Access to Food and Improved Nutrition at the Base of the Pyramid

Five business interventions to achieve social impact, financial sustainability and scale
People 1.5 billion rural small holder farmers at the BoP

Impact 925 million undernourished people worldwide

Market USD 2.89 trillion spent by the BoP on food

1 in 2008, source: World Economic Forum
2 in 2010, source: Food and Agriculture Organization
3 in 2007, source: World Research Institute
Executive Summary

Improving food and nutrition security through better availability, accessibility, and utilization of food and food products is a complex challenge. After all, it involves a sector where key activities (such as the production, distribution and consumption of food and the identification of food markets) are largely in the hands of private enterprises. Involved as consumer, producer or entrepreneur, for the Base of the Pyramid (BoP) population, interventions by the private sector in the food value chain can increase the income of the actors in the chain, increase the availability of food products, make food products more affordable, or increase the – nutritious – quality of food. Interventions will ultimately contribute to improving the availability of and access to nutritious food and food products.

In this study, based on the analysis of 16 cases and expert interviews, five different business interventions for BoP ventures were identified that achieve social impact, financial sustainability and, potentially, scale:

- Interventions focusing on smallholders: as customers of goods and services or as main suppliers to private-sector buyers (BI 1 and BI 2);
- Interventions focusing on BoP intermediaries between (smallholder) producers and consumers (BI 3);
- Interventions focusing on reaching BoP consumers with healthy and nutritious food and food products (in terms of both availability and quality) (BI 4 and BI 5).

Five Business Interventions

<table>
<thead>
<tr>
<th>Business intervention 1</th>
<th>Business intervention 2</th>
<th>Business intervention 3</th>
<th>Business intervention 4</th>
<th>Business intervention 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer development services</td>
<td>Secured sourcing schemes</td>
<td>BoP intermediaries</td>
<td>Food product adaptation</td>
<td>Hybrid market creation</td>
</tr>
</tbody>
</table>

**Main characteristics**

- **Private sector supplies products and services to smallholders in order to improve quality and volume of production.**
  - Business to Business (farmer-company relationships).
  - Impact: Contribution to food security through income generation of farmers and more and better foods on the market. The intervention often results in an improvement in the livelihoods of smallholders.

- **Commercial buyers or market players (food processors, retailers and wholesalers) to assure access to a supply of produce that meets specific volume and quality requirements.**
  - Business to Business (small farmers).
  - Impact: Impact on food security mainly through the increased income of value chain actors. Commercial buyers often do not supply BoP consumers.

- **Intermediaries with a core business in retail and with focus on reaching the low-income population (consumers and/or smallholders) with mainly local products.**
  - Combination of Business to Business (wholesalers) and Business to Consumer (retailers).
  - Impact: Increased income for value chain actors and potential to make quality food products more easily accessible and more affordable.

- **Adaptation of existing products, services, processes to serve BoP consumers. The adapting of practices is in most cases centered around providing more affordable products and services with a focus on product adaptation, including an adjustment of distribution models and marketing strategies.**
  - Business to BoP consumer.
  - Impact: Increased availability and affordability of food and food products.

- **Innovative strategies that seek to create new markets at the BoP, through the introduction of new (specialized) products.**
  - Business to BoP consumer with BoP entrepreneurs.
  - Partnership: To strengthen the company capabilities; companies enter into strategic partnerships with for-profit and not-for-profit organizations and public institutions with a view to co-create and innovate.
  - Impact: Improved access to and availability of quality foods.
The five business interventions identified are an entry point for companies and other stakeholders to develop products and services to improve access to food and better nutrition to the BoP. By deliberately choosing one of these strategies, implementing a suitable governance structure, and leveraging existing elements in specific models, companies are able to become more effective in the food value chain and to interact and partner with the BoP.

By broadening our understanding of the options available for engaging the private sector in food security and improved nutrition, this report provides key challenges and lessons to scale BoP ventures to be used by the private sector and its partners, be they NGOs or public authorities.

The Building Blocks for a BoP Venture

- Drivers: Motivations for the private sector to enter BoP markets with products and services that contribute to access to food and better nutrition.
- Governance: Establish an adequate structure to develop the BoP venture.
- Leveraging: Leverage your own business and partners to ultimately co-create value.
- Finance: Develop and use innovative financial mechanisms for BoP venture development and for access to finance for the BoP.
- “Resynchronization” in the food value chain: Identify the specific part of the value chain your business is in, and create links with other essential parts in order to create business opportunities and to drive innovation.
BoP Innovation Center  Access to Food and Improved Nutrition at the Base of the Pyramid

Authors
Nicolas Chevrollier, Rutger Bults, Thom Sprenger, Myrtille Danse, Birgit Poniatowski, Kirstin O'Neill

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Introduction

Improving food and nutrition security through better availability, accessibility and utilization of food and food products is a complex challenge. After all, it involves a sector where key activities (such as food production, distribution, food consumption and the identification of food markets) are largely in the hands of private enterprises. This study aims to deepen our understanding of the range of possibilities available for engaging the private sector in food security and improved nutrition at the Base of the Pyramid ("BoP"), be it via smallholders, entrepreneurs, or the actual consumers of food and food products. Key challenges and lessons will be identified with respect to barriers to growth, the scaling of processes, objectives, and adequate business models that satisfy customer needs and demands.

Base of the Pyramid (BoP)
The term BoP refers to the nearly 4 billion people that earn less than USD4 per day and live primarily in Asia, Africa and South America (also referred to as the “next billion”). The current world population, about 40% (2.6 billion people) is living on less than USD2 per day, with 1.4 billion of them living on less than USD1.25 per day. These individuals are largely excluded from formal markets, though they are a source of untapped entrepreneurial energy.
Nutrition security
Nutrition Security implies physical, economic and social access to a balanced diet, clean drinking water, safe environment, and health care. Education and awareness are needed to utilize these services.

Food Security
“When all people at all times have physical, social and economic access to sufficient, safe, nutritious food to maintain a healthy and active life” (World Food Summit 1996). Four main pillars of food and nutrition security can be identified:
- food availability; sufficient quantities of food available,
- food access; having sufficient resources to obtain appropriate foods for a nutritious diet,
- food utilization; appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation, and
- food stability; adequate access to food on a regular basis. As such related to all three pillars

The study consists of nine chapters, and has been divided into five main sections:
- The first two chapters describe the challenge of food and nutrition security for the BoP and the potential role of the private sector.
- The next chapter includes a description of the scope and methodology used in this study and a high-level view of the five identified business interventions.
- The next five chapters describe in detail the key characteristics and challenges associated with each business intervention. It also provides information of each of the case studies performed.
- The final chapter provides practical guidance to companies on how to get started with inclusive business, including tips for strategy, internal organization, partnerships and more.
- Finally the annexes provide additional information on literature, case studies, and the authors of this study.

Access to food and improved nutrition for the BoP
For people at the Base of the Pyramid, food dominates household expenditures by up to 80 percent of their disposable income (WRI, 2007). Putting sufficient food of good quality on the table is a continuous daily struggle for BoP households and has drastic consequences. The Food and Agricultural Organization (FAO) estimated in 2010 that there were 925 million undernourished people in the world\(^4\), of which 98 percent lived in developing countries. Thirty-three countries, most of them in the developing world, have alarming or extremely alarming levels of hunger\(^5\). Another one billion people suffer from “hidden hunger,” due to a structural deficiency of essential micronutrients (vitamins and minerals). Consequently, malnutrition is the underlying cause of almost one third of child deaths each year\(^6\). These are fundamental challenges to food and nutrition security.

Food fortification or enrichment
Food fortification is the process of adding micronutrients (essential trace elements and vitamins) to food. It can be purely a commercial choice to provide extra nutrients in a food, or sometimes alternatively it is a public health policy which aims to reduce numbers of people with dietary micronutrient deficiencies in a population. Common vehicles are staple foods, such as wheat or maize flour, cooking oil, sugar or salt, as well as condiments that are widely consumed across populations.

For BoP households, there are two key factors that have a major impact on food and nutrition security: food prices and household incomes. It is assumed that the higher the income a household or individual has to spend, the more food – and better quality food – the household or individual will be able to purchase. As mentioned previously, in addition to hunger caused by the insufficient intake of energy, the BoP is also impacted by hidden hunger. The World Food Program estimates that every child whose physical and mental development is stunted by hunger and malnutrition loses 5 - 10 percent in net income over their lifetime. So access to food is not only about access to the caloric content of food (quantity) but also very much about the nutritional quality of the food consumed. Typically, poor households live on one-dimensional staple-based diets and lack access to nutritious foods such as fruits, vegetables, meat, or dairy products.

Ensuring that adolescent girls, pregnant women, new mothers, and young children receive essential nutrients — such as vitamin A, iodine, iron, zinc, and folic acid — is a proven and cost-effective way to improve the health and wellbeing of millions of people around the world. Investing in improved nutrition not only leads to improved health, but also advances education and alleviates poverty. The world’s leading economists agree that investing in nutrition interventions is one of the most cost-effective ways to meet the world’s development challenges and can even increase a country’s GDP by 2 - 3% per year (Copenhagen consensus).

Smallholder
Narayanan and Gulati (2002) characterize a smallholder “as a farmer (crop or livestock) practicing a mix of commercial and subsistence production or, where the family provides the majority of labor and the farm provides the principal source of income”. Smallholders are defined by the Alliance for a Green Revolution in Africa (AGRA) as farmers with up to 7.4 acres of land.

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\(^4\) Source FAO
\(^5\) The Global Hunger Index (GHI), adopted and further developed by the International Food Policy Research Institute, is a multidimensional statistical tool used to describe the state of hunger indifferent countries.
BoP population

The high relevance of food for the BoP population can be examined from the perspective of both the consumers and the producers. From the consumers’ perspective, this relevance lies in the relatively high expenditure on food on a day-to-day basis. WRI and IFC state in The Next 4 Billion report (2007) that food represents the largest share of BoP household spending and the largest BoP market, estimated at USD 2.89 trillion.

From the producers’ perspective, food is highly relevant as around 70 percent of the BoP population depends on food production for their income, either as smallholders or entrepreneurs.

In contrast with the wealthier mid-market population, BoP markets are often rural. The World Economic Forum (WEF 2009) estimates that 2.5 billion BoP consumers live in rural areas, mainly in Asian and African villages, where agriculture is often the primary economic activity. Many smallholders are net food purchasers rather than net food sellers. Due to their limited holdings of land, they do not produce enough food to satisfy their own needs, which results in a large portion of their income being spent on food.

