Inclusive Innovation
Shared value at the Base of the Pyramid

Insights and key lessons from three pilots for pro-poor innovation

THREE PILOTS FOR PRO-POOR INNOVATION CONSORTIUM
Inclusive Innovation

It has been a decade since C.K. Prahalad and I first published the article “The Fortune at the Bottom of the Pyramid” which launched the “BoP” business movement. Since then, many corporate initiatives, entrepreneurial ventures, and innovation centers have been launched focused on the BoP. There have been fits and starts: many of these ventures have failed; some have been converted to philanthropic programs; a few have taken root and gathered commercial momentum.

This process of experimentation and learning has been viewed by some through a negative lens, pronouncing various BoP business ventures as the latest form of corporate imperialism — a “misfortune” at the bottom of the pyramid, or a quixotic quest for the impossible — a misallocation of valuable investment capital. As this important report makes clear, however, rumours of the imminent demise of BoP have been greatly exaggerated. Indeed, much has been learned over the past ten years and I believe that we are on the verge of taking the BoP business movement to the next level in the coming decade.

Just think of how far we have come over the past ten years: It has become increasingly clear that designing low-cost artifacts and products for sale in the low-income space is necessary but not sufficient to success. The landscape is littered with the remnants of failed BoP ventures focused on the sale of such things as low-cost water filters, solar lights and myriad other household goods. Reasons for failure: product misfire, low sales penetration, high cost distribution, and inability to scale. We now know that BoP enterprises must create wide and compelling value propositions — an entire business ecosystem that delivers value to local people and communities in multiple ways, not just through a single product.

We have also learned that co-creation is critical to BoP business success, involving local communities in the process of not only product design, but business model creation — what Ted London and I have called “creating a fortune with the BoP.” It is now increasingly clear that BoP entrepreneurs must come to view the poor more as partners and colleagues rather than merely clients or consumers. Such an approach calls for deep dialogue (two-way communication) rather than just deep listening. We now increasingly clear that BoP entrepreneurs must develop a new “native capability” which focuses on co-creating business concepts and business models with the poor, rather than simply marketing inexpensive versions of top-of-the-pyramid products to low-income consumers.

Finally, we have learned about the potential to leapfrog to environmentally sustainable technologies starting in the BoP — an approach I have called “Green Leap.” By gaining access to low-cost distributed clean technologies and developing inclusive business models around them, it is possible to engage in a form of modern-day green “alchemy.” When viewed through the emerging lens of “disruptive” or “reverse” innovation, many of these green technologies appear to have real commercial as well as environmental potential. We now know that BoP enterprises have an opportunity to commercialize the thousands of clean “shelf” technologies extant in the World to first serve the needs of the underserved at the base of the pyramid. Some may even one day revolutionise the way we live at the top of the pyramid.

We have indeed learned much over the past decade about how to serve the poor in a way that is environmentally sustainable, economically empowering, culturally embedded, and financially profitable. I cannot wait to see how much we learn in the next decade. This report represents a significant step in this continuing journey.
Introduction

Since 2002 a growing number of companies and NGOs have obtained first experiences in launching innovative products and services in the Base of the Pyramid (BoP). These initiatives provide useful insights for the next step. We are ready for a more nuanced view on doing business in BoP markets. How to approach such pro-poor innovations successfully? Where to focus and who can lead these efforts? How to develop these innovations and ultimately accelerate them? These are some questions that must be answered. Not only to reach impact at and with the BoP, but to learn how to manage the Inclusive Innovation process.

This experience-based review sets the scene for a series of publications. The series covers key challenges for any organisation that wants to address the most pressing issues experienced by the BoP.

Inclusive Innovation

Inclusive Innovation is the market-driven development of something new with impact together with low-income groups.

- **Together with the BoP**
  True impact can only be achieved when low-income groups are included in the process, either as entrepreneurs, producers or as consumers. Inclusive Innovation creates shared value. Innovating in co-creation with low-income groups is key to understanding the difference between need and demand.

