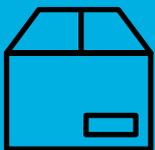


Scaling Inclusive Business



Content

Introduction	4
What does scaling mean?	7
The challenges of scaling	9
Opportunities to enable scale	11
Conclusion	14

Introduction

The Base of the Pyramid (BoP) refers to the more than four billion people who earn less than US\$ 8 per day¹. These people mainly live in Asia, Africa and South America. This term, and the thinking behind it, positions the poor in a different light. They are no longer seen as just the 'hungry masses', but rather as value-demanding consumers, resilient and creative entrepreneurs, producers, equal business partners and innovators².

Given the sheer size of the group the market potential for the BoP is enormous. The BoP represents a combined market value of over US\$ 5 trillion as it relates to billions of low-income people. The World Bank estimates BoP markets globally at \$20 billion for water-related projects, \$433 billion for energy and \$2,895 billion for household food needs. Significant growth happens in BoP markets as the fastest growing economies of the world are in developing markets where the majority of the BoP resides. The private sector, SME's or multinational corporations, show a growing interest in the BoP market segment by developing products and services based on the four A's: Affordability, Accessibility, Availability and Acceptability. BoP business strategies bear more chances to be successful if local BoP communities are involved and engaged in so-called inclusive business³. To date, when looking at inclusive business models there are four different ways to include BoP communities: (1) as consumers, (2) as producers, (3) as employees or (4) as entrepreneurs, e.g. distributors. In some cases the inclusion of the BoP is in two or more segments.

BoP as consumers

Renata Ltd., a producer of human and animal health products in Bangladesh, and BRAC, a large grassroots NGO with a network of rural health volunteers, have teamed up to produce and sell Pushtikona ('grains of nutrition') to poor people in rural Bangladesh. These are high quality, affordable sachets of vitamin and mineral powder to be added to home-cooked complementary foods for infants and young children (6 to 24 months old). Close to 1.3 million sachets of Pushtikona are sold door to door each month, reaching approximately 200,000 infants aged 6 to 24 months.

BoP as producers

Tanga Fresh Ltd. is a joint venture between a Tanzanian farmers association (TDCU) 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.' In 2011, Tanga Fresh sourced its milk from more than 4,000 smallholders that collectively produce around 38,000 liters per day. The company is the main dairy processor in Tanzania.

BoP as distributors

In West Africa, Fan Milk offers unique frozen dairy products, juice and juice drinks to a total population of more than 200 million people inhabiting seven West African countries. The main enabler of Fan Milk's growth was its distribution system. The company is seen as a pioneer in the development of sales and distribution systems. Bicycle vendors were introduced initially in Ghana. Nowadays consumers all over West Africa are served by 31,000 Fan Milk vendors on their bicycles.

Significant impact, from a BoP development as well as from an economic opportunity perspective, can be realized when inclusive companies manage to reach scale. Such scale can be created if a company expands to other regions or consumer segments. Another way of scaling is replication of successful inclusive business models by other companies⁴. However, to date, just a limited number of inclusive businesses have reached significant scale⁵.

This article explores the main challenges for scaling inclusive business propositions. Chapter 2 elaborates on the meaning of scale in BoP markets. Chapter 3 elaborates on the main challenges of scaling inclusive businesses. Chapter 4 describes opportunities to different actors who can play a role in enabling inclusive businesses to scale.

1 see [DIFD] for breakdown of BoP population

2 Prahalat, Kolk, Karnani

3 SNV, Mendoza

4 Endeva

5 Kayser

BoP as consumers



BoP as distributors



Dlight products: scaling up!



The Fruit Republic: scaling deep!



What does scaling mean?

Scale for a given inclusive business is the increase of impact and financial results over time. This increase can be due to the growth in the number of customers served or products delivered and therefore having an increase in the number of low-income people embedded in the business model.

