current or planned initiatives. A brief discussion of each issue follows.

Figure 6.2: Obstacles that Large Corporations Cite to Engaging with BoP Markets (per cent of companies citing obstacle)



Note: *One company can state more than one theme or have multiple corporate efforts
Source: Monitor interviews with MNCs and national corporates with operations in Africa (n=47)

Business Model Adjustments and Longer Horizons

Nearly 70 percent of companies in the sample cited the need to retool existing business models as an obstacle to entering low-income markets. Engaging the BoP entails a range of costs related to developing a new offer, aligning internal processes, and getting out from under legacy costs, systems, and overheads. Moreover, in our interviews, executives at 17 companies mentioned that it takes longer to build successful operations for the BoP than for other markets and hence the investment timeframe also is longer. As a representative at a national financial services firm put it, "we realise we cannot expect profits too soon from our BoP initiatives and we are prepared to give at least five years before expecting profits".

Business Environment

Not surprisingly, nearly 60 per cent of firms, including those experienced in Africa, reported challenges navigating local business environments. Problems such as poor infrastructure and difficult regulations were frequently cited. An example of the latter is "know your customer" requirements in financial services, which raise compliance costs and conflict with the imperative to provide ultra-low priced products. Interestingly, few companies mentioned corruption, although it is often highlighted in the literature and media as a problem in the business environment of low-income countries.

Cost of Market and Supplier Development

Companies described two separate costs that constitute a significant obstacle to working with or selling to the BoP. First, companies engaged in selling to the BoP often need to mount significant customer education around either the need for a product (e.g., health, clean water) or around the best use and limits of a product or service (e.g., financial literacy for consumers of financial services). Second, the

SUCCESS WITH SACHETS

In the early 2000s, Voltic, Ghana's market leader in bottled water, made an aggressive move into the BoP market but learned quickly that it would need a radically different business model to prosper.

At the time, Voltic's main business was high-end purified water sold in standard 500 ml bottles priced at $0.70 each to tourists, hotels, and other upper-income Ghanaians. Although hundreds of informal vendors already supplied water (of varying quality) to the BoP in 500 ml sachets (plastic pouches) , the company saw growth opportunities in the low-income market. It introduced a new brand, Cool Pac, available in sachets for about $0.035 per 500 ml, a slight premium above informal competitors. The company believed consumers would recognize the brand and perceive Cool Pac as a reliable, quality offering.

At first Voltic produced Cool Pac centrally at its factory in Accra, but the logistics and delivery costs to areas outside the capital proved prohibitive. After rethinking its business model, the company identified local franchisees to share the costs of setting up new, decentralized plants. The franchisees were entrepreneurs who had access to their own capital and an ability to run the operations, down to quality control and distribution via wholesalers to cash-and-carry street hawkers. Voltic and the franchisees split the operating margins, which reflect the economics of any high volume, low margin BoP-focused product. Thus Voltic paid for just half of the necessary capital costs, retained control of the brand, and avoided investment in additional trucking capabilities. Cool Pac took two years to reach meaningful scale. Voltic now sells almost 500,000 sachets every day. Meanwhile, it created 16 franchisees and approximately 560 jobs, not including the 10,000 hawkers estimated as involved in selling. This clearly is a winning formula and contributed value to Voltic's trade sale in 2009 to SABMiller.

Why was Voltic successful? It tried half-steps at first, but then engaged in a top-to-bottom rethinking and revamping of the business model, from capitalization, to brand, production, and distribution. It pursued a market entry rather than a market creation strategy, which accelerated the path to scale. It relied on established local franchise partners, but not necessarily BoP franchisees. Finally, it leveraged existing, informal distribution channels already in place.

companies are accustomed to working with high capacity, centralised, well-defined networks of suppliers. In sourcing from the BoP, in contrast, they often find themselves dealing with large numbers of small, relatively unsophisticated suppliers like farmers who require significant training. The costs associated with educating consumers and suppliers are material, and — if internalised — can add significantly to the burden placed on a new product or new market entry. Companies cited this problem most frequently as one in which they would be open to partnering with non-commercial partners for financing and execution — as Coca-Cola does with Technoserve[109] in a fruit juice sourcing initiative in Uganda.

Operational Partnerships

Despite an openness to partnerships with NGOs and other parties in engaging the BoP through "hybrid value chains"[110] and other arrangements, nearly 60 per cent of the companies noted that such partnerships were a source of difficulty and friction. At one level, the partnerships make sense, because NGOs and other not-for-profit organisations and community groups typically possess information and experience — and legitimacy — costly for the companies to obtain. For example, two-fifths of the companies say that they formed partnerships because they needed assistance with project management or demand stimulation; half of them note that they sought partners to distribute their goods because these partners understood the challenges of reaching low-income segments. However, the companies also describe friction in the partnerships, attributing it to the respective parties managing to different objectives (social vs. commercial), tracking different outcomes (sales vs. income increases), or misaligning in other ways. For such reasons, some companies prefer to collaborate with other commercial entities to working with noncommercial partners.

Among companies, forming a partnership commonly raises concerns, especially about governance and control. Such concerns are amplified when the partner is an

NGO more interested in social impact than commercial return. Similarly, working with informal partners also raises concerns, such as low levels of product knowledge and business experience. Nonetheless, as the 2011 Africa Progress Panel report notes, partnerships are becoming increasingly common at the bottom of the pyramid, and finding ways to make them more productive is an important agenda item for the future.

Funding Partnerships

Most companies say they possess enough resources internally to pursue BoP engagement initiatives—if they make it a priority. However, as donors become more interested in corporations as instruments of social change, alternative funding options have emerged. Adopting some of these new opportunities has proven attractive to corporations because of the high cost of entry to BoP markets, longer payback periods, and higher risk. Nearly half the companies in the sample reported considering obtaining outside, non-commercial funding for their BoP-oriented initiatives.

This type of funding offers cost advantages over commercial financing and adds an imprimatur from credible outside funding sources (e.g., DfID, GTZ). Companies that have sought donor financing, however, often find the funding process cumbersome, slow, and onerous. Although some companies outsourced the process to "grant specialists" to reduce the strain on full-time staff, some executives questioned the value of funding partnerships, given the drawbacks, including reporting requirements necessitating the establishment of procedures and metrics felt to be irrelevant to operating the business.

Such questions illustrate tensions inherent in relationships between commercial and not-for-profit actors. Even so, these tensions may be easing as representatives in many donor organisations become more comfortable in collabourating with companies and sensitive to their concerns.

Implications for Corporate Engagement

Despite the obstacles, big companies ranging from Olam, to SABMiller, to Yara are active and successful in BoP markets. There is, after all, a vast market to be served[111], and corporations considering entry can increase their odds of success by first considering factors in the following checklist[112]:

Entry Decision

- Are we attempting market entry or market creation? The latter is more expensive.
- Is there underlying demand, or is it need that must be converted to demand and willingness to pay?
- Are we already effectively in this market, and if so, do we need to protect our margins (e.g., from counterfeits, off-label uses, grey market activity, etc.)?
- Do we really know who the customers are and what they (will) use our product for?
- Are we prepared for informal competition that will not necessarily play by the same rules?

Business Model Adjustments

- Can we develop not just a new product for this market, but a new business model, and wait for the payback over a longer horizon?
- Can our product or service offer "formal sector quality" with "informal sector flexibility"? Can we improve the price/quality equation vs. existing offers in the market?
- Can we manage large numbers of low-value transactions? If not, can we find a partner who can?

- Can we work with informal markets, especially for distribution and as sales channels? Can we operate in a cash economy that this sometimes requires? And is there enough margin to create availability and incentives through highly layered channels?
- Can we afford to invest in demand stimulation and marketing? If not, can we find partners who will?

Internal Decision and Process Issues

- Can we keep out legacy and overhead costs as we develop our new business model and systems?[113]
- Do our leaders have the patience to allow this business to develop?
- Will our organisational culture stifle a bottom of the pyramid innovation, even if we have senior executive champions?
- Are we prepared to manage the unique risks (see table below)?

RISK	POTENTIAL RESPONSES
Image: there is high sensitivity to the perception that companies are profiting unduly from selling to the poor or underpaying BoP suppliers	• Demonstrate that commercial returns enhance community development • Quantify improvement in affordability, access, quality, or incomes vs. comparable options for BoP by participating
Brand: selling the same brand in low-income markets could dilute or cannibalise the brand in middle and upper-end markets—but BoP consumers typically want the same brand they see in media and advertising	• Introduce separate brand, support with similar marketing as main brand • Introduce distinct package size or channel within same brand
Competition: rivalry may include informal competitors with more leeway to operate (sometimes even re-selling a company's own products) via unauthorized channels.	• Incorporate informal competitors, where possible, in the value chain • Organise category campaigns to lift all players • Examine the full set of activities the competitors take on for their channels or customers and match or improve on them • Develop low cost ways to authenticate the product as legitimate

Once an entry decision is made, three other lessons from African corporate efforts may be helpful:

- **Share R&D Costs.** South African financial services firms joined to create industry-standard products for savings and education finance. Sharing reduces costs and risks for each player, although of course it does not create an advantage for any. This approach worked well in part because of an industry-wide imperative to respond to regulations requiring access to services to become more broadly available It succeeded in managing development costs, for instance, for the Mzanzi bank account product, and increasing access. It did not, however, solve for profitability.

- **Find Donor Partners.** As noted, this strategy has risks. Most large companies are reluctant to compete for challenge funds that offer low probability of payback or of being selected. However, Coca-Cola, Bayer, Safaricom, and other companies have selectively pursued donor funding aligned with their business objectives.[114] Donors may assist with needed category campaigns and accompanying demand stimulation. They may play a significant role in helping to underwrite supplier development or consumer education. Hivos, a Dutch NGO funded by the Dutch government and private donors, works extensively with Ecom, a commodity trading firm, to train small coffee farmers to supply to Ecom or the general coffee auction in Kenya.[115]

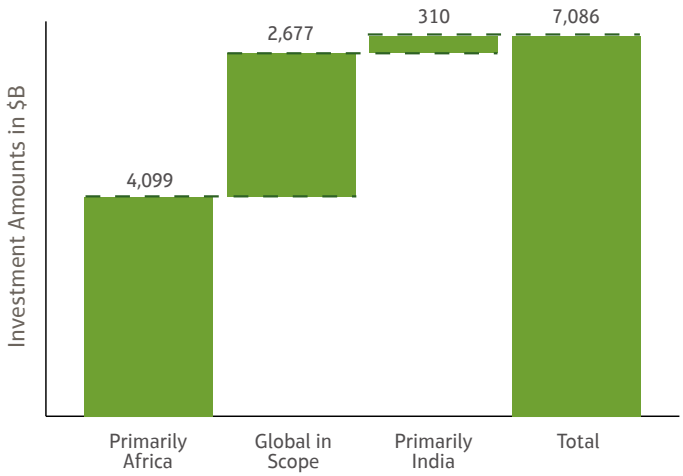
- **Create a Separate Unit.** With its own metrics and time horizon for success. BoP initiatives need time to develop the right business model and gain traction but a common reason for patience is the need to develop end-to-end solutions. Sanlam Developing Markets, for example, is a separate unit of a big South African

company and targets "entry level" insurance customers. The unit is home to its Zion Christian Church (ZCC) partnership for funeral cover and provides a platform for experiments with other product add-ons like free legal advice and burial repatriation[116].

Implications for Impact Investors

Impact investing has witnessed explosive growth in recent years, with new funds springing up across SSA. Three funds alone focus on health in Africa (Acumen, Aureos' Health in Africa, and PharmAccess' IFHA). GIIN estimates that impact investing worldwide is about a $50 billion asset pool, and a recent study for Rockefeller Foundation estimates that for West Africa (ECOWAS states) alone there are almost 70 separate funds operating on private equity or VC terms with a fund/portfolio size of about $3.2 billion[117]. Monitor's own analysis of 57 funds primarily targeting India and Africa found about $4 billion targeted to impact or SME investment in Africa alone (see Figure 6.3).

Figure 6.3: Representative Selection of 57 Impact & SME Investment Funds: Regional Breakdown



Source: Monitor analysis of 57 funds investing in India and/or Africa

On the surface, the amount of capital available to invest in social or "impact" enterprises seems more than adequate to the challenge and the demand. Questions arise, however, as to whether the funding vehicles announced are suited to the needs of businesses, and if there are enough promising enterprises to absorb the capital. Consistent with the findings of other recent research,[118] Monitor identified several high-level barriers that may (and already do) impede the connection between investors and opportunities in businesses servicing the BoP. For impact investing to continue its rise and realise its promise, these barriers must be addressed.