In this study, the BoP consists of consumers of goods and services, producers and entrepreneurs.
The role of the private sector

Food value chain
The private sector can support the increased availability of and access to nutritious food and food products for people that live at the BoP in different ways. In this study we build on the concept presented by the World Economic Forum: *The Next Billions: Business Strategies to Enhance Food Value Chains and Empower the Poor* (2009). With this approach, the structure of the food value chain serves as a basis for defining private-sector strategies that have the potential to contribute to food security and improved nutrition.

Food value chains consist of two main parts: one centered around agricultural producers and one centered around consumers. In the food value chain (WEF 2009), a network of food-related enterprises moves food products from production through various activities to consumption. The farmer receives inputs such as seeds, fertilizer, pesticides, and water from input suppliers; the product is further increased in value at the farm through community processing. The resulting produce is sold either to consumers – by the farmer himself or via an intermediary – or to larger food processors and traders (sourcing).

Toward inclusive business
The private sector can intervene all along the chain to offer products and services and also as business enablers for actors in the chain (e.g., information and communication technology services for accessing market information). More particularly, the interventions of the private-sector focus on optimizing the production of raw materials and food, with a focus on including small-scale farmers in local or regional value chains. The benefit here in terms of food security is income growth and, in some cases, an increased availability of food in local markets. Furthermore, the private sector intervenes to reach low-income food consumers with the production, processing, distribution, and marketing of food and food products. This benefits the accessibility and utilization of food.

As the WEF (2009) states, “the complexities of the food value chain and the interdependence of its different components present both a challenge and an opportunity.” These complexities are mainly the result of the multitude of players involved. In many developing countries, this is further complicated by fragmentation and inefficiencies that lead to a decrease in value for both the BoP and the companies encouraging progress. If the private sector turned this situation into an advantage by creating innovative interventions throughout the chain, the private sector itself and the people that live at the BoP could benefit from both an economic and social perspective.

Furthermore, where the private sector aims to substantially contribute to poverty alleviation through providing poor people with employment (and, consequently, income) or services and products,

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<th>Figure 3 Primary Food Value Chain</th>
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<td>agricultural input</td>
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companies may gain access to valuable new consumers, employees, suppliers, and distributors (the inclusiveness concept). This would also stimulate the development of a new market that was previously inaccessible as well as prove to be a source of innovation that could create a competitive advantage in the worldwide market.

For the BoP population, interventions by the private sector in the food value chain can increase the income of the actors in the chain, increase the availability of food products, make food products more affordable, or increase the – nutritious – quality of food. Interventions will ultimately contribute to improving the availability of and access to nutritious food and food products, two of the main pillars of food security.
In search of successful business interventions
Scope
The observations outlined above have resulted in the following scope and assumptions being defined for the study:

- Market-based approaches that have the potential to develop a sustainable business model suitable for scaling;
- BoP is considered as producers (smallholders), consumers and entrepreneurs;
- BoP consumers can either be smallholders that purchase agricultural inputs or urban or rural consumers that purchase consumer goods and services;
- Focus on availability of and access to food and food products, especially healthy and nutritious foods;
- Focus on "local-production-for-local-markets" solutions, where domestic markets are most relevant for the majority of both smallholder producers and consumers. The effect of this double impact is an improvement of the local economic ecosystem (e.g., income generation through smallholder production) and a strengthening of the local food system;
- While considerable attention has been paid to export markets (KIT 2008, Regoverning Market), these interventions are not subject of this study.

Database characteristics
When considering the continents where the 141 initiatives are situated (Figure 4), 52 percent are in Africa, 32 percent in Asia and 8 percent in Latin America.

Of the 72 selected initiatives in the first cut, the share of initiatives from Asia increased to 38 percent (Africa dropped to 48 percent), mainly due to the fact that more initiatives in Africa were strictly grant based (Figure 5).

The largest group of lead agents, i.e. the company/organization having end responsibility for the BoP product/service commercialization (see annex for additional definition), in the database is represented by SMEs: almost one third of the total (53 out of 141). Interestingly, the vast majority of these SMEs are local. Of the initiatives in the database focusing on BoP consumers, 25 percent are engaged in selling processed foods, mostly in urban markets (44 percent) or rural and urban markets (47 percent).

Methodology
The bases of this study are the identification, mapping, and analyzing of case studies in the area of food and nutrition. The activities involved in the three phases of the study are set out below:

1 Mapping and analyzing: Based on consultations with experts in the field and secondary research, a database of case studies was built up from which a selection of these case studies was made. The selection criteria were private-sector involvement, focus on local or regional low-income markets, and the association of local production with increased access to (nutritious) food products. This first sample consisted of 141 initiatives identified through desk research and expert interviews. After a first filtering exercise ("first cut"), this list was reduced to 72, excluding initiatives that were strictly grant or subsidy dependent or inactive (on hold or stopped). The remaining cases were clearly private-sector driven and focused on local or regional food markets. "Private-sector driven" does not necessarily mean that the private sector is the sole driver. There are various other ways in which projects can be implemented, such as via public-private partnerships.

2 In-depth case analysis and Business Interventions: In this phase, 16 cases (see annex) were identified for in-depth research by looking at their current social impact (income generation for the BoP, access to nutritious food, and food products), financial sustainability and potential to scale. The in-depth research of the 16 cases included an intensive analysis of secondary sources (publications, studies, Internet) rounded off with a verification interview with the entrepreneur or a representative of the company.

3 Conclusion and recommendations: These were established by analyzing desk research output, insights gained from expert interviews, and lessons learnt from the in-depth cases studied. Full cases are available upon request. Based on these cases, five successful business intervention were extrapolated.
One of the variables in assessing the different initiatives is social impact (ability to provide access to healthy food products or income generation for BoP) as mentioned above. The BoP is included in this study either as consumers, producers or/and entrepreneurs. In the database overall, the business cases contribute to the wellbeing of these BoP actors in different ways.

It is worth mentioning that the companies which sell agricultural inputs and consumer goods to smallholders contribute to the increased productivity or market access of farmers. They purposely include smallholders as consumers identified as a specific target group within the BoP.

The database reflects some promising, but inherently distinctive, market-based approaches to increased food security. These approaches are categorized in five different business interventions presented in the following section, each of them facing specific scaling challenges.
**Five business interventions**

Based on the case-study analysis, desk research and expert interviews, five different business interventions were identified that achieve social impact, financial sustainability and, potentially, scale;

- Interventions focusing on smallholders: as customers of goods and services or as main suppliers to private-sector buyers *(BI 1 and BI 2)*;
- Interventions focusing on BoP intermediaries between (smallholder) producers and consumers *(BI 3)*;
- Interventions focusing on reaching BoP consumers with healthy and nutritious food and food products (in terms of both availability and quality) *(BI 4 and BI 5)*.

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**Main characteristics**

- Private sector supplies products and services to smallholders in order to improve quality and volume of production.
- Business to Business (farmer-company relationships).
- Impact: Contribution to food security through income generation of farmers and more and better foods on the market. The intervention often results in an improvement in the livelihoods of smallholders.

- Commercial buyers or market players (food processors, retailers and wholesalers) to assure access to a supply of produce that meets specific volume and quality requirements.
- Business to Business (small farmers).
- Impact: Impact on food security mainly through the increased income of value chain actors. Commercial buyers often do not supply BoP consumers.

- Intermediaries with a core business in retail and with focus on reaching the low-income population (consumers and/or smallholders) with mainly local products.
- Combination of Business to Business (wholesalers) and Business to Consumer (retailers).
- Impact: Increased income for value chain actors and potential to make quality food products more easily accessible and more affordable.

- Adaptation of existing products, services, processes to serve BoP consumers. The adapting of practices is in most cases centered around providing more affordable products and services with a focus on product adaptation, including an adjustment of distribution models and marketing strategies.
- Business to BoP consumer (retailers).
- Impact: Increased availability and affordability of food and food products.

- Innovative strategies that seek to create new markets at the BoP, through the introduction of new (specialized) products.
- Business to BoP consumer with BoP entrepreneurs.
- Partnership: To strengthen the company capabilities; companies enter into strategic partnerships with for-profit and not-for-profit organizations and public institutions with a view to co-create and innovate.
- Impact: Improved access to and availability of quality foods.
In the following chapters the different business interventions are described and discussed in detail. After a general description of the business intervention (BI) and an overview of the main characteristics, the different challenges and solutions are extracted from the case studies. It should be noted that some case studies match the characteristics of more than one BI, in which case the case study is listed in the BI that best suits it and provides the most interesting points for learning. This BI is then used to support the formulation of challenges in the other relevant BIs.
Farmer development services

Case Study | Country
---|---
Dadtco #2 | Nigeria
Tanga Fresh #14 | Tanzania
East West Seeds #3 | Thailand
Farm development services

Key characteristics

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<td>Business to Business (farmer-company relationships).</td>
<td>Contribution to food security through income generation of farmers and more and better foods on the market. The intervention often results in an improvement in the livelihoods of smallholders.</td>
</tr>
<tr>
<td>Support by public authorities (incl. grant money) is often needed to kick-start the process. Some of the models (e.g. training) are more dependent on subsidies than others.</td>
<td>Supporting farmers or farmer organizations in a commercially viable way, making products or services (including credit) affordable, appropriate, and available. Improving economies of scale through farmer organizations.</td>
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Description
In this BI, the private sector supplies products and value-added services to small and medium farmers in a commercially viable way. The main driver is to enable these farmers to improve performance through increased and better access to higher-value local or regional food markets and through increased integration into the value chain. Increased productivity, quality and/or diversity enable the farmer to obtain higher market value and, as such, have a positive effect on employment opportunities and income growth.

A particular feature of high-value agricultural products is that, traditionally, they were not part of the customary diet of the local population and were mainly grown as cash crops for export to emerging and expanding markets worldwide. There has been an increased interest recently from the private sector in targeting local food systems with these products (BoP Inc. 2011).

The goods and services provided by private-sector partners could relate to both the farm input and output, or a combination. Examples of the most common products and services provided to farmers are:

1. Input: seeds, fertilizers, equipment;
2. Training: harvest and post-harvest practices, entrepreneurship, marketing;
3. Certification: international control systems, quality standards, good housekeeping;
4. Post-harvest handling: equipment, knowledge transfer, storage, distribution;
5. Finance: credit, insurance etc.

The integration of farmers into the value chain could be both horizontal (creating farmer cooperation) and vertical (creating clusters of farmers and entrepreneurs). In the vertical integration business model, the chain power of farmers is expanded as they gain control over more links in the supply chain. This type of integration can move forwards toward the end-consumer, or backwards toward the raw materials.

