

FOCUSING ON THE NEXT GENERATION

AN EXPLORATION OF ENTERPRISE IMPACTS ON CHILD POVERTY

By Heather Esper, Yaquta Kanchwala, and Ted London

Poverty can affect children in multiple ways and the damages caused by poverty can transcend into adulthood and onto the next generation. This article explores the role that Base of the Pyramid (BoP) ventures can play in alleviating poverty on children. We assess the impacts on children resulting from BoP ventures selling a product or service to, distributing through, employing, and/or sourcing from their caregivers. We examine these impacts within three dimensions of poverty: economic, capability, and relationship on children age eight and younger. The report assesses these impacts across business model and stakeholder. It also explores how impacts vary by age of the child, namely ranges 0-5 years and 6-8 years. We provide cross-sector strategies based on our findings for BoP ventures to enhance their impacts on children.



ABOUT THE AUTHORS

HEATHER ESPER is the Program Manager of Impact Assessment at the William Davidson Institute at the University of Michigan and an editor and writer for NextBillion.net. Her research centers on exploring the poverty reduction contributions of businesses and organizations serving low-income markets. Esper works with these ventures to identify, measure, analyze and leverage their impacts in order to develop strategies to better meet the needs of their stakeholders and further contribute to reducing poverty. She holds a Master's degree in Public Health and a Bachelor of Science degree in Global Health from the University of Michigan.

YAQUTA KANCHWALA is a Research Associate at the William Davidson Institute at the University of Michigan. She has worked in multiple sectors: agricultural value chains, agritech, food security, microfinance, and access to energy. Her experiences include developing social enterprise growth strategies and conducting rapid impact assessments. She holds a Bachelor of Science in Engineering from Rutgers University and a Master of International Affairs from Columbia University's School of International and Public Affairs.

TED LONDON is a Senior Research Fellow and the Director of the Base of the Pyramid Initiative at the William Davidson Institute and is a faculty member of the University of Michigan's Ross School of Business. His research focuses on designing enterprise strategies and poverty alleviation approaches for low-income markets, assessing poverty reduction outcomes of business ventures, and developing capabilities for cross-sector collaborations. He has published numerous articles, reports, and teaching cases, sits on several advisory boards, and shares his research in venues around the globe.

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ABOUT THE SERIES

This series was funded by the Bernard van Leer Foundation, a private philanthropic organization focused on improving the lives of children from birth to age eight. The goal of these cases is to gain a greater understanding of the ways in which businesses in emerging markets impact young children's lives and the potential to optimize impact on children. We also hope that these case studies will influence development and impact investing leaders to include metrics related to young children in their measurement systems.

IN THIS SERIES

IMPROVED HOUSING AND ITS IMPACT ON CHILDREN: AN EXPLORATION OF CEMEX'S PATRIMONIO HOY

Patrimonio Hoy provides construction materials to low-income consumers in Mexico, Nicaragua, Costa Rica, Colombia and the Dominican Republic through a 70-week payment plan that allows its customers to build onto their current homes or build new homes room by room.

IMPROVED SANITATION AND ITS IMPACT ON CHILDREN: AN EXPLORATION OF SANERGY

Sanergy builds 250 USD modular sanitation facilities called Fresh Life Toilets (FLT) in Mukuru, a large slum in Nairobi, Kenya, and sells them to local entrepreneurs for about 588 USD. Franchisees receive business management and operations training and earn revenues by charging customers 0.04-0.06 USD per use.

DIVERSIFIED FARM INCOME, MARKET FACILITATION AND THEIR IMPACT ON CHILDREN: AN EXPLORATION OF HONEY CARE AFRICA

Honey Care Africa (HCA) of Kenya supplies smallholder farmers with beehives and harvest management services. HCA guarantees a market for the beekeeper's honey at fair trade prices, providing a steady source of income.

ACCESS TO CLEAN LIGHTING AND ITS IMPACT ON CHILDREN: AN EXPLORATION OF SOLARAID'S SUNNYMONEY

SunnyMoney sells pico-solar products to BoP communities with limited access to electricity in Tanzania, Malawi, Kenya, and Zambia. It markets the lamps through schools and existing entrepreneur networks.

IMPROVED INCOME STABILITY, TRAINING, MARKET FACILITATION AND THEIR IMPACT ON CHILDREN: AN EXPLORATION OF VILLA ANDINA

Villa Andina of Peru produces high-quality agro-industrial food products through its work with local smallholder farmers. The venture trains farmers in organic cultivation techniques and provides guaranteed payment for the crops produced.

IMPROVED HEALTH CARE AND ITS IMPACT ON CHILDREN: AN EXPLORATION OF PENDA HEALTH

Penda Health provides high-quality, evidence-based, standardized primary care, both curative and preventative, to low- and middle-income families in Kenya while also specializing in women's health care.

BUILDING A SCALABLE BUSINESS WITH SMALL-HOLDER FARMERS IN KENYA: HONEY CARE'S BEEKEEPING MODEL

This teaching case study examines Honey Care Africa's transition from obligating farmers to maintain their own hives to providing hive management services. Readers will explore strategies to reduce side-selling and opportunities to generate greater impacts on farmers' families, in particular young children. The case can be found on Globalens.com.

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EXECUTIVE SUMMARY

Early childhood is a critical period in an individual's development. The damage caused by poverty during this phase of life can transcend into adulthood and onto the next generation. Children experience poverty both first-hand and through their caregivers, as well as across multiple dimensions.

The issues associated with early childhood development are large and complex. Traditional interventions to reduce poverty during early childhood are not enough alone. Given the magnitude of the challenge and the limitations of existing approaches, Base of the Pyramid (BoP) ventures, which pursue financial sustainability and scale while also contributing to poverty alleviation, are gaining interest. BoP enterprises have the potential to positively affect early childhood development. However, the understanding of BoP ventures' impact remains vague. Without an understanding of the types of impacts that occur on children across ages, BoP ventures' ability to improve more children's lives will remain limited.

This report compares and contrasts poverty alleviation impacts on children age eight and under across three types of BoP business models: businesses that sell a product to the BoP, businesses that sell a service to the BoP, and businesses that source from the BoP. We assess these changes in impact across different dimensions of poverty, specifically economic, capability, and relationship well-being. We also study how impacts on children vary across their caregivers' (stakeholder) roles within the venture, that is, how both positive and negative impacts on children of customers are different from those of producers, distributors, and employees, as well as from children in the broader community who do not interact with the venture. We assess how these impacts differ by the age of the child, specifically in two ranges: 0-5 years and 6-8 years.

Our analysis of the six BoP ventures identified a number of differences and similarities on impacts experienced by children across business models and across stakeholder groups within the ventures. Based on these findings we provide recommendations to increase, deepen, and enhance venture impacts. These findings and recommendations provide valuable information not only for BoP managers but also for investors in BoP ventures, many of whom have specific financial goals and impact requirements that must be met by investees.

Our data indicate that although all business models create potential for negative economic impacts for stakeholders and their children, producers' children can experience additional economic risks. These include lack of guarantee of business success and potential overreliance on a single source of income. Thus managers of ventures that source from the BoP should pay careful attention to how to reduce the likelihood and magnitude of negative economic risks affecting producers' children.

Another important difference relates to the stakeholder's role in the business. Children of caregivers who engage with a venture -- including distributors, employees, and producers -- experience capability and relationship well-being impacts from the knowledge, skills, and support gained through their caregivers' trainings and expanded networks. Children of distributors experience the largest magnitude of these impacts. Although the children of employees, distributors, and producers experience such additional impacts, their total number is much smaller than that of customers' children and children in the broader community. Thus ventures may choose between depth and breadth of impacts. If investors and their

ventures want to deepen impacts across all types of well-being, children of stakeholders who directly work with the venture are the ideal target population.

Additionally, our analysis suggests that ventures that sell services to the BoP benefit children in the broader community more so than those that sell products or source from the BoP. This occurs through a network effect that increases these children's knowledge and physical health or by positively affecting a public good such as soil, water or air. If investors are looking to create impact across the largest number of children, they should identify ventures that sell services to the BoP and, with those, recommend marketing and awareness-raising campaigns to further spread information and demand in the community. To summarize, investors with limited resources who have missions to target the largest number of persons rather than create the deepest impacts may want to identify service-selling ventures.

Our other findings include BoP ventures need a green value chain to mitigate negative environmental impacts that can affect children, BoP ventures need to partner to scale and reach more vulnerable children and BoP ventures can deepen impact on children through stakeholder retention.

Given the benefits that socio-economic impacts can have on children from the BoP in reducing the effects of poverty, we recommend all ventures focus on enhancing impacts on children, even when they are not their target customers. Additionally, we recommend that all BoP ventures systematically and regularly measure impacts on their stakeholders' children. This will allow ventures to gain a more nuanced understanding of the needs of young children as well as how these needs change over time, in order to better address them through their business activities.

POVERTY EXPERIENCED BY YOUNG CHILDREN

EARLY CHILDHOOD IS A CRITICAL PERIOD IN CHILDREN'S LIVES

UNICEF refers to early childhood (pre-natal to eight years old) as the “years of wonder.” In no other period in human life is the brain so responsive to changes in the environment and so able to learn, grow, and develop. Billions of highly integrated neural circuits in the brain are established through the interaction of biology, experience, and environment.¹ What happens in this period of development determines later life-outcomes related to cognitive ability, productivity, and socialization.² Lessons and behaviors not learned in early childhood, like reading and language, require added work later in life to develop.³ Stunting (low length or height for age), an irreversible outcome of chronic nutritional deficiency during the first thousand days of a child's life, can lead to future disease vulnerability and loss of productivity from cognitive and physical disability.⁴ Gender inequality can be socially ingrained through early childhood observations.⁵ Given the long-term outcomes of early childhood development, many economists argue that money spent on this is the most powerful investment a country can make, due to the large savings generated from reduced expenditures in other sectors such as health and public services over the life course of citizens.⁶

Optimal childhood development requires adequate nutrition and health care, social interaction with attentive and positive caregivers, and a safe and stimulating environment.⁷ A child's family, community, and socio-economic status have a large effect on his or her cognitive development.⁸ With such great opportunity for large positive effects comes even greater vulnerability to damage from poverty. This damage can transcend into adulthood and then onto the next generation. Poor nutrition, inadequate education, low-quality health care, and lack of opportunities affect young children raised in poor households in detrimental ways and increase the likelihood that they will remain poor in adulthood and have children who are poor themselves.

MULTIDIMENSIONAL EFFECTS OF POVERTY ON CHILDREN

Children are influenced by poverty in multiple ways, both first-hand and through their caregivers. Poverty is not just an income threshold one falls within, but is multidimensional. In addition to economic effects, children experience poverty through capability-related influences such as health and knowledge. Children are also influenced through the support and interactions they experience from others, as well as by their relationship with and the quality of the environment where they live.

Low and irregular income from low-skilled jobs in formal or informal markets result in the caregiver's lack of purchasing power to acquire a basic level of consumption required for children's development.⁹ This poor ability to purchase adequate nutrition, housing, health care, and education is compounded by the fact that the poor often pay a poverty penalty when the costs and time spent to access products and services are taken into account. Water, for instance, is significantly more expensive in urban slums than in richer communities due to lack of public drinking systems, which forces residents to either wait in long lines for access to mains, purchase expensive water imported into their community, or seek water from polluted rivers.¹⁰

Lack of income coupled with other factors including lack of access to clean water, sanitation, and health services can result in malnutrition.¹¹ Chronic malnutrition can have especially pernicious long-term effects which include poor physical and mental development, poorer school performance, susceptibility to infection, and lower-functioning immune systems.¹² Low income also affects access to other services, including education. Poorer communities are also less likely to gain access to and procure early child-care and educational programs for their children.¹³ In a UNICEF survey covering over 60 developing countries, in a third of the countries only ten percent or less of children receive these services.¹⁴

A caregiver's physical, intellectual, and psychological capability to care for her or his child can have large effects on early childhood development and the child's own future capabilities. Both nature (genes) and nurture (care and support from caregivers) contribute to a child's physical and mental capabilities. A mother's prenatal and postnatal health within the first two years of a child's life is critical. Good-quality prenatal health care reduces the risk of pregnancy complications and the infant's risk of complications.¹⁵ Postnatal health care and nutrition for the mother are important for the child during the breastfeeding period. Eliminating malnutrition in mothers can reduce disabilities in their infants by almost one third.¹⁶ Accessing good-quality early childhood nutrition and health care (including during the neonatal period) such as immunizations and regular check-ups can reduce the risk of child morbidity and mortality and improve children's intellectual and physical development.¹⁷ In addition to health-related influences, caregivers with higher formal education have higher educational aspirations for their children, who tend to have a higher sense of self-esteem.¹⁸

Children's social surroundings, in their family and in their community, also have large effects on cognitive development. A child needs secure attachment to a trusted caregiver with consistent caring, support, and affection early in life.¹⁹ Children in the poorest households suffer from low caregiver attentiveness as caregivers go to work and leave their children home alone or in the care of other children.²⁰ Seasonal work can lead to separation as fathers migrate to the city to find jobs. In the UNICEF survey covering over 60 developing countries, in about a third of the countries at least one in four children live without their biological fathers.²¹ This reduced attention can affect children's confidence and how they explore and learn about the world.²² Studies also find associations between putative parenting techniques and poor cognitive outcomes.²³

Poverty can increase stress and depression among adults and impair their ability to care for and support their children during prime years, which results in fewer opportunities for learning experiences.²⁴ Support includes parental encouragement and participation, which have been found to have positive cognitive outcomes²⁵ and can affect a child's study habits, self-esteem, self-efficacy, and sense of inclusion, which are all correlated with positive educational outcomes.²⁶ Additionally, in developing countries nearly half of children ages 2-4 are subjected to violent forms of discipline.²⁷ A child's community also plays an important role in procuring feelings of safety, social inclusion, role models, medical and educational services, and models of gender norms and role expectations.²⁸ Violence, crime, lack of services, and traumatic events can be devastating to a child's senses of safety and confidence, both of which are critical for learning.