- **Having impact**
  The objective of Inclusive Innovation is to have impact in a social, economic and ecologically sustainable way. Impact can be income generation, employment or improved access to basic services.

- **Market-driven**
  Led by businesses, inclusive innovations aim to create shared value. Companies get access to new markets and create business opportunities at the BoP together with low-income groups.

Need to know

The Base of the Pyramid (BoP)

The Base of the Pyramid refers to the four billion people with a daily income below $4 US dollar. Most of them lack proper access to immediate basic needs such as food, water, housing and clothing, let alone sanitation, education and healthcare. Chronic malnutrition and a range of health issues still are life-threatening challenges every day. People at the BoP predominantly live in the developing and emerging economies of Asia, Africa and Latin America.

Source: World Resources Institute, The Next 4 Billion

Trends

**A decade of BoP**

2002: The BoP concept was formally introduced by C.K. Prahalad and Stuart L. Hart in their article “The Fortune at the Bottom of the Pyramid”. Companies had begun playing an increasingly important role in targeting this large untapped market. Initially, multinationals followed a one-direction approach selling products and services to the poor. While the value for companies was clear, the extent to which their activities served the poor remained questionable. Moreover, strategies often failed to succeed because products were not developed in conjunction with the BoP.

BoP 2.0: In 2008, the next generation BoP approach was launched by the second edition of the Base of the Pyramid Protocol. Now people at the BoP are involved in the innovation process as valuable business partners. The new approach entailed a shift from business strategies targeted at the BoP to Inclusive Innovation together with the BoP.

Key principles:
- BoP consumers, producers and entrepreneurs included as partners
- Innovation is a product, service or process
- Co-creation of business models
- BoP demand central in design of products and services
- Embedded innovation
- Profit shared between strategic partners

Today: People at the BoP are included in projects as entrepreneurs, producers and consumers. Partnering with companies, civil society and public authorities, they co-create inclusive innovations. Under the currently emerging view – ‘BoP 3.0’ strategies – the various stakeholders with their different perspectives work collaboratively toward integrated system solutions. The strength of the company taking the lead is reinforced by smaller, more flexible, innovative, international and local companies. These are strong partnerships that have a collective impact on the BoP. This is the way of working of the 3P4PPI consortium.

**BoP Innovation Cycle**

Developing innovations at the Base of the Pyramid requires a specific approach. The innovation moves from the initial identification of the opportunity to the scaling of the innovation following crucial and iterative steps. All innovation projects that the BoP Innovation Center facilitates follow the BoP Innovation Cycle. This cycle builds on – and is an adaption of – the BoP Protocol 2.0, developed by Stuart Hart and Erik Simanis at Cornell University. It is used as a framework and tested in BoP contexts. At the same time, it is used to gain insights into the different phases of the innovation cycle.

**Market value of the BoP**

While purchase power per household at the BoP is low, by virtue of their number BoP markets around the world represent a combined value of about 5 trillion dollar in purchasing power parity (World Resources Institute, 2008; International Finance Corporation, 2007). Despite low margins per unit price realistic in this market, the large number of potential consumers has attracted the attention of many companies. This has led to a wave of multinationals starting to develop products at margins that were not deemed to be profitable before.

Main reasons to invest in BoP markets:
- Growth opportunities
- Substantive collective purchasing power
- Source of innovation
- Efficiency advantages
- Reputation and long-term survival
Inclusive Innovation is the market-driven development of something new with impact together with low-income groups.

From pyramid to diamond

Energy
Worth $433 billion
Improved access to energy is essential to allow BoP entrepreneurs and producers to increase their wellbeing.

Food
Worth $2695 billion
Great potential for the poor to obtain a higher income through BoP projects in food sector.

Water
Worth $20 billion
Crucial for improving farming, health and life quality.