Specific examples of integration are the so-called agribusiness clusters. An agribusiness cluster is like a group of value chain operators, supporters and enablers that have identified common ground for implementing a business idea and learning and working together, and which innovate and implement coordinated action around a specific commodity in one or more value chains. Typically, agribusiness cluster actors operate in physical proximity to each other. Agribusiness cluster members may comprise the following groups of actors: agro-input dealers, financial institutions, public and private business-support service providers, producers (and/or producer organizations), traders and processors. Each cluster is considered a unique and innovative public-private partnership. The type of investments and contributions made by the private-sector partners in a cluster varies according to the size and type of the

Case study East West Seeds  #3
High-quality, affordable vegetable seeds for South-East Asian farmers

East West Seeds (EWS) is a Dutch-Thai seed company that was founded in 1986 to improve local seed varieties locally and sell them, via intermediaries, to local South-East Asian smallholders. EWS successfully developed suitable small-scale production formats and invested considerably in demonstrating and transferring knowledge of the improved cultivation practices. It makes hybrid seeds available to growers via the establishment of local distribution centers. Growth of 15-20% is projected by EWS for the next few years.

Before EWS entered the market, vegetable seeds were produced by the farmers themselves or were imported. However, the varieties that were used were not adapted to the region’s environment or the farmers’ wishes; this was the gap in the market EWS decided to fill. The key challenge was to convince farmers, through demonstrations involving specific individual farmers, that they had to buy new hybrid seeds every time they harvested, instead of reproducing their own seeds themselves.

Since agronomic expertise strongly affects the success of hybrid varieties, EWS adopted a farmer field-school approach to educate specific farmers and extension workers. As part of this program, some farmers receive technology packages (including seeds, trellises, and plastic mulches) to demonstrate the advantages in their own villages. Another crucial aspect in the success of the business model is the access to credit. To prevent farmers getting caught up in a debt trap when having to buy new seeds every time, EWS and the local Thai government units concerned provided credit to the farmers to serve as their start-up capital.
partner: an association of milk producers and traders may contribute labor and invest in improved milk production technologies; a local mango processor may contribute by expanding his processing equipment. Furthermore, public funding may come from different sources: local and national government contributions through training and extension activities and/or international public funding.

The contribution made to food and nutrition security of the BoP population depends on the type of crop involved. In the case of export crops, the contribution will mainly be in the form of increased income for the value chain actors. Interventions involving local crops, the main focus of this study, such as cassava and/or local food products, will contribute by increasing availability, preferably for the BoP consumers.

**Challenges and solutions BI1**

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<tr>
<th>Challenges</th>
<th>Solutions</th>
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<tr>
<td>Establishing links between the agricultural produce of smallholders and (high-value) markets.</td>
<td>Develop a cluster approach by involving retailers, processors, and traders.</td>
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<tr>
<td>Defaulting: side-selling by farmers to other buyers after investments in grouping and upgrading.</td>
<td>Involve public and development parties to overcome major hurdles (markets, infrastructure).</td>
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<td>Identify key reasons to cooperate and build exclusive services.</td>
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<td>Local access and availability of the appropriate technology (decentralized, low cost).</td>
<td>Establish cooperative agreements that include specific incentives that stimulate loyalty among farmers.</td>
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<td>Partnerships with financial institutions to facilitate formalized credit for inputs.</td>
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<td>Act as a one-stop shop for farmers by providing animal feed, medicine and advice to farmers all on the same premises (see BI 3).</td>
</tr>
<tr>
<td>Limited capacity and limited knowledge of – traditional – farmers regarding the relevance of innovative products and services.</td>
<td>Include local farm/community leaders.</td>
</tr>
<tr>
<td></td>
<td>Show tangible results (model farms).</td>
</tr>
<tr>
<td></td>
<td>Include technical assistance/capacity-building program as one of the services.</td>
</tr>
<tr>
<td>Increase the availability of food and food products for low-income consumers.</td>
<td>Link (low-value) subsistence crops to local food processors.</td>
</tr>
<tr>
<td></td>
<td>Introduce fortified varieties.</td>
</tr>
</tbody>
</table>
**Case study Tanga Fresh #14**

**Sourcing, processing and distributing milk products in Tanzania**

Tanga Fresh Ltd. is a medium scale dairy company from Northern Tanzania. It is a joint venture between a Tanzanian farmers association, the Tanga Dairy Cooperative Union (TDCU), and a group of investors. Tanga Fresh Ltd. operates a coordinated dairy value chain of milk collection, processing and marketing, combined with growth opportunities offered to smallholders through heifer availability and cattle credit, known as the ‘Tanga Model’. Tanga Fresh started as a donor funded project to support small scale dairy farmers and gradually developed through establishing its own collection and processing centres.

In 2011, Tanga Fresh Ltd. sources its milk from 4063 smallholders that produce around 38,000 L/day. The company is market leader in Tanzania and sells several low to medium cost dairy products, mainly fresh milk and mtindi (sour milk), in Tanga and Dar-es-Salaam. The main innovation in the Tanga Model is the creation of rural Milk Collection Centers (MCC), that act as a one-stop-shop for farmers by providing animal feed, medicine and advice for farmers all on the same premises. Furthermore, through a cattle credit scheme combined with a modern breeding farm, smallholders are offered more opportunities to increase their productivity.

It is worth noting that the biggest group of initiatives in the database belongs to BI1 but that a relatively small number of these initiatives actually made it onto the case-studies short list as a number of them rely heavily on grants or subsidies.

**Figure 10 Source of funds per BI**

![Graph showing source of funds per BI (BI1 to BI5)]
**BoP Innovation Center**  Access to Food and Improved Nutrition at the Base of the Pyramid

**Case study Dadtco #2**

**Cassava from subsistence crop to cash crop through mobile processing**

Dadtco, a social enterprise established in 2002, develops mobile small-scale cassava processing units in Nigeria known as Autonomous Mobile Processing Units (AMPU) which allow first processing close to farms.

Connecting smallholders to the processing units involves a cooperative alliance made up of Dadtco, the International Fertilizer Development Center (IFDC), and the Dutch Ministry of Foreign Affairs. Dadtco supplies the inputs the farmers need to grow and harvest their crops: reproduction, fertilizer, harvesting equipment, and credit. The semi-finished product – the “cake” – is readily marketable and yields considerably higher margins in the markets than the unprocessed crop. Dadtco purchases these products from the farmers and sells them in local and international markets.

Dadtco has boosted the net yearly income generated by each hectare (ha) of cassava by at least USD 250 and the net yearly income of 600 farming families in Nigeria and Mozambique by USD 500, representing a total of USD 300,000 in additional net yearly income. It is expected that this will increase exponentially in the next years, due to the contracts established with SAB Miller.

**Tips**

This intervention model has significantly changed over time from the traditional focus on farmer organizations (horizontal integration) to the vertical integration of – organized – farmers into agricultural value chains. The following recommendations have been put forward:

**Improve relationships with farmers to increase loyalty:**
- by setting up short-term rewards and incentive programs;
- via educational programs on production techniques or market access for smallholders.

**Scaling: create linkage downstream in the value chain:**
- by creating demand through active links to markets (involving retailers, traders, processors);
- by introducing an agribusiness cluster approach (links B1-B2);
- by investing in input.

**Food security: add value to local crops:**
- by improving the value chains of locally important crops;
- by creating new opportunities for the private sector.

**Support access to finance in small farmer integration:**
- from loans to savings to insurance;
- by leveraging innovative delivery (e.g., ICT/mobile phones);
- by designing a financial model from the start in order to attract commercial funding.
Secured sourcing schemes

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kecap Bango #7</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Metro Cash &amp; Carry Vietnam #9</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Heineken, Sierra Leone Brewery #12</td>
<td>Sierra Leone</td>
</tr>
<tr>
<td>Alquería SA #1</td>
<td>Colombia</td>
</tr>
</tbody>
</table>
Figure 11  Secured sourcing scheme

Key characteristics

<table>
<thead>
<tr>
<th>What</th>
<th>Type</th>
<th>Who</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>To assure access to a supply of produce that meets specific volume and quality requirements.</td>
<td>Business to Business (small farmers).</td>
<td>Commercial buyers or market players (food processors, retailers and wholesalers) at or near the top of the supply chain who are able and ready to invest in increasing and improving small farmers’ production (from supplying services to providing input and credit).</td>
<td>Impact on food security mainly through the increased income of value chain actors. Commercial buyers often do not supply BoP consumers.</td>
</tr>
</tbody>
</table>
Case study Metro Cash & Carry Vietnam #9

Sourcing fresh produce from smallholders for high-value markets

Metro Cash & Carry Vietnam operates as a modern wholesaler and is competing with traditional wholesale markets for business customers (fresh food and catering sectors). Fruits and vegetables are important in the product portfolio of the Metro CC stores. With no professional supply companies present in Vietnam who can control the quality from field to fork, Metro CC decided it needed to move up the chain. Key to Metro’s approach was to get as close as possible to the farmers.

With the support of Fresh Studio Asia, Metro CC built a fresh distribution center (DC), situated in Vietnam’s premium vegetable growing area (Dalat) and within an hour of the farmer. By sourcing directly from (small-scale) farmers, instead of working with a long chain of collectors and traditional wholesalers, Metro CC ensured that vegetables could get in the cold chain as soon as they are harvested.

In partnership with local authorities and NGOs, Metro CC has invested in training programs for farmers and other small-scale service providers along the food supply chain. Training activities for smallholders include supervision and coordination of quality vegetable production, development of GAP standards, set-up of organized spraying teams, set-up of a tracking & tracing system, development of post-harvest protocol, chain organization and logistical services. So far the company and its local partners have trained 18,000 farmers in Vietnam and are running similar programs in other countries.

Description

This business intervention focuses on the direct relationship between (large) commercial buyers (e.g., agribusiness firms, processors, retailers) and their suppliers: smallholder agricultural producers. These buyer-driven models seek efficiencies in the chain to benefit processing and retail.

Owing to the many factors that limit their ability to substantially increase productivity, farmers are unable to deliver the volume and/or quality that commercial buyers require. This in turn restricts the development of markets for the agricultural produce. This business intervention aims at overcoming the various obstacles identified, while securing the mutual benefits for all the stakeholders involved.

The “secured sourcing scheme” intervention features approaches that enable the sourcing enterprises to engage with the BoP as producers. This so-called backwards integration leads to an increase of food security mainly through increased income for the value chain actors (smallholders), while the end-consumers of the product are mainly higher-end customers (Metro Cash and Carry). In cases where sourcing firms provide food and food products specifically for the BoP, these products are not always an essential part of the daily diet.

The main characteristics of these schemes are production by farmers on their own land (under a variety of contractual forms), technical assistance and agricultural input (including credit facilities) provided to the growers, and a certain level of guarantee to purchase the farm produce provided it meets quality standards. Out-grower schemes or contract farming are common names for this BI. In this BI, the demand for agricultural produce often exceeds supply, driving the business case for companies. In order to match the supply, the commercial buyer is generally willing to invest in its smallholder sourcing scheme.