The environment surrounding children also can affect their development. Poorer families are more likely to have inadequate housing, which can affect a child's health, safety, and stimulation.²⁹ Housing conditions such as overcrowding, indoor air pollution, and dampness and cold make children vulnerable to disease and illness.³⁰ The homes of low-income families are often highly vulnerable to disasters due to their inferior quality and infrastructure, while the small size of urban dwellings can force children to play in dangerous crime or traffic areas.³¹ Environments that allow for play are critical to a child's development, as play processes influence synaptic formation and help to secure attachment with caregivers and relationships with other friends.³² However, the environments that children have access to for play may also be breeding grounds for a variety of parasites and mosquitoes that carry deadly diseases.

A wide range of actors including governments and non-governmental organizations (NGOs) have intervened through a variety of means to address these risks to early child development in developing countries. However, such traditional interventions are not enough in themselves; the issues associated with early childhood development are too big and complex.

ROLE OF ENTERPRISES IN ALLEVIATING POVERTY

POTENTIAL FOR BUSINESS TO ADDRESS POVERTY

Despite evidence on the benefits of focusing on early childhood development many children continue to experience negative impacts associated with poverty. Given the magnitude of the challenge and the limitations of existing poverty alleviation approaches, BoP ventures that can create value for the poor are gaining interest. BoP ventures pursue financial sustainability and scale, while also contributing to poverty alleviation. The BoP is typically defined as individuals who earn less than 3,000 USD purchasing power parity (PPP) per year, primarily live in the informal economy in the developing world and constitute about four billion people – more than half the world's population.^{33,34} The BoP, however, is not a homogenous community and individuals within this economic segment have varying degrees of skills and education. Adults can have a few years of secondary education or vocational training or may not have completed primary school. Some serve as day laborers or temporary workers who migrate from rural areas to cities during the dry season. Others earn semi-regular incomes from low-skill jobs as construction workers, petty traders, taxi drivers, or janitorial staff in commercial and government offices. They live in poor-quality housing and have limited to no access to formal financial services.³⁵

Many BoP ventures blend traditional business structures and include ventures established by international and domestic companies, social entrepreneurs, and non-profit organizations.³⁶ BoP ventures can include businesses that sell a product or service to the BoPⁱ, businesses that source from the BoP, and businesses that employ the BoP. These ventures span sectors and involve a wide range of BoP stakeholders including customers, producers, distributors, and employees, and thus have a wide range of impacts and potential to reach a large number of the poor by scaling.³⁷

NEED FOR BETTER UNDERSTANDING OF BOP VENTURES' IMPACT

Despite the potential for having a large poverty reduction impact, the understanding of BoP ventures' social performance remains vague. Very little work has assessed changes in different dimensions of poverty and how they vary across different stakeholder groups.^{38,39,40,41,42,43} Even less work has compared such impacts across BoP enterprises. Given BoP ventures' dual mission of financial sustainability and scale and addressing poverty, ventures have tended to focus on the prior and use anecdotal stories to account for the latter. This lack of evidence and information reduces their ability to effectively improve operations and reach scale. BoP enterprises have the potential to positively affect early childhood development; however, without an understanding of the types of impacts that occur on children across ages, their ability to improve impacts on children will remain limited.

RESEARCH OBJECTIVE

This report is an analysis of poverty alleviation impacts on children across three types of BoP business models. The objective in this report is to compare and contrast impacts on children age eight and under across businesses that sell a product to the BoP, businesses that sell a service to the BoP, and businesses that source from the BoP. We aim to compare and contrast impacts on children across three dimensions of poverty, specifically economic, capability, and relationship well-being, to identify how resources can be used most effectively in order to have positive impacts on the largest number of children possible. We also study how impacts on children vary across their caregiver's (stakeholder) role within the venture -- how both positive and negative impacts on children of customers are different from those of producers, distributors, and employees, as well as from children in the broader community who do not interact with the venture. We assess how these impacts differ by the age of the child, specifically in two ranges: 0-5 years and 6-8 years. We use these findings to explore how ventures can enhance their positive impacts, mitigate negative impacts, and sustainably expand their business and impacts into current as well as new populations and markets.

METHOD

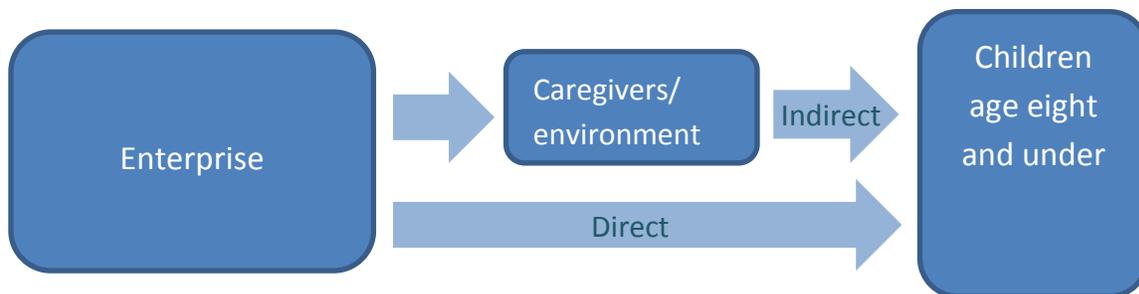
We apply the William Davidson Institute's (WDI) Base of the Pyramid Impact Assessment Framework (BoP IAF) to assess six BoP ventures' poverty reduction impacts on children eight and under. This framework is well recognized as a particularly useful tool by leaders in the development and corporate communities and has been successfully implemented in the field.⁴⁴ We chose the BoP IAF because it provides a systematic approach to understanding the positive and negative impacts a venture can have on BoP stakeholders such as customers, producers, distributors, and employees as well as the broader

ⁱ A service compared to a product is one in which the item being purchased is paid for continually, such as clean water or use of a safe toilet, while purchase of a product has a finite end although it may require numerous payments.

community. The tool is participatory and collaborative; it ensures that key stakeholders assist in identifying impacts across three areas of well-being: economic, capability, and relationship. It can be used across sectors and geographies, allowing comparisons among enterprises. Additionally, the framework helps managers improve their businesses by enhancing positive impacts and mitigating negative impacts.

We explore both direct and indirect impacts of an enterprise on children of BoP stakeholders (see **Figure 1**). We define direct impacts as those impacts that directly result from the enterprise on children, and indirect impacts as those impacts that occur on children as a result of the venture's direct impact on their caregivers, another adult, or the environment.

FIGURE 1.
Direct and Indirect Impacts on Children



The BoP IAF's three dimensions of well-being capture direct and indirect impacts for each venture. Within economic well-being we explored impacts that result from changes in a caregiver's income, income stability, savings, and risk that can create changes in assets and resources provided to children. For capability well-being we explored changes in the child's physical health, psychological health, knowledge, aspirations, and expectation for the future. For relationship well-being, we assessed changes in the types of interactions and support children receive from adults and other children in the community, and changes in their adaptability at school, to their social networks, and to those in their home and local environment.

All six enterprises assessed are BoP ventures that either sell to or source from the BoP. Enterprises were selected based on their business model and come from a variety of sectors -- sanitation, housing, renewable energy, local and export-based agribusiness, and health care. We chose two enterprises per business model in order to allow conclusions to be drawn across models.⁴⁵ Our sample consists of two businesses that sell a product to the BoP (Patrimonio Hoy and SunnyMoney), two businesses that sell a service to the BoP (Sanergy and Penda Health), and two businesses that source from the BoP (Villa Andina and Honey Care Africa) (see **Table 1**).

TABLE 1.
Venture Business Model Summary

Business Model Type	Venture Name (Venture Type)	Business Model Summary	BoP Stakeholders	Sector
Sell a product to the BoP	Patrimonio Hoy (Customer – Product)	Patrimonio Hoy (PH), operational in Mexico, Colombia, Costa Rica, Nicaragua, and Dominican Republic, aims to reach low-income customers seeking to build new homes or enhance their existing homes room by room. Customers, known as “socios,” pay 13,300 pesos (1,031 USD) for construction materials over the course of 70 weeks through a weekly payment plan. PH leverages CEMEX’s distribution networks and recruits “promoters” to promote and attract new socios to the program. PH also provides financing and technical advice to socios to complete their own construction projects.	<p>Customers: Individuals (called “socios”) who pay PH weekly installments for building materials.</p> <p>Employees: PH promoters who are from the local community (generally women) work part-time to attract new socios and full-time PH staff who work out of local offices called “cells.” Some full-time staff are hired from the community PH serves.</p> <p>Broader community: Individuals who do not have any relationship to PH other than living near PH activities.</p>	Housing
	SunnyMoney (Customer – Product) ^d	SunnyMoney (SM) sells pico (or micro) solar products to residents of BoP communities with limited access to electricity in Kenya, Tanzania, Malawi, and Zambia. SM markets its products through multiple channels: in Tanzania, we analyze selling through School Campaigns and in Kenya, through existing business owners (distributors). Average price of the d.light manufactured s2 lamp (previously known as the s1 lamp) is 10 USD across the four countries and costs between 12,000-15,000 Tanzanian Shillings (7-9 USD) in Tanzania when bought through SM’s School Campaign.	<p>Customers: Individuals who purchase the s2 solar lamp.</p> <p>Distributors: Business owners (distributors) who often operate small shops in city centers.</p> <p>Broader community: Individuals who do not have any relationship to SM other than living in the areas where the venture operates.</p>	Renewable energy
Sell a service to the BoP	Sanergy (Customer – Service) ^d	Sanergy provides sanitation facilities and franchising opportunities to the BoP: the venture designs and builds 250 USD modular sanitation facilities, called Fresh Life Toilets (FLT), and sells them to local entrepreneurs for 50,000 Kenyan shillings (KES) or about 588 USD in the Mukuru slum of Nairobi, Kenya. Franchisees receive business management and operations training from Sanergy and earn revenues by charging customers 3-5 KES (0.04-0.06 USD) per use.	<p>Customers: Individuals who use Sanergy’s FLTs.</p> <p>Distributors: Sanergy sells prefabricated toilets to franchisees who charge customers a small fee per use.</p> <p>Employees: Sanergy hires individuals from the BoP community it serves.</p> <p>Broader community: Individuals who do not have any relationship to Sanergy other than living in the area where the venture operates.</p>	Sanitation
	Penda Health (Customer – Service)	Penda Health (Penda) provides primary health care, both curative and preventive, to low- and middle-income families in Kenya and	<p>Customers: Individuals who use Penda’s women’s health services or primary curative and preventive</p>	Health care