Strategies to scale

Four scaling strategies for inclusive businesses can be distinguished (adapted from⁶):

Scale up: getting more customers, producers, employees, or entrepreneurs for what a company with its regular business does. Scale can be achieved by targeting new geographies, developing new distribution networks or new pricing policies. In business literature scaling up is often referred to as 'market development growth strategy'. Dlight⁷ has expanded its operation to impact 52M lives by being operational in various countries around the world.

Scale out: developing new products for existing consumers or to intensify BoP engagement. This could entail the introduction of new products in existing markets or the modification of existing products and services. This way of scaling is similar to what is called 'product development growth strategy' in business literature. Jain Irrigation Systems⁸ has increased the number of products they can offer to BoP clients coming from their pioneering work it did for the Micro Irrigation Industry in India.

Scale deep: being more efficient in what a company currently does for the same consumers, or with the same producers, employees or entrepreneurs related to the products produced or services delivered. This strategy includes more efficient routes to market or a better marketing strategy to increase recurring sales. Scaling deep is similar to the concept of 'market penetration'. The fruit republic in Vietnam⁹ is using ICT to train farmers better to produce sustainable food products.

Scale across: developing new products for new consumers, or a new business proposition with new producers, employees or entrepreneurs. This scaling strategy is similar to what is called the 'diversification growth strategy' in business literature. Scaling across can be realized by remaining in the same industry or moving across industries. After started in the micro-finance sector, Grameen Bank¹⁰ in Bangladesh has starting several companies in the telecom¹¹ and food¹² sectors.

Most businesses at the BoP choose the scale up strategy when aiming for growth in terms of impact and financial results. They expand product sales in different geographies for instance.

Inclusive businesses at scale?

Various characteristics influence the nature of the notion of scale of an inclusive business. Depending on the combination of chosen scaling strategy, the business model to engage with the BoP, the sector (e.g. food, energy, water, ICT) and the country and geography of operation (e.g. rural India versus urban Kenya) the magnitude of scaling is different. This magnitude varies over time as demographic, economic, regulatory and competition conditions are constantly changing.

A key question about the size of scale is: 'in relation to what?' Understanding if the scale of one initiative is meaningful in relation to the challenge it addresses is a different perspective than considering the scale of one initiative relative to competing initiatives in the same sector.

6 Ansoff, Andre et al 9 www.thefruitrepublic.com 12 www.grameencreativelab.com/live-examples/grameen-danone-foods-ltd.html
7 www.dlight.com 10 www.grameen-info.org
8 www.jains.com 11 www.grameenphone.com

The figure below shows the relation between the different concepts of scaling.

	Same BoP engagement	New BoP engagement
Same service or product	Scale deep penetration /market	Scale up development /market
New product or service	Scale out development /product	Scale across /diversification

Understanding at what scale an inclusive business becomes viable to sustain itself in the long run needs a different lens than assessing if a sector as a whole has sufficient scale to really overcome a developmental challenge for a prolonged period of time.

When determining the level of scale we can look at absolute scale. Absolute scale is in this regard explained as the level of scale at the BoP in relation to the overall development challenges that companies active at the BoP can address while contributing to improved BoP livelihoods. This

dimension is explored below by giving the example of the energy sector.

In the process of achieving scale, inclusive businesses face a number of challenges that are similar across scaling strategies.