Import substitution, an important driver for this business intervention, may be driven by commercial considerations but also by more political reasons (e.g., local regulations, government policies). An example of a commercial consideration is the replacement by beer breweries of barley malt with sorghum malt owing to the need to lower the costs and burden associated with imported barley malt (expensive, long duration, unpredictable custom procedures).
Challenges and solutions BI2

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant capital expenditures for the private sector.</td>
<td>Work in partnership with public and private partners, including government (infrastructure, market development). Governments often facilitate this initial phase.</td>
</tr>
<tr>
<td>Scaling potential is strongly dependent on the development of the farming and market infrastructure (see also first challenge above).</td>
<td>Food processors take initiative to develop new consumer products, based on the locally available farm produce (e.g., cassava and sorghum in locally brewed beer).</td>
</tr>
<tr>
<td>Commercial buyer does not have network or capacity to procure directly from small individual farmers.</td>
<td>Find existing institutions (e.g., cooperatives) or support establishment of new institutions (e.g., producer business groups) that can organize farmers and make larger-scale sourcing possible.</td>
</tr>
<tr>
<td>Credit facilities for smallholders.</td>
<td>Develop credit facilities, including opportunities for saving. Work together with specialized partners.</td>
</tr>
<tr>
<td>Lack of formal structures or institutions to support farmer development services.</td>
<td>Find the right partners to work with, or support the establishment of institutions that can do this (e.g., cooperatives).</td>
</tr>
<tr>
<td>Limited access radius: produce that needs to be handled or processed within 24 or 48 hours.</td>
<td>New technological innovations in cooling technology and process innovation.</td>
</tr>
</tbody>
</table>

Case study Alquería #1

**Sourcing milk from smallholders in Columbia**

Alquería is a family-owned Colombia-based dairy business founded in 1958 by Jorge Cavelier. As a doctor, Professor Cavelier’s goal was to improve the health of local communities by encouraging consumers to buy pasteurized milk products. His son, Enrique Cavelier, took over the family business in the 1980s and has been running it since.

Alquería’s mission is to ensure the production of top-quality milk products, as well as to serve local communities by allowing them to benefit from the business and its products. The company currently sources its milk from 5,000—6,000 smallholders, and is focused on expanding its reach further into remote areas of Colombia, so as to provide market access to farmers who would otherwise remain isolated. All of the milk collected, be it from smallholders or larger operations, is channeled into the same products.

As of now, Alquería does not advertise the use of BoP farmers as a source of its products. However, once more tangible results of this cooperation become known, the company is expected to share this information with its customers. The current situation means that any price increase due to higher transportation costs in reaching the BoP producers is passed on to consumers.

Case study Kecap Bango #7

**Sourcing black soy beans in Java**

Kecap Bango, a specialty sweet soy sauce made from black soy beans, has been manufactured since 1928. It was originally produced using Javanese soy beans and was marketed and sold exclusively in Java, where the brand has close local associations and a high level of visibility. Recognizing the potential to market the product throughout Indonesia, PT Unilever Indonesia, the local subsidiary of multinational Unilever, acquired a majority stake in the Bango brand in 2000.

Looking to expand its distribution and sales, Unilever undertook an assessment of its raw material requirements. This showed that the limiting factor were the black soy beans, which up until 2003 were grown solely in West Java and for which supply from existing sources could not easily be expanded. It was possible to import beans from abroad, but Unilever decided to use only locally grown beans, given that it was part of the Bango brand identity to be ‘local’ – and that Java provides ideal conditions to cultivate black soy beans. The company decided to focus its development of new suppliers in central and East Java. The main challenge here was that there were no formal structures or organizations except a few traders to work with farmers.

The Black Soy Bean Farmers Development Program is still growing. To date it has involved, via the farmer-owned cooperatives, some 6,600 smallholder farmers, who now grow approximately 25–30 per cent of the black soy beans used to produce the Bango brand.
Sourcing sorghum for locally marketed beer

Heineken’s local subsidiary in Sierra Leone, Sierra Leone Breweries Ltd. (SLBL), mainly produces beer for the West African market. Sierra Leone Brewery replaced imported European malted barley with locally grown sorghum as its beer’s main ingredient. Since sorghum was solely produced as a minor subsistence crop, the recipe change implied a drastic increase of smallholders in Heineken’s supply chain.

The underlying reason to invest in the local production of sorghum, which was rarely available on the market, was mainly operational (reduce import costs of raw materials, reduce raw material storage costs, reduce impact of currency fluctuations). In 2005, the local sourcing project in Sierra Leone started off as a Corporate Social Responsibility initiative. Heineken teamed up with the European Co-operative for Rural Development (EUCORD) to train and organize farmers in producer business groups and include them in the new supply chain. Heineken’s role was to co-invest in the development of the new supply chain, provide access to micro finance for inputs, and provide a guaranteed market for the smallholders involved. Fifty percent of the funding for this five-year program was provided by the Common Fund for Commodities (CFC), while the other 50 percent was provided by Heineken. In addition, Heineken invested in the development of the processing facility. Since the start of the pilot, the number of smallholders has increased to around 3,000. Due to an increase in the local consumption of the beverages produced by SLBL, Heineken expects it will expand its investments into technological innovations involving the plant as well as the establishment of a sorghum-processing facility in order to add value to the sorghum and use it for other consumer products.

As Heineken has created a sustainable market for sorghum, there is a greater incentive for smallholders to start growing sorghum. These smallholders live on less than USD 0.35 per day, which means that earning around USD 15 per 50kg bag of sorghum has a significant effect on their economic situation and wellbeing. The success of local sourcing in Sierra Leone, as well as in Nigeria and the Republic of Congo, has resulted in Heineken recently announcing an Africa-wide strategy to procure at least 60 percent of its required products and services from local sources. Key success factors are the short supply chain, the direct links between suppliers and buyer, and the stimulation of the local economy.

Tips

Support access to finance in small farmer integration:
- from loans to savings to insurance;
- leverage innovative delivery (e.g., ICT/mobile phones).

Support the transition to farmer cooperatives and independent business identities:
- innovate on how to organize farmers into commercial cooperatives;
- link to BI1 and agribusiness cluster, for instance.

Food security: develop a local value proposition:
- focus has been on high-value products for export markets;
- explore potential to shift this approach to local produce for local markets (product development, consumer insights).

For both BI1 and BI2, the challenge is to implement these interventions not only for export crops but also for local crops as shown in some of our case studies. This requires an integrated approach and creative solutions for cooperating with all actors in the value chain, specifically with regard to the link to consumers (developing food products based on local ingredients).
## BoP intermediaries

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hariyali Kisaan Bazaar #5</td>
<td>India</td>
</tr>
<tr>
<td>Suguo #13</td>
<td>China</td>
</tr>
<tr>
<td>Kheir Zamaan - Mansour Company #8</td>
<td>Egypt</td>
</tr>
</tbody>
</table>
Intermediaries with a core business in retail and with focus on reaching the low-income population (consumers and/or smallholders) with mainly local products.

Combination of Business-to-Business (wholesalers) and Business-to-Consumer (retailers).

Increased income for value chain actors and potential to make quality food products more easily accessible and more affordable.

Physical retail shops, outlets, or hubs, providing products (input and produce) in combination with a portfolio of services. This could vary from creating off-farm facilities like storage, grading and sorting, to a full-fledged retail hub where all kinds of services and products for both farmers and consumers are offered (finance, insurance, advice, inputs, retail of consumer goods, etc.).

The companies are building on (or expanding) existing business models (e.g., retailer outlets, mix of existing products/brands, market connections).
Case study Hariyali Kisan Bazaar #5

Rural retail hub targeting smallholders as consumers

A new generation of commercial intermediaries in India is demonstrating that service provision can itself be a profitable part of the business model, which can trigger inclusive growth. Main Indian suppliers of a wide range of agricultural products and services took up the challenge to reach out to low-income farmers in villages in rural India.

DCM Shriram Consolidated Ltd. (DSCL), a leading diversified Indian corporate house in the agri-input markets with first-hand knowledge of Indian farmers, established an innovative business venture called DCM Hariyali Kisan Bazaar. The rural retailer sells agri-inputs and consumer goods through its chain of centres, which also serve as a common platform for providers of financial services, health services, etc.

The Hariyali centres are procurement hubs for farm outputs, providing buyback and warehousing and thus creating multiple revenue streams based on transparent and effective participation in input as well as output value chains. Each Hariyali store has a catchment radius of 20 to 25 km, comprising about 15,20,000 farming families. They aim to provide producers with “urban amenities in rural areas”, easy availability of quality products at “city-like” fair prices and, through IT, provide commodity prices and commodity futures, as well as ATM access and weather forecasts. On the procurement side, they create linkages between producers and processors, exporters and retailers.

So far over 275 Hariyali outlets have been set up across eight states, reaching around 4 million farmers and their families. Investment decision to up-scale to 500 outlets has been taken.

Description

This business intervention is an innovative combination of forward and backward integration models. The approach is driven by intermediaries providing goods as well as services (including finance) to both farmers and consumers (not necessarily at the BoP). These intermediaries could include existing companies as well as companies established specifically to serve this market segment. A typical example is the development of retail for low-income groups through the opening of supermarkets, outlet stores or retail hubs in rural or urban BoP markets.

Major retail companies are increasingly active in developing countries, where they initially focus on serving high-income groups. Many low-income consumers live in remote villages or urban communities that lack access to conventional retail markets. While organized retail has entered even the poorest of cities, rural consumers are typically limited in what is offered to them by small private grocery stores, open markets and roadside peddlers. It is estimated that 80 percent of consumers in emerging markets shop exclusively through these small-scale retail channels, unable to find better options within walking distance. Reaching these consumers requires creative thinking and finding alternative business models, with a focus on effective last-mile distribution.

This has led to new innovative models for rural retail, such as the Hariyali Kisan Bazaar, which applies a “base of the pyramid” approach to both the input and output sides of the farm-to-consumer value chain. A new generation of commercial intermediaries is demonstrating that service provision itself can be a profitable part of the business model (see box “Hariyali Kisan Bazaar”).

What characterizes these interventions is that they use the so-called brick-and-mortar marketing, referring to marketing tactics used by businesses serving customers face-to-face, often in a building or a physical location.

Three main types of intermediaries have been identified:

- Smallholder aggregators: they have a relationship with both the farmers from whom they purchase and the buyers to whom they sell. In this BI, the core business of these intermediary is smallholder aggregation. The transaction costs of buying from or engaging with smallholders is almost always higher than is the case with sourcing from a few larger farmers. Furthermore, smallholder aggregation typically includes additional costs for the intermediary in adding value to the service provision, such as grading and sorting or finance, activities that are necessary in meeting the quality and volume requirements of emerging modern markets.

- Urban or rural retailers: physical outlet stores that sell consumer goods to low-income people in either urban settings or rural villages (Kheir Zamaan and Suguo).