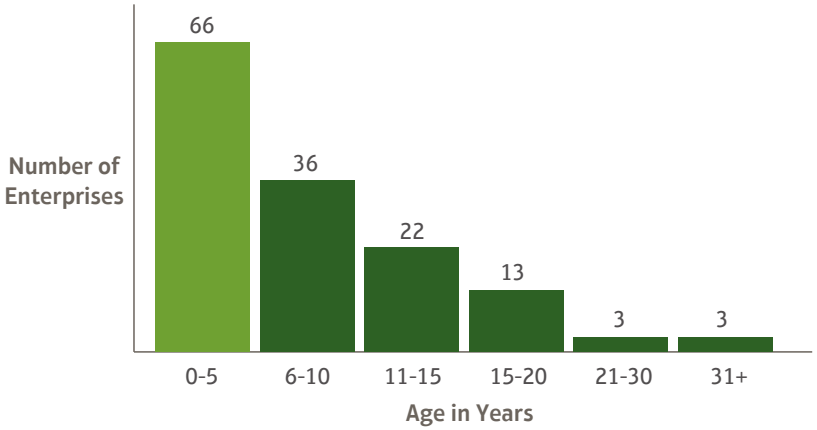
Opportunities Are Difficult to Find

In SSA, investors have difficulty finding conventional, commercial investment opportunities, let alone opportunities in SMEs engaging the BoP. Impact investing is a nascent field, and lacks much of the supporting ecosystem of traditional commercial investment, especially in this region. Moreover, the SSA investment market and its attendant risks are not adequately understood. Even investors already established, with "feet on the street", note significant challenges of imperfect information and limited services for evaluating risk and credit. There is no network of brokers, investment bankers, law firms, or other service providers to assist with making deals[119]. The situation is worse for investors based far away. The most extensive networks with the greatest experience of social ventures tend to be not-for-profit, capacity-building organisations that are not equipped to identify high-potential investments. Consequently, impact investors frequently end up chasing the same limited set of high-profile enterprises or pouring unanticipated time and labour into the search for opportunities.

Most Opportunities Are Early-Stage

In the Monitor dataset[120], 143 of 439 enterprises are SMEs, of which nearly half are less than five years old. As investment opportunities, such organisations are seldom "investment-ready" and they also tend to have relatively high risk profiles.

Figure 6.4: Almost Half of SMEs Examined Are Less than 5 Years Old



Note: n=143

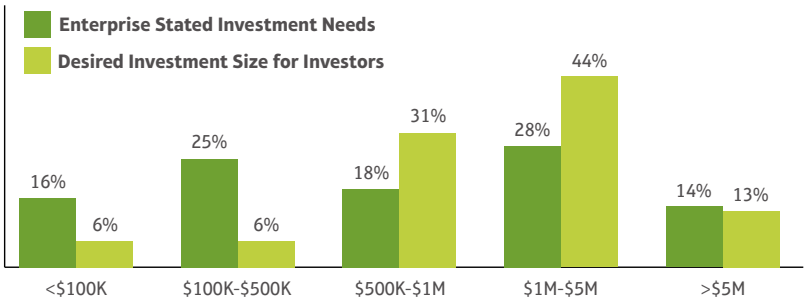
Young MBSs, of course, rarely have track records to justify investment; furthermore, they commonly have unproven governance and underdeveloped revenue models. Impact fund managers recognise that these enterprises need technical assistance (TA), not only at startup or once they receive outside capital, but even, in many cases, to get them ready to use this capital productively. Many MBSs need seed capital and advisory services simply to reach the "starting line". Even when they make it past the initial hurdle, MBSs often find it difficult to communicate their business potential and needs—they lack investor presentation materials, and more fundamentally, find it challenging to prepare formal requests for capital.

The early-stage nature of the firms poses another difficulty. Most of the funds being capitalised use the private equity (PE) model. But PE is rarely a funding modality appropriate to early-stage ventures. Many MBSs need angel or venture

stage funding, but little is available. Only 6 of the 84 funds investing in Africa or cross-region offer early-stage capital. As a rule, younger enterprises tend to be risky investments. For MBSs the risk elevates because few operate according to a proven business model.

MBSs Require Small Amounts of Capital

Figure 6.5: A Disconnect between MBS Investment Needs and Impact Investor Preferences

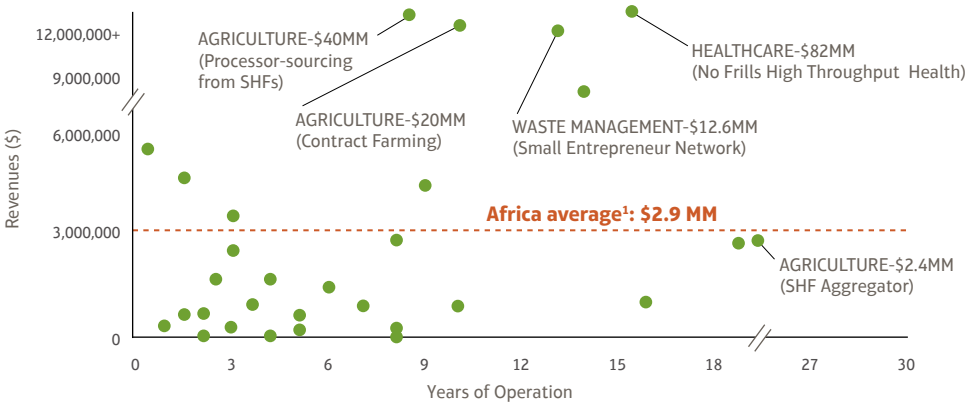


Source: Monitor interviews with 69 enterprises and 29 impact investors

The many "extreme SMEs" in the broader sample who could articulate a need for capital at all tend to need relatively small amounts. More than 50 per cent of the ventures that sought external investment say they require less than $1 million. These figures increase slightly when focusing on the distilled set of the most promising enterprises in the sample. This subset of 31 — selected on the basis of Monitor's judgment of the strength of the business model and prospects for success[121] — provides important insights. Overall, average revenues of this subset are about $2.9 million, and 60 per cent anticipate needing less than $3 million in outside capital. The average net margin for these MBSs is about 15 per cent across sectors. None reported margins above 30 per cent.

Agriculture represents the biggest sector in the subset (18 of 31). On average, these enterprises have relatively high revenues, about $4.3 million, and a stated investment requirement of about $4 million. But conversely, their margins tend to be low, averaging about 10 per cent, and sometimes less in more volatile years. Funds looking for significant equity returns in this space cannot expect to find much.

Figure 6.6: Annual Revenues of Promising Enterprises by Years of Operation[1]



Sector	Agriculture (n=18[2])	Non-Agriculture (n=13[3])
Average Revenue ($)	4.3MM	1.9MM

Note: [1] n=31 includes outliers, but revenue average of $2.9MM excludes two outliers [2] Outliers (with $40MM and $460K) removed from average; [3] Outliers (with $82MM and $2200) removed from averages

Source: Primary Research, Monitor interviews and analysis of 31 high promise MBSs

Managers of these enterprises express a preference for debt financing, which is difficult to obtain from commercial banks in SSA. When they can obtain loans, interest rates are high: in Ghana, the prevailing interest rate for loans of this type is approximately 35 per cent annually.

These findings point to a potentially dangerous mismatch between impact investors and fledgling MBSs. The traditional "2 and 20" private equity fund structure, adopted by a majority of investors interviewed by Monitor, is not consistent with the on-the-ground reality of enterprises engaging in low-income markets. This structure works best with established enterprises requiring bigger sums — on the order of $5 million or more — for the fund to make money. While more than 40 per cent of investors interviewed for this report say they welcome investments below $1 million, only 12 per cent will consider a deal below $500,000. This is not a new finding, but it remains a very real problem for both conventional SMEs and MBSs. The danger is twofold. First, promising enterprises will go unfunded and never realise their potential impact. Second, the funds may be unable to place their capital into deals, leading, in turn, to two more possible outcomes. The funds either will support enterprises engaged with more affluent segments than the BoP, or, worse, the funds will be unable to continue raising money to help the BoP.

Recommendations to Impact Investors

New business and engagement models are required to overcome these barriers and avoid the formation of an 'impact investment bubble' with too much money chasing too few opportunities. Here are five recommendations to avoid these problems.

Increase Availability of Early-Stage Funding

The need is clear for more early-stage funding with a higher risk threshold. The formation of TONIIC[122] as a companion group to GIIN to provide angel financing is a large step in the right direction. Yet even this effort, in all likelihood, needs to go farther, or be supplemented. Many enterprises in the early stage pose relatively high risk while generating relatively low returns, if any. Philanthropic and donor capital — i.e., capital that does not require a return — may be deployed here to sig-

nificant effect. The rule of thumb in commercial venture capital, that one in ten ventures will succeed, is optimistic at the bottom of the pyramid. Yet it is vital to keep the funds flowing to encourage innovative ways and better business models to meet pressing social needs. Donor capital can combine with commercial capital to provide early-stage funding on a commercial financing model, albeit with adjustments, to accept high risk while seeking high social returns.

Other vehicles to provide early-stage financing include challenge funds, either existing or new. For instance, Africa Enterprise Challenge Fund[123] runs a broad outreach campaign to identify enterprises for investment. AECF already provides early-stage financing to many enterprises, and in amounts (averaging $750,000) that are in range of many enterprises in the Monitor sample.

A key complement to early-stage funding is technical assistance. At this stage, the TA can facilitate making an enterprise more "deal ready" for second-stage financing. Donor or philanthropic capital may help by underwriting the costs of TA (see below).

More Debt, Less Equity

While attention to microfinance has centred on the outsized returns achieved by a handful of equity investors, equity represents a small fraction of activity in the sector. By far the biggest amount of funding moving into microfinance in the past is debt. Microfinance is of course well suited to absorb debt capital, given the nature of the product, nearly 90 percent of external investment into MFI funds consists of debt capital.[124] Worldwide, actors such as ResponsAbility, Accion, Blue Orchard, FINCA and Unitus provided over $850 million of debt capital to MFIs, followed by smaller equity funds like Lok, Elevar, and Bellwether, who have made about $120 million of equity investments.[125]

It is improbable anytime soon that MBSs will grow primarily with equity capital, and many of the enterprises in the "investable" subset have already figured this out. Over 80 per cent of MBSs express capital needs better served by mixed funding or debt. Meanwhile, a majority of funds we interviewed are set up to offer equity primarily, with a few notable exceptions. A final argument in favour of more debt vehicles lies in the returns themselves. The agriculture MBSs in the investable set represented the enterprises most likely to be using a proven business model for generating both social impact and financial return. Yet, as noted, the average net margin is approximately 10 per cent—and in some cases, like the SHF aggregators, lower; this is a level unlikely to interest most equity investors or support expected deal IRRs. Such performance is better suited to debt instruments, which are often more attractive to retail and high-net-worth individual impact investors.

Finally, returning to one of the key findings of Chapter 5, debt financing may be used to roll up, improve, or tie together existing informal retailers, service providers, and other fragmented players where scale exists among a cluster of similar enterprises. IFC has pioneered this approach in Africa with its funds via Equity Bank in Kenya and Trust Bank Ltd in Ghana to lend to budget private schools; PharmAccess' Medical Credit Facility and SHOPS' USAID-guaranteed bank lending combined with TA to small medical providers offer similar examples in health. Analogous approaches may apply to agrodealers and chemists to improve the delivery of critical goods to the BoP from medicines to fertilisers and seeds.

Increase Investment-Readiness of Early-Stage Enterprises

To address the lack of investment-ready enterprises needing small amounts of capital (less that $1 million), we see important implications for a range of actors. First, such brokers as described above could be motivated not only to identify enterprises for capital, but also to invest their own funds in grooming the enterprises to make them "deal ready"—a cost we estimate at somewhere between $40,000 and $60,000 per MBS[126] if done by Africa-based teams and providers.

Alternatively, vehicles will be needed to get TA to promising enterprises in their earliest stage of financing so that they can eventually meet the market for equity financing. There are several possibilities, including bundling TA with early-stage financing as described above, motivating brokers or shared-sourcing platforms to provide it, or even encouraging equity investors to support TA to bring deals along in a "pre-pipeline" phase of activity. In nearly all cases, TA will need to be donor-provided.

Finally, another category of enterprises may need TA of a different kind. About a dozen of the most promising enterprises in the sample were led by NGOs or the foundation arms of larger companies—e.g., Pesinet and Kilimo Salama. Such ventures are not only doing important work but also, in many cases, have developed business models with high potential. Just as the Boulder Institute did with MFIs in the early 2000s, helping to upgrade and commercialise an innovative idea, a similar opportunity exists in Africa to support NGO-led initiatives with TA. An interesting possibility involves having such NGOs "license" their innovations to others for scaling—if they do not wish to do so themselves. Such a practice could both release promising ideas for dissemination and honour the mission of the NGO innovators.

Help Build the Ecosystem

Given difficulties in sourcing deals, the development of shared deal-sourcing platforms is an increasingly popular suggestion. The concept makes sense, but, given the highly competitive nature of investing, it needs to be thought through carefully. Some TONIIC members are suggesting a "venture corps" to place aspiring recent MBAs in the field to scout for early-stage opportunities. Such an approach may address many investors' concerns about trust—given that many will not even take a referral from a source with whom they have not worked before.

Some organisations have suggested a more concerted use of challenge funds—not for capital but for referrals. Current rules prevent entities like AECF from doing this, but it could offer a platform for sharing opportunities it finds. Such an approach, however, does not address whether investors will be content to receive the same basic deal flow opportunities as their competitors, nor does it establish trust between investors and those identifying deal opportunities.