Energy

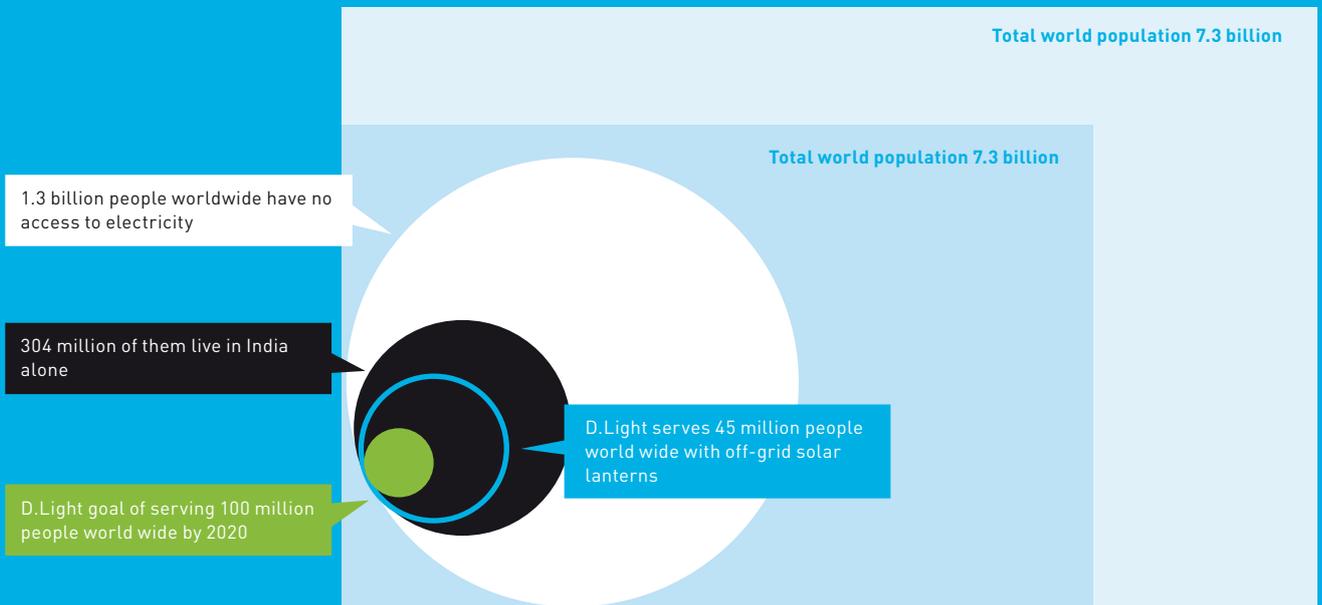


One of the fundamental developmental challenges is global access to energy. This challenge can be divided in many sub-challenges of which access to electricity and cooking on traditional biomass are paramount. 1.3 billion people do not have access to energy whereas 2.7 billion people still rely on traditional biomass for cooking.

When it comes to access to electricity there are many promising examples of companies offering a range of different solutions. In terms of people at the BoP reached, the global off-grid lighting business (offering solutions ranging from solar lanterns to solar home systems with mini-grid operators) is reaching a promising scale. D.light is the market leader in the solar lantern segment and the single biggest company in this sector, serving 45 million people at the end of 2014.

The figure below illustrates that the scale of the company in relation to the problem addressed is modest. D.Light currently is at 3.5% of the scale of the global challenge and its aspirations for 2020 are to reach about 8% of the global challenge. With its business it has significant impact and the performance of D.light is remarkable considering the challenge at hand. As it is not the only company working on this challenge it is valuable to consider the scale of the off-grid lighting market as a whole. Such data is however not available at the time of writing.

Scale of access to electricity problem in relation to the biggest off-grid lighting company in terms of people served



The challenges of scaling

Challenges to scale inclusive businesses relate closely to the nascent nature of the innovation and the business environment in which they operate. The following five key dimensions of challenges can be distinguished.

Insights

A crucial element to scale inclusive business is to understand the key drivers for low-income people to purchase or to get involved. Looking at a group of 4.5 billion people there is a lack of available information of what would drive a consumer in rural Cambodia to buy new dairy products or what drives the purchase of solar lamps in Uganda. Not having solid market data available for inclusive business is an increasing issue in BoP markets. Market Intelligence, another type of data is also lacking in most markets. Examples of this include specific data on the BoP sectors such as per country quarterly sales volumes, price developments, EBITDA, penetration levels, company and sector growth rates and future growth projections. This makes investors hesitant to engage with inclusive business.

At the BoP level, the lack of product awareness is a major impediment to scale. BoP consumers are risk averse and cautious buyers. Without awareness of the value proposition for BoP products or BoP engagement in inclusive business, sales and impact remains low. Increased awareness would unlock market demand. In addition, the BoP remains a largely unknown target group. This easily creates a mismatch between supply and demand as the value proposition is often driven by a very basic understanding of needs of the BoP and not by real market aspiration. The consequence is that inadequate services and products are developed, which results in low market penetration and limited progress on social impact.

