UNIVERSITÀ COMMERCIALE LUIGI BOCCONI - MILANO

# Cross-Sector Collaborations at the Base-of-the-Pyramid

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***For my mother …***

# Cross-Sector Collaborations at the Base-of-the-Pyramid

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# Abstract

This dissertation studies partnerships between companies and nonprofits at the Base-of-the-Pyramid (BoP), i.e. the underserved markets of the lowest income groups in developing countries. These so-called cross-sector collaborations have proven valuable strategic tools in other settings as they can benefit companies in a number of ways. For instance, they can improve the image of companies, boost employee morale or help firms foresee shifts in market demands. Many BoP cases clearly show how these relatively new types of partnerships play an essential role in the business models of companies. However, the literature does not specifically cover this particular topic. This dissertation addresses this research gap and presents four BoP cases and develops a theoretical framework based on the Resource Dependency Theory and the Resource-Based View with which the phenomenon of cross-sector collaborations at the BoP can be better understood. The case studies are from India, Kenya and Uganda and involve an improved cooking stove, an IT-based agricultural system, an insurance product and a mobile payment system. This research aims to contribute to the literature on the Base-of-the-Pyramid, cross-sector collaborations, the Resource Dependency Theory and the Resource-Based View. Furthermore, the conclusions will have valuable implications for managers in the business, nonprofit and public sectors.

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# Acknowledgments

While cleaning out my old room in my family's home recently, I came across a think binder. It contained my collective academic research papers, which I wrote during my studies in the Netherlands, Germany and the United States. As I paused to read these documents, I was reminded of how much I enjoyed researching topics as diverse as the political decision-making process of sending Dutch military forces to Srebrenica; the influence of outsourcing of the Space Shuttle Challenger disaster; and the OSCE's involvement in the Transdniestrian conflict. Instantly, I began to notice that over all these years the quality of my work increased substantially as my writing style improved, my analytical skills sharpened and my research projects became ever more relevant and robust.

After graduating in Political Science from the University of Amsterdam, I had the opportunity to study as a NAF-Fulbright student in the joint-Masters degree of Public Administration and International Relations at the Maxwell School of Citizenship and Public Affairs of Syracuse University. During my time in the United States I became particularly interested in the management of international public and nonprofit organizations. With this in mind, I started searching for doctoral programs in which I could further explore this topic. My fellow Maxwell classmate Greta Nasi advised me to look at her Alma Mater Bocconi University in Milan, where she is now an assistant professor. With its renowned SDA School of Management and one of Europe's largest Public Affairs departments, Bocconi's PhD in Business Administration and Management was indeed the right choice for me regarding my research interests. However, after taking several courses I became more and more interested in traditional business topics. At a conference early 2005 I met with Dwight Carey, a professor at Temple University and businessman in heart and soul. He shared his experiences in establishing many companies and his views on the essential role of entrepreneurs in society. It was that particular conversation which made me decide to change the focus of my dissertation from public administration to business administration.

The first time I started thinking about the Base-of-the-Pyramid (BoP) phenomenon as a potential research subject was after my good friend and fellow PhD student George Simeon mentioned the work of University of Michigan Business School Professor C.K. Prahalad. He believed that it would 'fit' me well because of my previous studies and other interests. Soon after I had read Prahalad's book *The Fortune at the Bottom-of-the-Pyramid* I began to explore the topic further in a few course papers. However, it was not until I learned about the work on cross-sector collaborations from Harvard Business School Professor James Austin before I began working on the definitive topic of my dissertation, namely cross-sector collaborations at the BoP. I had already noticed that many BoP cases emphasized the importance of partnerships between companies and nonprofits, but up until that moment no formal studies had been conducted on the matter. And so by the fall of 2006, I commenced the long journey that would ultimately lead to this dissertation.

The data collection was obviously the most interesting and fun part of the entire process. By the end of 2006 I had identified a number of potential cases on cross-sector collaborations at the BoP and by January 2007 I started planning my first research trip to India. For the Shell Foundation Breathing Space and Akashganga cases I would have to travel to several cities, which gave me the unique opportunity to see many parts of the country and to meet with many interesting business and nonprofit leaders. A second trip to Kenya and Uganda was planned for the end of August in order to research the Vodafone/Safaricom M-Pesa and AIG micro-insurance cases. However, due to problems in finalizing my meeting schedule I had to postpone the trip with a few weeks. Planning all the meetings and itineraries within a short period of time was further complicated by limited funds available to me at the time. It was certainly not the easiest task. In the end, I am very happy that it all worked out. Although I have seriously looked at some other cases from Philips and the Apollo Hospitals in India, I found that the data was not sufficiently rich to justify their inclusion in this work. Still, as it will be argued, I believe that I have gathered sufficient information to buttress the theoretical framework and substantiate my final claims.

Pursuing a doctoral degree in another country was a fascinating challenge. At the risk of sounding stereotypical the combination of culture, nature, history and great food made my life very pleasant in Milan. During these years, I especially enjoyed organizing social events for Milan's Dutch ex-pat community, the so-called NLBorrels. I'm happy that Sander Raaijmakers, the initiator of these worldwide events, asked me to be his partner in Milan. Not only did I host a monthly happy hour, but I also had the pleasure of arranging three national holidays (the famous Queensdays) and the Holland House Milano during the 2006 FIFA World Cup. Through these events I had the opportunity to meet with many fellow Dutchmen, several of which became good friends. My *Italy experience* became complete by adding another language to my repertoire by managing to pass two official language exams from the Università per Stranieri Perugia, (namely CELI 2 and 3).