Still other approaches focus on providing "virtual pipeline platforms". Organisations such as GreaterGood SA, Clearly So, and AngelSoft pique investors' interests via introductions to potential opportunities. Some parties advocate the formation of "social stock exchanges" to facilitate placing capital in social enterprises. This notion seems fanciful, given the preference among MBSs for debt financing. It is also unclear whether exits via an exchange are feasible: it is hard to imagine that volumes of trading in a competitive market for small, high-risk enterprises would generate enough capital or allow markets to clear efficiently. Additionally, this fails to address the need for VC or angel investors to help social enterprises launch. Finally, there is a paucity of exchanges that exist for SMEs in the developed world; such enterprises are likelier to succeed on an exchange than riskier, less proven extreme SMEs striving for social impact.

A more intriguing approach to shared deal sourcing involves developing a class of deal brokers or other intermediaries to take on the classic brokerage role and identify promising investments in exchange for a fee or a percentage of the funds placed. A few such entities, like Open Capital in Nairobi have recently emerged. However, an unresolved issue involves motivating deal brokers not only to make money in the near term but also to find enterprises with high potential social impact that may manifest over a relatively long period. Smaller deals will be as unappealing to deal brokers as they are to funds, for the same economic return reasons.

Implications for Donors

Donors — encompassing multilateral, bilateral, and philanthropic foundations — can play a vital role in helping to promote MBSs in Africa. This constituency has flexible capital, high capacity to absorb risk, an ability to generate knowledge and disseminate lessons, and convening power to bring key actors together. Realising this potential, however, will require acting in ways that sometimes differ from the historic paradigms of aid to sovereign governments or via NGOs.

Although aid, and especially aid to Africa, recently has been the target of harsh criticism, it is important to emphasise that it has made large and lasting impact in certain areas. The U.S. government's PEPFAR programme in FY2009 provided antiretroviral and other HIV/AIDS treatment via direct and indirect support to almost 3.7 million people in Africa.[127] Kenya's national school-based deworming programme increased average school attendance by 25 per cent at a cost of $0.36 per student, covering about 3.6 million school children in the first phase of activities. This programme was managed by the Kenyan Government with support from mulitple donors including Deworm the World.[128]

Donors and aid providers also make a difference in catalysing MBSs. DfID support to M-PESA is a well documented case,[129] as is Kilicafe, which used donor support to Technoserve to build the smallholder coffee cooperative sector in Tanzania. Success stories abound: the past decade witnessed an array of new approaches beyond traditional grants and foundation PRIs, including challenge funds, business networks, bank guarantees, databases of promising enterprises, case studies, direct investments, and participation in impact investing funds. Yet, there remains much still to do to stimulate market-based activity and help it grow beyond a nascent stage.

For donors to ramp up support to MBSs, some reframing of traditional approaches may be required. For example, donors must accept, if not embrace, the notion of supporting private enterprises that may — and should– earn profits from trading with the poor. What matters — or should matter — to donors in the end is increased social impact, rather than how it is achieved. After all, for years aid agencies have collabourated with private enterprises in product development and distribution — with pharmaceutical companies on vaccines or contraceptives, for example. This report argues for a broader commitment from donors to encourage MBSs more generally by helping them get started and reach scale. This, in turn, will require aid providers to develop a clear sense for when the public interest in poverty reduction merits a private entity's making profits — and when it does not.

By the same token, donors must distinguish between campaigns that involve donating goods and services and those that may achieve longer term impact through market-based approaches. In some instances these two approaches may complement each other. It is important to clarify understanding of the circumstances in which the approaches are incompatible or complementary, so that the same donor does not support both free provision of a product or service and an MBS in the same area. Research by the Abdul Latif Jameel Poverty Action Lab (JPAL) or similarly rigorous sources on this topic may be helpful.

At a more tactical level, here are specific principles to guide donors willing to support MBSs:

- **Tie funding to campaigns.** Instead of providing financing for standalone efforts (e.g., clean water awareness campaigns), tie "category" financing to specific MBS initiatives (e.g., building water kiosks alongside clean water awareness); have the enterprises apply competitively for support to ensure the best outcome.

- **Support "BoP Cost Equivalence".** As noted, commercial enterprises find low-income markets expensive to serve. Donors can cover the additional expense of such matters as training and demand stimulation that will make serving these markets more viable—as the South African government's Monyetla programme does for training BPO workers, or the Gates Foundation/Technoserve training programme with Coca-Cola in Uganda.[130]

- **Provide basic/shared infrastructure.** This may be physical infrastructure, like roads or water kiosks; social infrastructure, like cooperatives or other aggregation platforms; or knowledge infrastructure, like rigorous analysis and lessons learned from effective market-based approaches, or reliable measurement of the actual returns to impact investing. Knowledge infrastructure should not be neglected. For all of the attention paid to microfinance, savings, social franchising, and—more recently—microfranchising, other promising approaches, including contract farming and (profitable) distribution to the poor, are "orphans". At the same time, some knowledge assets are funded, although they have questionable value—for example, shared databases listing inclusive businesses but are not tied directly to any activity, like investing.

Similarly, not one of the 47 big companies engaging with the BoP in the Monitor sample mentioned lack of information about their peers' activity as an obstacle. This calls into question the value to such companies of networks and forums to share best practices — although these may have value for other constituencies.

- **Increase focus on risk capital and risk management.** As noted, low-income markets are highly volatile. Donors and aid agencies are uniquely placed to absorb and share risks. Some donors have provided guarantees for lending in financial services[131], or supported the ongoing quest for a weather-based index insurance product that SHFs will buy[132]. However, there are many other opportunties for donors to help cushion risk, directly for the BoP, and for the enterprises serving them. Donors could help provide early-stage risk capital to MBSs, for example. Or they could support development of insurance for contract farming and aggregators who buy from SHFs. Many small agricultural enterprises that trade with SHFs for thin margins could also benefit from access to hedging capabilities like those at bigger traders such as Olam, Ecom, and Neumann Kaffee Gruppe.

- **Support scaling up**, recognising different routes to scale (see Chapter 5), and factoring in considerations of time-limiting commitments and exit within each route.

Finally, a number of specific donor-funded tools, funds, and activities can support the development of MBSs in Africa. Some of these represent extensions of programmes already in place or resemble initiatives already under way; others may seem more radical in light of traditional approaches. These include:

Support to MBSs

- **Channel improvement** via a competitive application process for enterprises seeking to build a full channel for socially beneficial products and services. This support could take such forms as:

  - **A distribution training fund.** Enterprises could apply for support to cover the costs of building out the channel so that goods and services reach the poor affordably. Funding could flow preferentially to enterprises (individually and in groups) that distribute multiple products and baskets of goods.

  - **A demand stimulation fund.** Enterprises could apply competitively when rolling out offerings like clean water, irrigation, or improved seeds or cook stoves. This would support important activities in both above-the-line and below-the-line marketing to ensure demand and reduce burdens on low-margin products.

- **Market extension** support available on a competitive basis to enterprises seeking to move "downmarket" where operations would not otherwise be viable. For example, an agricultural trader dealing with medium-sized farms could also source from adjacent local smallholders. A variant would involve investing via "structured demand", in which a grant or impact investment in (or alongside) a large buyer with significant demand at the top of the supply chain—e.g., entities like Ghana Nuts, SOCAS, school feeding programmes, or others—is earmarked to improve the buyer's ability to trade with small suppliers and create markets for smallholder outputs. Such an approach is already under-way in the Gates Foundation partnership with WFP in Purchase for Progress. Such support could similarly be used to incentivise an MNC like Bayer to expand its reach past the initial 200 storeis in a program like Green World.

- **Insurance against "side-selling"** could be an excellent use of donor funds to support proven business models providing significant income increases to farmers at large scale. Many contract farming and other direct procurement schemes investing in farmer capabilities and inputs (e.g., coffee initiatives in East Africa, cocoa initiatives in West Africa, horticulture and floriculture programmes, etc.) depend on the farmers selling back outputs to the organisers of the scheme. But inevitably some farmers face a cash crunch and sell their output elsewhere, which threatens the viability of the organiser. One solution to this problem is contract enforcement with penalties, but this can be difficult and counterproductive. A better approach treats side-selling as a risk to be managed and insured. Such insurance would enable more farmers to participate in organised schemes while protecting their freedom to sell outside the programme if necessary, while still affording certainty to the scheme organiser.

- **Small infrastructure** capital expenditure to make "last-mile infrastructure" business models more viable. In India, state government and donor funds have helped launch a rural water kiosk sector operating at scale. Donor funds could play the same role in SSA.

- **Transplantation and replication of effective models and practices**, enabling enterprises successful in one jurisdiction to apply for funds to take their model elsewhere, either through a competitive application process or a donor-led approach.

Direct Support to the BoP

- **Underwrite the purchasing power of low-income people** through vouchers, subsidies, and bursaries. Governments often lead such initiatives but donors and aid agencies could provide support. A rich literature on healthcare subsidies and vouchers already exists[133], and indeed the success of FETs in South Africa indicates the benefit of providing bursaries to learners in such programmes. In Brazil, Ananghuera, a leading provider of vocational education for the middle of the pyramid and lower segments supported by IFC investment, relies extensively on state-funded scholarships to enable it to reach BoP students and attain scale.[134] The key in providing such vouchers and subsidies directly to BoP customers is to ensure they reach the people for whom they are intended, while avoiding distorting the market and burdening state finances.[135]

- **Technical assistance** to farmers/suppliers to build their capacity to participate in supply chains and "meet the market", ideally in programmes where buyers at the top of the supply chain are committed to source either directly or indirectly but on fair terms from the BoP. This applies equally to sectors from agriculture to handicrafts to BPO. Funding should be tied to participation in a specific supply chain programme rather than to underwrite training for individual farmers or suppliers.

- **Increase access to credit** for the poor, whether in terms of direct microcredit support[136], or working with banks (via guarantees like USAID's DCA program[137]) or specialised entities (like the Masisizane Fund in South Africa) that provide credit and TA to SMEs.

Support to Impact Investing

- **Catalyse development through research**, as the Rockefeller Foundation's support to found GIIN acheived in helping to establish some common metrics for impact, via the IRIS standard. Donor funding of research in other critical areas also is important—see the recent J.P. Morgan report on impact investing as a potential asset class[138], for example. More data should be gathered and published, especially on returns, exits, transaction costs, and other elements in impact investing.

- **Provide shared ecosystem resources and incentives** to help encourage impact investing in SSA[139]. Intermediaries and providers of professional services are scarce to non-existent in many countries. Given the low (financial) returns available to impact investors, other sources will have to finance development of this ecosystem, at least in the initial stages.

- **Underwrite an "NGO commercialisation fund"** that, along with support for accompanying TA, would help spread innovations beyond their NGO creators. This could involve helping to finance direct commercialisation of an NGO or a subset of activities, as ACDEP is seeking to do for Savanna Farmers Marketing Company; placing an NGO like Pesinet on a more commercial footing; or enabling an NGO like Kickstart to license its IP and technology so that others can benefit.

Support to Market-Based Approaches Generally

Donors can support cultivation of knowledge to facilitate development of market-based approaches. In addition to research topics already mentioned, donors may support investigation of such matters as:

- **Lessons from failure.** Too few stories of failure—and why enterprises failed—are well documented, although lessons derived therefrom are highly valuable.
- **Impact evaluation frameworks.** IRIS represents a good start but there is more to learn.
- **Impact investment returns and exits.** As noted, aggregate data to guide investment and expectations are badly needed.
- **Certification platforms.** Little work has been done on this approach outside of healthcare, where it has shown promise in the ADDO programme in Tanzania, the licensed chemist programme in Ghana, and the PharmAccess programme across Africa. Licensing has great potential to help improve and upgrade the quality of small, fragmented shops to serve the poor.
- **The relationship between MBSs and government services.** As the Living Goods example in Chapter 4 suggests, even an MBS that does not fully cover its costs can be cost-effective and operate at large scale as compared to government programmes. Research is needed to verify and document substitution effects.

- **Guarantees.** While guarantees of commitments to enable financial institutions to lend to SMEs (whether MBSs or otherwise) are common, information about the effectiveness of these arrangements is scarce.

- **BoP Segments.** Public and private entities — and academic researchers — too commonly view the BoP as a monolith. More granular understanding of BoP buying and selling behaviours, occasions, and segments is needed for more enterprises to succeed with inclusive business models.