Channels

The incapacity to build large distribution networks due to constraints in the operating environment, like physical dispersion of population and a poor infrastructure, is another challenge. Marketing communication channels are also often limited to radio or television while below the line marketing is often the most efficient communications channel at the BoP. The lack of channels is also illustrated

by the relative absence of organizations that have links to the market. The balancing act is to create 'high touch' – 'low cost' channels. 'High touch' because low-income groups are risk averse customers that need a relation with trusted distribution agents. This trust is enabled via frequent interactions or touch points between sales force and consumers. 'Low-cost' because affordability in these markets is key.

Human capital and leadership

Getting the right people with inclusive business management skills is challenging in any developing market. There is simply too much demand for well educated people and little awareness of inclusive business specific expertise among them. Inclusive business requires a set of skills, like brokering partnerships with NGOs, that is not always available at the company level. Engagement of smallholder farmers for instance is a lengthy process. It creates issues for multinational companies which are not able to find the right pool of talent to push the boundaries of their organization towards inclusive business over time. This also applies for SMEs of which the founders usually are great innovators, but may lack a manager mindset for repeating processes and structuring them. This requires different skills and a different professional appetite. It finally has an implication for the quality of the business ecosystem. Business service providers that could provide specific inclusive business technical assistance to companies have difficulty hiring appropriate staff with adequate skills.

Finance

For the majority of investors the risk profile of innovative business models and technology solutions for BoP markets is too high and the payback time too long. As this is a relatively new area, it is often perceived as an unproven market where only a limited number of cases can provide evidence of return on investment. Finally, oftentimes inclusive business proposals are not investment ready and



would benefit from receiving technical assistance, such as business plan improvement, in combination with the monetary investment.

exemptions is also an example of how regulations and policy makers could make a difference. More structural issues include the volatility of the political and business climate that can threaten the continuity of business operation.

Institutions

There is a lack of inclusive public policy addressing bottlenecks within the business environment that if resolved would encourage the rise of inclusive businesses. For instance, enforcement of regulation on the trade of BoP products to deal with inferior copycats could be improved in the energy sector. The absence of a welcoming fiscal regime that enables scale more quickly with VAT and import tariff

These challenges emerge for different reasons and at various levels. This can for example include: the DNA of the company, or the sector the company operates in. An example of this would be the inability of off-grid lighting providers to influence or monitor relevant policy due to the lack of relevant connections or experience in this area. Ultimately, mitigating scaling barriers for inclusive business is often sector and country specific.

Insights	<ul style="list-style-type: none"> - lack of understanding of real aspirations of low-income people (especially for western MNCs) - lack of industry know how readily available via for instance sector associations - anecdotal evidence of the relation between scale of business operation and impact - lack of awareness of BoP products amongst low-income groups
Channels	<ul style="list-style-type: none"> - limited distribution network to BoP consumers or producers for sourcing - limited marketing channels and marketing understanding on inclusive business - structural factors such as low density or state of road/ICT infrastructure in Africa
Human capital and leadership	<ul style="list-style-type: none"> - limited pools of intrapreneurs in MNC's that can push corporate boundaries - limited pools of management professionals to implement growth in SMEs - limited number of organizations that can provide appropriate technical assistance to scale
Finance	<ul style="list-style-type: none"> - there is insufficient capital for the early stages of business development that carries high risks - lack of combination between investment and technical assistance - inadequate duration of traditional funding - limited track record of impact investing industry
Institutions	<ul style="list-style-type: none"> - inhibitory laws, regulations and procedures - adverse intervention by politicians or officials or political unrest - no specific inclusive business view from policy makers

Opportunities to enable scale

Several opportunities to overcome barriers and to enable scale can be formulated.