	<i>Service)</i>	specializes in women’s health. The outpatient clinic aims to deliver a positive patient experience by offering evidence-based, standardized, high-quality primary health care in a friendly environment. The average cost per visit is approximately 425-637.5 KES (5-7.5 USD) as compared to 3400-4250 KES (40-50 USD) at high-quality private clinics. Penda provides the local population with an alternative to free or nearly free government clinics, which often have very long wait times; to self-provider clinics, many of which do not have qualified practitioners and/or equipment; and to traditional healers who practice non-evidence-based medicine	health care services (patients can be women, men and children). Employees: Penda hires individuals from the communities it serves. Broader community: Individuals who do not have any relationship to Penda other than living near Penda activities.	
Source from the BoP	Villa Andina (<i>Producer</i>)	Villa Andina (VA) produces high-quality agro-industrial food products through its work with smallholder farmers. Based in Cajamarca, in the northern Andes of Peru, VA collects, processes, and sells dehydrated goldenberry fruit, fresh goldenberries, and dehydrated mangos, while providing guaranteed weekly payments to its network of approximately 700 Peruvian farmers for the fruit they grow. For the goldenberries, VA pays a steady 26.4 soles (10.34 USD) per arroba (1 arroba = 12 kg) throughout the year, compared to the local price of 5-10 soles (2-4 USD) per arroba for nine months of the year and 30-32 soles (about 12 USD) per arroba during the remaining three months (dry season).	Producers: VA trains local subsistence farmers to grow goldenberries using organic cultivation techniques. Farmers sign a contract to uphold VA’s organic standards and join a farmer association to sell the crops to the venture. Employees: VA hires workers from the BoP community, to peel and prepare the fruit for processing in its Cajamarca facility. Broader community: Individuals who do not have any relationship with VA other than living near VA activities.	Mainly export based agribusiness
	Honey Care Africa (<i>Producer</i>)	Honey Care Africa (HCA) provides training, resources (such as trucks, motorbikes, extraction equipment, and scales), collection centers, and beehive management extension services via Hive Technicians to its beekeepers, who are smallholder farmers. Along with HCA’s infrastructure investments in communities, HCA arranges financing for farmers to purchase hives for 5,000 KES (59 USD), which includes full technical support for the life of the hive. HCA guarantees market access and price for the collected honey, and ensures a stable source of income for its beekeepers. To increase honey production, HCA uses modern Langstroth hives which typically have an eight-year lifespan and produce, on average, three harvests a year, with a maximum of six harvests.	Producers: HCA sells hives to smallholder farmers, manages these hives using a cluster model, and buys the produced honey at market value. Employees: HCA hires individuals from the BoP community it serves to work directly with beekeepers. Broader community: Individuals who do not have any relationship with HCA other than living near HCA activities.	Mainly local-based agribusiness

^dBusiness model includes distributor (franchisee/dealer)

We used well-recognized research methods in our data collection and analysis.^{46,47} Our data collection, which included field visits with each venture, focused on developing a rich and holistic understanding of their impacts on children and included data in the form of documents, photographs, interviews with recordings, and observations. Our data analysis consisted of triangulation across data sources to confirm findings, detailed coding, and comparisons of impacts on children of stakeholders within each venture as well as comparison of impacts across enterprises.

To gain an initial understanding of each venture's influence on young children in the local context, we first conducted a literature review of potential impacts on children within each sector. We then spoke with experts about types of impacts that children experience from improvements within their sector. We then gained a deep understanding of each venture's business model. This included reviewing existing secondary information and conversations with headquarter staff at each venture. These sources of information provided key insights into potential impacts for stakeholders within each venture.

We used the same interview protocol during field visits with all ventures. The protocol contained a series of open-ended question and follow-up probes to explore potential impacts across different stakeholder groups on children age eight and under within the three areas of well-being. The protocol explored impacts that occurred directly on children as a result of the venture as well as impacts that occurred through their caregivers and other community members.

Field visits began in January 2012 and were completed in November 2012. Each field visit began with detailed in-person interviews with key members of the venture's senior management team. This was followed by in-depth qualitative interviews with key stakeholders including people directly impacted by the venture.ⁱⁱ We also spoke with individuals aware of the venture, but who did not interact with it, as well as locally-based partners and other organizations such as governmental agencies, NGOs, schools, and clinics operating within the community. For the full list of stakeholders interviewed per venture, please see **Table 2**.

ⁱⁱ The study was reviewed by our Institutional Review Board and determined to be exempt.

TABLE 2.
Stakeholders Interviewed Per Venture

Venture	Stakeholders interviewed (and number of interviewees)
Patrimonio Hoy	Customers (19) Employees (17) External organizations (7) Non-participants (2)
SunnyMoney	Customers (15) Non-customers (22) Distributors (6) Employees (3) External organizations (29)
Sanergy	Customers (5) Distributors (6) Employees (6) Non-customers (5) External organizations (4)
Penda Health	Customers (25) Employees (7) Non-patients (12) External organizations (8)
Villa Andina	Producers (9) Non-VA producers (6) Employees (4) External organizations (12)
Honey Care Africa	Producers (7) Non-Honey Care producers (2) Employees (3) External organizations (6) Honey consumers (3) Honey sellers (3)

We employed several strategies in our interview protocol to assess the impacts of each venture. Questions focused on comparing the current well-being of each child to his or her status prior to interacting with the venture across different dimensions of well-being. Follow-up probes were used to help ensure respondents considered both positive and negative impacts on children’s well-being. We also probed into why respondents felt these changes were a result of the venture. We also asked the respondents to compare the well-being of his or her children to others in the community.

Interviews were conducted with the assistance of translators where required and the more sensitive questions were asked toward the end of the interview. We reviewed our collected data regularly in order to recognize emerging patterns and identify any sources of variation during data collection.^{48,49} This also provided the opportunity to probe more deeply into key impacts until saturation was reached, e.g. when additional data collection did not yield new insights.⁵⁰ All interviews were recorded.

We developed detailed summaries of each interview.⁵¹ We then identified and coded impacts for each interview based on type of well-being.⁵² Analysis of the coding resulted in a systematic process of

grouping the raw data within the BoP IAF. Using the framework, we conducted within-group analysis to develop a summary of impacts for each stakeholder group in the venture.^{53,54} Next, we conducted cross-stakeholder comparisons within each venture, and we developed individual in-depth case studies on each of the six ventures (see **Tables 3-8** reproduced from the individual cases; impacts likely to have the largest effect on children are bolded). We then conducted cross-venture comparisons by area of well-being and stakeholder (see **Tables 9-11**). These analyses enabled us to develop a deep understanding of relative changes in child well-being.^{55,56} Together these data provided a rich assessment of impacts on children age eight and under across BoP ventures.

Table 3.

Patrimonio Hoy - Summary of Impacts on Children Age Eight and Under Across Stakeholders

	Economic Well-Being	Capability Well-Being	Relationship Well-Being
Customers' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Reduced financial resources available for child's well-being due to caregivers' decreased financial resources resulting from the program's weekly payments during the construction phase (Indirect) • Increased financial resources available for child's well-being available due to caregivers' increased financial resources from income-generating activities associated with completing a building project (Indirect) • Increased financial resources available for child's well-being as a result of caregivers' decreased expenditures associated with building completion (Indirect) • Increased financial resources available for child's well-being related to caregivers' increased savings (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Increased risk of injury due to proximity to construction site during the building phase (Direct) • Reduced illness due to safer home (Direct) • Reduced injuries due to safer home after the building phase is completed (Direct) • Improved child health through caregivers' improved health (Indirect) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Increased knowledge about construction and masonry through observation of their caregivers' skills in self- construction, as well as through participation in these activities (Direct) • Increased school achievement due to increased space (Direct) <p>Leisure Time</p> <ul style="list-style-type: none"> • Reduced free time due to increased responsibility: Older children are expected to take on more responsibility at home as caregivers take on additional jobs or build the home (Direct) <p>Psychological Health</p> <ul style="list-style-type: none"> • Enhanced cognitive development due to increased space (Direct) • Increased self-esteem due to increased privacy (Indirect) <p>Aspirations</p> <ul style="list-style-type: none"> • Children develop higher aspirations for their future due to changes in caregivers' expectations in life (Indirect) 	<p>Interactions</p> <ul style="list-style-type: none"> • Improved child-caregiver interactions due to increased space at home (Direct) <p>Support</p> <ul style="list-style-type: none"> • Decreased time for caregiver and children to spend together due to caregivers' increased employment to make weekly payments or caregivers spending more time on self-construction activities (Indirect) • Closer relationships with family members due to increased space (Direct) • Closer relationships with friends due to improved home (Direct) • Children receive more support from their caregiver when the latter is less stressed (Indirect) • Closer relationships with caregivers related to the latter spending less time repairing and cleaning the home and reduced stress associated with financial state (Indirect) <p>Adaptability in School</p> <ul style="list-style-type: none"> • Easier assimilation into school environment as a result of gaining an improved home (Direct) <p>Local Environment</p> <ul style="list-style-type: none"> • Increased security from gaining a more secure home (Direct)

Children from the Community	<p>Wealth</p> <ul style="list-style-type: none"> Increased financial resources available for child's well-being as a result of promoters' extended families starting to work at PH (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> Reduced illness and injury in children who play at a PH house (Direct) <p>Psychological Health</p> <ul style="list-style-type: none"> Increased jealousy of friends' PH homes (Direct) <p>Aspirations</p> <ul style="list-style-type: none"> Increased aspirations from living near dignified housing (Direct) Improved aspirations for the future as young children see promoters as role models (Direct) 	<p>Local Environment</p> <ul style="list-style-type: none"> Decreased quality of environment for children living near plants that PH sources materials from (Direct)
Children of PH's Employees	<p>Wealth</p> <ul style="list-style-type: none"> Increased financial resources available for child's well-being due to caregivers' stable job (Indirect) 	<p>Psychological Health</p> <ul style="list-style-type: none"> Increased self-esteem as a result of caregivers' increased self-esteem (Indirect) 	<p>Interactions</p> <ul style="list-style-type: none"> Children experience better interactions with their caregivers when the latter experience less stress and tension (Indirect) <p>Support</p> <ul style="list-style-type: none"> Increased social capital from caregivers' increased social network results in increased resources for children (Indirect)

Note: Impacts that are likely to have the largest impact on children are bolded.

TABLE 4.

SunnyMoney - Summary of Impacts on Children Age Eight and Under Across Stakeholders

	Economic Well-Being	Capability Well-Being	Relationship Well-Being
Customers' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being through caregivers' increased savings due to reduced expense on kerosene-based lighting (Indirect) • Increased financial resources available for child's well-being due to caregivers' decreased spending on medical expenses related to kerosene use (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Reduced risk of respiratory illness and burns and less strain on eyes due to reduced exposure to kerosene-based lighting (Direct) <p>Psychological Health</p> <ul style="list-style-type: none"> • Increased feelings of security and control over their environment as a result of introducing a solar lamp in their home (Direct) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Improved school performance due to ability to study longer hours (or do homework) by using a solar lamp (Direct) <p>Aspirations</p> <ul style="list-style-type: none"> • Increased expectations of the future including the wish to continue their education due to improved school performance from studying longer hours (Direct) 	<p>Interactions</p> <ul style="list-style-type: none"> • Increased risk of conflict between siblings over the use of the solar lamp (Direct) <p>Support</p> <ul style="list-style-type: none"> • Caregivers spend increased amount of time with children to discuss their homework due to additional hours of light provided by the solar lamp (Direct) • Children receive more support from their caregivers when the latter experience less tension and stress as a result of reduced kerosene-related medical issues and expenses (Indirect) <p>Adaptability in School</p> <ul style="list-style-type: none"> • Increased ability to assimilate into the school environment by being prepared for class and performing more confidently, all facilitated by studying longer hours due to the use of a solar lamp (Direct) <p>Home Environment</p> <ul style="list-style-type: none"> • Reduced threat of household fire from reduced use of kerosene (Direct)
Distributors' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being due to increases in caregivers' income as they add solar products to their shops 	<p>Education/Knowledge</p> <ul style="list-style-type: none"> • Improved entrepreneurial skills by observing the increased business activity as their caregivers add solar products to their shops (Direct) • Increased knowledge and interest in renewable energy (Direct) 	<p>Support</p> <ul style="list-style-type: none"> • Increased social capital from caregivers' increased social network results in increased resources for children (Indirect)
Children in the Broader Community		<p>Aspirations</p> <ul style="list-style-type: none"> • Improved aspirations for the future as young girls see female dealers earning an income and managing a shop (Direct) 	<p>Local Environment</p> <ul style="list-style-type: none"> • Improved ambient air quality through reduced kerosene fumes and carbon dioxide emissions (aggregated through the community) from reduced kerosene use in the community (Direct)

Note: Impacts that are likely to have the largest impact on children are bolded.

TABLE 5.