- Rural retail hub: a physical outlet store or one-stop shop, targeting smallholders for agricultural inputs (e.g., agri services, financial services (from credit to insurance), consumer goods, retail agri inputs, and services such as health and education) and outputs (including, e.g., output buyback, output warehousing and output financing) (Hariyali Kisan Bazaar).

**Case study Kheir Zamaan  #8**

Mansour Company, urban retailers for low-income groups

Started in 2006, Kheir Zamaan is an urban retailer focusing especially on low-income groups such as government employees, retired people, drivers, manual labours, nurses and teachers. As low-income people constitute a majority of the Egyptian population, the Mansour Company capitalized on its well-developed retail experience in the Egyptian market to adapt its high-end business model to suit the needs of this important, low-income, market segment (the Kheir Zamaan supermarkets).

A number of elements contribute to the business model of Kheir Zamaan (low price retailer). Leveraging its existing business, seventy five percent of the suppliers of Kheir Zamaan are shared with Metro, another retail branch of the Mansour Company targeting customer segments with higher incomes. Supply chain management and transportation are also combined between Metro and Kheir Zamaan. About 90% of the items are local and only 10% are imported. Combined with low rental and adapted marking (focusing on price not on brand), Kheir Zamaan can provide low-cost products for its customers.

In 2009, Kheir Zamaan had a volume of sales of USD 60 million and employs 1,300 people.

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**Case study Suguo  #13**

Supermarket targeting rural Chinese BoP consumers

Nanjing-based supermarket chain Suguo is consistently ranked in the top ten supermarkets in China. Suguo has successfully penetrated rural Chinese markets by persuading rural cooperatives to become franchisees of the supermarket and so building on existing networks. Helped by a central government subsidy of USD 400 per store, Suguo helps remodel retail outlets and keeps them stocked.

Suguo realized that they could gain a first mover advantage in the less competitive rural market. They discovered a clear business opportunity in the country side that matched their expansion strategy: farmers’ demand for both capital and consumer goods was not appropriately satisfied.

The main innovation of Suguo was the transformation of cooperatives into retail stores. So far, around 1,500 rural outlet stores have been created (50% of Suguo sales in rural areas). Franchising is a relatively cost-effective approach for Suguo and it enables them to move into the rural market quickly. Before becoming a franchise, each cooperative has to comply with specific food safety and quality standards. In the case of Suguo around 60% of grocery goods have to be sourced from the central distribution system, the rest is sourced locally (mainly fresh fruits and vegetables).

A main sourcing channel for Suguo’s central distribution systems are the so-called local production bases (40% of total procurement), where many small farmers work together to produce the same products. Suguo also improved the rural consumption environment by providing healthier goods.
### Challenges and solutions BI3

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>High initial investment to set up the hubs/outlets.</td>
<td>Only larger and financially sound companies can do this alone; working with other investors (public and private) is necessary.</td>
</tr>
<tr>
<td>Business model that is based on a good understanding of local community needs, demands, etc. (management of micro markets).</td>
<td>Develop an inclusive proposition that targets not only rural farmers, but also rural consumers (or the other way around). One-stop shop concept.</td>
</tr>
<tr>
<td>Retailers have the advantage of economies of scale, but without effective logistics support they cannot compete with other shops.</td>
<td>Reduce penetration costs by using alternative business models, such as franchising and micro financing.</td>
</tr>
<tr>
<td>Retailers have to broaden their own business model, addressing other challenges in the value chain (e.g. inputs, services, storage facilities, distribution processing).</td>
<td>Cooperative models with other suppliers of goods and service providers; expand the number of product categories (e.g., small sachets of healthier foods, offered by companies like Unilever).</td>
</tr>
<tr>
<td>Models based on small margins, with annual fluctuations.</td>
<td>Enter into a contract with large buyer with consistent and high demand.</td>
</tr>
</tbody>
</table>

### Tips

This BI includes innovative approaches for linking farmers to consumers and is mainly implemented by large companies (retailers, wholesalers) with a strong local position and extensive knowledge of the local markets. The crucial success factor is the leveraging of existing elements of your own company and combining them with elements of other business models. This includes developing a portfolio of goods and services for sale to both farmers and consumers.

**Extend to a brick-and-mortar business intervention:**
- intervention channel through a physical location;
- link between smallholders and BoP consumers;
- franchise model allows rural penetration and consumer insights.

**Develop a portfolio of services for price and quality-sensitive customers:**
- intermediary model with low margins;
- business model depends on capitalizing on added value of (combined) services;
- combine low prices with brand awareness.

**Leverage existing elements of current business models:**
- effective supply chain for consumer goods (supermarket);
- knowledge on how to set up retail or outlet stores;
- share business support services, HR, IT, logistics.

**Increase link to food and nutrition security:**
- introduce healthy food products;
- link with nutrition-focused behavior change component.
## Food product adaptation

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britannia, Tiger Biscuits #15</td>
<td>India</td>
</tr>
<tr>
<td>Minute Maid #10</td>
<td>Kenya</td>
</tr>
</tbody>
</table>
**Key characteristics**

<table>
<thead>
<tr>
<th>What</th>
<th>Type</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation of existing products, services, processes to serve BoP consumers.</td>
<td>Business to BoP consumer.</td>
<td>Increased availability and affordability of food and food products.</td>
</tr>
<tr>
<td></td>
<td>Traditional approach is to focus on the repackaging of products (into smaller quantities) to make them affordable for low-income consumers. More recent developments include the adaptation of products to allow producers to move into specific low-income market segments.</td>
<td>Based on the existing business model, firms leverage their existing organization with projects largely integrated into the mainstream business and funded with the firm’s capital.</td>
</tr>
</tbody>
</table>
Description
This business intervention includes companies already active in the local food market that, by adapting company practices, want to develop a profitable business that targets the low-income market segment. The adaptation of practices is in most cases centered around providing more affordable products and services with a focus on product design, along with adjustment of distribution models and marketing strategies. This approach refers to a company strategy for capturing markets; the company develops a BoP approach mainly through its existing capabilities. These interventions could be integrated with the existing management and performance measurement systems of the company concerned.

The product adaptation may include introducing healthy varieties of food products. In this case, existing regular food products are used as "carriers" for bringing essential vitamins and minerals to low-income consumers. This could vary from the fortification of staple foods (maize, wheat) to the fortification of processed foods that are consumed on a regular basis (condiments, biscuits, bakery and dairy products). These existing products often target higher socioeconomic (A, B) market segments that are willing to pay for healthier varieties. The challenge here is to adapt these products to specific BoP markets.

Market segmentation for fast moving consumer goods
The socioeconomic classification (SEC) groups urban Indian households on the basis of education and occupation of the chief wage earner (CWE: the person who contributes the most to the household expenses) of the household into five segments (SEC A, SEC B, SEC C, SEC D and SEC E households in that order). This classification is more stable than one based on income alone. Being reflective of lifestyle is more relevant to the examination of consumption behaviour. ‘High’ socioeconomic classes refers to SEC A&B, ‘mid’ socioeconomic class refers to SEC C and ‘low’ socioeconomic classes refers to SEC D&E. In 1991 in India around 50% are belonging to D&E, where 20 % belongs to SEC C

Source: NRS IV (1990-91) & IRS *(1998-99)

Case study Minute Maid #10
Locally produced mango juice for the BoP
Coca Cola Juices Kenya Ltd. has an offering that targets both the BoP and high end consumers. It sells its juice drinks in 300ml, 500ml and 2L PET bottles via big supermarkets, but also adopts a very elaborated distribution strategy to reach shops and kiosks in Nairobi or Kampala’s townships. Each urban Manual Distribution Center services an area 1 kilometer in circumference, reaching a maximum of 150 retail outlets. Coca Cola Juices Kenya serves 15 distributors in the country, including 7 in Nairobi (60% of the total market). In addition, other bottling franchisees also have a network of MDCs operating in various other territories.

Coca-Cola’s Minute Maid juice brand was introduced in the market early 2010 and is inspired by Uganda and Kenya’s increasingly health-conscious lifestyle. The product is affordable for people living in slums and is retailed in Uganda at UGX2,000 (USD 0,77) per 400ml returnable glass bottle and in Kenya at Ksh40 (USD 0,45) per 300ml plastic bottle and Sh55 (USD 0,62) per 500ml bottle. The sales target for a distributor in Nairobi is on average 6500 bottles per year, which leads to an average annual profit of USD 588.

Minute Maid mango in the East African market is presently produced 100% with local mango puree. In order to guarantee supplies, Coca Cola teamed up with TechnoServe to organize mango farmers in Producer Business Groups (‘Project Nurture’). So far 15,300 farmers in Kenya and 8,600 farmers in Uganda have been recruited and trained and funded by TechnoServe under the project.

Challenges and solutions BI4

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products with low margins; significant scale is necessary to become</td>
<td>Build on existing strategies. Adapted products are distributed via existing channels or alongside an existing recognized brand ensuring its accessibility, availability, and affordability.</td>
</tr>
<tr>
<td>profitable.</td>
<td>Introducing new specialized brands or adapting a whole brand to BoP markets.</td>
</tr>
<tr>
<td>Risk of damage to brand image by introducing low-cost varieties.</td>
<td>Transfer of CEO impulse and vision.</td>
</tr>
<tr>
<td>Fortification in itself is not a unique selling argument, especially for</td>
<td>Cost of fortification covered by cost reductions in other parts of the production process (incl. distribution, marketing, etc).</td>
</tr>
<tr>
<td>low-income consumers.</td>
<td>Develop social marketing campaign, together with other public-private partners.</td>
</tr>
</tbody>
</table>

Case study: Britannia #15

Fortified Tiger Biscuits, reaching low-income segments

Britannia is one of India’s leading food companies and a leading name in the bakery and dairy segments in the Indian marketplace with revenues close to USD 1 Billion annually.

Britannia has launched commercially an iron-fortified version of its popular Tiger biscuits in 2007, based on two different recipes. The first contains a higher dosage of iron and is distributed via the Naandi Foundation’s midday meal program (250-300k children) in a relation facilitated by GAIN. The second contains a lower dosage of iron and is distributed via 3.5 million rural and urban retail outlets throughout India. Today, fortified products including Tiger Iron Zor, MarieGold, Milk Biki & staples like bread sell close to 3.6 billion units annually and constitute 55% of Britannia bakery volumes.

Through testing (with partner GAIN) the cost of fortification was brought down to 6 paise per kilogram (1 paise = 1/100 rupee), which accounts for 2-3% of product cost.

Tips

The focus is on marketing and adjusting elements of business operations to specific demands of the low-income consumers. The main findings are listed below.

Take a strategic decision to expand into BoP markets:
- ensure support at Board level;
- trickle-down strategy to focus on BoP segments.