Insights

Quantitative data about the BoP exists at a macro level, but what is needed is to couple it with qualitative data (e.g. what drives consumption of nutritious food in Nigeria?) and more meso or micro quantitative data (e.g. how much have farmers spent on fertilizer in Northern Vietnam?). Only by developing these more targeted insights, will appropriate inclusive business propositions be developed. Innovative methods, especially using ICT should be considered to unravel these preferences. Creating these insights is also an area where sector organizations such as the global-off-grid-lighting-association and business platforms existing in BoP markets like the BoP Innovation Center can play a role. These coalitions can create business cases from these insights and support companies entering new markets. They will also be better positioned to develop strategic interventions that will really have an impact on BoP populations.

Opportunity: Create a coalition of sector organizations and companies to unravel qualitative insights of the BoP leveraging ICT technologies.

To move from anecdotal evidence of positive impact of companies at the BoP to sound proof of what works and what not, there is a need for academia to perform long-term impact evaluations. These evaluations would ultimately improve the performance for all inclusive business initiatives and allow the businesses to reach scale in a more systematic way. There is an opportunity to provide value by providing such insights to impact investors and MNCs that look for proof of impact. Governments and R&D departments of companies will need to make budget available for such research.

Opportunity: Create longitudinal impact analyses of the performances of inclusive business.

Channels

Companies can collaborate around the issue of channels and distribution to the BoP in cases where the existing channels are insufficient. Channels can be shared when

the right portfolio of products is created. A coalition of companies that have products in different segments, such as energy, food, beverages, personal care and mobile services, can share a distributor without the risk of funding the success of their competition. This provides an opportunity to lower costs, risks and to reduce the level of resources required. Especially when it comes to new products that do not have the proven track record or volume yet that is required for absorption in existing distribution channels. Companies in demand of such distribution channels could have joint ownership in such entities.

Opportunity: Pilot the creation of BoP distribution intermediaries providing a shared basket of products to the BoP.

Optimizing distribution channels at the BoP is also a major endeavor especially in terms of incentive, stock management and cash management. Many BoP distribution systems rely on so-called micro-entrepreneur models where trusted people in the community act as sales and distribution agents. While ensuring the necessary trust for recurring sales, it is also a costly and slow model to roll-out. Technology has proven to be efficient in some instances, for example in the collection of payments and distribution of rewards while creating initial awareness of products.

Opportunity: Investigate how ICT can optimize distribution channels by providing the right incentives, payment modalities and training to BoP distributors.

Human capital and leadership

Leadership, in particular from large corporations, needs to be improved. Large corporations have a catalytic role to play in scaling inclusive business. Beyond developing their own innovation, large corporations can use their expertise and capital to support the growth of smaller inclusive businesses. To do so, senior leaderships in companies need to provide the necessary time frame and space for these initiatives to growth and scale. New venture approaches are needed, either inside MNCs with corporate venturing or outside MNCs with initiatives such as the Development through Impact Venturing (DIVA). As an impact venture



Understanding BoP buying patterns

incubator, DIVA will work directly with companies to act on radical business development opportunities, sharing the cost and reducing the risk of taking business action.

Opportunity: Set up appropriate venture space for BoP business lines to grow.

To bring inclusive business to the next level a new breed of business leaders is needed; leaders that understand both commercial and impactful business. Demand from students for business with a sense of social purpose already influences curricula. 'Sustainability', 'CSR', and 'Social Entrepreneurship' are making their way up as key topics in top courses worldwide. From INSEAD on social entrepreneurship, to Cornell University on BoP markets, there is a growing, yet limited, recognition of the importance of new business forms. Developing more of these curricula and programmes will eventually pave the way for a new generation of talented business leaders with both a business and social acumen. Leaders are needed that can successfully deal with the complexity related to income levels or with the challenge of fostering partnership between companies and NGOs. UNCTAD has recognized that and created a platform where these programmes can be featured (<http://businesschoolsforimpact.org/>). To reach a maximum audience, blended programmes are emerging that include both online and offline components, such as the Inclusive Business Accelerator. Similar programmes could be created

to support the development of business skills and expertise of business services providers who are supporting inclusive business.

Opportunity: Accelerate the development of blended curricula that include 'inclusive business' or 'inclusive innovation' in its core especially in business schools and academia in Africa and Asia.