Health
Worth $158 billion
Providing affordable and accessible healthcare products and services is key for low-income groups.

The most challenging and promising opportunities in the 21st century will be found at the intersection of unmet societal needs and business innovation.

Chris Laszlo, author of Embedded Sustainability: the Next Big Competitive Advantage, 2011

Motto

High income
$12.5 Trillion Market

Low income
$5 Trillion Market
$3000 PPP

source: Illustration from C.L. Prahalad’s “Fortune at the Bottom of the Pyramid”
Three Pilots for Pro-Poor Innovation

A learning environment to innovate for and with the BoP

Pilots

Medical test kit for the African market

Situation
Poor people are more vulnerable to disease. Access to medicines improves the quality of health. However, up to 40% of drugs available to the poor in Africa are suspected to be of low quality. This problem can have a tragic impact on those who take the medicines. Apart from the issues of counterfeit drugs entering the market and uncertainty regarding the quality of donated medications, problems with medicines also arise during transportation, handling and storage: they can degrade and become substandard before they reach patients.

Inclusive Innovation
A medical test kit is a very important tool for checking the quality of medicines. For pharmaceutical and distribution companies, regulators and health practitioners, the test kit allows quality to be controlled throughout the distribution chain. DSM, ICCO and EPN are working in conjunction with other local partners and the BoP Innovation Center. The aim is to produce a new antibiotic test kit that checks whether medicines contain the correct quantities of active ingredients. This innovative product will be developed, co-produced and tested in collaboration with local partners. This product will be brought to market in Africa (Bangladesh) and Africa (Rwanda).

Partners
DSM, ICCO, EPN, local partners, BoPInc

Cold storage for Ethiopia and Vietnam

Situation
Almost 1 billion extremely poor people live in rural areas where they are engaged in agricultural activities. A lack of knowledge of post-harvest practices combined with poor infrastructure and no storage facilities result in at least 40% waste in the fresh-produce supply chains in developing countries.

Cold storage chains for dairy products and vegetables produced in rural areas would have a tremendously positive effect on the income generated by smallholder farmers in developing countries.

Inclusive Innovation
Dairy sector in Ethiopia
For effective use in the BoP market segment, cooling units have to be small in size, easy to maintain and function with off-grid energy. Mueller, a leading Dutch company in the dairy cooling business, has accepted the challenge. Together with local entrepreneurs and smallholder farmers, Mueller aims to create an effective solution. Wageningen UR and SNV will gather insights from the BoP on people’s needs and expectations regarding the cooling unit. The cooling unit has two distinct value propositions: (1) cooling evening milk to sustain quality when the milk is collected the next morning; (2) increased flexibility for the processor in collecting milk once a day instead of twice.

Fruits and vegetables in Vietnam
Conventional cold storage equipment can be modified for use in a collection and distribution centre. However, to distribute the final products from the distribution center to the 300 fruit and vegetable shops spread all over Hanoi and Hai Phong, an innovative solution needs to be developed that facilitates easy distribution to the city and to appropriate small-scale storage units in shops. A critical mass of daily orders is needed for the project to be cost-effective and compete with cheaper Chinese vegetables.

Partners
Mueller, SNV, LEI Wageningen University and Research (LEI), BoPInc, local partners

Biogas socket in Rwanda

Situation
Over 1 billion people in the world do not have access to grid-based electricity.

People at the Base of the Pyramid spend enormous amounts of time and precious financial resources securing inefficient or unsafe off-grid alternatives such as firewood and kerosene. This limits income generation and educational activities. Furthermore, it obstructs their social and economic development and has a negative effect on overall health.

Inclusive Innovation
A sustainable solution to this problem is the production of electricity from biogas. Many rural households in Africa and Asia already use household biogas digesters for cooking. In this pilot, an electricity socket will be developed that allows people with biogas digesters to produce electricity in their homes. The partners currently working to bring this product to market include TNO, SNV, the BoP Innovation Center and local partners. This product will be brought to market in Asia (Bangladesh) and Africa (Rwanda).