Sanergy - Summary of Impacts on Children Age Eight and Under Across Stakeholders

	Economic Well-Being	Capability Well-Being	Relationship Well-Being
Customers' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being as a result of reduced medical expenses due to the reduced occurrence of poor sanitation-related diseases (Indirect) • Reduced financial resources available for child's well-being due to increased expenditures when families begin to pay to use sanitation facilities (Indirect) • Increased financial resources available for child's well-being due to increases in caregivers' income from reduced sick leave at work due to better health outcomes of improved sanitation practices (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health from access to improved sanitation solutions (varies by prior sanitation use) (Direct) • Improved child health due to applying good sanitation practices learned at school such as hand washing at FLTs (Direct) • Improved child and fetus health through caregivers' improved health from using a safe, sanitary toilet (Indirect) • Reduction in child cases of diarrhea, parasites, and other diseases due to cleaner local environment (ground and water) as a result of introduction of FLTs (Indirect) <p>Psychological Health</p> <ul style="list-style-type: none"> • Improved child self-confidence and self- esteem from access to improved sanitation (Direct) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Reduced school absenteeism and ability to spend more time on school work as a result of improved physical health (Direct) <p>Aspirations</p> <ul style="list-style-type: none"> • Children develop higher aspirations in the long term when a clean, safe toilet is introduced to their community (Direct) 	<p>Interactions</p> <ul style="list-style-type: none"> • Improved child-caregiver interactions as children share information about improved sanitation practices that they learn at school (Direct) <p>Support</p> <ul style="list-style-type: none"> • Support from franchisees in using the bathroom and washing hands (Direct) • Increased amount of quality time spent with caregivers due to improved child and caregiver health (Indirect) • Increased social capital resulting from caregivers' and children's ability to invite guests to their home now that an FLT is nearby; additional foot traffic by their home (Indirect) • Children receive more support from their caregivers when their caregivers experience less tension and stress (Indirect) <p>Adaptability in School</p> <ul style="list-style-type: none"> • Easier assimilation into school environments for children who learn to use FLTs (Direct) <p>Local Environment</p> <ul style="list-style-type: none"> • Improved cleanliness of local environment from reduced human waste in streets and walkways (Direct) • Increased safety and security for women and children due to safe, well-lit, and open FLTs near home (Direct)

Distributors' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Changes in financial resources for child's well-being due to changes in caregivers' income (Indirect) • Decreased financial resources available for child's well-being due to household expenditures on the FLT (Indirect) • Increased financial resources available for child's well-being due to caregivers no longer needing to pay for sanitation facilities (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Same as impacts on customers' children <p>Psychological Health</p> <ul style="list-style-type: none"> • Same as impacts on customers' children <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Same as impacts on customers' children <p>Aspirations</p> <ul style="list-style-type: none"> • Same as impacts on customers' children • Children develop higher aspirations when observing their caregivers in their current franchisee role (Indirect) 	<p>Interactions</p> <ul style="list-style-type: none"> • Same as impacts on customers' children <p>Support</p> <ul style="list-style-type: none"> • Changes in support from caregivers due to changes in time caregivers have available to spend with children (Indirect) • Increased social capital from caregivers' increased social network results in increased resources for children (Indirect) • Same as impacts on customers' children <p>Adaptability in School</p> <ul style="list-style-type: none"> • Same as impacts on customers' children <p>Home Environment</p> <ul style="list-style-type: none"> • Children benefit from increased cleanliness and security at home (Direct) <p>Local Environment</p> <ul style="list-style-type: none"> • Same as impacts on customers' children
Children in the Broader Community		<p>Physical Health</p> <ul style="list-style-type: none"> • Reduction in child cases of diarrhea, parasites, and other diseases due to cleaner local environment (ground and water) as a result of introduction of FLTs (Indirect) • Potential negative health impact on children who live near cement factories that Sanergy sources raw materials from (investigation required as cement production usually emits harmful pollutants) (Indirect) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Increased awareness of health and sanitation issues (Direct) 	<p>Local Environment</p> <ul style="list-style-type: none"> • Improved cleanliness of local environment from reduced human waste in streets and walkways (Direct)
Children of Sanergy's Employees	<p>Wealth</p> <ul style="list-style-type: none"> • Changes in financial resources available for child's well-being due to changes in caregivers' income (Indirect) • Changes in financial resources available for child's well-being due to changes in medical expenses (Indirect) 	<p>Education/Knowledge</p> <ul style="list-style-type: none"> • Children learn skills that caregivers learn at training (Indirect) <p>Aspirations</p> <ul style="list-style-type: none"> • Children develop higher aspirations due to changes in caregivers' traditional views of employment (Indirect) 	<p>Support</p> <ul style="list-style-type: none"> • Improved daycare facilities for children as Sanergy employees can afford reliable childcare centers (Indirect) • Increased ability to care for children due to improved psychological health of caregivers (Indirect) • Increased social capital due to caregivers' increased social network results in increased resources for children (Indirect)

Note: Impacts that are likely to have the largest impact on children are bolded.

TABLE 6.

Penda Health - Summary of Impacts on Children Age Eight and Under Across Stakeholders

	Economic Well-Being	Capability Well-Being	Relationship Well-Being
Customers' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Changes in financial resources available for child's well-being due to changes in household expenditure on health care (Indirect) • Increased financial resources available for child's well-being due to increases in caregivers' income from reduced sick leave at work as a result of better health outcomes from high-quality health care (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health from access to high-quality affordable health care (Direct) • Improved child health due to health-related trainings that partner schools receive from Penda (Indirect) • Improved child health due to caregivers' increased knowledge of health issues from forming trusting relationships with Penda's Clinical Officers (Indirect) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Reduced school absenteeism and ability to spend more time on school work as a result of improved physical health (Direct) <p>Psychological Health</p> <ul style="list-style-type: none"> • Improved psychological health as children are happier due to improved health (Direct) 	<p>Interactions</p> <ul style="list-style-type: none"> • Children experience better interactions with their caregivers when the latter experience less tension and stress (Indirect) <p>Support</p> <ul style="list-style-type: none"> • Increased amount of quality time spent with caregivers due to improved child and caregiver health (Indirect) • Caregivers live healthier lives due to changes in their health knowledge and are able to provide more support to children (Indirect)
Children in the Broader Community		<p>Education/Knowledge</p> <ul style="list-style-type: none"> • Increased awareness of health care from the health-related messages children receive from their friends and friends' parents who are Penda patients (Indirect) 	
BoP Employees' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Changes in financial resources available for child's well-being due to changes in caregivers' income (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health due to caregivers' Penda training (Indirect) • Improved child health through caregivers' health insurance (Direct) 	<p>Support</p> <ul style="list-style-type: none"> • Increased social capital from caregivers' increased social network results in increased resources for children (Indirect)

Note: Impacts that are likely to have the largest impact on children are bolded.

TABLE 7.

Honey Care Africa - Summary of Impacts on Children Age Eight and Under Across Stakeholders

	Economic Well-Being	Capability Well-Being	Relationship Well-Being
HCA's Producers' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being due to increases in caregivers' income i.e. if financial resources are redirected to the child's educational, health, and nutritional needs (Indirect) • Changes in financial resources available for child's well-being due to changes in caregivers' income stability (Indirect) • Decreased financial resources available for child's well-being due to household expenditures on beehives (Indirect) • Increased financial resources available for child's well-being as a result of caregivers' improved health (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health (age 1 and over) due to benefits from consuming honey (Direct) • Improved child health due to increased production of crops due to increased pollination (Direct) • Honey causes both benefits and risks for women's health during pregnancy indirectly, affecting the health of the fetus (Indirect) • Risk of allergic reaction from beestings (Direct) • Improved child's health due to reduced use of chemical pesticides (Indirect) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Children learn about conservation (Direct) 	<p>Support</p> <ul style="list-style-type: none"> • Caregivers spend increased amount of quality time with children due to less time spent tending to beehives (Indirect) <p>Local Environment</p> <ul style="list-style-type: none"> • Children benefit from the conservation of their local environment (Direct)
Children in the Broader Community	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being due to an increase in caregivers' income from non-HCA jobs created in the community by HCA producers (Indirect) • Increased financial resources for children through HCA producers' support to non- HCA farmers (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health due to increased production of crops due to increased pollination (Direct) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Improvements in environment provide opportunities to teach children about conservation (Direct) 	<p>Local Environment</p> <ul style="list-style-type: none"> • Children benefit from the conservation of their local environment (Direct)
HCA's Employees' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being due to increases in caregivers' income i.e. if financial resources are redirected to the child's educational, health, and nutritional needs (Indirect) • Increased financial resources available for child's well-being due to caregivers' increased savings (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health (age 1 and over) due to benefits from consuming honey (Direct) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Children learn about conservation (Direct) 	<p>Support</p> <ul style="list-style-type: none"> • Increased support of caregivers due to the latter living at home and working in the local region (Indirect) • Increased social capital from caregivers' increased social network results in increased resources for children (Indirect) <p>Local Environment</p> <ul style="list-style-type: none"> • Children benefit from the conservation of their local environment (Direct)

Note: Impacts that are likely to have the largest impact on children are bolded.

TABLE 8.

Villa Andina - Summary of Impacts on Children Age Eight and Under Across Stakeholders

	Economic Well-Being	Capability Well-Being	Relationship Well-Being
VA Producers' Children	<p>Wealth</p> <ul style="list-style-type: none"> • Changes in financial resources available for child's well-being due to changes in caregivers' income stability from a guaranteed market connection, weekly payments, and reliance on the crop (Indirect) • Increased financial resources available for child's well-being due to increases in caregivers' savings via participation in farmer associations (Indirect) • Reduced financial resources available for child's well-being due to caregivers' increased expenditures (Indirect) 	<p>Physical Health</p> <ul style="list-style-type: none"> • Improved child health due to benefits from goldenberry consumption (Direct) • Improved child health due to improved nutrition from applying organic standards to subsistence crops (Direct) • Risk of reduced variety and quantity of food available for a child due to cash cropping (Direct) • Reduced stress on fetus through mother's improved health from farming goldenberry, a less labor-intensive crop (Indirect) <p>Education/Knowledge</p> <ul style="list-style-type: none"> • Children learn skills that caregivers learn at training (Indirect) <p>Leisure Time</p> <ul style="list-style-type: none"> • Children's leisure time does not change with goldenberry farming (Direct) <p>Aspirations</p> <ul style="list-style-type: none"> • Children develop higher aspirations due to changes in caregivers' traditional views and methods of farming (Indirect) 	<p>Interactions</p> <ul style="list-style-type: none"> • Improved family interactions due to caregivers' membership in a farmer association (Direct) • Improved interactions between caregivers and children as the former experience less stress and tension due to a newfound increased income stability (Indirect) <p>Support</p> <ul style="list-style-type: none"> • Children experience more support from their caregivers due to the latter living at home and working in the local region in the dry season (Indirect) • Children spend less time with caregivers due to weekly harvest of goldenberry (Indirect) <p>Adaptability in School</p> <ul style="list-style-type: none"> • Children benefit from earlier school enrollment (Indirect) <p>Local Environment</p> <ul style="list-style-type: none"> • Children benefit from an improved local environment (Direct)
BoP Employees'	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources available for child's well-being due to increase in caregivers' income (Indirect) 		<p>Support</p> <ul style="list-style-type: none"> • Children experience a change in support from their caregivers, due to the latter's role as VA peelers (Indirect)
Children in the Broader Community	<p>Wealth</p> <ul style="list-style-type: none"> • Increased financial resources in the community can benefit children due to their caregivers' increased access to goods and services in the local community (Indirect) 		<p>Support</p> <ul style="list-style-type: none"> • Increased social capital from caregivers' increased social network results in increased resources for children (Indirect)

Note: Impacts that are likely to have the largest impact on children are bolded.

TABLE 9.