Finance

Several concerns of investment funds could be removed through more cooperation and partnership between funds. This would not only mean promoting more 'club deals', i.e. the sharing of an investment between several parties, to spread risk this could also involve sharing of costs, to improve the balance between rewards and costs of impact investing. For instance, funds could share the costs for due diligence, legal consultancies and other relevant processes that are part of the procedure for assessing and approving investment proposals.

Opportunity: Increase partnering between funds to mutualize costs and increase potential return.

Technical assistance is not an uncommon practice in impact investing, but often it is focused on the post-investment

situation in order to offer a sort of guarantee that the investment will be put to its best use. However, based on the limited experience of impact investors working on inclusive business pre-investment technical assistance can be equally important. Specifically, this technical assistance can help them to develop a financially sustainable business plan.

Inclusive business is a nascent sector and often investment officers lack the in-depth knowledge of the sector to realize suitable investments. They can be trained to better understand the specifics of inclusive business. Topics to be considered for training include awareness of the prevalence of informal markets, underdeveloped distribution channels, focus on basic needs goods, and specific consumer behavior.

Opportunity: Developing a dual agenda on technical assistance and investment towards impact investors.

Less important to bridging the gap in understanding between investors and inclusive business ventures, but equally important in lowering the risk barriers for investors, is the use of more innovative funding mechanisms. So-called catalytic funding can bring down the risk for investors. Investors shy away from interesting investments that have a capital risk that is too high. They could be convinced to invest if other parties, like public partners or NGOs bear a higher capital risk, thereby bringing down the capital risk for the investor. Examples of these kinds of catalytic funding are guarantees, subordinated debt or first-loss reserves.

Opportunity: Supporting more innovative funding mechanisms.

Institutions

Governments play a pivotal role in overcoming institutional barriers. However, governments will only do so when there is sufficient urgency. That urgency needs to come from pressure from the public or pressure from local business interests, often combined with new knowledge generated by knowledge institutions. There is an opportunity for inclusive business sectors to align on a number of topics and form coalitions that can address the government's role in this arena. For instance:

- the development of quality standards and government adoption as a minimum quality standard (e.g. for solar lamps);
- the enforcement of regulations on product quality and brand protection to deal with lower quality copycats;
- favorable fiscal regimes (e.g. VAT exemptions, low import and tariffs) for products that improve lives of BoP people;
- laws on commercial borrowing can be very protective, this hampers growth of some companies. For instance in India it is very hard to finance a local company with foreign debt from donors or investors.

A lot of the above depends on having industry associations locally that can speak with a common message and enough weight to convince governments to work on this. With individual companies working on this in isolation, progress is much too slow to enable a quick scale-up within a country.

Opportunity: Starting a policy dialogue around inclusive business at the national and regional levels in countries of interest.

Insights	<ul style="list-style-type: none"> - Create a coalition of sector organizations and companies to unravel qualitative insights of the BoP leveraging ICT technologies. - Create longitudinal impact analyses of the performances of inclusive business.
Channels	<ul style="list-style-type: none"> - Pilot the creation of BoP distribution intermediaries providing a shared basket of products to the BoP. - Investigate how ICT can optimize distribution channels by providing the right incentives, payment modalities and training to BoP distributors.
Human capital and leadership	<ul style="list-style-type: none"> - Set up appropriate venture space for BoP business lines to growth. - Accelerate the development of blended curricula that include "inclusive business" or "inclusive innovation" in its core especially in business schools and academia in Africa and Asia.
Finance	<ul style="list-style-type: none"> - Increase partnering between funds to mutualize costs and increase potential return. - Developing a dual agenda on technical assistance and investment towards impact investors. - Supporting more innovative funding mechanisms.
Institutions	<ul style="list-style-type: none"> - To start with a policy dialogue around inclusive business at the national and regional levels in countries of interest.

Conclusion

Scaling inclusive business is the ultimate test for an industry that proposes a new approach to achieving social impact using the efficiency of market based approaches.