Implications for Governments and Policy Makers

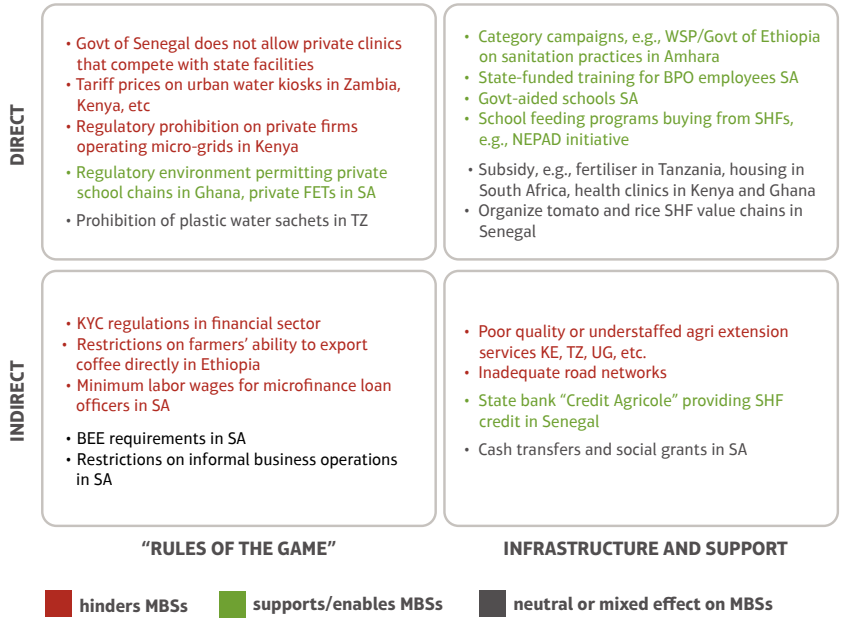
Government sets the stage for MBSs and defines the rules under which they operate. In most countries, government also occupies the best position to help or hinder a given initiative achieve scale. For example, government may facilitate MBSs through such initiatives as well run extension programmes in agriculture and healthcare that upgrade skill and stimulate demand; conversely, MBSs may be impeded by public provision of services or subsidies that skew incentives and crowd out alternatives.[140]

Figure 6.7 illustrates government effects on MBSs in greater detail, highlighting in colour positive, negative, and neutral impacts. The research team expected to find significant adverse effects but was surprised and encouraged to note the extent that government facilitates MBS growth.

Across the nine SSA countries investigated in this report, of course, these effects differ though a few broad-brush patterns are clear. In South Africa and Senegal, for example, government is more active both in promoting and inhibiting MBSs. Extreme variation at a country and sector level is more common, however. Water kiosk regulations and tariffs differ significantly in Zambia and Kenya, for example[141].

Governments intervene both for and against MBSs. In some cases—especially health and to a lesser extent education and water—SSA governments typically provide services free or subsidised, which poses a high barrier to market-based alternatives. At the same time, provision of a service via a market-based approach raises important questions about the best way to provide service affordably, sustainably, at scale, and at high quality—goals that may not be attained by either government providers or market-based solutions by themselves.

Figure 6.7: Examples of Government's Role in Supporting or Hindering MBSs

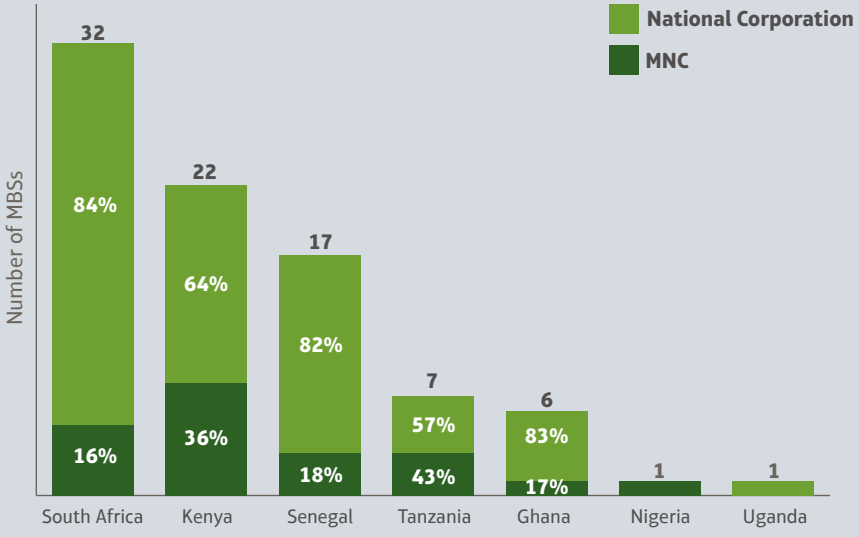


Governments interested in encouraging MBSs have many levers at their disposal to pull. Obvious ones involve increasing the urgency behind existing initiatives to build and improve physical infrastructure, especially in transport, and, similarly, expanding and upgrading agricultural extension services, perhaps using paraskilled agents and mobile-enabled platforms. Governments can also gather and publish

THE SOUTH AFRICAN STATE

In South Africa the state has assumed a specific, and distinct, role in increasing corporate engagement with the BoP via the institution of "Black Economic Empowerment" (BEE) regulation, which in November 2010 became "Broad-Based Black Economic Empowerment". Among multiple other things, the regulation requires companies to conduct business in a more inclusive fashion. Of the countries studied for this report, South Africa has by far the most corporate initiatives aimed at the BoP, but this may be a function not only of regulation but also of much stronger private sector than elsewhere in SSA. As to whether regulation has an effect on poverty, the evidence is inconclusive. The South African initiatives in the Monitor sample are a mixed bag of spectacular successes and sub-scale efforts with little chance of ever making a meaningful impact. However, the BEE legislation has certainly caused companies to increase involvement in low-income markets—and maybe this is a good enough start.

South Africa Had the Most Corporate Initiatives Targeting the BoP



Note: n=86; "Corporation" includes both National Corporations and MNCs
Source: Monitor sample of 439 MBSs in Africa

more information about the BoP — income segments, locations, educational levels, occupations, and other pertinent data — to help other constituencies target assistance more effectively.

Here are additional policies and actions to promote MBSs in SSA. To create a more hospitable environment, governments may:

- **Develop regulatory frameworks that allow for both public and private provision of goods and services.** In several instances — such as primary education in Ghana and vocational training in South Africa — governments permit private operators to offer services beyond those the state provides. MBSs also offer innovation, affordability, and access to segments of the poor that are not well served by oversubscribed state services. Mali's regulatory framework allows NGOs and other groups to partner with community clinics to allow for additional innovation, as Pesinet has begun to show.

- **Invest in aggregation platforms.** Groups of low-income suppliers or customers become economically viable trading partners. Cooperatives and SACCOs in many (though not all) African countries tend to be weaker than their counterparts elsewhere. Many MBSs have undertaken the cost of assembling their own aggregation — MAFA in Ghana for farmers and adjacent plots of land; Porini Camps in Kenya, which arranges leasing of rural land from smallholder owners into combined areas to be used by tourism operators; or SHOP-NET in South Africa, which aggregates the purchasing power of more than a thousand spaza shop owners. Government can do more to facilitate the formation of such groups and create more viable economic entities.

- **Raise awareness — but in conjunction with specific businesses.** Governments have long supported public education campaigns to promote clean drinking water, use of condoms, improved cook stoves, or better sanitation. Some efforts have been successful, as the Gyapa example in Ghana shows. In other instances, however, the needle has not moved. Governments are growing more sophisticated in the use of behaviour change communication (BCC), which can be tied to MBS efforts to introduce a service. This has occurred in Tanzania where WSP's rural sanitation campaign is linked to the provision of latrines by local *fundis* (masons). The results of this initiative are not yet known but MBSs, when accompanied by a government-funded BCC campaign, often increase their odds of success.

- **Provide "smart subsidies" to users of MBS products and services.** In some cases, smart subsidies take the form of direct payments to improve affordability to users of a service (e.g., bursaries for FET students in South Africa), or sometimes to a provider to enable it to offer a service to a lower income segment (e.g., payments to certain kinds of private schools as in India or South Africa). In other cases this may consist of capital costs for enterprises — as described in water and energy in Chapter 4 — which can operate on a breakeven basis but cannot recover capital costs. A successful example is South Africa's Monyetla programme, which provides extensive training subsidies to cover the costs of training high school graduates from urban South Africa to make them employable for BPO companies like Genpact and TCS.

- **Use purchasing power to create anchor demand.** Governments, whether via school feeding programmes, concessions, or the sheer number of functions that it conducts, has vast purchasing power which can be used to generate anchor demand for MBSs. Sometimes this may take the form of concessions, as in South African sanitation, where it has been key to scaling up both Tedcor and Silulumanzi. And in distributing its social grants via ATMs on the Absa Bank network, government transactions created opportunities for recipients to engage with the formal banking network. In other cases, government purchasing power may manifest as capital commitments or BOT arrangements, as are being negotiated in Kenya between Ikotoilet and government buyers in cities. The case of Pesinet offers an interesting twist: government clinics sell services at a volume discount to Pesinet for resale to BoP mothers in Bamako.

In sum, governments, donors, impact investors, large corporations, and individual entrepreneurs each have an interest, and an ability to help, in the campaign against global poverty. Market-based solutions are not a panacea, but they can deliver real progress, as many examples in this report indicate. Working together, and in concert with traditional approaches to poverty alleviation, these constituencies can help turn the promise of MBSs into progress in overcoming an age-old social challenge in many parts of Africa.

Appendix: About the Study

THIS REPORT is based on a sixteen-month research project that was sponsored by twelve organisations interested in new approaches to economic development and social change on the African continent: The Bill & Melinda Gates Foundation, which provided anchor funding and project design guidance; Business Trust of South Africa and the Swiss State Secretariat for Economic Affairs (SECO), which provided additional major contributions; and Rockefeller Foundation, the Global Impact Investing Network (GIIN), Omidyar Network, USAID via its SHOPS Programme (Strengthening Health Outcomes through the Private Sector), IFC, World Bank, World Bank Institute, Actis, and FMO (Netherlands Development Finance Company). We are grateful to them for their support throughout the course of the project.

The study builds on research in India by Monitor's Inclusive Markets practice, presented in our 2009 report *Emerging Markets, Emerging Models*. That research was driven by the premise that "the next microfinance is out there" and sought to identify other commercially sustainable market-based approaches that could help to address the pressing issues of poverty and development. The study found that when MBSs work, they have enormous potential to improve the lives and livelihoods of low-income people.

Emerging Markets, Emerging Models included a number of examples from around the world showing that similar approaches could work in different contexts. This begged the question of whether these were isolated cases or truly part of a larger trend. A related question was whether different business models effective in engaging the poor could be found elsewhere. Following this, the team turned its sights to another huge potential low-income market: sub-Saharan Africa (SSA).

WEIGHING BABIES IN MALI

Market-based solutions like Pesinet are pioneering innovative ways to deliver and price low cost, high quality services such as preventative health care and monitoring.

The team set out with the primary objectives to:

- Provide an evidence-based view of commercially viable business models that provide, or have potential to provide, social benefit to the poor at scale;
- Identify barriers to scale and viability that can be overcome;
- Catalyse practical and real action with relevant players in the space based on the evidence we found.

Country Coverage

Given the heterogeneity of SSA, we developed a targeted approach, focusing on countries where there was already evidence of activities targeting the poor. If viable MBSs could not be found in these countries, it seemed unlikely that many would exist in more challenging environments. Moreover, we selected these countries to

allow comparability across different dimensions: South Africa, for example, enabled us to take a closer look at the influence of a well functioning state, while by exploring Senegal we could assess potential differences between Anglophone and Francophone countries. The final selection included Ghana, Kenya, Senegal, South Africa and Tanzania. The team also made forays into Uganda, Nigeria, Mali and Zambia.

While the India study focused on enterprises that engaged the poor as customers or suppliers, research in Africa also examined their role as distributors or sales agents. The team looked at more than a dozen sectors including agriculture, education, health, housing, financial services, water, and sanitation, and also considered legal forms ranging from initiatives embedded in government entities or NGOs, to programmes run by large corporations, to small and medium enterprises engaging the BoP.

The study followed a five-phase schedule that began with a mapping exercise during which the team profiled and analysed 407 enterprises to identify lessons and insights, based on primary conversations usually held in country. In later phases another 32 initiatives were added to the overall dataset. The team took an empirical approach to understanding African MBSs, drawing on primary research through conversations with more than 300 experts; in-country referrals to build this bottom-up dataset; and secondary research from academics, practitioners, donors, and consultants.

We interviewed a mix of well-known and celebrated examples of BoP engagement (M-PESA; Kilicafe; Wizzit; Equity Bank) and lesser known initiatives, often with innovative models, such as Tedcor, an aggregator of small entrepreneurs and provider of back-end business support to deliver municipal waste management services in South Africa; Juhudi Kilimo, which provides small asset financing in Kenya; and SOCAS, a government-coordinated, end-to-end tomato value chain programme in Senegal. While many of the enterprises investigated employed interesting business models, they did not always meet the criteria for a market-based solution (see Chapter 2). Some were undoubtedly socially beneficial, but relied on

permanent donor support and would not otherwise be commercially viable. Others were not actually serving the poor.

From this dataset, relevant business models, model elements, and compelling themes that merited further analysis surfaced in the second phase of the project. By delving deep into each business model/element, the team aimed to identify the drivers of successful engagement with the poor. The tools were:

- Field visits, during which we conducted 529 customer, producer and distributor interviews both individually and through focus groups
- Supplementary interviews with over 118 management representatives, 23 experts, and five government agents
- Economic analysis of business models to:
  - Unpack revenue and cost components and the interrelationships between different parts of the initiatives
  - Calculate key financial metrics to benchmark against examples of BoP engagement at scale

Because the India research had revealed relatively few large companies engaging with the BoP, the team sought to understand issues with and obstacles to corporate engagement with low-income markets in Africa. The team interviewed 47 companies including national and multinational corporations operating primarily, but not exclusively, in the target countries.[142] Of the companies interviewed, 34 were based in Africa, with the majority headquartered in South Africa, and the remainder based in Europe and North America. Conversations with experts at a number of multilateral institutions, bilateral donors and leading research institutions about their experiences working with corporations bolstered the research and facilitated testing of emerging hypotheses.