Summary of Economic Well-Being Impacts on Children Age Eight and Under by Business Model

Economic Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Customers’ Children	<p>Income</p> <p>1. Increased financial resources available for child’s well-being due to reduced need for sick leave from using the product/service</p> <p>Savings</p> <p>1. Reduced financial resources available for child’s well-being as financial resources are diverted to purchase the product/service</p> <p>2. Increased financial resources available for child’s well-being due to long-term increases in savings from reduced medical expenditures and reduced expenditures on alternatives</p>				<p>Income</p> <p>1. Increased financial resources available for child’s well-being from the ability of the producer to sell their product to the venture at market prices</p> <p>Income Stability</p> <p>1. Increased financial resources available for child’s well-being from increased income stability from guaranteed market for the products</p> <p>Savings</p> <p>1. Potential for increased savings via participation in farmer associations</p> <p>2. Reduced financial resources available for child’s well-being as financial resources may be diverted to invest in the business, or increased expenditures on items required to comply with venture’s rules</p> <p>Risk</p> <p>1. Change in financial resources available for child’s well-being due to potential for increased financial risk due to lack of guarantee of economic success as well as potential over-reliance on a single crop as a source of income</p>	
	<p>Income</p> <p>1. Increased financial resources available for child’s well-being if the product allows for income generating activities to occur or generate more income from increased business activity</p>					

Economic Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Distributors' Children		<p>Income</p> <p>1. Increased financial resources available for child's well-being from increased income earned by the franchisee owner/dealer</p> <p>Savings</p> <p>1. Increased financial resources available for child's well-being from savings generated by using the product/service</p> <p>2. Increased financial resources available for child's well-being from savings from no longer needing to pay for the service</p> <p>3. Reduced financial resources available for child's well-being due to the investment required to work with the venture</p> <p>Risk</p> <p>1. Change in financial resources for child's well-being due to potential for increased financial risk due to lack of guarantee of the business's economic success*</p>				
Employees' Children	<p>Income</p> <p>1. Change in financial resources available for child's well-being due to changes in caregivers' income</p> <p>Income Stability</p> <p>1. Increased financial resources available for child's well-being from increased income stability as a result of regular wage payments*</p> <p>Savings</p> <p>1. Increased financial resources available for child's well-being from household savings if the employee gains formal benefits such as medical insurance</p>					
Children in the Broader Community	<p>Income</p> <p>1. Increased financial resources available for child's well-being due to increases in caregivers' income earned as distributors, producers, and the ventures themselves which can generate additional jobs in the local community or when stakeholders spend the additional income earned in local markets</p>					
	<p>Savings</p> <p>1. Increased financial resources available for child's well-being due to health care savings from improved health in the community*</p>					

*These impacts were not mentioned during qualitative interviews but, based on extensive literature reviews and impacts that occur on other stakeholders, they are likely to occur.

^dBusiness model includes distributor (franchisee/dealer)

TABLE 10.

Summary of Capability Well-Being Impacts on Children Age Eight and Under by Business Model

Capability Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Customers’ Children	<p>Physical Health 1. Changes in health for children who directly use the product/service or for children of caregivers who use the service due to changes in incidence and prevention of disease and injury</p> <p>Psychological Health 1. Improved child psychological health such as increases in dignity, confidence, or self-esteem from directly using the product/service 2. Increased feelings of security and control over their environment through use of the product/service</p> <p>Knowledge 1. Increased school performance due to either 1) in cases where the product/service improves the health of the child, reduced school absenteeism due to sickness allows the child to spend more time on school work or 2) where the product/service allows the child to study longer hours, he/she can enjoy improved grades in school</p> <p>Aspirations/Expectations for the Future 1. Children develop higher aspirations and raise expectations for their future through the use of the product/service and when their caregivers develop better expectations for the future from the use of the product/service 2. Children develop higher aspirations from observing individuals in the community take on new roles*</p>				<p>Physical Health 1. Improved child health from access and consumption of higher quality/quantity of crops 2. Improved child health from the benefits of reduced pollution of natural resources that result from reduced use of pesticides and increased use of organic methods of production 3. Risk of reduced variety and quantity of crops available for children’s consumption due to over reliance on source of income</p> <p>Knowledge 1. Children learn skills that their caregivers learn through trainings at work 2. Children learn about conservation of the environment</p> <p>Aspirations/Expectations for the Future 1. Children of producers develop higher aspirations due to changes in their caregivers’ traditional views and methods of farming*</p>	
				<p>Physical Health 1. Improved child health due to caregivers’ increased knowledge of health issues through the venture</p>		

Capability Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Distributors' Children		<p>Children of distributors experience all capability impacts that customers' children do from use of the product or service (see row above). They also experience:</p> <p>Physical Health 1. Improved child health due to caregivers' increased knowledge of health issues through the training they receive*</p> <p>Knowledge 1. Children learn new entrepreneurial, business, and communication skills by observing their caregivers at work or through their caregivers' use of these skills at home 2. Children increase knowledge and interest in the sector their caregivers work in</p> <p>Aspirations/Expectations for the Future 1. Children develop higher aspirations from observing individuals in the community take on new roles*</p>				
Employees' Children	<p>Children of employees experience all capability impacts that customers' and producers' children do from use of the product or service or producer output (see row above). They also experience:</p> <p>Physical Health 1. Improved child health from caregivers' improved ability to care for their children's health due to the training they receive</p> <p>Psychological Health 2. Increased self-esteem as a result of caregivers' increased self-esteem*</p> <p>Knowledge 1. Children learn new business, leadership, and communication skills when their caregivers transfer these skills and information from workplace to home 2. Children increase knowledge and interest in the sector their caregivers work in. Employees' children of ventures that source from the BoP also learn about environmental conservation concepts through their caregivers</p> <p>Aspirations/Expectations for the Future 1. Children develop higher aspirations from observing individuals in the community take on new roles*</p>					

Capability Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Children in the Broader Community	Aspirations/Expectations for the Future 1. Children develop aspirations to own the product		Knowledge 1. Children gain new knowledge from direct users of the service sharing information with others and from the venture’s marketing campaigns that result in a deeper awareness of such topics			
			Physical Health 1. Increases in child health due to the “network effect” in which improved health of a treated group or improvements in a public good such as air, water, etc., leads to improvement in health of non-treated groups			
	Physical Health 1. Negative physical health impacts can occur if the venture negatively affects a public good in any part of the supply chain* Aspirations/Expectations for the Future 1. Children develop aspirations from observing individuals in the community take on new roles					

*These impacts were (i) seen in one case study of a business model category or (ii) then were not mentioned during qualitative interviews but, based on extensive literature reviews and impacts that occur on other stakeholders, they are likely to occur.

^dBusiness model includes distributor (franchisee/dealer)

TABLE 11.

Summary of Relationship Well-Being Impacts on Children Age Eight and Under by Business Model

Relationship Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Customers’ Children	<p>Interactions</p> <p>1. Improved interactions between caregivers and children resulting from less stress and tension due to increased savings and improved health*</p> <p>Support</p> <p>1. Increased support from caregivers, as caregivers and children who use the product/service experience improved health, fall sick less frequently and require reduced rest to overcome an illness</p> <p>Local Environment</p> <p>1. Children develop respect and enjoy similar benefits from improved conservation of their local environment through the use of the product/service*</p>				<p>Interactions</p> <p>1. Improved family interactions due to reduced caregiver stress and tensions from increased income stability or due to increased support that producers receive from their farmers associations*</p> <p>Support</p> <p>1. Change in support received from caregivers – increased support from caregivers no longer needing to leave home for extended periods but also changes in time spent tending to their crops</p> <p>2. Children gain access to increased social capital from their caregivers’ increased social network from member associations*</p>	
	<p>Interactions</p> <p>1. Change in family interactions resulting from use of the product</p> <p>Support</p> <p>2. Change in support from caregivers, as caregivers gain more free time through the use of the product but children may also experience reduced support in the short term if their caregiver engages in additional work to make product payments</p>					<p>Local Environment</p> <p>1. Children develop respect and enjoy similar benefits from improved conservation of their local environment as farmers reduce use of pesticides and increase growth of plants</p>
	<p>1. Adaptability in School Increased ability to assimilate into the school environment from use of the product/service or from earlier enrollment in school*</p>					

Relationship Well-Being						
Venture Name (Venture Type)	Patrimonio Hoy (Customer – Product)	SunnyMoney (Customer – Product) ^d	Sanergy (Customer -Service) ^d	Penda Health (Customer -Service)	Villa Andina (Producer)	Honey Care Africa (Producer)
Distributors’ Children		<p>Interactions</p> <p>1. Change in interactions between caregivers and children due to changes in financial-related and work-related stresses*</p> <p>Support</p> <p>1. Change in support received from caregivers from caregivers’ ability to work closer to home but potential for long work hours*</p> <p>2. Children gain access to increased social capital from their caregivers’ increased social network</p> <p>Local Environment</p> <p>1. Children develop respect and enjoy similar benefits from improved conservation of their local environment through the use of the product/service</p>				
Employees’ Children	<p>Interactions</p> <p>1. Change in interactions between caregivers and children due to changes in financial-related and work-related stresses*</p> <p>Support</p> <p>1. Change in support received from caregivers from caregivers’ ability to work closer to home but potential for long work hours. In some cases, caregivers can afford reliable day care for their children while they are away</p> <p>2. Children gain access to increased social capital from their caregivers’ increased social network</p> <p>Local Environment</p> <p>1. Children develop respect and enjoy similar benefits from improved conservation of their local environment through use of product/service or changes in the agricultural ecosystem</p>					
Children in the Community	<p>Local Environment</p> <p>1. Children develop respect and enjoy similar benefits from improved conservation of their local environment. However, there is potential for negative impacts in the conservation of their environment for children who live near factories that pollute the environment while producing raw materials that are sourced by the venture</p>					

*These impacts were (i) seen in one case study of a business model category or (ii) then were not mentioned during qualitative interviews but, based on extensive literature reviews and impacts that occur on other stakeholders, they are likely to occur.

^dBusiness model includes distributor (franchisee/deal

RESULTS

This section explores how economic, capability, and relationship well-being impacts on children can differ by the venture business model and by the stakeholder's (caregiver's) role within a model.ⁱⁱⁱ

ECONOMIC WELL-BEING

Our findings indicate that there can be both positive and negative economic impacts on children across the three business models and that these impacts vary across stakeholders. All economic impacts on children explored within this section are indirect, as caregivers control household income, savings, and decision-making over how financial resources are used. We found that caregivers often spend increased earnings and savings from engaging with the venture on food, which has more pronounced beneficial effects on younger children (ages 0-5) than older children (ages 6-8), and on school fees and supplies, which mainly impacts older, school-going children. In cases where households face increased expenditures, due to interacting with the venture such as purchasing the product/service or taking on an investment loan, caregivers may reduce spending on food and/or school supplies. Additional negative economic impacts may occur for producers' and distributors' children due to financial risks associated with working with the venture.

Income

Across all three business models, the potential for increased income occurs for those who use the product or service, or consume the agricultural crop. Use can result in improved health, which reduces sick time away from work and allows persons to be more productive. Increased income can also occur if the product allows for income-generating activities to take place or generates increased business activity. For example, in the Patrimonio Hoy example, customers have the opportunity to conduct or expand a home-based business. In the SunnyMoney instance, solar lamp customers can keep their businesses open past sunset.

Producers and distributors can enjoy increases in income from working with the venture compared to their income generating activities prior to engaging with the venture. Producers experience increases in income as a result of the venture offering to buy their product at market prices. Distributors have the opportunity to earn more by adding the venture's new products to their existing inventory, as seen in the SunnyMoney case, or launching an FLT business, as seen in the Sanergy example. Employees can experience changes in income through changes to their wages (in some cases employees may earn less than they did in their previous job).

Children of non-users also experience economic benefits when customers or producers spend their increased income in the local community, or create opportunities to employ community members. In the Honey Care case, beekeepers hire local persons to help build the apiary, and in the Villa Andina case producers purchase products from farmers in the local markets. Similarly, in the Patrimonio Hoy example, customers hire local masons to help build new rooms, and in the Sanergy instance some franchisees-distributors hire local people to manage FLT day-to-day operations.

ⁱⁱⁱ Further details on each impact can be found in individual case studies on each of the six ventures, developed by William Davidson Institute with the Bernard van Leer Foundation's support. Please see either of the institute's web pages for the individual cases or email Heather Esper at hmoehle@umich.edu.

Income Stability

Irregular income is a defining feature of the BoP and variations in income earned per day can range from losing money to earning relatively large amounts to not earning any money for extended periods of time. Ventures that source from the BoP or employ the BoP can help smooth household income variations through regular payment of wages and guaranteed market access. All six cases show that employees can achieve income stability as a result of regular salary payments. Honey Care and Villa Andina producers also experience increases in income stability as a result of the ventures providing a guaranteed market for their products.

Savings

Across all three business models, savings can increase for those who use the product or service or consume the agricultural crop, as use can reduce medical expenditures and/or expenditures on poor-quality or expensive alternatives. In the SunnyMoney case, use of solar lamps reduces the number of kerosene lamps used in the household. This reduces fuel expenditures and medical costs associated with reduced exposure to kerosene's toxic fumes and burns. In the Patrimonio Hoy case, building a high-quality room reduces the need for future expenses on repairs and also protects inhabitants from storms and flooding, which reduces illness associated with exposure to the elements.

In addition to the above, distributors operating through a franchisee model experience savings from no longer needing to pay to use the product or service (such as Sanergy's FLT use) but this benefit is enjoyed by a small number of children compared to the number of customers' children. Employees' children experience savings when the enterprise provides formal benefits such as medical insurance. Producers gain potential for additional savings when the associations they join have a group savings program, as seen in the Villa Andina case.