Scaling for an inclusive business can take multiple paths - scale up, out, deep and across - depending on the sector, the market opportunity considered and the nature of the business to grow. After being under scrutiny for the past 10 years following the momentum created by the "Fortune at the bottom of the pyramid", we are at the tipping point of showing the maturity and impact of BoP businesses via these scaling pathways.

However, this ultimate test of scaling inclusive business is facing five main challenges: i. lack of insights, ii. underdeveloped inclusive channels, iii. limited human capacity to develop these businesses, iv. inadequate access to finance and v. non-conducive public environment. Only by removing these barriers will inclusive businesses find their way to scale.

Opportunities for change exist that provide immediate solutions whereas others will in the mid-term better shape the emerging Inclusive Business industry. Inclusive business as of yet is not business as usual. By taking the stand point of industry transformation, all actors involved need to focus on adopting a new mind set in which inclusive business becomes mainstream

business. The new processes and the new leaders will make inclusive business the BoP business standard of the future, and this will provide impact as well as financial return at scale.

Furthermore, in addition to targeted actions tackling specific issues, an ecosystem approach to addressing the barriers to scale for inclusive business is necessary. It requires what is often called industry facilitation. Either at a sector level with organizations like GOGLA or at a regional level, companies and governments should support the emergence of industry facilitators or intermediaries that will ensure that some of the abovementioned systemic barriers are eliminated.

Our call is to invite stakeholders, such as companies, NGOs, academia, government and intermediaries, to create a roadmap for leveraging the aforementioned opportunities. Let's together set inclusive business as the standard for business in the BoP!

References

- [DFID] Tracking reach to the Base of the Pyramid through impact investing, January 2015
- [Ansoff] Ansoff, I.: Strategies for Diversification, Harvard Business Review, Vol. 35 Issue 5, Sep-Oct 1957, pp. 113-124.
- [Kayser] Kayser, O., Buninich, V. Scaling up business solutions to social problems, p179, 2015
- [Andre] Kévin André, Clémentine Gheerbrant, Anne-Claire Pache, Changer d'échelle, manuel pour maximiser l'impact des entreprises sociales, Essec Business School, 2015
- [Karnani] Karnani, A. (2007) 'The mirage of marketing the Bottom of the Pyramid: how private sector can help alleviate poverty', California Management Review, 49:4, 90-111.
- [Kolk] Kolk, A. , Rivera-Santos, M., and Rufin, C. (Forthcoming) 'Reviewing a Decade of Research on the Base/Bottom of the Pyramid Concept', Business and Society.
- [Mendoza] Mendoza, R.U., and Thelen, N. (2008) 'Innovations to make markets more inclusive for the poor', Development Policy Review, 26:4, 427-458.
- [Prahalad] Prahalad, C.K., and Hart, S.L. (2002) 'The Fortune at the Bottom of the Pyramid', Strategy and Business, 8, First Quarter, 54-67.
- [SNV] SNV, and, WBCSD (2008) Inclusive Business - profitable business for successful development. Geneva: WBCSD and SNV.
- [Chevrollier], Nicolas Chevrollier , et al., "Access to Food and Improved Nutrition at the Base of the Pyramid: 2SCALE publication, 2011
- [Endeva] Multiplying impact: Supporting the replication of inclusive business models, Aline Krämer, Clara Perón, Tendai Pasipanodya, 2015
- [Monitor] Beyond the pioneer gap, getting inclusive industries to scale, Monitor Group, 2015, www.beyondthepioneer.org

Acknowledgement

This position paper has been elaborated by the BoP Innovation Center in cooperation with SNV and Nyenrode Business University. The authors are grateful to the following experts who shared their valuable expertise.

Andre Nijhof (Nyenrode Business University)
 Lucie Klarsfeld (Hystra)
 Koen Peters (GOGLA)
 Tendai Pasipanodya (Endeva)
 Eelco Baan, Jan Ubels (SNV)
 Luiz Ros – (IADB)

About the authors

Nicolas Chevrollier - BoP Innovation Center
 Jorrit Reintjes - BoP Innovation Center
 Michiel Brandt - Nyenrode Business University



the following organizations have supported this publication