The team also interviewed more than 50 impact investors, which boosted understanding of the barriers and incentives to their participation in this space. These conversations helped to create a detailed picture of investment preferences and requirements, which facilitated making recommendations towards encouraging investment in this space.

On the back of assessing more than 400 MBSs and studying six business models in depth, Phase 3 entailed a deliberate analysis of insights generated to distil common themes and lessons on engaging the African poor, as well as cross-cutting obstacles to achieving scale and commercial viability. Lessons and implications for the range of actors in this field were then articulated and practical steps to move the field forward were developed and tested with project sponsors.

Considering the project mandate to catalyse practical and real action, the fourth phase focused on disseminating study findings by hosting and participating in multiple targeted events across Africa, and in Washington, Bern and London. These sessions, held with over 200 people in all, allowed the team to share and test research findings with a subset of the community of interest—MBSs themselves, corporations, donors, policy-makers and investors—whilst enabling a number of connections to be made (among MBSs, as well as with investors, donors and thought leaders) that allowed sharing of experiences and ongoing building of networks. The team followed up by formally introducing a subset of about 25 MBSs deemed most "investable" to a range of interested impact investors.

In the fifth and final phase, the team continued with endeavours to catalyse MBS activity by working with specific sponsors to develop action plans or "blueprints" to lay out steps to address particular cross-cutting obstacles. During this exercise the team identified more than 30 potential blueprints to tackle a range of barriers from impact investing to agent training and churn. From this set, the Bill & Melinda Gates

Foundation and SECO collaborated with the team to consider potential solutions for the disconnects identified between sources of (impact) investment capital and investment opportunities found through the study. Work in the area of catalyzing more and better impact investing is ongoing as of this writing.

In conclusion, based on the connections between MBSs and investors, the tabled solutions for impact investment, and ongoing dialogue with project sponsors about their future focus and programme activity, this study has already evolved into something more that just a report. The team hopes that this contribution to the evidence base on market-based solutions will continue to inspire action and innovation by those keen to improve the lives of the poor.

Summary of In-Depth/Field-Based MBS Case Studies

To form the detailed findings about business models in Phase 2, the team conducted site visits and more in-depth interviews with a number of MBSs using the same or similar business models. Those entities, which form the basis of the analysis in Chapters 3 and 4, are listed below:

CH. 3 - SMALLHOLDER FARMER AGGREGATION		
AFRO-KAI LIMITED	Uganda	Aggregates small farmers across all regions of Uganda through the trade, collection, processing and transporting of sorghum, barley and maize, with supply of barley and sorghum being sold onwards to Nile Breweries and other buyers
LESIOLO GRAIN HANDLERS	Kenya	Largest and most sophisticated grain handling and storage operation in the grain-rich region of Nakuru, dealing primarily with smallholder farmers and offering both warehousing and trade in barley, wheat, and maize, and selling on to buyers like East Africa Breweries, large millers, national cereal board, and the open market
LUGARI CEREAL FARMERS GROWERS GROUP	Kenya	Agrodealer in the CNFA network who arranges transport for farmers of his association, and engages in both selling inputs and buying outputs from local farmers

In-depth case studies Additional examples

MASARA N'ARZIKI FARMERS ASSOCIATION (MAFA)	Ghana	An industrial maize aggregation scheme initiated by Yara and Wienco, consisting of the provision of fertilisers, hybrid seeds, agri-chemicals, and agronomical advisory and training services on credit to over 2,000 farmers in Northern regions of Ghana. MAFA buys from small farmers to create a demand for output sales and guarantee a market for their produce, and the maize is then sold on to industrial processors (e.g., Nestle) and large brokers
SAVANNA FARMERS MARKETING COMPANY	Ghana	Marketing firm owned by the Association of Church Development Projects which acts as buyer and broker for cash and staple crops (soybeans, groundnuts, cashew and sorghum) and provides market access and attractive prices for over 12,000 farmers in the Northern, Upper East and West regions of Ghana. SFMC sells directly on to Ghana Nuts, Guinness, and others
EXPORT TRADING COMPANY LIMITED	Tanzania	An East African trader and exporter who has recently developed networks for farm gate collection and aggregation of produce from smallholder and other farmers
KILIMSULI AGROVET	Tanzania	Agrodealer in CNFA network who buys outputs and conducts farm gate collection, in addition to selling agricultural inputs
CH. 3 - DISTRIBUTION AND SALES THROUGH IMPROVED INFORMAL SHOPS		
BAYER GREEN WORLD	Kenya	Bayer in Kenya began the Green World programme (in partnership with GTZ) to target smallholder farmers with a dedicated line of crop protection products in smaller packs. Bayer identifies existing, informal agrodealers, and trains them to become 'local consultancy centers' for farmers
CNFA	Tanzania	CNFA, funded by donors like AGRA, selects and trains commercial trainers which then work to train and certify agrodealers, disseminating the knowledge provided to them initially by CNFA. Certified agrodealers can then participate in the country's government-sponsored fertiliser voucher scheme and should be able to provide better service to farmers, especially on proper input usage and sales
AGROSEED	Senegal	Distribution of hybrid seeds to independent agrodealers in Senegal at an affordable price
FLASH	South Africa	Mobile money platform for small home shop owners, offering mobile-based credit, savings and transaction functionalities at low or no fees
CH. 3 - PRIVATE VOCATIONAL TRAINING AT THE SEAM IN SOUTH AFRICA		
JEPPE COLLEGE OF COMMERCE AND COMPUTER STUDIES	South Africa	Offering courses in IT, media, tourism, finance and business studies to full- and part-time school leavers/ job seekers across four urban regions
SILULO ULUTHO TECHNOLOGIES	South Africa	Basic computer literacy training offered to those wishing to increase their employability; part of bigger operation that also includes chain of internet cafes and PC sales

In-depth case studies Additional examples

CENTRAL BUSINESS ACADEMY	South Africa	College that specialises in business courses and the provision of learnership opportunities to its base of disabled students
DT NURSING INSTITUTE	South Africa	Specialised nursing college located in Durban, started by two nurses seven years ago , and now serving 300 learners each year
EDU-FIX TRAINING INSTITUTE	South Africa	Located in Mafikeng, this college offers IT, human resources, tourism and design qualifications, and helps students to attain their driver's licenses
CH. 4 - MOBILE-ENABLED BUSINESS MODELS FOR NON-FINANCIAL SERVICES		
KENCALL/ FARMERS HELP LINE ('HUDUMA KWA WAKULIMA')	Kenya	Offers agricultural information, advice and support over the phone to SHFs on land preparation, planting, pest management, harvesting, post harvest and marketing of produce including climate and weather. Farmers call help line and are called back to save airtime charges.
NAFIS	Kenya	Provides agricultural information via an interactive voice response (IVR) system. The service is intended to complement existing extension service agents to provide useful information on dealing with specific agricultural issues
KILIMO SALAMA	Kenya	Offers affordable insurance on farming inputs (seeds, chemicals and fertiliser) against drought and excess rain. The service costs the farmer 5% of the total input price. Registration is through a mobile-based point of sale system at an agrodealer, and payment is made using the M-PESA platform
PESINET	Mali	NGO providing early detection and treatment of childhood diseases via home health monitoring and remote diagnosis by community health workers attached to community healthcare centres
SMS FOR LIFE	Tanzania	Provides weekly status reports on the stock availability of malaria drugs at health facilities within a country. Information is collected through SMSs from health workers' handsets and is aggregated at a central server, with the aim of improving access and availability
COMMUNITY KNOWLEDGE WORKER INITIATIVE (GRAMEEN FOUNDATION)	Uganda	Uses individuals in rural communities as conduits for agri-information from various sources
DRUMNET	Kenya	Offers a low-cost, real-time platform for facilitating interactions between value chain partners using mobile technology. The service is primarily intended to increase linkages between farmers and buyers through contract farming agreements with a guaranteed price
D-TREE INTERNATIONAL	Tanzania	Offers scheduling software that enables community healthcare workers to manage follow-ups and diagnostic decision trees for more accurate diagnosis and appropriate treatment
ESOKO	Ghana	Provides current market data via text within agriculture and trade sectors and offers a platform to facilitate buying and selling
GOOGLE SUITE	Uganda	Text-based marketplace where consumers can buy and sell a range of items

In-depth case studies Additional examples

GOOGLE TIPS & GOOGLE SMS SEARCH	Uganda	Google Tips: Allows user to search for health and agricultural information via text message; Google SMS Search: enables a user to search Google via text message
MOTECH (GRAMEEN FOUNDATION)	Ghana	Provides healthcare information to pregnant women, encouraging antenatal care
PROJECT MASILULEKE (PRAEKELT FOUNDATION)	South Africa	Uses 'Please Call Me' messages to disseminate HIV/ AIDS awareness messaging
CH. 4 - LAST-MILE INFRASTRUCTURE: MICRO-GRID ELECTRICITY GENERATION		
KATHAMBA PICO-HYDRO	Kenya	Community-managed micro-grid connecting 65 households; the initiative uses a small 1.1kW generator powered by a local stream, and has been running since 1992
PROJECT ERSEN	Senegal	Donor-funded government initiative employing private concessions to electrify rural villages of fewer than 1,000 residents through solar-diesel hybrid systems
NGOMA DIESEL MICRO-GRID	Uganda	55kW generator supplying 165 connections in Luwero
NJOMBE CATHOLIC DIOCESE HYDRO PROJECT	Tanzania	Set of stations ranging from 75kW to 150kW, that supplies more than 1,100 households in Lugarawa, Mavanga, and Matembwe
THIMA PICO-HYDRO	Kenya	2.3kW stations supplying 125 households in Thima
CH. 4 - LAST-MILE INFRASTRUCTURE: URBAN WATER KIOSKS		
KAFUBU WATER AND SEWERAGE COMPAY	Zambia	Publicly-owned water company providing water and sewerage services in Ndola on an exclusive concession basis. For the urban poor, it delivers water services to ~8,400 peri-urban residents through networks of standpipes and kiosks
NANYUKI WATER AND SEWERAGE COMPAY (NAWASCO)	Kenya	Publicly-owned water company providing water and sewerage services on a concession basis. In their peri-urban unit, they currently provide treated water from a local river through informal and formal kiosks
LUSAKA CITY WATER COMPANY	Zambia	416 water company kiosks in Lusaka
NAIROBI CITY WATER AND SEWERAGE COMPANY	Kenya	6 water company kiosks in Nairobi (24 under construction)
NAIVASHA WATER COMPANY LIMITED	Kenya	15 water company kiosks in Naivasha (5 under construction)
NKANA WATER AND SEWERAGE COMPANY	Zambia	115 water company kiosks in Kitwe
USHIRIKA WA USAFI	Kenya	4 community-run kiosks in Laini Saba-Kibera

In-depth case studies Additional examples

CH. 4 - DISTRIBUTION THROUGH DEDICATED DIRECT SALES FORCES		
HEALTHKEEPERS NETWORK	Ghana	Sale of a basket of health products through a network of female sales agents who also provide advice on health-related topics
LIVING GOODS	Uganda	Network of local women sales agents that work part time to bring important health products to the doorstep of BoP consumers. Agents deliver important health education messages to rural customers in the villages, while also offering health products which are often not available locally at low prices
TOYOLA ENERGY	Ghana	Manufactures and distributes improved efficiency cook stoves using a dedicated network of door-to-door sales agents
SAFARICOM/ MTN/ VODACOM AIRTIME SALES AGENTS	Multiple Countries	Pay-as-You-Go airtime sales through vendors; one of the most omnipresent examples of informal distribution and sales in developing nations

In-depth case studies Additional examples

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2. [Swiss] State Secretariat for Economic Affairs (SECO)
3. Business Trust of South Africa
4. Rockefeller Foundation
5. Actis Acts
6. FMO (Netherlands Development Finance Company)
7. Global Impact Investing Network
8. International Finance Corporation (IFC)
9. Omidyar Network
10. USAID via its SHOPS (Strengthening Health Outcomes through the Private Sector) Project
11. World Bank
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As always, however, full responsibility for the content, including any errors, is strictly attributable to the authors and to Monitor Group.

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Finally, we note that all the photos in this report were taken by Monitor team members in their field work and acknowledge not just their analytic but their photographic talents and contributions.

Contributing Monitor Team Members

Almost 40 people worked on this project at some point in the process, logging over 620 days on the road in nine countries to generate the data and insights.