The entire PhD program and the writing of this dissertation have been very fruitful learning experiences. From the coursework to my highly individual research project, which would take me to four continents, I often believed I had grown roots to my desk and computer. It is a great privilege to have the chance to pursue a doctoral degree and devote several years on mere intellectual development and the study of a single topic. However, this entire enterprise would not have been possible without the help of those individuals who I would like to thank from the bottom of my heart.

First, I would like to thank my former Maxwell School professors who supported my application to Bocconi University: Stuart Bretschneider, John Murray, Dana Radcliff and Alan Tidwell. Along with them I would also like to thank the Public Administration and the International Relations departments, as well as the organizations that financially supported me during my graduate years in the United States such as the Netherland-America Foundation and the Institute for Human Studies. Without them it would have been much less likely I could have successfully pursued this PhD. Second, I am especially grateful for the assistance and support I received from the professors in my Dissertation Committee: Giuseppe Airoldi, Francesco Perrini, Jac Geurts and Dwight Carey. I really enjoyed discussing my ideas and the results of the individual cases, as well as learning much from their respective experiences and insights. Without their guidance and advice this research project would not have been what it has become. In addition, I want to thank some other professors who have helped me in different ways during the entire process: Alfonso Gambardella, Gianmario Verona, Carlo Salvato, Stefano Brusoni and Paul Vlaar. Special thanks are for Dora Zacchetti and Jacqueline Fuchs for their help with all administrative matters. Third, I am greatly indebted to all those people who freed up time in their agendas to explain their work, ideas, and experiences within the individual cases. There are simply too many to mention here, but I want to especially thank Dr. Mary Muiruri for her support during the past four months. Her strength has been an example and a source of inspiration and I wish her the best of luck with her work in Kenya. Also some of my friends have at some point been very helpful in finishing this dissertation: Wim Oosterveld, Rogier Huijmans, Octavio and Gina Hinojosa-Mier, Marije Brinkhuis, Patrick Beeker and Sander

Raaijmakers. Fourth, I would like to thank my fellow PhD-students, and in particular Lucia Guilhoto, Pietro Perotti and George Simeon. Over the past three and half years we have built up quite a portfolio of great memories that I will cherish for the rest of my life. I'm especially indebted to George for his great support and friendship. Besides providing me with the golden research idea and hosting me several times in his (and Eleonora's) house, he was a continuous source of intellectual challenge. Fifth, on a day-to-day basis I am most thankful for the unremitting support of my girlfriend Shantala. It was amazing to meet her again in Mumbai in February 2007 since our first encounter in Amsterdam over eight years ago. Throughout our entire friendship she has always been very supportive of my academic endeavors. Her patience and support over the past year, and especially during these past four months, have unquestionably helped me finishing this project. I am happy that we will now finally have the chance to do something about the long-distance status in our relationship.

Finally, I want to thank my parents for their unconditional support during all these years. There are no words to express my gratitude for giving me the chance to exploit so many academic and extra-curricular activities. It is therefore very painful that I have to write these words without my mother being able to read them as she recently passed away on Monday, October 1, 2007. The dreadful telephone call, which came from my brother Yvo very early in the morning of that day, still resonates through my mind. I had just returned to Mumbai from my second research trip to East Africa and was planning to stay for a few weeks with Shantala. The news was bad, very bad. My mother fell ill the night before, lost conscious and was taken to the hospital where she was diagnosed with a brain tumor in a very advanced stage. Although the doctors expected she would awake quickly from the coma after medication, this did not happen and she had to give up the uneven battle already that afternoon. I immediately took the first flight back to the Netherlands, but she passed away while I was on the flight on way home.

The last four months of working on this dissertation were extremely difficult. There was still much work to do, which included transcribing several interviews, analyzing two cases, devising the theoretical framework, and writing the introductory and concluding chapters. My trips abroad and recent relocation from Milan to the Netherlands made it more challenging in staying organized with all my books, articles, brochures and research notes in boxes. Forced by the problems of renovating my family home, my father and I ultimately stayed with my brother and his girlfriend Maud for two and half months. We had a very intimate time together during which I could continue working on my dissertation in a temporary study room. And despite our shared sadness and grief, we found comfort in seeing Max, my baby nephew, learn new things every single day. I was the happiest uncle in the world!

Finishing a thesis is almost always a demanding process. A professor even once told me that following a PhD program and writing a doctoral dissertation would be a long and lonely road. He was right. But I am very happy and proud that I have made it all the way to the end and am now free to explore other paths. Still, presenting my final work before my Committee only four months after my mom's sudden and unexpected death is a bitter and sad reality. I know that she has always been proud of what my brother and I have achieved so far, and I am sure that she would have loved to celebrate this accomplishment and the next steps of my life as if they were my very first. Understandably, I miss her terribly. For her, for her love and her unconditional support of my academic journey, I dedicate this dissertation to my mother.