Leverage existing elements of your current business:
- current brand acceptance;
- distribution channels shifted toward BoP consumers;
- existing products with adaptation.

Focus marketing on BoP consumers:
- nutrition is not always a selling point;
- involve institutional markets to start up commercial marketing;
- use aspiration-focused marketing to sustain sales.
## Hybrid market creation

### Case Study | Country
---|---
Pushtikona #11 | Bangladesh
Grameen Danone Food Ltd #4 | Bangladesh
KeBal #6 | Indonesia
Valid Nutrition #16 | Malawi, Ethiopia
**Key characteristics**

<table>
<thead>
<tr>
<th>What</th>
<th>Type</th>
<th>Partnership</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating and launching new products in combination with &quot;doorstep&quot; distribution models or proximity models.</td>
<td>Business to BoP consumer with BoP entrepreneurs.</td>
<td>To strengthen their capabilities; companies enter into strategic partnerships with for-profit and not-for-profit organizations and public institutions with a view to co-create and innovate.</td>
<td>Improved access to and availability of quality foods.</td>
</tr>
</tbody>
</table>

Hybrid business models where products are sold to a mixture of institutional (food aid, health centers) and commercial markets.

Figure 14: Secured sourcing scheme
Case study Grameen Danone Foods Limited  #4

The Shokti Doi Yoghurt and danone.communities

Grameen Danone Foods Limited is a joint venture between Groupe Danone and the following 4 Grameen Companies: Grameen Business Promotions Services, Grameen Welfare, Grameen Energy, Grameen Telecom. The focus of activities is to bring healthy nutrition to low-income populations in Bangladesh and alleviate poverty through implementation of a proximity model. The actual product ‘Shokti Doi’ is a fortified yoghurt aimed at children 6 to 9 years old. Idea formed in October 2005 and launch of yoghurt production in April 2007. In April 2010 – 1 in 4 children around Bogra classified as having eaten at least 1 Shokti product per week over previous 3 months. Grameen Danone Foods Limited plans to break even in 2013.

An innovative funding mechanism has been developed by Danone to support these activities: danone.communities. Danone employees are free to invest part of their income in this fund. 90% is invested in common financial markets to generate return on investment. Other 10% invested in social business that does not pay return on investment. Investors in danone.communities: Danone, Danone employees, Credit Agricole, Institutional investors (e.g., Caisse des Depots et Consignations). Danone is in minority.

A double masked, randomized controlled trial was commissioned by GAIN and undertaken by Johns Hopkins University to evaluate the nutritional impact of Shoktidoi. The study reveals positive results which will be available in 2012.

Strategic multi stakeholder partnership

Pushtrikona: partnership between Renata Ltd and BRAC. Business model based on combining marketing to B+C consumers (Renata) with sales at community level to BoP consumers (BRAC).
Shokti Doi: joint venture between Grameen and Danone builds on established reputation of Grameen with BoP consumers to develop demand for a new product and Danone core competencies on the product.
KeBal: Initiated by NGO (Mercy Corps), drawing on pro-bono services from other organizations to develop marketing approach and franchise model; after successful proof of concept, spin-off to newly established local company with ongoing Mercy Corps technical support. Currently in phase of privatization of KeBal via transfer to Jakarta Foundation.

Description

This business intervention focuses on companies which, through renewing their business practices, aim to create or develop new markets at the BoP. The driver for companies and social ventures is creating shared value and connecting company successes with social progress.1

This could include developing new products and specific market-creation strategies combined with redesigning distribution models. This strategy challenges companies’ competences and requires them to move beyond their existing business models. Cooperative models and partnerships are crucial in achieving success. These approaches could be applied to products that fulfill specific needs (health, nutrition) where customer demands require development.

This market creation is qualified as hybrid since the partnerships are often between for-profit and not-for-profit organizations, with business models that rely both on institutional and commercial markets and the need for companies to depart from their usual business models.

Of all the BIs described, this is the BI whose business model is least proven, especially when traditional return-on-investment models and timelines are considered. The breakeven points of the cases included have either not been reached or are not expected to be reached before 2013 (Pushtrikona: breakeven point not yet reached; Shokti Doi: breakeven point expected in 2013; KeBal: breakeven point expected in 2013). Nevertheless the potential for impact and scale remains of interest.

In the case of market-creation strategies that build more on innovation capabilities, firms set up ad hoc structures intended to manage the projects separately from the mainstream organization. Different approaches to scale have been recognized in this BI: replicating the approach in other regions; focusing on demand creation and social marketing; increasing the number of products and services offered as a package; introducing products developed for the institutional market to commercial markets which are still being trialed at this stage.

1 Rethinking Capital, Michael E. Porter, Harvard University
Case study Pushtikona  #11

Proximity distribution model

Renata Limited, a producer of human and animal health products in Bangladesh, and BRAC, a large grassroots non-governmental organization with a network of rural health volunteers have teamed up, with GAIN support, to produce and sell Pushtikona (‘grains of nutrition’) – an high quality and affordable sachets of vitamin and mineral powders to be added to home-cooked complementary foods for infants and young children (6 to 24 months old). This micronutrient powder contains 15 essential minerals and vitamins that improve the nutritional value of complementary foods (price per sachet = Tk. 2.50/USD 0.034). The product is being sold at the same price point across all income classes which is listed on the label. Also to be noted: a margin on the price goes to pay for breastfeeding promotion (Tk. 2.50/USD 0.034).

Leveraging the partnership, Renata through its pharmacy channels sells to consumers at ABC segments in 64 districts in Bangladesh and BRAC through health volunteers sells to C and D segments across the country. Close to 1.3 million sachets of Pushtikona are sold door to door per month. BRAC community health volunteers were initially trained on need and importance (rationale) of complementary basic micronutrients in daily food patterns (marketing efforts and trainings in nutrition education were supported financially by GAIN). An estimated reach of approximately 200,000 infants aged 6 to 24 months per month has been achieved.

Case study Kedai Balitaku (KeBal)  #6

Micro-franchise model

Initiated by Mercy Corps in Indonesia, KeBal is a micro enterprise that develops and sells healthy street foods, which is an innovative solution to fight against both child malnutrition and general poverty in a country where the urban poor often do not have access to cooking facilities and largely live on processed food purchased in the street. Centralized kitchens have been set up, where nutritious meals are cooked and then sold by street vendors in carts. The various menus, which consist of a variety of snacks and main dishes, have been designed by nutritionists, hired by Mercy Corps, so as to respond to the nutritional needs of children. The street vendors emanate from the BoP as Mercy Corps employs individuals living in the urban slums of Jakarta. Through a franchise system, vendors and kitchens will have to become self-sustainable and pay a fee to the Kebal headquarters. At the same time, this system offers franchisees the possibility to gradually pay back loans and eventually own their carts or kitchens.

Case Study Valid Nutrition  #16

Highly nutritious ready-to-use foods

Launched in 2008, Valid Nutrition (VN) is a pure social business model (not-for-profit, but run as a business and financially self-sufficient) that develops, manufactures and distributes a range of highly nutritious ready-to-use foods (RUFs) on the African continent. These ready-to-use foods are highly fortified, lipid-based nutrient dense pastes specifically designed for the prevention and treatment of malnutrition. At this moment VN is mainly selling products to treat severe acute malnutrition, so-called ready-to-use therapeutic foods (RUTFs).

To stimulate the local economy as well as providing life-saving products at affordable prices, Valid Nutrition produces RUFs in the regions in which they are consumed, under licence from Nutriset, the company that developed the original RUTF formula. It established production and sales facilities in Malawi, Ethiopia and, previously, Kenya. The end-users are children between 6 and 36 months of age that suffer from severe acute malnutrition. To reach this target-group, VN sells its products on humanitarian markets; to NGOs, governments and international institutions (UNICEF 65%).

The main innovation of the business model is the combination of a new delivery model (Community-based Management of Acute Malnutrition - CMAAM), that is based on changing attitudes and behaviours of mothers at community level, and a new product (RUTF). This resulted in a demand led instead of a supply led approach. Currently Valid Nutrition is moving into products to treat moderate acute malnutrition and prevent chronic malnutrition; supplementary and complementary products that will be sold via both institutional and retail channels.
**Tips**

The case studies in this BI relate to interventions that focus on delivering nutrition to the BoP population. Companies and other partners depart from their existing business models to co-create and innovate. Most interventions started from scratch (new products, new services) in situations where a need existed but where customer demand was latent rather than active. The main findings are listed below.

**Establish a strategic partnership upfront to co-create a market:**
- mutual benefits in sharing distribution, R&D process;
- hybrid partnerships (both for profit and not for profit).

**Develop new capabilities in your organization:**
- new collaborative environment to cope with new mind sets;
- emergence of special projects and project teams.

**Adopt an hybrid governance structure:**
- possibility of using social enterprise status;
- develop KPIs that reflect the multidimensional goals of the structure and its innovative nature.

**Allow space for the development of innovative mechanisms by trial and error:**
- develop a new financial instrument like danone.communities;
- set up new distribution channels via existing informal networks.

**Demand creation, e.g. in cooperation with public organizations:**
- focus on the demand (instead of the need) linked to a product or service;
- use social marketing campaigns;
- spend time understanding BoP consumers and entrepreneurs via focus groups or an immersion period.

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**Different approaches to get new healthy food products to BoP consumers’ doorsteps**

- Pushtikona: Shasthya Shebikas (community health volunteers) doorstep distribution in rural areas
- Grameen Danone Food Ltd: Grameen Ladies doing door to door sales in rural areas
- Kebal: Street vendors with carts sell at prices that allow BoP mothers to buy healthy food for their children

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**Challenges and solutions BI5**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnerships are crucial, including the appropriate governance structure to be determined.</td>
<td>Period of trial and error in co-creation. Clear agreements on handover point between the test and commercial phase.</td>
</tr>
<tr>
<td>Financing model for an innovative product-development phase.</td>
<td>New financing models emerging at companies. Support by public authorities of innovation.</td>
</tr>
<tr>
<td>Demand creation is an essential element of the marketing strategy.</td>
<td>Partnerships with not-for-profit organizations and establishment of a social-marketing program with public authorities.</td>
</tr>
<tr>
<td>Long initial period of trial and error.</td>
<td>Strategy is to prepare for the future market. Include KPIs that are not only financial (social value creation).</td>
</tr>
<tr>
<td>Slow pace of market penetration.</td>
<td>The guaranteed sales via large-scale not-for-profit distribution helps to offset slower growth of retail distribution and creates economies of scale in production that drive the price down for everyone.</td>
</tr>
<tr>
<td>Significant initial capital investment.</td>
<td>New financial instruments, PPP, shared value creation.</td>
</tr>
<tr>
<td>Company has to adopt new operating methods and management approaches.</td>
<td>Introduce special project team. Leverage capabilities from partnership at early stage.</td>
</tr>
</tbody>
</table>
The way forward

From the wide range of the cases studied, whether in depth as described in Chapters 3 to 7 or as reviewed from the database, the evidence has emerged that companies can develop a value proposition that both promotes financial sustainability and facilitates better access to food and improved nutrition.