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Endnotes

1. Ashish Karamchandani, Michael Kubzansky, and Paul Frandano, *Emerging Markets, Emerging Models: Market-Based Solutions to the Challenges of Global Poverty* (Cambridge, MA: Monitor Group, 2009). The report is downloadable at http://www.mim.monitor.com/downloads/emergingmarkets_full.pdf.
2. Monitor Group wishes to recognise the generous support, both financial and intellectual, of the sponsors of this report, a group of entities interested in advancing knowledge of market-based solutions and the cosystems in which they flourish. This group is comprised of: The Bill & Melinda Gates Foundation, hich provided anchor funding and project design guidance; Business Trust of South Africa and the Swiss State Secretariat for Economic Affairs (SECO), which provided additional major contributions; and also includes Rockefeller Foundation, the Global Impact Investing Network (GIIN), Omidyar Network, USAID via its HOPS Programme (Strengthening Health Outcomes through the Private Sector), IFC, World Bank, World Bank Institute, Actis, and FMO (Netherlands Development Finance Company), all of whom provided significant financial support. Note that the research focused mainly on enterprises that served the $2/day - $3/day income segments and below in Africa, so findings and conclusions are heavily influenced by this choice. The research naturally covered efforts in adjacent (i.e., higher) income segments, however, these enterprises were not the primary focus of the search nor the analysis.
3. Shaohua Chen and Martin Ravallion, *The Developing World Is Poorer Than We Thought, But No Less Successful in the Fight against Poverty*, World Bank Policy Research Working Paper 4703 (revised August 2009), http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2010/01/21/000158349_20100121133109/Rendered/PDF/WPS4703.pdf (accessed 11 March 2011). Data indicates that the number of poor in Africa (using the $2/day measure) has risen each year of measurement, although there has been a slight decrease in the $2 per day poverty rate from 74 per cent in 1981 (294 million people) to 73 per cent in 2005 (557 million people).
4. On the infrastructure challenge, see Africa Progress Panel, *Driving Progress: The Transformative Power of Partnerships*, Annual Report for 2011, p. 14. Citing a World Bank study, this report indicates a shortfall in infrastructure investment of $93 billion per year on the continent.
5. The set of 439 enterprises includes some also serving higher-income segments of the bottom of the pyramid, and probably a few lower-income as well. The major findings and conclusions of this report are built around the circumstances and characteristics of the $2-a-day segment.
6. This conclusion presumes minimum standards for governance, stability, safety, and economic performance; Monitor did not conduct research in "failed states" such as Zimbabwe or the Democratic Republic of the Congo.
7. CGAP's 2010 Annual Report (p. 37) estimates this figure at 88 per cent, primarily used to refinance retail lending.
8. Government schools in Ghana tend to be inexpensive compared to other countries in Africa due to more government subsidy, but fees tend to be higher in urban areas. School fee data from Abolishing School Fees in Africa, Unicef and World Bank, 2009, p101-02.
9. Karamchandani, et al, *Emerging Markets, Emerging Models*.
10. Chen and Ravallion, *The Developing World Is Poorer Than We Thought*.
11. The other two countries are Haiti and Afghanistan.
12. Most of these criticisms, and others, can be found in William Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good* (New York: Penguin, 2006). For a lively written exchange between Easterly and Steven Radelet, senior fellow at the Center for Global Development and former United States Department of the Treasury Deputy Assistant Secretary of the for Africa, the Middle East, and Asia, on the pros and cons of ODA programmes, see "Online Debate: The Effectiveness of Foreign Aid", *Council on Foreign Relations*, http://www.cfr.org/foreign-aid/effectiveness-foreign-aid/p12077 (accessed 9 March 2011).
13. International Monetary Fund, *Global Monitoring Report 2010: The MDGs after the Crisis*, (Washington D.C.: IMF, 2010), pp. 128-129 http://www.imf.org/external/pubs/ft/gmr/2010/eng/gmr.pdf (accessed 9 March 2011).
14. Department for International Development, *UK aid: Changing lives, delivering results*, (London: DfID, 2011), https://s3-eu-west-1.amazonaws.com/media.dfid.gov.uk/BAR-MAR-summary-document-web.pdf (accessed 9 March 2011).
15. For a discussion of the calculation of "poverty lines" (usually delineated at incomes of $1.25 per day (PPP) and $2.00 per day (PPP)) see Chen and Ravallion, *The Developing World is Poorer than We Thought*.
16. See Daryl Collins, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven, *Portfolios of the Poor: How the World's Poor Live on $2 a Day* (Princeton: Princeton University Press, 2009) for the best account of this phenomenon, based on daily financial diaries of poor people in three countries. See also Tariq Md. Shahriar, "Vulnerability, Poverty, Seasonality, Food Security and Microfinance", Annotated Bibliography Series No. 2, 2007 (Institute of Microfinance: Dhaka). Available at http://www.inm.org.bd/document/bibliography_series2.pdf (accessed 2 May 2011).

17. According to USAID SHOPS, over 60 per cent of the bottom quintile in Nigeria, and over 50 per cent of the bottom quintile in Uganda receives care from private for-profit providers of modern medicine (see www.shopsproject.org).
18. The International Labour Organization defines "informal sector enterprises" as "private, unincorporated enterprises; all or at least some of the goods or services produced are meant for sale or barter; their size in terms of employment is below a certain threshold to be determined according to national circumstances, and/or they are not registered under specific forms of national legislation; they are engaged in non-agricultural activities". See Ralf Hussmanns, Statistical definition of informal employment: Guidelines endorsed by the Seventeenth International Conference of Labour Statisticians (2003), International Labour Organization, http://www.ilo.org/public/english/bureau/stat/download/papers/def.pdf (accessed 11 March 2011).
19. The definition of smallholder farmers tend to vary by country and study, but are commonly defined as farmers with less than 2 hectares of land (Geoffredy Livingston, Steven Schonberger, and Sara Delaney, "Sub-Saharan Africa: The state of smallholders in agriculture", paper presented at the IFAD Conference on New Directions for Smallholder Agriculture 24-25 January, 2011, available online at: http://www.ifad.org/events/agriculture/doc/papers/livingston.pdf, accessed (29 April 2011), as well as Adeleke Salami, Abdul B. Kamara, and Zuzana Brixiova, "Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities", African Development Bank, Working Paper, April 2010, available online at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/WORKING%20105%20%20PDF%20d.pdf, (accessed 29 April 2011). In Ghana, the Monitor team spoke with farmers of larger landholdings who we will refer to as SHFs, due to the nature of their production and market access (e.g. cost concerns, interaction with intermediaries, training and TA needs) being more comparable to the traditional smallholder farmer than to commercial farmers, or independent farmers on larger landholdings in East Africa. .
20. According to the Bill and Melinda Gates Foundation, "The soils of sub-Saharan Africa are the most degraded in the world. Farmers in the region use about 10 times less fertiliser than farmers elsewhere. Together, these factors contribute to crop yields that are two to five times lower than the global average". See http://www.gatesfoundation.org/learning/Pages/grantee-agra-soil-health-programme-farms-africa.aspx (accessed 26 April 2011).
21. World Bank, *World Development Report 2008: Agriculture for Development*, (Washington, D.C.: World Bank), p. 42.
22. President Obama committed a minimum of $3.5B to the "Feed the Future" effort in 2009, with the goal of catalysing multiples of that from other funding sources. See http://www.feedthefuture.gov/gh_factsheet.html (accessed 22 April 2011).
23. USAID funded several projects to develop the Rwanda coffee market, including PEARL, which involved activities from organizing cooperatives to farmer training to setting up coffee washing stations to providing USAID-guaranteed loans to various value chain players. See http://pdf.usaid.gov/pdf_docs/PNADG793.pdf for a fuller treatment and early evaluation of the various value chain projects.
24. University of Michigan published a recent review of value chain projects, and most value chain projects publish their own self-evaluations. See http://www.microlinks.org/ev02.php?ID=46504_201&ID2=DO_TOPIC (accessed 27 April 2011).
25. ADM 2010 Annual Report. See http://www.adm.com/en-US/investors/shareholder_reports/2010AR/Financial_Highlights/Pages/default.aspx (accessed 18 April 2011).
26. The sample size is far too small to draw any conclusive inferences. Moreover, each aggregator operates in a thin margin, highly volatile environment, so it becomes even more difficult to make attributions about effect on profitability
27. One illustration of this challenge is in the area of farm productivity inputs, which are risky but can have huge productivity returns. African farmers use, on average, only 9kg of fertiliser per hectare, compared to their counterparts in India, who use on average, 89.8 (subsidised) kg/hectare. A number of factors contribute to this low level of usage, but one of them is the difficulty of getting distribution and sales (and, often, credit) right. A number of companies, from Yara to Syngenta, to more local ones like Athi River Mining and Orion's Kilimo Faida in Kenya, are working to address this, but progress is slow and complicated (sometimes assisted by subsidy regimes in countries such as Tanzania and Malawi).
28. It is important to note here that when we refer in this report to "informal" channels, we are in fact referring to a broad range of stores and kiosks that are typically fragmented, unorganized, scattered, and operate largely in a cash economy. This is distinct from their legal status as formal or informal. Some may be registered and formal, and others may operate outside the formal business registration. This report in no way suggests that there is advantage to be conveyed by working with informal, unregistered sales outlets; rather, the opposite. Some of the most successful models we examined found ways to work with registered stores, or get stores registered and formalized. By advocating an approach that works with "informal channels" we are suggesting that there are successful models whereby firms can and should work with these small, fragmented outlets to create "virtual" owned channels that look similar to more typical formal channels where they are accustomed to having more control.

29. Karamchandani, et al., *Emerging Markets, Emerging Models*, p. 105.
30. Erik Simanis provides more background on market creation vs. market entry decisions and the implications for product selection, development and margins in Chapter 4 in Ted London and Stuart L. Hart, eds., *Next Generation Business Strategies for the Base of the Pyramid: New Approaches for Building Mutual Value* (London: FT Press, 2011).
31. This is similar to the recognition for a division of labour, even if across different functions, in Coca-Cola's MDC channel arrangements, described further in Chapter 5 below.
32. This is not universally so, and financial services offers a notable exception. This report documents elsewhere the role of private insurers like Sanlam and Hollard in addressing the low income funeral cover market. And newer banks like Capitec and African Bank have emerged in the last decade to address primarily the lowest end of the formally employed sector. While these are typically LSM5 or LSM6 customers, so not formally the BoP, they are nonetheless a market that had been traditionally ignored by the "Big Four" commercial banks. While the new entrants have not moved fully downmarket, there is undoubtedly more competition in their target segments than prior to their entry.
33. According to the Annual Review of Small Business in South Africa 2005-2007 (Final draft August 2008), " 40 per cent of small firms report constraints on growth as a result of the regulatory burden from the state. See http://www.thedti.gov.za/publications/Annual_Review.pdf pp.48-49 (accessed 29 April 2011).
34. Public and private Further Education and Training in South Africa: a comparative analysis of the quantitative evidence, Salim Akoojee and Simon McGrath, South African Journal of Education, Vol 27(2)209–222, available online at: http://www.ajol.info/index.php/saje/article/viewFile/44138/27653 (accessed 27 April 2011). Newer reports suggest that the number of students in private colleges could now be as high as 1,000,000.
35. "FET colleges 'need radical overhaul'", BuaNews, 6 September 2010, http://www.southafrica.info/about/education/fetcollege-060910.htm (accessed 7 March 2011).
36. Department of Education, Education Statistics in South Africa 2008, March 2010, p. 23, http://www.education.gov.za/LinkClick.aspx?fileticket=zLnOddukw per cent2B4 per cent3D&tabid=462&mid=1326 (accessed 7 March 2011).
37. CBA is SETA/government funded and learners pay nothing. Data has been included for comparison purposes.
38. National Qualifications Framework.
39. Interviews with several South African financial sector firms suggested to us that this is somewhat analogous to the relatively benign regulatory environment that spawned some of the innovation in the financial services space, which thereby allowed companies like Capitec, African Bank, and Blue Financial to begin to effectively serve the lowest end of the formal market at scale.
40. For the field to cement its credibility (vis-à-vis unregistered "fly by night" operators) and establish evidence of impact, we believe that some form of tracking of such placement figures more formally will be essential. FETs should find ways to do this voluntarily before the state makes it a regulated requirement, as this transparency will help improve performance and inform student decisions on whether to attend.
41. Statistics South Africa, Quarterly Labour Force Survey: Quarter 4 (October to December), 2010 Press Statement, 8 February 2011, http://www.statssa.gov.za/news_archive/press_statements/PressStatement_QLFS_4th_quarter2010.pdf (accessed 7 March 2011).
42. According to IFC, in 2008, Anhanguera "provided scholarships to 108,735 students in partnership with federal, state, and local governments. On average, these scholarships covered 23 per cent of student fees; 27,677 covered upwards of 50 per cent of fees and 8,757 covered 100 per cent. These scholarships are valued at R$134.7 million. AESA students also have access to market rate loans offered by a private Brazilian bank". – see http://www.ifc.org/ifcext/che.nsf/AttachmentsByTitle/2010CaseStudyAnhanguera/$FILE/AnhangueraCsStdy.pdf (accessed 27 April 2011).
43. International Telecommunication Union, http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom.html (accessed 2 May 2011).
44. International Telecommunication Union, Mobile Cellular Subscriptions 00-09 (accessed 2 May 2011) and Trading Economics, http://www.tradingeconomics.com/tanzania/improved-sanitation-facilities-percent-of-population-with-access-wb-data.html (accessed 21 February 2011).
45. Part of this can be explained simply by timing – mobile applications and penetration rates have improved substantially even since 2008. But one should not underestimate the power of leading success stories like M-PESA, or of regulatory environments that are conducive.
46. Thompson Reuters, Google, Nokia, Syngenta, and other MNCs have all introduced mobile-based applications for development in recent years.
47. For instance, Google generates ~96 per cent of its revenues from advertising, not from user fees or transactions .