*Lieve mama, deze is voor jou!*

**PART I – INTRODUCTION**

The first part of this dissertation consists of three chapters. The first chapter gives an introduction and explains the Base-of-the-Pyramid (BoP) and cross-sector collaboration phenomena and explains why additional research on the link between them is of principal importance. In addition, it describes why the Resource Dependency Theory and the Resource-Based View of the firm provide a good basis for devising a theoretical framework that can shed light on the underlying reasons for the formation of cross-sector partnerships at the BoP, and introduces the two questions that guide the empirical case studies. Finally, this chapter lays out how the entire dissertation is organized. The second chapter discusses various aspects of the Base-of-the-Pyramid phenomenon, including its place in academic research, and presents a number of business cases in which cross-sector collaborations play an important role. The third chapter elaborates on the research methodology that is applied in this dissertation – i.e. the multiple case study approach – and expounds upon a variety of issues such as the unit of analysis, data collection and analysis, and reliability. The chapter concludes with an explanation of the case study protocol and the criteria for success.

> "*Economic achievement depends primarily on people's abilities and attitudes and also on their social and political institutions. Differences in these determinants or factors largely explain differences in levels of economic achievement and rates of material progress.*"
> Peter Thomas Bauer (1976)

## CHAPTER 1 – Introductory chapter

For over fifty years Western initiatives to alleviate poverty were driven by a dominant logic that was based on the assumption that poor people were victims who could only be helped trhough large-scale development aid projects to break the *vicious circle of poverty*. The late Peter Bauer said (1987: 30) that "according to this notion, stagnation and poverty are necessarily self-perpetuating: poor people (…) are trapped in their poverty, and cannot generate sufficient savings to escape from the trap." Development solutions were therefore often centered on the principle of distributive justice by way of offering aid and credit rather than on the actual development of sustainable wealth-creating institutions in the private sector. Contemporary approaches to the problem of dire poverty, such as those advocated by Jeffrey Sachs (2005), Director of the UN Millennium Project, appear to be novel, but have been criticized for being 'more of the same' and for lacking an effective implementation strategy (Easterly 2006). Although Bauer (1954) already noticed in the fifties that entrepreneurial activities were taking place in Western Africa and that this contributed much more to economic development than state-led projects, his vision was dismissed as eccentric and off the mark (Yergin & Stanislaw 2002). This dissertation proposes to revisit Bauer's theory, and takes it as a starting point to study how companies can do business in developing countries and contribute to reducing poverty.

In his bestselling book *The Fortune at the Bottom of the Pyramid* C.K. Prahalad (2004: 1) writes: "If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up." After a period of growing antipathy towards western companies, many of them are now paying attention to customers at the Base-of-the-Pyramid (BoP), i.e. the poorest people in the world (Brugmann & Prahalad 2007).[1] This approach advocates the idea that the BoP offers many opportunities for companies. Because markets in the developed world and the high-end markets in emerging economies are becoming saturated as supply exceeds demand, often combined with shrinking populations who have developed brand indifference Chan Kim and Mauborgne (2005: 8) argue that instead of continuing price competition, companies should open up new and uncontested market space, i.e. a blue ocean, and create new demand with the opportunity for highly profitable growth: "As red oceans become increasingly bloody, management will need to be more concerned with blue oceans than the current cohort of managers is accustomed to." A similar line of reasoning advanced by Hamel and Prahalad (2000). Although these scholars don't mention the BoP as a blue ocean, it could very well be perceived as an uncontested market space. In addition to market opportunities, the BoP can also become an incubator for disruptive new technologies (Hart & Christensen 2002; London & Hart 2007). To achieve sustainable growth with a growing and more affluent population such technology may even have to be regenerative in nature (McDonaugh & Braungart 2002; London & Hart 2007). This dissertation is about companies doing business at the BoP and how they collaborate with organizations from other sectors in achieving their objectives.

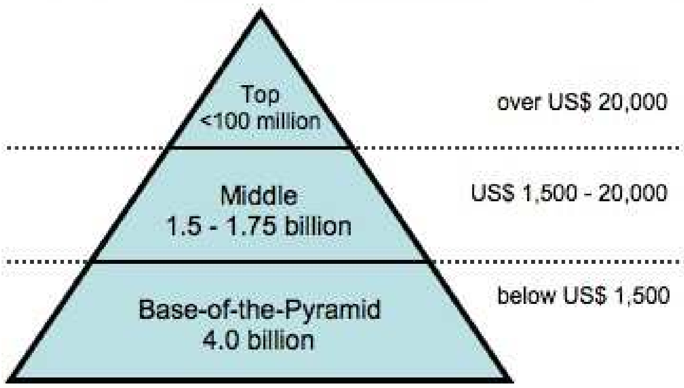
The BoP focuses on low-income populations in the developing world, as shown in figure 1.1. This population has a Purchasing Power Parity (PPP) of less than US$ 2 per day and consists of 4 billion people (World Bank 2002). This income cut-off point and size of the BoP are arbitrary and debatable (Mendoza & Thelen 2007). Throughout the literature different numbers are reported and London (2007) therefore believes that such empirical income measures serve best as approximations in order to capture the essence of the BoP

[1] Initially the term Bottom-of-the-Pyramid was used (Prahalad & Hart 2002; Prahalad 2004), but because it was sometimes perceived as derogatory it was changed by the term Base-of-the-Pyramid (Hart 2005).

definition instead of a precise measure. He also notes observations of other scholars that the BoP is not homogeneous, neither within countries nor between them (Dawar & Chattopadhyay 2002; Mendoza & Thelen 2007). Prahalad (2007) says that the BoP is not monolithic. However, what developing markets have in common is the fact that economic activity is mostly informal, which means that transactions are cash-based and often unregistered. London (2007: 11) defines the BoP as a term that "represents the poor at the base of the global socio-economic ladder, who primarily transact in an informal economy."