Partners
TNO, SNV, local partners, BoPInc

Learning questions

01 How do I deal with the complexity of the local eco-system to develop an inclusive innovation?
02 In which country do I implement my BoP pilot?
03 How do I get BoP consumer and market insights?
04 How do I find a suitable set of partners to do a BoP pilot project?
05 How can I work together with local partners and utilise their capabilities to develop an Inclusive Innovation project that meets the demand of the BoP?
06 How do I ensure that field testing delivers valid results?
07 How do I measure willingness to buy and set the price for a product?
08 When and to what extent is business development capacity within the project teams/consortium of partners indispensable?
09 How do I support and encourage a project team to start working on the potential business case at an early stage?
10 Which different roles and responsibilities can be identified and divided among an Inclusive Innovation consortium?

Answers to these questions are formulated in Learning Notes.
Contact BoPInc for more information: info@bopec.org
Starting Inclusive Innovations

The Inclusive Innovation process is based on iterative interactions between stakeholder groups. Ideally, the BoP, companies and the public domain are included in the process from the start.

Every inclusive innovation starts with an idea. To get off to a good start, it is essential that opportunities can be identified. This identification process is a set of interacting activities whose objective is to transform the initial ideas into a draft action plan. At the identification stage nothing yet is concrete. Different approaches are welcomed as helpful methods. Each approach provides its own set of ideas, stakeholders and business models based on a specific process. Depending on the type of innovation and based on several internal criteria, you can choose an appropriate method for identifying opportunities.

Internal criteria include:
- Sensitivity of information
- Availability of time and human capital
- Maturity of the idea
- Acceptance of fuzziness in the process

Focus groups
The most common method for generating ideas is to combine existing ideas and theory in brainstorming sessions. Focus groups bring to the table sufficient knowledge, ideas and perspectives to create space for innovation. This method requires working very intensively but involves fewer people. It allows control of sensitive data and is more effective when an innovative idea has already been shaped.

This method was used by the partners involved to generate ideas for accessing energy in the Jari region (Brazil). With focus groups and brainstorm sessions, companies combined existing ideas and knowledge to identify opportunities.

Call for interest
When an initiator is confronted with a shortage of human capital or time, a call for interest can be the most appropriate method. This method starts with a description or briefing. Anyone who can contribute towards achieving the intended objectives can respond by pitching an idea or solution to the initiator.

TNO wanted to explore possibilities of using biogas for both cooking and electricity. Other parties appeared to have similar ideas. By leveraging the partner network of BoPInc, it was possible to generate ideas and start piloting in Bangladesh, Rwanda and Ethiopia.

Ideenation
Ideenation is based on a crowdsourcing mechanism that involves outsourcing tasks to a distributed group of people often unidentified initially. Through online platforms, people participating contribute with novel ideas and their own business skills. The way this crowd-sourced information is assessed is crucial to success. It requires also accepting a high level of uncertainty.

IDEO, Unilever and WSUP posted the following challenge on OpenIDEO.com: “How can we improve sanitation and better manage human waste in low-income urban communities?” The objective was to develop an innovative business model for delivery of better household sanitation services for the urban BoP. After six weeks of exploratory research and two weeks of on-the-ground research in Ghana, 25 homes in Accra, Ghana were fitted with Clean Team toilets and now have sanitation services.

Scoping
Scoping is an engagement tool based on analyzing best practices in a specific sector. Scoping starts with gathering data on existing value propositions, successful initiatives and business models. An inventory and analysis of best practices and cases can be a strong evidence-based guide to promising ideas.

From Idea to Opportunity

The Global Alliance on Improved Nutrition (GAIN) and the BoP Innovation Center published the report “Access to Food and Improved Nutrition via the Base of the Pyramid”. This study, based on the analysis of 16 cases and expert interviews, identified five different business interventions for BoP ventures for achieving social impact, financial sustainability and, potentially, scale.