In business models that sell services to the BoP or positively impact a public good such as with business that source agri-products from the BoP, the benefits can improve health in the community. As such, children of non-users can also benefit from their household's increased health care savings due to reduced expenditures on medical needs. However, savings are likely to be the largest for children who use the product or service or consume the crop directly, e.g. children of customers and producers, and potentially of distributors and employees.

All three business models can have negative short-term impacts on consumers', producers', and distributors' savings, which can result in negative impacts on financial resources available for their children. Distributors and producers often need to make large upfront investments or expenditures in order to work with the venture. These costs can divert money from their children's needs during the repayment period. For customers, purchase of the product or service can also lead to reduced financial resources available for their children's well-being in the short term when households divert money towards the purchase whether in one lump sum or over numerous installments. Children of customers who purchase products are likely to experience some negative economic impacts until the product is paid off, while children of customers that purchase services are expected to experience longer-term financial impacts due to ongoing costs. These impacts are expected to be less substantial than compared to those for distributors and producers since the size of the economic investment is often smaller (except in the case of Patrimonio Hoy).

Risk

There is no guarantee of economic success for distributors and producers. This financial risk can affect the economic benefits available to their children, though these stakeholders do have the opportunity to earn more money if the business is successful. Producer households may face additional financial risks if they over-rely on the cash crop as a single source of income, increasing their risk if the crop fails or they break their sourcing contract with the venture by selling their products to non-venture brokers for on-the-spot cash. This can affect the financial resources available for the producer's household, as brokers do not provide the same level of income, income stability, and business and capacity-building training that ventures can provide.

CAPABILITY WELL-BEING

Our findings indicate a variety of capability well-being impacts that occur across the three business models, the most common of which are changes in physical health, knowledge, and aspirations and expectations for the future. These impacts occur both directly and indirectly on children and vary across the role of the caregiver in the business model and by children's ages. Children who use services or products directly also experience psychological health impacts. Additionally, in cases where ventures sell to the BoP, all children in the community can develop new aspirations from observing community members take on new roles in the marketplace, such as women running businesses.

Physical Health

We found improved physical health impacts on children of all caregivers regardless of stakeholder role, across all three kinds of business models, although the reasons for improvement vary. Children who directly use the product or service can experience improvements in health including reduced incidence of disease from less exposure to conditions that can cause disease or injury (such as in the Sanergy, Patrimonio Hoy, and SunnyMoney cases) and better health care (such as with Penda Health). There can be negative health impacts in the short term, such as increased risk of injury for children who live in or near the construction site during the product assembly period with Patrimonio Hoy. Negative physical health impacts can also occur for children who live near the venture if the venture's activities negatively affect a public good in any part of the supply chain. For example, children who live near cement factories where ventures source raw materials can be harmed by the factory's possible release of poisonous sulfur dioxide and nitrous oxide gases into the air.

Children of producers experience improved health from reduced use of pesticides and increased use of organic methods. Villa Andina's producers apply organic methods they learn through the venture's training program to other subsistence crops they grow. Producers' children also experience improved health through increased access and consumption of higher quality and quantity crops, either through increased pollination or growing crops by organic methods. At the same time there is potential for reduced risk in variety and quantity of crops available for consumption if their caregivers over rely on a single cash crop. This over-reliance is seen in the Villa Andina instance when the new crop -- goldenberry -- is introduced in smallholder farms which may reduce their land devoted to subsistence crops. This may negatively affect their children's nutrition, especially if they do not purchase food at the local market to make up for what they have reduced growing.

Children in the community can experience health benefits indirectly through a "network effect" in which improved health of a treated group improves health of non-treated groups or the venture positively affects a public good, such as the local environment, resulting in health benefits for all. With Penda, improved

health for children and their caregivers can reduce the spread of disease, allowing non-users' children to be more likely to be healthier. If a public good is positively affected by the venture's activities, which then has a corresponding health impact, then all children in the community can benefit. In the Honey Care example, bees deliver an essential ecosystem service as pollinators, which can benefit children's nutritional intake through higher crop yields and crop quality. Another example of improvement of a public good occurs in the Sanergy case. Children in the community that do not use FLT's still enjoy the benefits of reduced diarrhea and other sanitation-related diseases in the community due to reduced exposure to open defecation and from less polluted land and water sources. We did not see this network effect for physical health in business models that sell products to the BoP. In the SunnyMoney case, using solar lamps offers physical health benefits to the user and persons living in the household, including reduced risk of injuries, such as burns, in the short term and improved respiratory health in the long term, due to reduced exposure to poisonous gases omitted from kerosene lamps. The magnitude of this benefit is affected by the number of kerosene lamps replaced.

Children who use a product or service can also receive indirect health impacts through their caregivers' increased knowledge of health issues gained from the venture's marketing and awareness-raising campaigns. Additionally, distributors' and employees' children experience additional health benefits from their caregivers' increased knowledge of how to care for their children from life-skills trainings that ventures offer. Penda's BoP employees learn first aid skills and how to provide medical care to children. Sanergy's FLT franchise owners remind children to wash their hands after using the toilet.

Across the six ventures, improved physical health impacts younger children more than older children. In particular, reduced exposure to elements, parasites, diseases, and/or toxic particulate matter is likely to make a larger difference in the health of younger children (ages 0-5) due to their weaker immune systems than in older children (ages 6-8). Although older children do still enjoy the benefits of improved physical health, improved nutrition for children during their first thousand days is crucial for their physical and cognitive development. Additionally, reduction in pollutants to a public good such as reduced feces in the local surroundings is especially likely to affect children ages 0-5 more than older children, since they crawl and play on the ground.

Psychological Health

Children who use the service or product directly experience psychological health impacts. With Sanergy, using a safe and private toilet can improve dignity, confidence, and self-esteem. The impact on psychological health is expected to be larger for children ages 6-8 who attend school and can be teased by their friends. Improvements can also be seen if the product or service provides children with a sense of security and control over their environment. For instance, solar lamps provide light in the dark with a reduced threat of fire. Another example can be seen in the Patrimonio Hoy case, as a home gains more space, children have more room to develop their own interests. Additionally, activities are assigned to specific areas, resulting in children gaining more structure to help them develop. Children also have a stronger sense of belonging as they gain more space and feel more secure when they have a home constructed of brick or concrete versus laminate plastic or cardboard. The latter can allow the elements to threaten the stability of their home and let thieves easily enter, causing fear and stress.

Children of employees experience positive psychological health benefits as a result of their caregivers' increased self-worth from recognition at work and in the community. Children model their parents' attitudes and behaviors, which increases their own sense of self-esteem.

Knowledge

Across all three business models, there are opportunities for children to gain new knowledge. These lessons vary by business model and role of their caregiver in the venture. Children of customers of products and services benefit from changes in school performance, while children of producers, distributors, and employees benefit from skill transfer from their caregivers. In both cases, it is expected that older children benefit more than younger children since they are more likely to attend school and have greater capacity to retain such skills. Reasons for improved school performance differ by business model. While school-going children of households that buy services improve their school performance from reduced absenteeism due to improved health, children of households that buy products improve their grades from the ability to study longer hours.

Children of distributors and employees learn new entrepreneurial, communication, and business skills by observing their caregivers in their job, or through their caregivers' use of these skills at home. These children also gain knowledge and interest in the sector their caregivers work, such as renewable energy in the case of SunnyMoney. Similarly, children of producers that Honey Care and Villa Andina source from learn skills their caregivers acquire at training and about environmental conservation concepts. In the Honey Care case, children of employees also learn about environmental conservation through their caregivers.

Children in the community increase their knowledge through the network effect; this is seen only in cases where the venture sells services to the BoP. Children gain a deeper awareness through other children and caregivers who use the service as well as through the venture's marketing campaigns in the community. For example, Sanergy holds community education events on sanitation and its benefits. In the Penda case, children in the community learn about health-related messages from their friends and friends' parents who are Penda patients.

Aspirations/Expectations for the Future

Children experience higher aspirations and increased expectations for the future across all six ventures, though the reasons for these vary by the business model and caregiver's role with the venture. These impacts are experienced more by older children than younger, as they are more aware of changes in their surrounding environment.

Children can develop higher aspirations as using the product or service can raise their expectations for the future. As children tend to mimic their caregivers, their aspirations can also increase as their caregivers experience higher expectations for the future from using the product or service.

The aspirations of children of other stakeholders can also increase when their caregivers develop better expectations for the future. This is seen with producers where children develop higher aspirations due to changes in their caregivers' traditional views and methods of farming. Additionally, all children in cases where ventures sell to the BoP, including those children in the community especially girls, can experience increases in aspirations from observing community women take on new roles such as managing a shop and/or earning an income for themselves and their family.

Children in the community who do not own the product may develop aspirations to do so when for example they live near someone with an improved house or a solar lamp. Although this could create feelings of jealousy we did not hear of any such cases during our interviews. Additionally and

interestingly, during our interviews we did not learn of children aspiring to use either the sanitation or health services.

RELATIONSHIP WELL-BEING

Within each business model, we found changes in the quality and quantity of interactions between children and their caregivers who engage with the venture. We also found changes in the support provided to children by their caregivers. Children who are in the broader community do not experience changes in either interaction or support from caregivers. Another common impact seen, irrespective of business model type, is among children of stakeholders who interact with new people due to the venture's activities (e.g. children of distributors, employees, and producers as well as customers' children if their caregivers own a business that is affected by the venture's product/service). These children experience increased social capital through their caregivers' expanded networks. A third common impact seen among all stakeholders' children, including those in the community, is that they develop respect and affection for their local environment when efforts are made in environmental conservation. Lastly, improvements in school adaptability are experienced only by school-going children who directly use a product or service that allows for more time to study, or in cases where producers can provide earlier access to school for their children.

Interactions

As caregivers and children enjoy the benefits of using the product or service such as increased savings or improved health, they experience less stress and tension, improving child-caregiver interactions. This can be seen in the Penda example due to child and caregivers' improved health and reduced expenses on health care. Additionally, producers who join farmer associations learn better communications skills, including how to actively listen and respect others' opinions, which results in their children experiencing better interactions with them. Likewise, interactions can improve for children of distributors and employees as their caregivers experience less financial-related stress. However, there is a possibility that these stakeholders may face increased work-related stress, which could affect family interactions.

If there are limited numbers of the product in the household, there is an increased risk of conflict between siblings over use, which can worsen gender differences – for instance, if the son is given preference over daughters to use the solar lamp to study. However, the product can also allow for improved family interactions, as seen in the Patrimonio Hoy case, when increased space allows children to play together or separately in different areas of their house. Interestingly, we did not hear of conflict in the use of services among siblings and household members. Producers are also likely to experience reduced stress as a result of increased income stability from working with the venture. Changes in interactions are likely to affect the development of younger children (ages 0-5) more than older children (ages 6-8).

Support

Within each business model, children experience increased support from their caregivers as a result of increases in the latter's free time. This increase can result from improved health, working closer to home, or product-delivered benefits, and can allow caregivers to provide better attention and care to children as well as spend more time with them. Younger children benefit more than their older siblings while older, school-going children benefit from their caregivers' support when they help with their homework and pay closer attention to their school performance.

Caregivers who use a product or service that provide health benefits can spend more time with their children due to reduced sickness, which allows household members to spend less time resting and more time together. Caregivers of children who purchase a product gain additional opportunities to spend quality time with their children. For instance, due to the availability of clean light in the SunnyMoney case, the household does not have to go to sleep after sunset and caregivers can spend evening time with their children, tackling homework; in Patrimonio Hoy, living in an improved house structure with increased space enables caregivers to spend more quality time one-on-one with children as opposed to children having to compete for their caregivers' attention in a crowded room. There is, however, the potential for negative impacts in the short term for children of caregivers who purchase a product. If caregivers engage in additional work to be able to make regular-interval installments to pay for the product/investment, this can reduce support for children until the payment period is over.

For children of producers, caregivers can have more time to spend with their children due to having a passive income such as hives as seen in the Honey Care case. Additionally, in the Villa Andina instance, we see that the venture provides the opportunity for adults to stay close to home to earn their livelihood rather than travel away from home for extended periods. However, children of producers may also experience decreased support, as shown in the case of Villa Andina. Since the goldenberry crop is labor-intensive, some children actually experience less time overall with their caregivers throughout the year, although we did find that in some cases children helped with fruit-picking or played nearby while their caregivers tended to the crop.

Children of employees across the business models also experience increased time with their caregivers, who no longer needed to take jobs that required extended time away from home. These changes in support are nuanced – children enjoy having their caregivers live at home and work in the local region, but the latter may have long workdays. Distributors such as franchisees in Sanergy are able to work closer to home, increasing support, but the number of hours they work may increase, decreasing daily child support.