Since the 1950s, the BoP has been the focal group for government and civil sector interventions. But with the public and nonprofit sectors failing to deliver effective solutions to eradicate poverty, many are now looking at companies to provide answers to this global problem (Margolis & Walsh 2003). In their groundbreaking article *The Fortune at the Bottom of the Pyramid* Prahalad and Hart (2002) argue in favor of an inclusive capitalism and enabling growth and profitable business at the BoP while contributing immensely to

**Figure 1.1 - Global income groups: identifying the Base-of-the-Pyramid**




Sources: Prahalad & Hart 2002, Prahalad 2004

human welfare. Indeed, in his earlier mentioned book with the same name Prahalad (2004: 112) is extremely optimistic about the impact of the BoP approach: "I have no doubt that the elimination of poverty and deprivation is possible by 2020." The publication of the article and the book has had a great impact on business thinking. The book became a bestseller and was named Best Business Book of 2004 by Amazon, Best Book of 2004 by Fast Company, and it appeared on the Economist's list of best business and economics books (Walsh et al. 2005). Recently, Prahalad has been named the greatest management thinker alive by Thinkers 50, an annual ranking of the Top 50 management thought leaders in the world. "Just like Peter Drucker and Philip Kotler, Prahalad has the uncanny ability to sense emerging reality and conceptualize it into a major movement. Examples are core competency, co-creation of value with customers and most recently his focus on the bottom of the pyramid population."[2]

Over the past few years the BoP approach has attracted the attention from academics, business managers, developmental non-governmental organizations, and the international public sector. The approach proscribes a fundamental rethinking of the way business is done (Prahalad 2004; London & Hart 2004). Most notably, it encourages companies to adapt their technologies and change their business models in order to reach the BoP markets. One often-mentioned element of these new business models concerns collaboration with a variety of non-traditional partners, including public sector organizations, nonprofits and community groups (Hart & Christensen 2002; Prahalad 2004; Wheeler et al. 2005). The importance of these alliances becomes clear at the very beginning of Prahalad's (2004:2) book: "The opportunities at the BoP cannot be unlocked if large and small firms, governments, civil society organizations, development agencies, and the poor themselves do not work together with a shared agenda."

These so-called cross-sector collaborations with non-business partners are a relatively new phenomenon and can be defined as *voluntary collaborative efforts between organizations from two or more sectors to solve a social, economic or environmental problem that is of mutual concern and which brings benefits to all partners*. Despite some similarities, they differ from traditional strategic alliances in many ways due to, amongst

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[2] Source: C K Prahalad crowned world's top management guru. The Times of India, 8 November 2007.

others, diverging performance measures, organizational cultures, and incentive and motivation structures (Austin 2000b). This observation in itself provides an interesting starting point for further research. However, it is the growth of cross-sector alliances over the past years in particular which makes additional research desirable (Nelson 1996; Logan 1997; Waddell 1997; Austin 1998, 2000a/b; Wymer & Samu 2003). Other reasons include the shift from philanthropic partnerships to more integrated governance structures (Austin et al. 2006; Sagawa & Segal 2000) and the argument that they are the key to solving many social, economic and environmental problems (Googins & Rochlin 2000; Berger et al. 2004).

Many known existing BoP case studies have clear elements of cross-sector collaborative activities. For instance, in order to reach the rural unbanked Indian population, the ICICI bank works closely together with non-governmental organizations and micro-finance institutions. To serve the Middle- and Top of the Pyramid markets in Bangladesh, Telenor from Norway joint ventured with Grameen from Bangladesh, founded by Nobel-laureate Muhammad Yunus and known for their micro-finance models that inspired numerous similar organizations throughout the world. Together they founded GrameenPhone to achieve high financial returns, while Grameen-Telecom was to serve the Base-of-the-Pyramid through the famous ‘village phone’ model.

Despite these examples, the acknowledgement by academics of the role cross-sector collaborations play in BoP business models, the growth in these partnerships and the change to more integrative forms, as well as the broad albeit dispersed body of literature on such partnerships in other settings (e.g. Austin 2000a; Googins & Rochlin 2000), cross-sector collaborations at the BoP have never been the subject of rigorous research. Although some studies do provide valuable insights into the essence and structures of effective alliances, a pure theoretical understanding of their existence has not yet been published. This gap in the literature needs to be addressed by more systematic research. Improved knowledge about this topic is not only interesting for academic scholars, but can be very useful for businesses as well. Hart claims that companies should understand the importance of the BoP market in the long-run. He says (Hart & London 2007): "Ultimately, the BoP represents the breeding ground for tomorrow's global competitors…. There is an emerging set of skills and capabilities that some companies are going to figure out and some aren't, and the ones that don't are gonna go down by the waste side." Thus, if BoP markets become more important then companies should fully understand what it takes to become successful in them.