Quick Scan
Currently, the BoP Innovation Center is developing an inexpensive and time-efficient alternative: the quick scan. Cross-linking cases, identified challenges and best practices from existing scoping studies may provide enough inspiration to get off to a quick start on Inclusive Innovation.

Learning Notes

Key lessons Medical test kit for the African market

Learning question: How do I deal with the complexity of the local eco-system?

The actual success of this inclusive innovation - the test kit itself - depends on the health of the eco-system, the enabling environment, in which the project and the final product will be introduced. Rather than being a stand-alone product, the test kit will be a screening and referral device. It will help healthcare and pharmacy staff to decide whether to return a product, have it tested further or refer it to the government for inspection.

Stakeholders consider the test kit to be a tool that can help strengthen the recall system which takes substandard drugs off the market. However, success depends on the presence of an active recall system, which is not yet the case. A recall system must be mandated by the government and based on legal requirements. Although those involved in the project were aware of this situation, the focus of the project design was more on social marketing and awareness creation. Furthermore, although the quality of medicines is on the local partner’s agenda, influencing local policy is a long-term process that is largely beyond the scope of the current partners.

Key lessons Cold storage for Ethiopia and Vietnam

Learning question: How do I gain BoP consumer and market insights?

The cold storage pilot in Ethiopia aims to enable small-scale producers to preserve the quality of fresh food during storage and transport. A first quick scan identified key issues. During a local visit, interviews were conducted with main stakeholders. Based on the results, a focus group was initiated. The outcome was that farmers are part of a cooperation, rather than having collective ownership of the cooling unit. The question was raised who would pay for the cooling unit: the farmer, the processor or the end consumer? Developing a business case, finding information and acquiring knowledge of hierarchical relations takes time. In Ethiopia, the government is an important stakeholder that needs to be engaged in the process. For the market research, finding a local research agency was a real challenge.

Lessons learned:
A sound value proposition has to be in place to engage companies or entrepreneurs to invest. Real partnership only starts after the risk involved for the entrepreneur has been clarified.

Finding a capable local market research agency can be difficult and time-consuming.
Innovation is not just a matter of inspiration or individual talent. It is a strategic business objective that requires specific structures, processes and knowledge.

Is creating an inclusive innovation a challenging task? Certainly. And while there is still some debate on whether innovation can help solve developmental challenges, I think the main question resides in the ‘how’ and not in the ‘why’, states Nicolas Chevrollier, Programme Manager at 3PI4PPI at the BoP Innovation Center.

‘The main challenge is how to optimise the outcome of any innovation trajectory towards development. However, the process of innovating at the BoP is often reduced to a genius’ spark of intelligence which ultimately leads to a transforming product or service. Creativity and talent are part of the process of innovation, but ultimately it is a structured process that can be managed.’

Challenge 1 Obtaining BoP Insights
For companies without previous experience in targeting BoP consumers, it can be a challenge to enter this market. Entering these markets requires BoP insights into how the 4As – affordability, acceptability, availability and awareness – can be optimised to deal with the unique characteristics and constraints of the BoP market. This is not an easy task given that solid data is scarce and marketing, distribution and retailing structures are often weak in developing countries.

Challenge 2 Developing BoP Partnerships
Successful Inclusive Innovation ventures need strong partnerships to achieve impact. The processes and steps involved in arriving at effective collaboration are full of challenges, including aligning goals properly, developing a suitable governance structure and managing multi-stakeholder interventions. Innovation in the BoP context has its own dynamics, mainly related to the very diverse nature of the partners (often local) involved.

Challenge 3 Co-creating inclusive innovations
‘Co-development catalyses business imagination and ensures the business model is culturally appropriate and environmentally sustainable by building on local resources and capabilities’ (BoP Protocol 2.0). Inclusive innovations are co-created with BoP consumers, producers and entrepreneurs with established principles, techniques and methods.