48. In our survey, younger users were more comfortable with SMS-based or data-based services, which require better literacy.
49. This finding holds true in settings from Africa to Asia – Dialog Telecom in Sri Lanka has created an explicit role for an "infomediary" in providing m-enabled services to the BoP.
50. Vivien Foster, "Africa Infrastructure Country Diagnostic", in *Overhauling the Engine of Growth: Infrastructure in Africa*, Executive Summary (World Bank, Washington D.C.: 2008).
51. A 2000 World Bank/UNDP study on rural electrification programmes placed the average cost of grid extension at between $8000–10,000/km, rising to around $22,000 in difficult terrains.
Source: Practical Action http://practicalaction.org/practicalanswers/product_info.php?products_id=293, (accessed 21 February 2011).
52. S. Banerjee, H. Skilling, V. Foster, C. Briceño-Garmendia, E. Morella, T. Chfadi, "Ebbing Water, Surging Deficits: Urban Water Supply in Sub-Saharan Africa", Africa Infrastructure Country Diagnostic, Background Paper 12 (Phase I). https://www.infrastructureafrica.org/aicd/system/files/BP12_Water_sect_maintxt_new.pdf, (accessed 11 February 2011).
53. For example Monitor investigated at D-light's solar lamps in Tanzania and water sachet manufacturers like Voltic in Ghana and Bara Jii in Senegal.
54. The research team excluded consumer product models not only for this reason, but also because they have been adequately studied and have more in common with some of the other models (shared/informal channels and agent networks) than with utility provision.
55. Kenya grants regulatory exemptions to facilities managed by community-based organizations below a certain size. There is a broad range of regulation in each country – within the exemption in Kenya, for instance, CBOs are free to set prices, and need no generation or distribution licenses. In Senegal, in contrast, all aspects are regulated, irrespective of scale, and tariffs are set and regulated by region. This in some ways makes it more predictable for private players to enter, but reduces flexibility for the operators. On the other hand, Senegal also provides capital subsidies.
56. Monitor interviews with consumers in Kenya, Senegal and Tanzania.
57. International Finance Corporation, S*afe Water for All: Harnessing the Private Sector to Reach the Underserved*, (Washington D.C.: IFC, 2010), 5-8; R. Cardone and C. Fonseca, *Financing and Cost Recovery*, (Delft: IRC, 2003), p. 11.
58. According to the 2011 World Bank Global Monitoring Report, Benin, Guinea, and Uganda are also on track to meet the goal by 2015. All other SSA countries are not. See http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALMONITOR/EXTGLOMONREP2011/0,,contentMDK:22885534~pagePK:64168445~piPK:64168309~theSitePK:7856232,00.html (accessed 27 April 2011).
59. Karamchandani, et al, *Emerging Markets, Emerging Models*, pp. 40-46.
60. Water companies are government-regulated urban private utility providers.
61. UfW is water that is usually siphoned from the mains before it reaches the official consumer, often by informal water vendors.
62. Kiosk capital cost varies depending on the distance from the main water grid and the degree of finish and features of the installation. In most cases, urban kiosks required less capital than rural water kiosks seen in India, which typically required $12,000 - $20,000 per installation.
63. Some water companies may be open to delegating responsibilities for peri-urban areas to independent entities under contractual agreements using local government and communities to monitor compliance with performance standards. For example, in Ghana, the government decentralised the water supply, creating the Community Water and Sanitation Authority with a mandate to support community management and implementation of the National Community and Sanitation Programme in small towns and rural areas.
64. We have observed the use of agents in a broad range of sectors, including basic health products (condoms, oral rehydration), durables (cook stoves, solar lanterns), credit (microfinance), mobile airtime, eyeglasses, household water filtration devices etc.
65. Companies like Avon, Natura and Unilever (through Project Shakti in India) have successfully demonstrated the power of creating networks of (often) BoP agents to distribute products in emerging markets: in 2009, Unilever reported that Project Shakti had 45,000 agents responsible for 10-15 per cent of Hindustan Lever Ltd.'s rural sales.
66. Our research in Northern India suggests that even for items as small and basic as condoms, women frequently had to rely on their husbands to make the purchase when they went into larger nearby towns, and that the women frequently do not leave the local village for such purchases.

67. The benchmark case that suggests that some agent networks can indeed succeed in Africa is naturally that of mobile airtime agents, who tie up with one or more mobile operators. They earn about $60 a month, from margins of between five and ten per cent. However, they are typically not dedicated to one entity and will sell multiple SKUs from multiple sources.
68. See Neil Davidson and Paul Leishman, "Building a Network of Mobile Money Agents", GSMA report, http://mmublog.org/wp-content/files_mf/building.pdf (accessed 28 April 2011).
69. There are a range of reasons, beyond training costs and churn, for Health Keepers' current cost recovery rates (see fn 16).
70. Almost every agent with whom we spoke, outside of MFI loan officers, typically had multiple sources of income, and their agent work was a supplement rather than main source of earning.
71. It is worth noting that the HealthKeepers Network lost its funding partner in June 2009 which had substantial impact on its operations and expansion plans. It generally has had less time and resources to develop and test its business model. In addition, it is possible that the low agent retention from 2009 to 2010 reflect only temporary agent dormancy.
72. Although even Toyola recently added solar lanterns to its sales mix.
73. IFC Case Study on Coca-Cola SABCO, http://www.ifc.org/ifcext/advisoryservices.nsf/AttachmentsByTitle/SABCO_Case_Study/$FILE/Coca-Cola+SABCO.pdf (accessed 11 February 2011).
74. Karamchandani, et al, *Emerging Markets, Emerging Models*, p. 10.
75. Sher Verick, *The Impact of Globalization on the Informal Sector in Africa*, Economic Commission for Africa (Addis Ababa, 2006), www.iza.org/conference_files/worldb2006/verick_s872.pdf (accessed 1 February 2011).
76. *Susu* collectors are one of the oldest financial groups in Africa. Based largely in Ghana they provide (for a small fee) an informal means for Ghanaians to securely save and access their own money, and gain limited access to credit. Deposits, often of low but regular value, are usually taken on a daily basis over the course of a month. At the end of this period, the susu collector returns the accumulated savings to the client but keeps one day's savings as commission.
77. Avon margins from http://ycharts.com/companies/AVP/gross_profit_margin (accessed 4 May 2011); Natura margins from http://www.hoovers.com/company/Natura_Cosm%E9ticos_SA/rhkyiff-1-1njg78.html (accessed 4 May 2011).
78. Chart data sourced from: CIA World Factbook; MTN Annual Report 2008 and 2009; MTN Press Release; Safaricom Industry Update 2009; "What are the Economic and Social Impacts of the Mobile Phone Sector in Developing Countries?", Proparco 2009; "Taxation and the Growth of Mobile in East Africa: Making Connections", Deloitte 2008; Vodacom Annual Report 2009; Bharti Airtel Annual Report 2009; Zain Annual Report 2008; Tigo Annual Report 2008; Avon Annual Report 2009; L'Oreal Cosmetics Annual Report 2009; Natura Annual Report 2009; Gyapa figures assume $200k spent on marketing divided over total sales 2002-10, Monitor Analysis.
P&G ad spend as pct of sales, http://www.patabugen.co.uk/sniper/test/download/industry_articles/Advertising%20Age%20-%20P&G%20Rewrites%20Its%20Definition%20of%20Ad%20Spend.pdf (from Advertising Age - accessed 14 May 2011);
Coca-Cola ad spend as pct of sales, http://www.thecoca-colacompany.com/investors/pdfs/form_10K_2006.pdf
Africa ad spend, http://adage.com/datacenter/globalmarketers2010, both accessed 14 May 2011.
79. http://www.westernseedcompany.com/marketing.html (accessed 4 May 2011).
80. http://www.kdairyscp.co.ke/documents/Report_on_Map_Milksheds_with_Potential4Growth_Final.pdf, p. 30 (accessed 4 May 2011).
81. A small but growing literature examines sub-groups within the BoP. World Resources Institute and International Finance Corporation, *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid* (Washington D.C., 2007) painted the portrait along income and regional dimensions. Market research firms, particularly in South Africa, have developed working pictures at the LSM (Living Standards Measure) level, and have begun to focus on LSMs 4 and 5 who are the higher end of the BoP in South Africa (see Analytix for a sample report at http://www.htrends.com/modules.php?op=modload&name=research&file=detail&id=2823729) (accessed 16 May 2011). The South African Advertising Research Foundation has also expanded and updated LSMs in recent years along with AC Nielsen — see http://www.saarf.co.za/LSM/lsms.htm (accessed 16 May 2011).
82. While we observe that this is not impossible to accomplish, the only MBSs we saw that made substantial sales inroads to the lowest income segments were in the water sector, where prices between $0.01 - $0.025/day did not – taken alone – prove to be a major deterrent to success. MBSs that sourced from SHFs also offered the potential to reach deep into lowest income segments of the BoP, but not uniformly.We found this to be fairly typical for maize spot procurement among larger buyers. Many traders, like Export Trading Co. in Tanzania, would only engage SHFs when they had a guaranteed contract for maize procurement in place.
83. It has been well documented that the SHFs themselves often are diversified themselves; many cocoa farmers in West Africa, for instance, crop cocoa and maize simultaneously.

84. We found this to be fairly typical for maize spot procurement among larger buyers. Many traders, like Export Trading Co. in Tanzania, would only engage SHFs when they had a guaranteed contract for maize procurement in place.
85. See forthcoming working paper from Rockefeller Foundation and Monitor Inclusive Markets, "Building the Field of Impact Sourcing", June/July 2011. To be available at www.mim.monitor.com.
86. There are undoubtedly more than three routes to scale, but these are the most frequently observed in Monitor's analysis of the 439 enterprises in SSA.
87. See Karamchandani, et al, *Emerging Markets, Emerging Models,* p. 83 for a more detailed description of FabIndia.
88. In the 1970s, low-tech bucket stoves using less charcoal and wood than those available locally were successfully introduced in Thailand. Following this, Keith Openshaw and Max Kinyanjui introduced the stove to Kenya as the Jiko stove. The stove quickly achieved success in the Kenyan market as well, with penetration rates of over 50 per cent in urban homes and 15 per cent in rural areas. In the absence of indigenous solutions, the stove was also introduced and well-received in Rwanda, Tanzania and Ethiopia. See Daniel Kammen, "Cook stoves for the Developing World", http://kammen.berkeley.edu//cookstoves.html (accessed 5 May 2011).
89. See http://www.mixmarket.org/mfi/country/Uganda for details on MFIs by assets and borrowers in Uganda (accessed 5 May 2011).
90. For example, IFC provides up to $7M of risk participation in local currency financing to budget private schools and vocational training institutions via Trust Bank Ltd in Ghana. This programme was introduced in 2009.
91. There are many free giveaway programmes in Africa. The research team was deliberately searching for fully commercial models, but was repeatedly referred to giveaway models like A to Z Bednets, or Lifestraw, and thus found many without particularly looking for them.
92. "Pricing Health Products", Abdul Latif Jameel Poverty Action Lab (J-PAL), http://www.povertyactionlab.org/policy-lessons/health/pricing-health-products (accessed 24 March 2011).
93. See Karamchandani, et al, *Emerging Markets, Emerging Models*, p. 128.
94. See Fisher's interview with PBS on http://www.pbs.org/newshour/bb/social_issues/july-dec10/kickstart_07-13.html (accessed 5 May 2011).
95. See endnote 92.
96. A to Z produces 29 million LLIN bednets a year at a cost of about $5/each, employing 7,000 local workers, mostly women, in Tanzania. http://www.acumenfund.org/investment/a-to-z-textile-mills.html (accessed 4 May 2011).
97. There were a few notable exceptions. Living Goods in Uganda and Technoserve in Ethiopia have engaged the MIT Poverty Lab to develop impact assessments, and DDD in Kenya (based on work in Cambodia) do significant analysis of their social results. But even at a more basic and less rigorous level – for instance, what is the increase in income for participating farmers, or what is the cost savings to consumers of higher quality healthcare, or what is the effect of access to clean water—data are thin.
98. Collins, et al, *Portfolios of the Poor* remains, in our view, required reading for anyone serious about market-based solutions and serving the poor, and illustrates the volatility and shocks that beset the BoP constantly.
99. See International Fund for Agricultural Development, "The Potential for Scale and Sustainability in Weather Index Insurance", 2010, pp. 34-35, http://www.ifad.org/ruralfinance/pub/weather.pdf (accessed 5 May 2011).
100. Erik Simanis, "Needs Needs Everywhere – But Not a BoP Market to Tap", in London and Hart, *Next Generation Business Strategies for the Base of the Pyramid*, pp. 103-128.
101. There is an emerging literature in the water sector in particular describing low willingness to pay. See Ned Breslin's thought-provoking piece, "Rethinking Hydro-Philanthropy" published by Water for People, at http://support.waterforpeople.org/site/DocServer/Breslin-Rethinking-hydrophilanthropy-012910-web.pdf?docID=1521 (accessed 15 May 2011).
102. Indeed this topic was the focus of a recent G20 competition to find innovative approaches to providing such finance affordably. See also Dalberg Global Development Advisors, *Impact Investing in West Africa* (April 2011), http://www.rockefellerfoundation.org/news/publications/impact-investing-west-africa (accessed 9 May 2011), and World Bank country-level enterprise surveys, available at http://www.enterprisesurveys.org/.
103. Assumed 50 per cent discount on total finance charges related to debt for FY 2009 financials for all enterprises; This assumes interest rate charges of ~10 per cent in Kenya, ~18 per cent in Ghana and ~11 per cent in Uganda; 1 Lugari FY2009 financials adjusted for depreciation costs and finance expenses – a) capital expenditure on tarpaulins and weighing scale depreciated using 10 year straight line method, b) finance charges assumes overdraft debt required in the amount of COGS at 20 per cent interest p.a. for four months; 2 SFMC Full Year 2009 net profits adjusted for total interest expenses due in 4Q 2009 based on management interviews and financial statement; 3 Assumes interest rates are provided at 10 per cent per annum from 20 per cent.