This dissertation examines four empirical BoP cases in which cross-sector collaborations play an important role. The primary purpose of this study is to contribute to the existing body of fundamental knowledge on cross-sector collaborations at the Base-of-the-Pyramid by devising a theoretical framework that provides a tool for better understanding their existence. From reviewing the literatures on the Base-of-the-Pyramid and cross-sector collaborations, it became clear that such a framework would probably have to incorporate a number of recurring elements, including resource needs, environmental constraints, resource flows, the partnership as governance structure, and rent generation. For instance, Sagawa and Segal (2000: 110) write: "Given the growth in alliances as a survival strategy in both the business and nonprofit sectors, it is not surprising that cutting-edge corporations and social sector organizations are looking outside their own sectors to address specific needs." Rangan et al. (2007: 9) write that "alliances with civil society groups, whether formalized nonprofits, self-help groups, or community associations, can give companies strategic insight and access to new customers or suppliers." Austin, Refico et al. add that "*these emerging forms of collaboration involve more and different types of bilateral resource flows and generate greater value to businesses, nonprofits, and society than the traditional approach*." (Austin, Refico et al 2004).

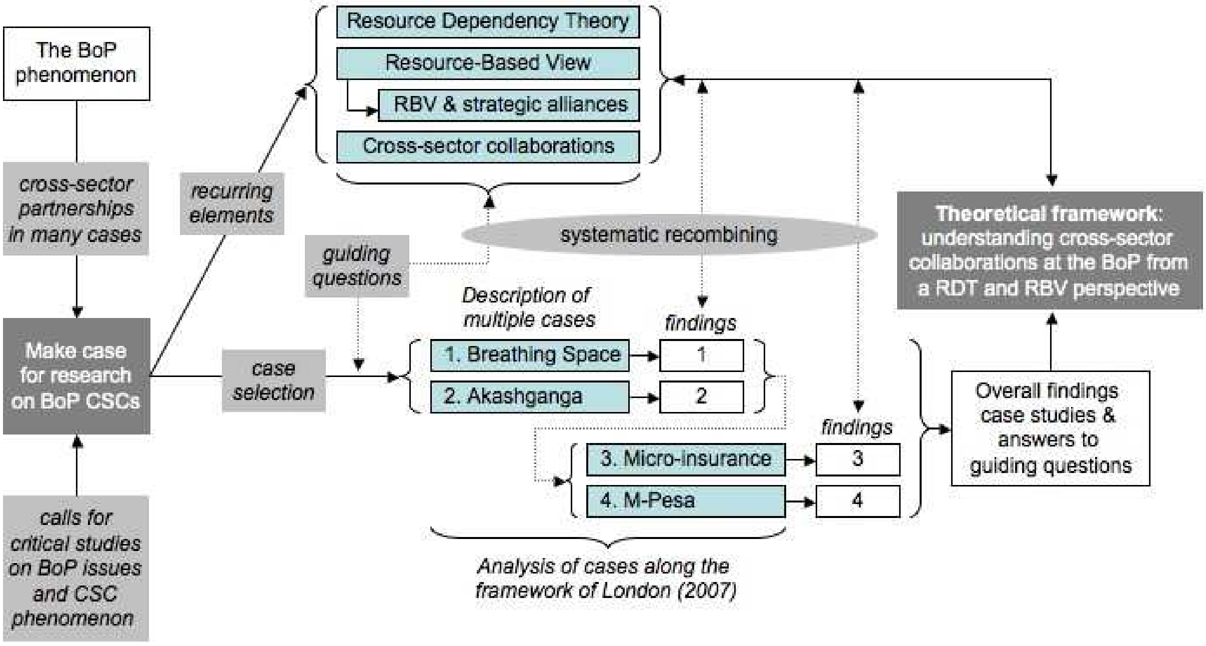
The identification of these recurring elements suggests that the Resource Dependency Theory (RDT) and the Resource-Based View (RBV) are necessary ingredients for the theoretical framework. The former classifies as a Behavioral Theory of the Firm and explains why companies depend on their external environment for obtaining necessary scarce resources. The theory perceives informal or semiformal linkages – which includes cross-sector collaborations – as a strategy to reduce uncertainty resulting from the established relationships with organizations in that external environment. The RBV is a decision-based model that provides insight in the underlying theoretical reasons why companies collaborate with non-business organizations. From the Resource-Based perspective alliances are seen as vehicles to 'aggregate, share or exchange valuable resources with other firms' (Das & Teng 2000) in the case where there is a 'resource need' (Eisenhardt & Schoonhoven 1996) in order to obtain a 'relational rent' (Dyer & Singh 1998) or even an 'inbound spillover effect' (Lavie 2006). As will be shown in a later chapter, these elements are all applicable to cross-sector collaborations, even though they have never been discussed from this angle before.

To devise a clear theoretical framework that explains the existence of cross-sector collaborations at the Base-of-the-Pyramid, this dissertation applies a multiple case study approach, as shown in figure 1.2. To obtain relevant data, four empirical cases from India, Uganda and Kenya will be examined with two driving questions in mind, namely:

- Why do companies collaborate across the traditional business sector while introducing new products and services at the BoP?
- What are the partner's key resources and knowledge that companies want to obtain, have access to, or benefit from?