Employees and distributors who interact or work closely with a new set of people as a result of the venture have access to increased social capital due to their expanded social networks. This increased social capital can benefit their children in the short and long term through increased awareness of opportunities and resources for their children. This benefit extends to children of producers who are members of associations that they may have joined as a requirement to work with the venture.

Local Environment

All three types of business models affect a public good such as the air, soil, or water and thus influence the environment. These impacts on the environment are experienced by all children regardless of their caregivers' role; children living near the activity that affects the public good are likely to experience a larger magnitude of impact. Ventures that source farm products from the BoP can affect natural resources such as soil and water. In the Villa Andina case, the venture improves the broader ecosystem through organic practices; in the Honey Care case, through bee pollination.

Ventures that sell to the BoP can have both positive and negative impacts on environment conservation. Children benefit from improved conservation of the local environment through the use of the product or service. A positive example from the Sanergy case is the improved cleanliness of both the local land and water from reduced human waste in streets and proper waste disposal that does not pollute the water system. This benefit is enhanced as more children and adults use FLT's and further reduce waste in the

streets. Additionally, as neighbors see clean environments around their homes, they feel encouraged and in some cases even compelled to keep the surrounding areas clean, throwing out less garbage into streets and open drainage systems. The impact on children could be negative if the venture pollutes a public good – for instance, if cement factories from where Patrimonio Hoy sources their cement, pollute the local air with poisonous sulfur dioxide and nitrous dioxide gases, then the environment for children living around the factories is negatively impacted.

School Adaptability

These impacts apply to school-going children and are specific to the product and service that can affect schoolwork or to ventures that can facilitate earlier entry into school. In both products analyzed, children's ability to study and complete their homework improved, which allows them to be better prepared for class and perform more confidently. In the Villa Andina case, children of producers who have established a kindergarten class by hiring a local woman to lead the class are better able to assimilate into school environments as a result of earlier entry into school versus their peers. If the venture introduces children to practices they encounter in school such as using a toilet (in the Sanergy case) and adding a bathroom to their home (in the Patrimonio Hoy case), they assimilate easier into school environments and encounter less teasing by other children.

DISCUSSION

While business model design, implementation and operation strategies, and socio-economic impacts vary, all six ventures share poverty alleviation goals and integrate them in their mission. These ventures prove that BoP enterprises have a valuable opportunity to create significant impacts on children's well-being. Children experience direct impacts from using the product or service or consuming an agricultural crop, but also indirect impacts through the effects that ventures can have on their caregivers. Even children in the broader community can be impacted directly through the effects the venture has on the environment or health in the community as well as indirectly through changes in their caregivers' financial resources. Guided by existing literature, we believe that impacts that can improve financial resources, physical and psychological health, knowledge and school performance, aspirations, interactions, support, social network, and the local environment can indeed reduce the effects of poverty on children.

While our findings are qualitative and do not prove correlation and causation, they do provide a deep understanding of how a venture's activities affect stakeholders' children. Our findings demonstrate a variety of similarities and differences in impacts among children of caregivers within a venture and across ventures. Based on our findings, we encourage BoP businesses to consciously aim to be more child-focused in design, in order to enhance and expand positive impacts on children, as well as be proactive in measuring and evaluating impacts on children. The following discussion identifies cost-effective strategies for managers at BoP ventures, as guided by our field findings and analysis, to increase positive impacts, reduce negative impacts, and increase venture scalability and sustainability to reach more children. We first explore similarities and differences across business models (see **Table 12**) and then explore findings applicable across business models (see **Table 13**). Each finding is followed with potential recommendations to improve impacts on children.

TABLE 12.
Similarities and Differences across Business Models and Recommendations to Enhance Impacts on Children

Findings	Recommendations
All business models create potential for negative economic impacts for children.	<ol style="list-style-type: none"> 1. Explore methods to provide access to additional support to caregivers and their families during the payback period or when costs are incurred to comply with venture requirements, to ensure that stakeholders' children are minimally affected by the change in financial resources available in the short term. 2. Explore alternative payment options for different types of customers.
Producers' children experience additional risk.	<ol style="list-style-type: none"> 1. Specific to agribusiness-based BoP ventures, explore methods to discourage producers from over-reliance on a crop as well as side-selling to external brokers, to reduce potential risks to their children from income instability and from reduced variety and quantity of crops for consumption.
Children of caregivers who work with a venture experience additional capability and relationships well-being impacts.	<ol style="list-style-type: none"> 1. Consider including training modules to improve caregivers' life skills, such as parenting techniques to further benefit children. 2. Assess ways to ensure distributors and producers from different areas and employees from other offices meet and regularly interact with colleagues to develop and strengthen their social network, thus extending resources to their children. 3. Explore strategies to provide support for children while caregivers work with ventures.
Children of distributors experience the largest magnitude of impacts, compared to those of other stakeholders.	<ol style="list-style-type: none"> 1. When limited resources are available, consider enhancing impacts for the largest group of stakeholders in order to benefit the maximum number of persons.
Ventures that sell services to the BoP, benefit children in the broader community more than other types of ventures (that source from the BoP or sell products to the BoP).	<ol style="list-style-type: none"> 1. Explore ways to spread information and knowledge on the benefits using the product/service offers to further enhance impacts on children in the broader community.
All stakeholders' children in businesses that sell to the BoP experience impacts related to aspirations developed from exposure to new roles in the community compared to children of all stakeholders in businesses that source from the BoP	<ol style="list-style-type: none"> 1. Encourage distributors and employees to expose children to new roles they take on through working with the venture as well as potentially provide access to resources for children to fulfill such aspirations.

TABLE 13.

Common Findings across Models and Recommendations to Improve Impacts on Children

Findings	Recommendations
Caregivers control economic impacts experienced by their children.	1. Explore marketing methods targeted toward caregivers, especially mothers, to increase awareness of how increased financial resources such as income and savings generated from engaging with ventures can be redirected toward their children’s needs.
BoP ventures need a green value chain to mitigate negative environmental impacts that can affect children.	1. Explore ways to implement supplier codes of conduct and partner with companies that are certified in clean manufacturing practices.
BoP ventures need to tailor child-friendly strategies based on phases of early childhood development.	1. Recognize that impacts are experienced differently by younger and older children and develop strategies to impact all age groups. 2. Explore designs to increase child-friendliness of the venture’s products and services.
BoP ventures need to partner to scale and reach more vulnerable children.	1. Explore conditions under which partnerships are beneficial to develop the value chain.
BoP ventures can deepen impact on children through stakeholder retention.	1. Understand reasons stakeholders stop engaging with ventures and assess impacts to understand the effect on these stakeholders. 2. Seek ways to develop trust, support, and respect between the venture and its stakeholders to maximize stakeholder retention.

SIMILARITIES AND DIFFERENCES ACROSS BUSINESS MODELS AND RECOMMENDATIONS TO ENHANCE IMPACTS ON CHILDREN

All business models create potential for negative economic impacts for children

All three business models analyzed in this report have the potential to create short-term negative economic impacts for children of consumers, producers, and distributors related to costs associated with interacting with the venture. The decrease in financial resources available for children's needs is less for consumers, who in general pay smaller amounts to purchase the product or service (except in the case of Patrimonio Hoy), compared to distributors and producers who may take on large business-investment loans. Additionally, children of consumers who pay for a product are likely to experience shorter-term negative economic impacts until the product is paid off while children of consumers of services are expected to experience longer-term financial impacts due to ongoing costs. The more substantial negative economic impacts are potentially on children of distributors and producers, as they must make large investments in order to work with the venture. These caregivers may also face the uncertainty of whether their business will succeed. The potential for such impacts and/or the inability to acquire an investment loan can prevent households from engaging with the venture.

To help ensure that stakeholders' children are minimally affected by the change in financial resources available in the short term, ventures should explore methods to provide access to additional financial and/or non-financial support to caregivers and their families during the payment period or when expenses are incurred to comply with venture requirements. Such support can be provided through the venture or by connecting their BoP stakeholders with NGOs, community-based organizations (CBOs) and/or government programs. Ventures can also explore alternative payment options for their BoP stakeholders based on an individual's financial situation; this may allow the venture to engage with others within the BoP that previously were limited by financial constraints associated with the venture's payment model. Such options could include "pay-as-you-go," "free trial period," "free side-product with main purchase," "discount with purchase of multiple items," "pay via regular installment," and "pay via accelerated installments that gains a discount" models.

Producers' children experience additional risk

Producers' children can experience additional economic risk if they over-rely on the income associated with a cash crop.^{iv} We found that some producers reduce the amount of land they dedicate to growing subsistence crops and may even sell their assets such as cows to gain resources to produce higher volumes of the cash crop. Another threat can come from non-venture brokers who convince producers to sell their crop to them, instead of the venture, for on-the-spot cash. Such side-selling can cause contracts to be voided, jeopardizing the income stability that ventures provide to smallholder farmers, and can also destroy the crop or future production due to poor handling of the product by these brokers.

To reduce potential risks to children from income instability and reduced consumption in variety and quantity of crops, agribusiness-based BoP ventures should explore methods to discourage producers

^{iv}Although we did not find that distributors over-relied on their income as franchisees or dealers (the majority had a diverse set of income sources), this may occur in other business models.

from over-reliance on cash crops. Examples of such methods include a range of trainings in such areas as technical capacity-development, business processes, increasing sustainable production volumes, and life skills that include the importance of balanced nutrition (both quality and quantity of food) for all household members. Other potential guidance includes financial literacy training to educate producers on the concept of income stability and long-term savings as well as trainings that inculcate producer pride and ownership over the product as a reason to avoid selling to non-venture brokers. Ventures can also explore methods to diversify income sources through adoption of other types of income-generation activities such as dairy. Such activities can be introduced and implemented through organizations. Additionally, ventures may want to consider diversifying crops via double-cropping (a second type of crop is planted after the first crop type is harvested), or multi-cropping (two or more crops are grown in the same place, in the same growing season) to diversify the producer's income base.

Children of caregivers who work with a venture experience additional capability and relationship well-being impacts

Across the six enterprises, children of stakeholders who work with a venture gain a variety of additional capability and relationship well-being impacts. The information and skills that producers, distributors, and employees gain both consciously and subconsciously from venture trainings and from working for or with a formal organization are transferred to their children. Children learn entrepreneurial, communication, and business skills, and general knowledge of the sector their caregivers work in, by observing them in their job or through their caregivers' application of the knowledge and skills at home. To strengthen this impact, ventures should, in addition to providing effective business and technical trainings, include training modules that teach and strengthen life skills. These life skills can include improved parenting techniques and topics such as communication with teens, nutrition for young children, and how to deal with violence and trauma, among others. Ventures should employ several methods of training, including classroom-based (lecture-style), group-based exercises, interactive discussions and role-play with the facilitator, and field-based trainings to help stakeholders retain information.

Children of distributors, producers, and employees also gain access to increased support, opportunities, and resources through their caregivers' expanded social network. Managers of BoP ventures can bolster this impact by further increasing the size and strength of these stakeholders' social networks by ensuring that distributors, producers from different areas, and employees from other offices meet and regularly interact with colleagues. Ventures should provide opportunities to these stakeholders, such as quarterly meetings, to share best practices and solutions to the variety of challenges they face, as well as develop camaraderie and healthy competition among the venture's distributors and employees. Not only will this strengthen these stakeholders' networks and improve resources for their children, it also can increase individual business success.

Variations in work hours can affect children. Ventures often allow caregivers to work closer to home than they previously did but, in some cases, caregivers work longer hours, which can affect their interaction with family members and the support they provide to their children. To mitigate the impact from decreased support, BoP ventures should help identify high-quality child support options such as day-care and after-school activities for the children of their producers, distributors, and employees. CBOs, local NGOs, and government extension workers in the area may be able to identify such options or provide the necessary outreach activities that would decrease the time children spend unsupervised or alone.

Children of distributors experience the largest magnitude of impacts compared to those of other stakeholders

The magnitude of well-being impacts on stakeholders varies across all six ventures, as well as among stakeholders within a venture. Distributors' children who use the product or service reap the largest benefits in terms of both number of impacts and magnitude, as they experience the same impacts consumers' children experience in addition to other unique impacts such as knowledge and skill transfer, as discussed earlier. Additionally, if the product or service is available free of charge for distributors' children, their caregivers experience increases in financial resources available for children. Although distributors' children experience the most impact, they also tend to be one of the smallest groups. Thus, in order to benefit the maximum number of children when limited resources are available, ventures should focus on enhancing impacts for the largest group of stakeholders rather than deepening impact for the smallest group.