If we limit our focus to a narrow scope and what actually works, you might wonder whether any suitable cases can be found at all. However, we found a number of cases that do provide products and services at scale to the BoP in a financially sustainable way. Each BI impacts the BoP differently in terms of income generation or access to healthy food. They also achieve financial sustainability and scale at different paces.

### Selection metric

<table>
<thead>
<tr>
<th>BI</th>
<th>BI1</th>
<th>BI2</th>
<th>BI3</th>
<th>BI4</th>
<th>BI5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BoP income generation</td>
<td>⬤ ⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
</tr>
<tr>
<td>Access to healthy food (nutrition)</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
</tr>
<tr>
<td>Business feasibility</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
</tr>
<tr>
<td>Potential for scale</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
<td>⬤ ⬤ ⬤ ⬤</td>
</tr>
</tbody>
</table>

The scale of interventions differs per target group and absolute numbers can, for instance, range from several thousands of farmers for BI1 to hundreds of thousands of consumers for BI5.

More precisely, in the cases that focus on selling food products to BoP consumers, the numbers range from over a million packages per month (Pushktikona, Britannia) to around 40,000 cups of ‘Shokti Doi’ yoghurt (Danone) a day. If we consider businesses that sell agricultural inputs to smallholders (BI), they reach over 1 million farmers in total (Hariyali Kisaan) or aim at involving around 150,000 farmers (Dadtco). With regard to companies that include smallholders in their supply chain, the numbers vary from 4,500 (Tanga Fresh) on a daily basis to around 20,000 in total (Kecap Bango) to less than 2,000 fixed contracts (Metro Cash & Carry). Retailers like Suguo use around 2,000 small rural outlet stores to distribute their products, whereas Kheir Zamaan operates 19 urban retail stores to serve urban BoP consumer markets.

The five business interventions identified are an entry point for companies and other stakeholders to develop products and services to improve access to food and better nutrition to the BoP.

By deliberately choosing one of these strategies, implementing a suitable governance structure, and leveraging existing elements in specific models, companies are able to become more effective in the food value chain and to interact and partner with the BoP.

While the last point refers to broadening the scope of one intervention, it is also clear that the selection of a certain business intervention does not only depend on the features of the company itself, but is also strongly related to the local context. This could include local competition and the presence – or absence – of local partners. One of the challenges remains the business environment. For instance, in countries with a large BoP population and persisting food and nutrition insecurity as well as an unattractive business environment, it will be difficult to go beyond business intervention 1 and, to some extent, business intervention 2. The business environment, which is not explicitly addressed in the case studies, determines to a large extent the chance of success of any intervention.
Based on the clustering and the case studies, the following building blocks of a BoP proposition have been identified:

1. **Drivers**: Motivations for the private sector to enter BoP markets with products and services that contribute to access to food and better nutrition.

2. **Governance**: Establish an adequate structure to develop the BoP venture.

3. **Leveraging**: Leverage your own business and partners to ultimately co-create value.

4. **Finance**: Develop and use innovative financial mechanisms for BoP venture development and for access to finance for the BoP.

5. **“Resynchronization” in the food value chain**: Identify the specific part of the value chain your business is in, and create links with other essential parts in order to create business opportunities and to drive innovation.

### Drivers

The five business interventions allow companies to develop a specific strategy while entering the BoP environment. The motivations for doing so are numerous and require specific capabilities and the development of partnerships. Identifying the main drivers that motivate a specific company to develop BoP products and services has proven to be essential in sustaining the long-term effort these ventures require in order to ultimately achieve the desired impact. All interventions take time. Several case studies of BI5, for instance, are expected to take more than 7—8 years to reach financial sustainability.

Companies could combine a number of these drivers:

- **Commercial (short-to-medium term):**
  1. Market exploitation based on customer demand. This enables companies to open new market segments at the BoP by using an adaptation of their current business model.

- **Commercial**: Scarcity of resources and increasing demand for food-related products stress the need for companies to increase sourcing capabilities, increasingly with involvement of the BoP producers.

- **Strategic**: First mover advantage.

- **Strategic (longer term):**
  1. Increasing the innovation potential of the company in terms of products/services and business models. The BoP environment is a constrained environment in terms of financial resources or infrastructure, necessitating the emergence of new ideas to develop adequate services and products.

  2. Developing a future market by empowering smallholders, BoP consumers and partnering in hybrid alliances. Developing a future market at the BoP often implies developing a favorable local ecosystem with all stakeholders, including public authorities.

An overview of the BIs and the relevant motivations are given in the table below:

<table>
<thead>
<tr>
<th>Main Motivation</th>
<th>BI1</th>
<th>BI2</th>
<th>BI3</th>
<th>BI4</th>
<th>BI5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Strategic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As stated previously, the selection of a business intervention depends on the company’s motivation for starting a BoP activity and the party driving it internally with the BoP market characteristics. By being clear on the motivations for entering the BoP environment, it is possible to decide which business intervention best supports the achievement of the goals. These motivations may change over time or differ between business units of a company.
Governance
This building block relates to the development and implementation of the BoP proposition and, more specifically, to the approaches for embedding the BoP strategy in the company, particularly in terms of governance.

Particularly in the case of multinational corporations (MNC’s), a proper governance structure of BoP activities at a given company has proven to be the key to success. It includes:

- Ensuring ownership and continuation (from Board level to intrapreneurs). The encouragement and commitment of the board is essential for guaranteeing the time span required for these ventures to nurture (up to 7—8 years).
- Enabling employees to commit their talent to the development of the BoP activities is crucial. Intrapreneurs who bring passion and professionalism to the development of BoP ventures should clearly view this path as part of their career development.
- Adequate Key Performance Indicators (KPIs) and an adapted timeline need to be developed to reflect the multi-dimensional status of most of the initiatives we have scrutinized in this study. In most cases, the BoP activities do not suit the existing performance management systems of companies (unit sales, turnover, return on investment) and a performance indicator could be included that focuses on the local society (income, empowerment) and the company’s corporate social/environmental image. In large MNCs, consistency of these policies across different business units also supports the development of a suitable governance structure.
- Particularly in terms of market creation, companies set up BoP business units, often initiated by special teams, to direct BoP activities and reinforce the governance structure. These units could “bridge” the different interests and approaches (marketing, R&D, business development, brands, Corporate Social Responsibility).

A proper governance structure also allows companies to make optimal use of business and market capabilities. In very few of the cases studied, companies started in the BoP environment from scratch. Often a number of existing elements in a given organization are built upon (distribution channel, brand reputation, networks, sourcing capabilities, marketing, etc.) and combined with leveraging capabilities of other parties in the overall food system. Indeed, from an external perspective, food is a sector inherently embedded in the local settings, and this provides elements to build upon (partner organization, agri-capabilities). At the same time, from an internal perspective, companies use a combination of existing brands, products, distribution channels/suppliers as the starting point of their BoP ventures.

Leveraging
In the majority of the cases studied, the private sector works together with other partners, including public, private and non-profit organizations. The respondents in the case studies stated that working in partnerships was an important (not to say crucial) factor to the success of the interventions.

The reasons for entering into these partnerships vary from cooperating with organizations with complementary knowledge and/or skills to jointly developing the capabilities of both the company and the partners (co-creation).

The nature of the partnership models differs from BI to BI, with interdependency being an important factor. In BI3, for instance, the focus is on commercial business agreements between the different partners. In BI2, on the other hand, the commercial buyers, as the dominant partners, “contract out” services to specialized local players. In BI5 (and BI1 to a lesser extent), the different partners are working in a multi-stakeholder partnership, where partners are more interdependent.

An overview of the most important reasons for partnering is given below:

- Access to local distribution systems; very present in BI5, this point also involves BoP entrepreneurs in the value chain.
- Understanding BoP consumers/ producers and the local context. Partnerships between for-profit and not-for-profit organizations in BI1, for instance, support the private sector in understanding the structure of the local farming ecosystem.
- Product/Service development (R&D, innovation).
- Access to market, especially relevant for BI1, BI2, and BI3. Partnerships can open up business opportunities for local organizations/companies in national, regional and export markets.

1 A person that acts like an entrepreneur and creates a new business within an existing company.
Finance

One of the major constraints to private parties in engaging and investing in new products and services aimed at improving access to food and improved nutrition is the absence of seed capital targeted at the stimulation of innovative solutions during the different stages of the innovation cycle – from the early stages of opportunity identification through to later phases of piloting co-created solutions. It is in this fuzzy front-end of innovation that the funding gap is widest. For the later stages of market introduction and scalability, it is easier to obtain commercial loans, guarantees, and venture capital if the private party can comply with all rules for submitting an investment plan. This may include the need for patient capital, taking into account the longer timeline for return on investment than is the case with traditional business models.

Of the cases studied, the development finance needed by individual enterprises varies significantly depending on the relevant BI, their size, stage of maturity, human resource capacity, and other factors. Ranging from a few hundred thousand to several millions of dollars for large multi-national companies, it is often a challenge to obtain – financial – support for the pre-seed/seed phases of innovation from existing financing institutions.

To fill the gap, companies can develop innovative financing schemes internally, including employee contributions to investment funds. Impact investing also offers a new alternative for channeling large-scale private capital for social benefit. This new type of investment aims to achieve a desired societal impact while yielding an acceptable financial return. However, this movement is still young and entrepreneurs still find it hard to obtain financing, particularly for new ventures in which the entrepreneurs’ funding needs are too small for traditional debt or equity financing.

Beyond the financial mechanisms that a company can develop itself, it is up to the private sector, the financial institutions, and the public authorities to take action to develop financing mechanisms that can offer – small – investment capabilities that support BoP initiatives targeting the food sector.

Furthermore, the issue of access to finance for the BoP itself has been referred to on numerous occasions. A number of innovative solutions have been developed to enable BoP consumers or producers to access adequate financing, such as micro-finance institutions providing access to loans via mobile phones.

Resynchronization

The emergence of major conglomerates in the food industry has created a situation where they see other parts of the chain via interfaces (market interfaces for instance). This entails a risk of poorer quality, more difficult traceability, food safety concerns and a dependency on few crops.

To limit the risks, companies need to resynchronize through the value chain, as they often limit themselves to specific actions within the chain (e.g., selling input, processing). Resynchronization in the food value chain means that a company influences the process beyond its own intervention space by investing in the ecosystem around the intervention. This involves creating links both upstream and downstream in the value chain. For example, a processor that invests in the development of a farmer organization or a retailer investing in educating the BoP consumer on the nutritious value of products.