Each of the cases will be comprehensively described in chapters 7 to 10. Their findings will be presented in chapter 11 with reference to these two questions, followed by an analysis from the Resource Dependency and Resource-Based Views. Finally, some general conclusions will be drawn based on the cases, their analyses and the theoretical framework. The overall findings of this research project will be of interest to various groups. First, it is relevant for scholars who focus on research in the RDT and RBV traditions, as well as those

**Figure 1.2 - General research framework**




who study cross-sector collaborations. Second, it will be of interest to scholars in the fields of Base-of-the-Pyramid strategy and marketing, international business strategy, nonprofit and public sector policy and management, and international development. Third, the cases, findings and conclusions should contain valuable insights and lessons for practitioners in the business, nonprofit and public sectors, some of which are presented in the final chapter. The next chapter in this first part of the dissertation deals with the background of the Base-of-the-Pyramid phenomenon and its status as an academic research field. It also discusses a number of BoP business cases emphasizing the importance of cross-sector collaborations. Chapter 3 spells out the methodology discussing the research questions, the unit of analysis, data gathering, data analysis, validity, case choices, case study protocol, and results interpretation.

Part II contains three chapters of literature review. It starts with chapter 4 which briefly explains the Resource Dependency Theory. Subsequently, chapter 5 comprehensively discusses the Resource-Based View. It gives an overview of the key texts in the field, the different types of firm resources, and especially the RBV studies on strategic alliances. Chapter 6 reviews the literature on cross-sector collaborations. Although much has been written on the topic, actual research remains intermittent and has not yet reached mainstream business scholarship. Still, this chapter makes an attempt to survey the main issues that have been addressed, including motivations, risks, problems, typologies and partnership phases.

Part III is dedicated to discussing four empirical cases of commercial ventures at the BoP in which cross-sector collaborations played a central role. Chapter 7 talks about Breathing Space in India, a program from the Shell Foundation that is focused on building a self-sustainable value chain in order to introduce improved cooking stoves that should lead to a reduction in indoor air pollution (IAP). Chapter 8 discusses how SKEPL, a small Indian company, developed and marketed Akashanga, an automated milk collection system for small village dairy cooperatives. The next chapter (9) deals with micro-insurances that the insurance company AIG Uganda provides to micro-borrowers in collaboration with micro-finance institutions. Finally, chapter 10 discusses how Vodafone and its Kenyan subsidiary Safaricom developed and launched M-Pesa, a very popular mobile payment service that is quickly spreading among Kenyan mobile phone users.

Part IV is dedicated to the findings and conclusions. Each of the case study chapters concludes with a summary in which the major findings are discussed. Chapter 11 presents the overall findings of the four cases. In particular it will provide clear answers to the guiding questions on why companies collaborate across the traditional business sector at the BoP and what specific resources they are looking for when doing so. Chapter 12, perhaps the most important chapter of this dissertation, builds on chapter 11 and all previous ones by analyzing the findings, the literature and the data at a meta-level in order to devise a framework that presents the theoretical underpinnings of the phenomenon of cross-sector collaborations at the BoP. The final chapter (13) discusses the final conclusions and tries to establish what lessons can be learned from the cases and the findings. It provides some suggestions for future research and gives some practical recommendations for those involved with BoP ventures or cross-sector collaborations.

## CHAPTER 2 – The Base-of-the-Pyramid phenomenon

This chapter provides additional background to the Base-of-the-Pyramid phenomenon. It begins with a discussion on what sets the BoP markets apart from more traditional markets and why companies have not identified them as a business opportunity. The second part provides an overview of how attention for the BoP grew over time. Consequently it explains how initial criticism led to a further progress in thinking about how companies can do business with the poor. Particular attention will be paid to the BoP Protocol™. The third part discusses the place of BoP research in wider business academics and how it relates to social entrepreneurship and corporate social responsibility. The final part briefly presents a few BoP case studies that can give an initial idea what roles cross-sector collaborations can play in reaching the Base-of-the-Pyramid.

### *The Base-of-the-Pyramid: an unexplored business opportunity*

Two important questions addressed in this dissertation are what makes the BoP different from other more traditional markets, and why have companies not noticed the opportunities in these markets earlier? Neither of them are easy to answer, require extensive study and actually fall outside the scope of this dissertation. However, because of the central importance of gaining a better idea why companies collaborate with nonprofits and other non-business organizations at the BoP, it is important to examine what separates these markets from other ones.

Among the main theories in the literature on development economics, the institutional approach seems to offer the most promising and parsimonious explanation of the poverty predicament at the macro-level. Defining institutions as "the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction," North (1990: 3) argues that they "structure incentives in human exchange, whether political, social, or economic" and that (North 1998: 95) "institutional change shapes the way societies evolve through time and, hence, is the key to understanding historical change." North believes that a set of political and economic institutions leads to low transaction costs enabling the existence of efficient factor and product markets. The costs of transacting depend upon four variables, namely (1) the costs of measuring, (2) the size of the market because it affects the relationship between players, (3) the costs of enforcement and (4) ideology as it influences individual perceptions of fairness and justice, which has an effect on measurement and enforcement costs. At the Base-of-the-Pyramid the costs of measuring are high because of a lack of property rights. Also, the size of individual BoP markets is fairly small. People often only trade with those who they trust and who are in their direct vicinity. Making exchanges over longer distances and longer periods is risky since there are hardly independent mechanisms in place to handle disputes and reward compensations. These costs are hard to observe and require a comprehensive look in each individual BoP markets because of their vast differences.