104. In recent years, groups like World Business Council on Sustainable Development (WBCSD), Business Trust in South Africa, and IBLF (International Business Leaders Forum) have been joined by Business Action for Africa (BAA), Business Call to Action (BCtA), Frontier 100 (F100), and others who have explicit goals to harness the power of large corporations to address, at least in part, poverty issues.
105. Prahalad, *The Fortune at the Bottom of the Pyramid*. 2004.
106. Michael E. Porter and Mark R. Kramer, "Creating Shared Value", *Harvard Business Review* (January 2011).
107. For example, Guinness has smallholder sorghum farmers engaged in its supply chain in Cameroon - http://www.aecfafrica.org/index.php?option=com_content&view=article&id=32:guinness-cameroon&catid=31&Itemid=55 (accessed 16 May 2011) Unilever has 11,000 smallholder farmers in a supply chain it set up to procure allanblackia in Africa, and says its objective is 500,000 smallholder suppliers. http://www.unilever.com/sustainability/news/news/unileverwinsawardforAllanblackia.aspx accessed (12 April 2011).
108. In some cases, even within a given firm we observed several different approaches. FNB Bank in South Africa has a very large and successful offering aimed at the middle of the pyramid and segments adjacent called Smart Solutions, which is a significant line business for them. But they have also experimented with a supply chain lending programme to support emerging farmers which has met with more limited demand – see http://web.me.com/reciprocity2/BOP_Lab/Publications_files/FNB09.pdf (accessed 12 April 11) and http://www.mfsa.net/new/public/24_03The_great_unbanked_are_not_so_numerous_copy.pdf (accessed 15 May 2011).
109. Funded with $7.5 million by the Bill & Melinda Gates Foundation, see http://www.thecoca-colacompany.com/press-center/nr_20100120_africa_juice.html (accessed 15 May 2011).
110. See Bill Drayton and Valeria Budinich, "A New Alliance for Global Change", *Harvard Business Review* (September 2010), which advocates partnering with social entrepreneurs in the citizen sector, or Porter and Kramer, *Creating Shared Value*, which discusses the "blurring of for-profit and non-profit" and describes Rainforest Alliance's role in Nespresso's supply chain.
111. IFC and WRI in 2007 estimated the overall BoP market (up to $8/day) as a $5 trillion opportunity, see http://pdf.wri.org/n4b_executive_summary_graphics.pdf (accessed 15 May 2011).
112. For more on this topic, see Ashish Karamchandi, Mike Kubzansky, and Nishant Lalwani, "Is the Bottom of the Pyramid Really for You", *Harvard Business Review* (March 2011).
113. This issue arises most acutely in our survey among financial services firms, which have large IT systems or billing platforms, extensive branch banking footprints, significant installed base of insurance agents, and other regulatory-required overheads. There is always enormous pressure to allocate the costs to new initiatives, stay within the existing branch banking or agent paradigm, and thus layer on costs that may not be sustainable to BoP price points and needs. Standard Bank in South Africa has rolled out its Community Banking initiative that leads with transactional banking and relies not on branches but on using informal spaza shops and others as virtual branch locations in townships. See http://www.brandsandbranding-online.co.za/brandbook2010-11profiles/StandardBank.pdf (accessed 15 April 2011).
114. Coca-Cola's partnership with Technoserve in fruit juice in Uganda is funded by the Bill & Melinda Gates Foundation. Bayer's Green World model had support from GTZ, and famously, DfID's Financial Deepening Challenge Fund supported Safaricom in developing M-PESA. There are other examples of well-aligned donor-corporate partnerships in Africa, for instance, the World Cocoa Foundation's work in improving smallholder cocoa farmer livelihoods which is jointly supported by the Gates Foundation and the major cocoa buyers including Mars, Nestle, Hershey, Cadbury/Kraft, and others (see http://www.worldcocoafoundation.org/who-we-are/members.html for the full set of WCF members).
115. http://www.hivos.nl/english/content/view/full/328 (accessed 15 April 2011).
116. http://web.me.com/reciprocity2/BOP_Lab/Publications_files/Sanlam08.pdf (accessed 15 April 2011).
117. See http://www.nytimes.com/2010/04/24/your-money/24wealth.html (accessed 15 May 2011) and Dalberg, Impact Investing in West Africa, April 2011.
118. Two good recent reports on the topic include those by John Simon at CGD and by JP Morgan and Rockefeller Foundation. See http://www.cgdev.org/content/publications/detail/1424593/, and http://www.jpmorgan.com/pages/jpmorgan/investbk/research/impactinvestments.
119. See footnote immediately above. John Simon's CGD report articulates this well on p3 in the executive summary, see http://www.cgdev.org/content/publications/detail/1424593/, (accessed 15 May 2011).
120. Readers should recall that the companies covered by this report are generally filtered by whether they serve, or aim to serve the $2/day segment or below.

121. Out of the 439 enterprises, only a subset of 143 operate on "investable" for-profit terms and were not large MNCs or national corporates with good access to capital markets. Of the 143, 69 were able to articulate their needs for expansion capital. Of this further subset, the Monitor team then selected 31 of the enterprises for analysis. These 31 were not selected based on a rigorous sampling basis, but more using the judgment of the team as to the most attractive potential investment prospects, and based on making introductions for many of them to impact investors. This judgment, while not scientific in any way, was based on strength of business model, strength of entrepreneur, demonstrated past success, and other factors.
122. http://toniic.com/index.php/ (accessed 15 April 2011).
123. http://www.aecfafrica.org/ (accessed 15 April 2011).
124. CGAP's 2010 Annual Report (p. 37) estimates this figure at 88 per cent, primarily used to refinance retail lending
125. Monitor's analysis of major investment vehicles into microfinance in recent years, while not comprehensive, yielded a similar, and slightly lower, ratio of debt vs. equity funds flowing into microfinance than the CGAP 2010 annual report (see endnote 124).
126. Based on extensive interviews with deal brokers and TA providers on what it takes to provide "deal grooming" and basic TA to SMEs on key issues like governance, financial statements, solving modest strategic issues, etc, we estimated approximately 55 "man days" of effort, provided by locally based and paid staff. This figure could range as high as $75,000 per enterprise — or more — depending on the need and delivery model.
127. http://www.pepfar.gov/documents/organization/138417.pdf (accessed 19 April 2011).
128. See http://cega.berkeley.edu/materials/E2A_Ndanyi—Levy.pdf (accessed 19 April 2011), http://www.povertyactionlab.org/sites/default/files/publications/54_Policy_Briefcase_4.pdf (accessed 19 April 2011). MIT's Poverty Action Lab notes deworming as one of the most cost-effective potential interventions in addressing education and provides compelling, systematic evidence of the results when done in a sustained manner.
129. http://webarchive.nationalarchives.gov.uk/+/http://www.dfid.gov.uk/news/files/mobile-banking.asp (accessed 14 May 2011).
130. See endnote 109 above.
131. For information on guarantees at USAID, see http://www.usaid.gov/our_work/economic_growth_and_trade/development_credit/ ; for AGRA's Standard Bank guarantee details see http://www.agra-alliance.org/section/work/finance. IFC also offers extensive guarantees, for instance to NIB Bank in Ethiopia to participate in smallholder coffee financing http://www.ifc.org/ifcext/spiwebsite1.nsf/projects/A7DAC0868C2F361B8525772300741C5A (all accessed 15 May 2011).
132. IFAD recently surveyed efforts to provide weather risk insurance and other products to smallholders. No programs were larger than 70,000 participants. See http://www.ifad.org/ruralfinance/pub/weather.pdf (accessed 15 May 2011).
133. See http://shopsproject.org/sites/default/files/resources/5361_file_FINAL_FP_Voucher_Innovations.pdf (accessed 20 April 2011) for a considered early evaluation of two voucher programmes in Kenya and Uganda for family planning and reproductive health services. The report opines " Do FP/RH voucher programmes work? Yes but….. Kenya's experience with SM vouchers and Uganda's with STI vouchers shows that vouchers can help increase uptake of SM and STI services. The evidence, however, is less clear in the case of Kenya's FP vouchers. A complex mix of factors is responsible for low uptake of FP vouchers. However, financial barriers are not the main obstacle to FP use, suggesting that an independent FP voucher programme may not be the most appropriate strategy".
134. http://www.unianhanguera.edu.br/ir/ (accessed 20 April 2011), where the company reports "To improve access to educational opportunities by lower income students, the Brazilian government has increased financial aid and incentive programmes for postsecondary education. The Prouni programme provides free scholarships for low income students in exchange for tax benefits to for-profit education companies. The corresponding tax benefits exempt the revenues derived from bachelor and associate programmes from the Programmea de Integração Social (Social Integration Programme), or PIS, the Contribuição para o Financiamento da Seguridade Social (Social Security Financing Contribution), or Cofins, as well as exempting the net income share proportional to the revenues of these programmes from the Imposto de Renda da Pessoa Jurídica (Legal Entities' Income Tax), or IRPJ and the Contribuição Social sobre o Lucro Líquido (Social Contribution on Net Income), or CSLL".
135. A number of countries in Africa, including Tanzania and Ghana in our focal countries, subsidize fertiliser as a key input. Some programmes, like Malawi's starter pack approach, have succeeded in raising outputs and productivity of basic staples like maize substantially, but they typically come at a very high cost to the national Treasury and are as a consequence difficult to sustain. Such programmes are also difficult to implement, often do not take into account the distribution channel and its capabilities, and occasionally lead to unintended behaviours as we encountered in Ghana where some MAFA participants were diverting the subsidized vouchers that they received as a part of the programme to other crops that they also farmed, instead of maize. A balanced treatment of the pros and cons of fertiliser subsidy

can be found Michael Morris, Valerie A. Kelly, Ron J. Kopicki, and Derek Byerlee, *Fertilizer Use in African Agriculture*, World Bank, 2009, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/03/15/000310607_20070315153201/Rendered/PDF/390370AFR0Fert101OFFICIAL0USE0ONLY1.pdf (accessed 19 April 2011).

136. We note that for all the discussion of extraordinary growth driving questionable practices for microcredit in South Asia, microcredit still struggles to scale in Africa, where the largest MFI in Uganda, for instance, has 110,000 borrowers or the largest MFI in South Africa has 64,000 (if excluding Capitec, which serves different segments). See http://www.mixmarket.org/mfi/country/Uganda and http://www.mixmarket.org/mfi/country/South%20Africa (accessed 15 May 2011).

137. A good recent example of this is a USAID guarantee to Diamond Bank and Accion in Nigeria to provide better financing to small medical providers. See http://shopsproject.org/about/highlights/financing-opportunities-nigeria-through-development-credit-authority (accessed 20 April 2011).

138. See JP Morgan's report on http://www.jpmorgan.com/pages/jpmorgan/investbk/research/impactinvestments.

139. See endnote 118.

140. The provision of RDP housing grants in particular raises a tricky set of issues. The nature of the subsidy is "all or nothing", such that families earning even R10 above the income ceiling receive no grant or subsidy at all. This has led to the development of an active and somewhat peculiar dynamic in "backyard rentals", where the lowest-income township dwellers who have formal housing informally rent their spare property to families from the next income tier up who typically erect semi-portable shacks on the property and pay rent to the lower income family that qualified for the RDP grant. Shisaka, a South African consultancy, estimates that about 10% of all South African households live in such "small-scale rentals", with rents ranging from R150 to R300/month ($21 - $43/month) http://www.shisaka.co.za/documents/5.%20April%202010_Leardership%20Forum%20Presentation_Backyard%20Rentals_A%20Di%20Lollo.pdf (accessed 15 May 2011).

141. We would point out, however, that the regulation of prices at all in this sector tended to inhibit commercial viability of the models, compared to rural water kiosk models we have observed in India, Ghana, and elsewhere.

142. Among the 47 firms interviewed, 19 companies were in financial services, eight were ICT companies, and seven were consumer packaged goods companies and 6 were agricultural firms with the rest of the sampling covering sectors such as retail, water and others. When asked how they engage the BoP — either as consumers, employees or suppliers/producers - more than half, 65 per cent, said that they engage the BoP as consumers, with engagement of BoP as suppliers/producers and employees coming in at 30 per cent and 5 per cent respectively.

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