From the perspective of access to food and improved nutrition, this will engender the emergence of opportunities. A number of the case studies show the development of propositions which involve the BoP both as producers and consumers of the food products concerned.

Case studies provide evidence of mechanisms that facilitate this reconnection of the value chain. For example, companies have created special investment funds to develop this ecosystem and invest in farmer development. Also, public authorities get involved and create public-private partnerships to facilitate customer education.

By reconnecting, the traditional value chain then becomes a shared value chain where societal development is ultimately linked with market opportunity. In pursuing that path, companies create new innovations, new technologies, and new management structures to be in a better position to serve these new markets.

Impact Investments: An emerging asset class. www.morganmarkets.com
Annexes

Terminology definition of lead agents
The concept of ‘lead agent’ is introduced in the database. This focuses on the governance structure of the activity and includes the following definitions:

MNC (Multinational Corporation):
- Driver of the project is an international company operating in several countries, but managed from one – home – country.
- The rationale behind participation of the company is business-driven.
- While other stakeholders may be involved, the MNC is the main decision-maker and investor.

SME (Small and Middle-Sized Enterprise):
- Companies with less than 250 staff, but in practice often even less than 50.
- The participation of the company is business-driven.
- While other stakeholders may be involved, the SME is the main decision-maker and investor.

Social enterprise:
- Working according to an economic, social, cultural, or environmental mission consistent with a public or community benefit.
- Reinvests the majority of its profit/surplus in the fulfillment of its mission.
- While other stakeholders may be involved, the social enterprise is the main decision-maker and investor.

PPP (Public-Private Partnership):
- Cooperation of 2+ partners of different stakeholders (public, private, knowledge institutes, NGO).
- Agreed to work toward one goal: system of risk and responsibility sharing (money-based).
- Clear role delineation in the partnership.
- Development and implementation is based on a – signed – agreement.

Non-profit organizations (NGO/Foundation/International Organization):
- Non-governmental organizations.
- (Private) foundations (including Corporate Philanthropy).
- International organizations.
References


## List of case studies for deep dive

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Country</th>
<th>BI</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Alquería SA</td>
<td>Colombia</td>
<td>2</td>
<td>Alquería S.A. is Colombia’s third-largest dairy company. Alquería does business with low-income populations on the supply side, e.g. dairy farmers, and on the distribution side, e.g. retailers.</td>
</tr>
<tr>
<td>#2</td>
<td>DADTCO</td>
<td>Nigeria</td>
<td>1</td>
<td>Dutch Agricultural Development and Trading Company (DADTCO) is a private enterprise specializing in processing large-volume commercial agricultural products with high trade potential.</td>
</tr>
<tr>
<td>#3</td>
<td>East West Seeds</td>
<td>South East Asia</td>
<td>1</td>
<td>East West Seeds (EWS) is an Asia-based seed company that cultivates vegetable varieties locally for the local market. It brings high-quality vegetable seeds at an affordable price to South East Asian farmers</td>
</tr>
<tr>
<td>#4</td>
<td>Grameen Danone Foods Ltd.</td>
<td>Bangladesh</td>
<td>5</td>
<td>Grameen Danone Foods Limited, a joint venture between Groupe Danone and the following four Grameen companies: Grameen Business Promotions Services, Grameen Welfare, Grameen Energy, Grameen Telecom. It brings fortified yoghurt (“Shokti Doi”) to low-income, populations in Bangladesh and alleviates poverty through the implementation of a proximity model.</td>
</tr>
<tr>
<td>#5</td>
<td>Hariyali Kisaan Bazaar</td>
<td>India</td>
<td>3</td>
<td>The “Hariyali Kisaan Bazaar” chain seeks to empower the farmer by setting up centers which provide all-encompassing solutions to farmers under one roof.</td>
</tr>
<tr>
<td>#6</td>
<td>KeBal</td>
<td>Indonesia</td>
<td>5</td>
<td>“KeBal - The Healthy Street Food Project” was developed in Jakarta to address the need for more healthy street food particularly for young children under the age of five. The KeBal concept is built around neighborhood-based central kitchens that cook a selection of nutritious meals and snacks for sale via street carts.</td>
</tr>
<tr>
<td>#7</td>
<td>Kecap Bango</td>
<td>Indonesia</td>
<td>2</td>
<td>Kecap Bango is one of several types of sweet soy sauce produced in Indonesia. It was purchased by Unilever Indonesia in 2001, selected because of its existing market, the strengths of the company, and the expected appeal of the product formulation for national distribution.</td>
</tr>
<tr>
<td>#8</td>
<td>Kheir Zamaan</td>
<td>Egypt</td>
<td>3</td>
<td>The Mansour Company, through its high-end Metro supermarket chain, was one of the early companies to introduce the super market concept in Egypt in 1998. In 2006, it opened its new chain, Kheir Zamaan (KZ), to serve lower-income people. Since that time, this new chain has expanded in several low-income areas in greater Cairo.</td>
</tr>
<tr>
<td>#9</td>
<td>Metro Cash &amp; Carry Vietnam</td>
<td>Vietnam</td>
<td>2</td>
<td>Metro Cash &amp; Carry is a German-owned fresh food distributor which established its first Vietnamese outlet in 2002. As part of their core-business activities, MCC buys fresh produce from several smallholders in the Lam Dong province, a vegetable-growing region. In partnership with local authorities and NGOs, MCC has invested in training programs for farmers and other small-scale service providers along the food supply chain.</td>
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<tr>
<td>Number</td>
<td>Name</td>
<td>Country</td>
<td>BI</td>
<td>Short Description</td>
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</tr>
<tr>
<td>#10</td>
<td>Minute Maid</td>
<td>Uganda, Kenya</td>
<td>4</td>
<td>In line with its 2020 Vision, Coca Cola aims to triple its global juice business by the year 2020. One approach to achieving this growth is to increase its market share among low-income consumers in Africa by building on existing distribution channels.</td>
</tr>
<tr>
<td>#11</td>
<td>Pushtikona</td>
<td>Bangladesh</td>
<td>5</td>
<td>Renata Limited, a producer and marketer of human and animal health products in Bangladesh, and BRAC, a large grassroots non-governmental organization with a network of rural health volunteers, collaborate in the Bangladesh Sprinkles Project “Pushtikona” (grains of nutrition); high quality and affordable sachets of vitamin and mineral powder to be added to complementary foods.</td>
</tr>
<tr>
<td>#12</td>
<td>Sierra Leone Brewery Limited (Heineken)</td>
<td>Sierra Leone</td>
<td>2</td>
<td>Facing the rising cost of barley, Sierra Leone Brewery, a subsidiary of Heineken, is now supporting the local production of sorghum, and is buying the grain directly from farmers. Substituting the imported malted barley with more of the local sorghum is bringing money into the pockets of both farmers and brewer.</td>
</tr>
<tr>
<td>#13</td>
<td>Suguo</td>
<td>China</td>
<td>3</td>
<td>Suguo supermarket is a Nanjing-based local supermarket, consistently ranked among the top ten supermarkets in China. Suguo has successfully penetrated the rural Chinese market by persuading rural cooperatives to become franchisees of the supermarket.</td>
</tr>
<tr>
<td>#14</td>
<td>Tanga Fresh</td>
<td>Tanzania</td>
<td>1</td>
<td>Tanga Fresh Ltd is a joint venture between a Tanzanian farmers association (TDCLU) and investors. It offers a coordinated dairy value chain of milk collection, processing and marketing combined with growth opportunities offered to smallholders through heifer availability and cattle credit, known as “the Tanga Model.”</td>
</tr>
<tr>
<td>#15</td>
<td>Tiger biscuits</td>
<td>India</td>
<td>4</td>
<td>Britannia is one of India’s leading food companies and a leading name in the bakery and dairy segments in the Indian marketplace. Britannia has launched a commercial iron-fortified version of its popular Tiger biscuits that are distributed via 3.5 million rural and urban retail outlets throughout India.</td>
</tr>
<tr>
<td>#16</td>
<td>Valid Nutrition</td>
<td>Malawi, Ethiopia</td>
<td>5</td>
<td>Valid Nutrition is developing, manufacturing and distributing a range of highly nutritious ready-to-use foods (RUFs) on the African continent. It produces RUFs in the countries or regions in which they are consumed, thereby stimulating the local economy as well as providing life-saving products at affordable prices.</td>
</tr>
</tbody>
</table>
About the BoP Innovation Center and the Global Alliance for Improved Nutrition (GAIN)

The BoP Innovation Center (BoP Inc.) is an independent foundation using a multi-stakeholder approach to facilitate sustainable innovations in Base of the Pyramid (BoP) markets. These market-based innovations aim to co-create a positive impact on the wellbeing of low-income people. We firmly believe that creating market-based sustainable innovations for the BoP can create a win-win-win situation for all organizations involved and the people at the BoP.

Nicolas Chevrollier is a program manager at BoP Innovation Center responsible for Scaling & Enabling Environment. He has over 12 years of experience at the intersection of innovation, business, and development gained at companies, knowledge institutions and not-for-profit organizations around the globe.

Rutger Bults is responsible for Matchmaking & Business Relations at the BoP Innovation Center with prior experience at NCDO (Business in Development) and BiD Network, as an organizer and project manager at the interface of the private and public sectors.

Thom Sprenger is strategy advisor to the BoP Innovation Center team. He has more than 20 years of professional experience as a senior partnership advisor of the Dutch Minister for Development Cooperation and the senior coordinator of the Amsterdam Initiative against Malnutrition (AIM).

Myrtille Danse is the Executive Director of the BoP Innovation Center. She has over 15 years of experience working on sustainable chain development and inclusive business strategies of the local private sector in transition in developing economies. Most of these experiences are related to the food sector.

The Global Alliance for Improved Nutrition (GAIN) is an alliance driven by the vision of a world without malnutrition. Created in 2002 at a Special Session of the UN General Assembly on Children, GAIN supports public-private partnerships to increase access to the missing nutrients in diets necessary for people, communities and economies to be stronger and healthier. In less than a decade, GAIN has been able to scale its operations by investing in and working alongside more than 600 companies in more than 30 countries, reaching over 600 million people with nutritious foods.

Birgit Poniatowski develops multi-sector partnerships and coordinates GAIN’s relationships with international organizations, governments, civil society and academia. She has over 15 years of experience in program and relationship management as well as governance at the UN and non-governmental organizations and in the private sector.

Kirstin O’Neill is a Junior Associate in GAIN’s Investment and Partnerships Team, with previous experience in the private sector as well as at UNHCR, where she worked as an intern during her studies.
Contact Information

Postal address
BoP Innovation Center
P.O. Box 19219
3501 DE Utrecht

Telephone
+31 (0)30 2305 915

Email
info@bopinc.org

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