North claims that three types of institutions affect the height of these costs. First, there should be rules that induce entrepreneurial activity and encourage a trial-and-error approach to see what works and what not, for instance bankruptcy laws and low-costs ways to measure property rights. Second, formal rules should be complemented by informal rules allowing for exchange without thinking about all the terms of exchange, such as conventions, norms of behavior and self-imposed codes of conduct. Third, effective enforcement mechanisms should ensure that formal rules are abided by. At the Base-of-the-Pyramid most of these institutions are simply lacking. De Soto (2000) has extensively written about the consequence of deficient or non-existent of property rights registration systems in underdeveloped nations. In his book *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* he claims that the total value of real estate of the poor that is not legally owned amounts to at least US$ 9.3 trillion, which is forty-six times the total amount of World Bank loans and ninety-three times all development aid in three decades.

However, the question why companies have not been active before at the Base-of-the-Pyramid not only depends upon the lack of institutions. At the firm level, there are two other important impediments preventing companies from successfully exploiting BoP markets. First, in his book *The Fortune at the Bottom of the Pyramid*, Prahalad (2004) describes that multinationals have been victims of their own dominant logic, restricting them from seeing a market opportunity at the BoP. He mentions, for instance, that one assumed the poor did not have used for western-style products and services, that the poor could not pay for them or appreciate technological innovations. This paradigmatic thinking hampered companies to understand the needs of the poor, conceptualize new products and subsequently design and market them. As Prahalad says (2004: 9) "BoP markets enable firms to challenge their perspectives on cost" and claims they can be reduced ten to two hundred times compared to developed markets if companies learn to innovate from the BoP up. Second, and in line with the lessons that can be drawn from the institutional perspective, Prahalad (2004) believes that they should understand how to develop a BoP market and how to access it as this differs much from traditional markets. Companies can create 'the capacity to consume' by incorporating the principles of affordability, access and availability. Affordability implies that companies need to understand that the poor cannot easily pay for products, but that single-serve packages or innovative payment systems makes them affordable. Access means that the products and service must actually reach BoP markets, which implies adapting or building new distribution networks. Availability concerns the efficiency of the distribution networks and the understanding that products must be available because with just little money on hand the poor cannot delay buying decisions. These principles sound easy on paper, but are of course very complicated to implement in practice. Besides Prahalad, several authors have offered insights into how they can be incorporated into the strategies of Western firms (e.g. Samli 2004; Hart 2005; Mahajan & Banga 2006).

*The emergence of a research field*

C.K. Prahalad and Stuart Hart first coined the term Bottom-of-the-Pyramid in their article *The Fortune at the Bottom of the Pyramid* published in 2002.[3] Hart explains this contribution (Hart 2005; Hart & London 2007) was a culmination of earlier progress in two separate fields, namely those of development and global strategy. In the former field, Hart himself was particularly influenced by new ideas on sustainable development, environmental management and anti-globalization, which led to the publication of his article *Beyond Greening* in 1997. In this piece, Hart (1997) argued that in a world where one sixth of the population leaves a disproportionately large 'ecological footprint,' large corporations should lead the way in pursuing environmentally sustainable business strategies, influence public policy and change consumer behavior. In the latter field, which focuses particularly on emerging markets, particularly the article *The End of Corporate Imperialism* by C.K. Prahalad and Kenneth Lieberthal (1998) contributed to the BoP concept. In this article the authors argued that multinationals miss out on opportunities in emerging markets by simply selling old products in new markets, instead of rethinking every element of their business models and discover the lower income markets of up to US$ 5,000 per year per person. From their studies they concluded that markets did still not serve the majority of the world's population. While this finding received some attention for a while, e.g. through the establishment of the BoP learning lab was established, it was not until 2002 when Prahalad and Hart's article was published. Almost simultaneously Prahalad published the article *Serving the World's Poor, Profitably* with Al Hammond, in which they argued that

[3] This dissertation will in principle use the term Base-of-the-Pyramid, unless Bottom-of-the-Pyramid was the word originally used in writings.

multinationals can improve the lives of the poor radically once they realize the aggregate buying power of the poor and a high volume of low-margin transactions can be profitable. Since the publication of the seminal article *The Fortune at the Bottom of the Pyramid* several initiatives have led to an increased attention for the BoP, among which:

- Academic & practitioner conferences, e.g. the *Eradicating poverty through profit* conference from the World Resources Institute, the *Business as an Agent of World Benefit* conference at Case Western Reserve University (2006) and the *Business with Four Billion* conference at the University of Michigan at Ann Arbor (2007).
- Attention by different institutes, e.g. Ashoka, the Acumen Fund, the Skoll Foundation, the World Resources Institute, and the Schwab Foundation.
- Establishment of academic research centers, e.g. BoP learning labs in a number of universities around the world, Harvard Business School's Social Enterprise Initiative and the BoP Initiative at the University of Michigan.
- Corporate and nonprofit initiatives, e.g. by Hindustan Lever, S.C. Johnson, Philips, the Light-up-the-World Foundation and the Skojo Foundation.
- Involvement of the public and supranational sector, e.g. the United Nations Capital Development Fund

From an academic perspective, the emergence of an increasing body of literature has been particularly important. First, a number of books have been published on the BoP (e.g. Prahalad 2004; Samli 2004; Hart 2005; Mahajan & Banga 2006; and Rangan et al. 2007). Second, steadily more academic research papers have been presented at conferences and published in business journals. For instance, Hart and Christensen (2002) write about the potential disruptive impact of innovations that are designed for the BoP. Whitney and Kelkar (2004) explore how design contributes to BoP market strategies. Arnould and Mohr (2005) look at the relationship between development and marketing opportunities in BoP market nations. Wheeler et al. (2005) focuses on how self-sustainable businesses can emerge at the BoP, eventually with the involvement of external actors such as multinationals.