Key lessons
Put the private sector in the driving seat
While each partner contributes value to the innovation, ownership of the inclusive innovation is in the hands of the entrepreneur. The entrepreneur is the one ultimately scaling and sustaining the business. As soon a company realises a business opportunity exists, the priority of the project increases. The efficient and result-oriented way of working of companies positively impacts the speed of the pilot.

Manage expectations in terms of impact
Ultimately, inclusive innovations aim to achieve direct impact on the BoP. However, many activities are focused on development of the innovation and the opening up of the BoP market. These activities have a life span of several years. If expectations are managed carefully, there will be less disappointment if the real impact on the BoP is less visible or takes longer than expected.
Inclusive Innovation

Three Pilots for Pro-Poor Innovation Consortium

**What’s next**

**Join**

**Online Communities**

NextBillion.net is a website and blog bringing together the community of business leaders, social entrepreneurs, NGOs, policy makers and academics who want to explore the connection between development and enterprise. www.nextbillion.net

BusinessFightsPoverty.org is the leading online community for business and development, connecting over 10,000 professionals. It is a vibrant community of individuals from business, the international donor community, non-government organisations and academia – all of whom share a passion for fighting poverty through business. www.businessfightspoverty.org

**changementmakers**

A global community of action that grows the impact of change-making – from dedicated individuals and community organisers to Fortune 500 companies and global foundations. www.changementmakers.com/innovations

Join the BoP Innovation center newsletter:

www.bopinc.org

Join the WBCSD newsletter

www.wbcsd.org/work-program/development.aspx

**Follow**

Who? @jaideepPrabhu

Co-writer of Jugaad innovation: think frugal, be flexible, generate breakthrough growth. (2012)

Why? Jaideep’s research interests are in marketing, innovation, strategy, and international business. His current research is on the globalisation of innovation, and the role of emerging economies in this process.

Who? @NextBillon

Twitter account of nextbillion.net, a community for any professional interested in Inclusive Innovation and development regarding the Base of the Pyramid

Why? Exploring the connection between development and enterprise through blogs and analysis

Who? @SocInnovators

The Center for Social Innovation at the Stanford Graduate School of Business educates leaders who can solve the world’s toughest problems.

Who? yPaPPI partners

@RCCStweet @MinBuZa_news @LEiWageningenUR @TNO_nieuws @BoPinc @SNVworld

**Inclusive Development Professionals**

Scoop It is a user-based webfeed that allows anyone to create an online magazine by selecting articles related to your topic of interest. You can subscribe to a topic feed, or create your own magazine.

**References**

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The BoP Protocol 1.0, Simanis, Hart www.bop-protocol.org/docs
Innovation Is Not the Holy Grail, Seelos, Mair www.ssireview.org/articles/entry/innovation_is_not_the_holy_grail

**Next Publications**

1. **Gaining BoP Insights**
   On finding the BoP market and individuals, to understand the context

2. **Developing BoP Partnerships**
   On finding and connecting with the right partners for an inclusive innovation

3. **Co-creating Inclusive Business**
   On the process of including the BoP in your business model

4. **The Inclusive Innovation Cycle**
   A specific approach to develop innovations at the Base of the Pyramid

**Know more**

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

Five business interventions to achieve social impact, financial sustainability and scale

BoP Innovation Center (2012)

Download: goo.gl/TBkb9

From Blueprint to Scale

The Case for Philanthropy in Impact Investing

Monitor Inclusive Markets (2012)

Download: www.mim.monitor.com/blueprinttoscale.html

How to Develop Business and Fight Poverty

Inclusive Business Guide

Endeva (2010)


Access to Safe Water for the Base of the Pyramid

Lessons Learned from 15 Case Studies

Hystra (2011)

Download: goo.gl/UYyOZ

Inclusive Business Guide

Endeva (2010)