Ventures that sell services to the BoP, benefit children in the broader community more than other types of ventures (that source from the BoP or sell products to the BoP)

Ventures selling services to the BoP have the greatest potential to impact children in the broader community, as they have more impacts on these children compared to ventures that source from the BoP or sell products to the BoP. Children in the broader community benefit from increases in knowledge, physical health, financial resources, and improvements in the local environment resulting from activities implemented by ventures that sell services to the BoP. Our data suggests that ventures that sell services have this larger impact on children of non-users through the network effect.

Children in the broader community learn new information when a venture that provides a service to the BoP enters the community. Children gain information directly from the venture's marketing campaigns and through the network effect via other children and caregivers who use the service. Furthermore, ventures that positively alter a public good such as the local environment affect the related well-being of all children. This new information and improvement in the environment can improve the physical health of children in the broader community and their family members, saving the families money from reduced medical expenditures and increasing income from caregivers' increased ability to work. Ventures that sell services to the BoP and directly impact the health of their customers further impact health well-being of children in the broader community through the network effect, where benefits to well-being are gained through improved health of others in the community. These children also experience improved aspirations and expectations for the future from seeing community members take on new roles.

Given that children in the broader community constitute the largest stakeholder group and thus provides the opportunity to impact the greatest number of people, ventures should seek to enhance impacts on these children whenever possible. Ventures can do so by increasing the spread of information through marketing messages that educate the community on concepts related to the product, service, or produced crop. These marketing methods can include SMS-based messaging that can be forwarded to friends and family, radio advertisements, community town-hall events, informational vans, and street shows and/or theater with local actors. Ventures can also leverage children as information distribution agents as they enthusiastically spread messages to friends and family. Demand for the service can be increased by awareness creation about benefits provided by the venture and by encouraging positive

behavior change, such as using safe sanitation practices versus open defecation. Such efforts can convince BoP households to pay for the product or service rather than seek low-quality alternatives.

All stakeholders' children in businesses that sell to the BoP experience impacts related to aspirations developed from exposure to new roles in the community compared to children of all stakeholders in businesses that source from the BoP

Ventures that sell products and services to the BoP create new roles for community members compared to ventures that source from existing producers. Due to this difference, all children, including those in the broader community, experience additional capability well-being impacts such as improved aspirations and expectations for the future from seeing their caregivers and others in the community take on new roles. Such roles include women as distributors running their own businesses and earning money for their families, as well as caregivers working as employees of a formal sector company versus informally, e.g. as a housekeeper.

Ventures should encourage distributors and employees to further expose children to the new roles created in the community through “bring your child to work” days, speaking engagements at local schools, or outreach through education-based partners. Ventures can also explore methods to provide access to resources (whether with partners or alone) for children through scholarship funds or awareness on how to achieve personal goals, in order to help them further strengthen and fulfill their aspirations. The magnitude of increased aspirations is likely heightened when coupled with increases in school performance. Thus ventures could explore ways to further encourage their stakeholders' children to improve their grades through performance reward programs.

COMMON FINDINGS ACROSS MODELS AND RECOMMENDATIONS TO IMPROVE IMPACTS ON CHILDREN

Caregivers control economic impacts experienced by their children

All economic impacts that children experience across the three business models are indirect, since caregivers control household income, savings, and decision-making over expenditures and purchases. Unless caregivers spend the increased financial resources on their children's needs, the latter do not enjoy the full economic benefits that these ventures offer.

To increase the likelihood that financial resources are directed toward children's needs, ventures can incorporate specific messages in their marketing campaigns on how increased savings from engaging with the venture can be devoted to children's needs. For instance, ventures could provide messages on a monthly basis on different ways that savings generated can be spent on children. One such monthly message could direct parents to save for their children's school fees a few months before the start of the school year; this could be particularly helpful given that many BoP households have trouble saving for school fees. Ventures could also explore methods to increase their stakeholders' financial skills and access to financial tools to further increase their savings.

Another way to increase the spending of increased financial resources on children includes targeting such messages toward mothers. Research shows that mothers are more likely than fathers to spend financial resources on their children and hence ventures could explore methods and marketing strategies to target

mothers to buy their products and services. An example would be to attract mothers to Penda clinics to increase child-patients. In addition to targeting mothers, ventures can explore methods to target opinion leaders such as community leaders and respected elders in the community so they can spread the word on benefits gained to the rest of the community. Such methods could include awareness-raising, demonstrations and model farms, and free-trial offers on products and services.

BoP ventures need a green value chain to mitigate negative environmental impacts that can affect children

All children are impacted if the venture negatively affects a public good such as the air, water, or soil anywhere along its value chain, including during earlier production phases. To protect children from potential negative impacts on shared natural resources, ventures should implement and enforce supplier codes of conduct. Ventures should also engage in partnerships with companies that share similar values and are certified in clean manufacturing practices.

BoP ventures need to tailor child-friendly strategies based on phases of early childhood development

Although all BoP children are vulnerable to the effects of poverty, children 0-5 years old are especially vulnerable due to their low immunity and dependence on adults. Thus children ages five and younger are more likely to be affected by changes in nutrition and support received from caregivers. Older children, ages 6-8, are able to experience more impacts than younger children due to their enhanced cognitive capacity and from interacting with more people. Knowledge and skills that caregivers pass to their children are expected to be better understood by older children and applied more prominently among them versus their younger siblings. Furthermore, older children are better able to understand and accurately pass on messages about the benefits a product/service provides to their family and friends. Impacts related to aspirations are also likely to be experienced more by older children, as they are more aware of changes in expectations and their surrounding environment. The impacts on psychological health studied in this report are expected to be larger for children who attend school and can be teased by their friends. Older children also experience unique impacts from attending school, including improved school performance resulting from their ability to study longer hours and reduced absenteeism from improved health.

BoP venture managers should recognize these differences in impacts by children's age and develop strategies to enhance their impact on all age groups. Ventures should introduce important concepts such as environmental conservation, in order to inculcate environment-friendly habits early in young children. Given that older children are more likely to retain and apply such information, ventures should partner with schools to share such information. Ventures can also work with schools to provide ways to increase and support other impacts experienced by older children including expanding and fulfilling their aspirations. For younger children, ventures should ensure that caregivers are aware of nutritional requirements and care that are critical to that development phase. Ventures should also explore ways to make their products and services more child-friendly; this could include designing aspects of their business to increase use by children, e.g. child-friendly toilet seats in the FLT's or child-friendly waiting rooms in the Penda clinics. Ventures should develop age-appropriate messaging regarding the product/service if the delivery mechanism is via young children (3-5 years).

BoP ventures need to partner to scale and reach more vulnerable children

All six enterprises have the potential to reach more children. However, due to the lack of technical and financial tools, resources, and infrastructure in many BoP markets, ventures often must partner with other organizations and institutions to create the necessary ecosystem of services required for producing, distributing, and retailing products and services to and from the BoP – or develop it on their own. Underdeveloped processes in the value chain such as production, processing, transport, distribution, marketing, and finance can make it difficult for the venture to operate and scale sustainably. However, partnerships may not be possible in all contexts, such as when relevant organizations do not exist or external actors are inefficient or poorly trained; in such cases ventures often must absorb the role themselves, causing them to face difficulty in scaling to these new markets.

Scaling a venture is an essential next step in the enterprise growth model to maximize the number of children who can experience their impacts. To help ensure it reaches scale and reaches more children, a venture should carefully explore when it is most beneficial to partner with external organizations to develop the value chain or when it is better off to absorb additional roles itself. Additionally, ventures should consider joining relevant trade associations to strengthen their lobbying efforts to the government for business-enabling policies and the necessary physical infrastructure. Such platforms also provide opportunities for collaboration and in-depth conversations to eliminate duplicate efforts and share resources to strengthen the links in the value chain. Ventures can also aim to strengthen dialogue with investors on the challenges they face when scaling to new markets to temper expectations and also develop ideas to improve functionality within the chain.

BoP ventures can deepen impact on children through stakeholder retention

Embedded in the mission of all social enterprises is the goal to create lasting positive social and economic impact on stakeholders. Our data indicates that some BoP stakeholders who engage with the venture stop doing so for a variety of reasons including lack of financial resources to pay for the ongoing service, availability of a higher-paying job, unmanageable requirements to continue working with the venture, or not being satisfied with a product or service provided. In some cases when these stakeholders stop interacting with the venture, the positive impact on their children is reduced, and children may face additional negative impacts. Ventures must dedicate resources to understanding the reasons their stakeholders stop engaging with them. Ventures should also assess their impacts on these stakeholders and their children compared to stakeholders that continue engagement in order to ensure additional harm is not occurring. If the venture finds that additional substantial negative impacts are occurring, it should identify ways to reduce their likelihood, such as connecting individuals with community organizations that can reduce the effect of the negative impacts.

To ensure children continue to benefit from their impact, ventures should also seek ways to increase retention. Ventures should explore ways to develop trust, support, and respect between stakeholders and themselves in order to maximize retention. Methods to do this include developing feedback mechanisms to track and rectify negative experiences with the venture, providing excellent customer service and after-sale services, and exploring innovative approaches to improve relationships with the BoP. Additionally, ventures that engage with distributors can train dealers and franchisees to share best practices on using the product/service, and teach them how to spot a counterfeit item to reduce potential negative customer experiences. Ventures can also develop mobile sites (potentially with partners) to reduce the customer burden associated with travel.

CONCLUSION

Poverty can affect children in several ways and the damage caused by poverty can transcend into adulthood and onto the next generation. Base of the Pyramid (BoP) ventures that merge for-profit business practices with social missions are gaining traction as an alternative approach to poverty reduction. These ventures, through engagement with stakeholders who may be children themselves or their caregivers, have the potential to positively affect early childhood development by providing access to increased financial resources, improving physical and psychological health benefits, increasing aspirations, and enhancing interactions and support from caregivers. However there is limited understanding of how BoP ventures affect children, especially by age, which hinders the ability to further enhance impacts that they experience during early childhood. Through robust qualitative research, this report aims to understand economic, capability, and relationship well-being impacts that six enterprises, with varying business models and from different geographies and sectors, can have on children.

While qualitative findings do not prove correlation or causation and consist of likely impacts, they do provide a deep and holistic understanding of how the ventures' activities affect stakeholders' children. Future researchers are encouraged to conduct quantitative, survey-based studies to capture changes in impacts experienced by children. Furthermore, because we were dependent on the ventures for identifying interviewees, we recommend future studies employ random sampling to avoid any possible sampling bias.

Our comparison of six BoP ventures led to the identification of a number of similarities and differences on impacts experienced by children across business models and across stakeholder groups within each venture. Based on these findings we provide recommendations to increase, deepen, and enhance venture impacts. These findings and recommendations provide valuable information to BoP managers but also to venture investors, many of whom have specific financial goals and impact requirements that must be met by investees.

Our data indicate that although all business models create potential for negative economic impacts for stakeholders and their children, producers' children can experience additional economic risks. These include lack of guarantee of business success and potential overreliance on a single source of income. Thus managers of ventures that source from the BoP should pay careful attention to how to reduce the likelihood and magnitude of negative economic risks affecting producers' children.

Another important difference relates to the stakeholder's role in the business. Children of caregivers who engage with a venture -- including distributors, employees, and producers -- experience capability and relationship well-being impacts from the knowledge, skills, and support gained through their caregivers' trainings and expanded networks. Children of distributors experience the largest magnitude of these impacts. Although the children of employees, distributors, and producers experience such additional impacts, their total number is much smaller than that of customers' children and children in the broader community. Thus ventures may choose between depth and breadth of impacts. If investors and their ventures want to deepen impacts across all types of well-being, children of stakeholders who directly work with the venture are the ideal target population.

Additionally, our analysis suggests that ventures that sell services to the BoP benefit children in the broader community more so than those that sell products or source from the BoP. This occurs through a network effect that increases these children's knowledge and physical health or by positively affecting a public good such as soil, water or air. If investors are looking to create impact across the largest number

of children, they should identify ventures that sell services to the BoP and, with those, recommend marketing and awareness-raising campaigns to further spread information and demand in the community. To summarize, investors with limited resources who have missions to target the largest number of persons rather than create the deepest impacts may want to identify service-selling ventures.

Our other findings include BoP ventures need a green value chain to mitigate negative environmental impacts that can affect children, BoP ventures need to partner to scale and reach more vulnerable children and BoP ventures can deepen impact on children through stakeholder retention.

Given the benefits that socio-economic impacts can have on children from the BoP in reducing the effects of poverty, we recommend all ventures focus on enhancing impacts on children, even when they are not their target customers. Additionally, we recommend that all BoP ventures systematically and regularly measure impacts on their stakeholders' children. This will allow ventures to gain a more nuanced understanding of the needs of young children as well as how these needs change over time, in order to better address them through their business activities.

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