*Criticism and a new BoP approach*

The greater part of the BoP literature focuses on the exploration of new business opportunities in underdeveloped markets (London 2007) and suggests that the BoP is all about different marketing (Seelos & Mair 2007). Over the years, the BoP perspective has therefore yielded some strong criticism. The articles *Misfortune at the Bottom of the Pyramid* (2006) and *Fortune at the Bottom of the Pyramid: a Mirage* (2007) from Aneel Karnani, ironically also from the University of Michigan Business School, sum up the most important points of criticism quite well. He argues (2004: 100) the BoP proposition is "too good to be true" and that "there is neither glory nor fortune at the bottom of the pyramid; unfortunately, it is a mirage." Karnani contests the size of the BoP, both in number of poor people and market size. Indeed, he believes the BoP market is only a fraction of the US$ 13 trillion as estimated by Prahalad. Moreover he considers the market not to be very profitable for companies as the Purchasing Power Parity (PPP) is grossly overestimated, and deems it not the role of multinationals to take the lead in selling to the poor. Indeed, if the poor spend their little money on luxury items, instead of higher-priority needs, they may actually lower their welfare. Karnani argues the poor should be primarily seen as producers, not consumers, and suggests improvement in access to micro-finance, the creation of efficient markets, job creation, and a facilitating role of the government. In his second article, although being very similar, Karnani presents an overview of all case studies discussed in Prahalad's book (2005) and evaluates them in the light of their impact on the poor.

As noted correctly by Seelos and Mair (2007) most of the BoP literature deals with the questions whether and why companies should enter low-income markets. Hart argues that the grappling with these questions was an important step that took the debate to what he calls BoP 1.0 (Hart & London 2007). This term is a reflection of our thinking about doing business at the BoP and its requirements, such as different price points, redesigning packaging, outsourcing production to low-cost areas, extended distribution and arm's length partnerships with nonprofits and other organizations. Despite the success of some companies in applying this approach and the lessons we derived from them, it also created a backlash, holding that business at the BoP is only about selling to the poor in order to contribute to the companies' profits without really having a positive impact on the new consumers themselves. According to Hart, the challenge therefore is to think about how business at the BoP creates growth and profits for the companies but also for the communities and the environment. He therefore advocates for a BoP 2.0, which is a more process-oriented, tacit and relationship- and trust-based approach. He argues that it is not just about listening to those at the BoP, but also about engaging in a deep dialogue with them and achieving a process of two-way learning. What is more, it involves building local capacity by establishing personal social relationships instead of simply outsourcing everything to nonprofit organizations (Hart & London 2007).

To realize this new approach, companies will have to change their mindset and not see the poor as consumers or customers – while the nonprofits should not see them only as clients – but as partners and colleagues instead. The BoP Protocol™ was established by a number of academic institutions with the financial aid from a few companies precisely with this consideration in mind. It is "a pioneering business incubation process that enables multinational corporations to generate new business opportunities at the Base of the Pyramid." Based on a participatory philosophy, the BoP Protocol™ is a model for business co-creation that marries MNCs' resources, technologies and best practices with those of the community."[4] The Protocol consists of three interdependent phases:

1. Opening up phase: focus on learning with the community to co-generate ideas and opportunities that leverage local capabilities and socio-economic systems in order to produce benefits for all.
2. Building the eco-system phase: focus on the incubation and advancement of the co-generated ideas by building up a network of partnerships with local and grassroot organizations.
3. Enterprise creation phase: focus on transitioning the venture concept into actual pilot-testing and formalizing the enterprise.

Besides these phases, the Protocol follows some business principles that are captured in operating guidelines – e.g. show respect and humility, and starting small – and a code of conduct – e.g. equitable sharing of wealth and tracking the triple bottom line. Thus, the approach proposed in the BoP Protocol™ is about joining the capabilities and resources of multinationals and the knowledge and resources of local communities in order to co-create something that neither sector can do alone. As Hart argues (Hart & London 2007) it is creating something that neither could have done alone. Brugmann and Prahalad (2007) also observed a trend towards co-creation business relationships between companies and NGOs.

*The place of BoP research in business academia*

A legitimate question about research on the Base-of-the-Pyramid concerns whether it can and should be perceived as a separate field that is to be recognized as such. Since the BoP phenomenon is a very recent one – Prahalad and Hart's article was published only six years ago – it is obviously too early to answer this question. Certain is that the 'BoP community'

[4] Information is retrieved from http://bop-protocol.org

of researchers and practitioners, including advocates in the nonprofit and public sectors, have been very successful in gaining attention for this business opportunity and alternative approach to poverty alleviation. With specific reference to the sub-community of BoP scholars, it can be argued that as an 'admittance-seeking' social movement it is establishing itself increasingly more as a new academic field along the lines of the model of Hambrick & Chan (2008). First, BoP research differentiates itself from existing disciplines. Not only does it provide insights in doing business in new international markets setting it apart from previous poverty alleviation methods, but the combination of the two differentiates the BoP approach from existing research fields in business administration and management. Second, the BoP community is very successful in mobilizing others. As argued in a previous section, the idea of doing profitable business at the BoP while contributing to social and environmental ends has been received very well outside academia because its attendant favorable environmental conditions (e.g. international political attention for eradicating abject poverty, and negative attitudes towards multinationals and the capitalist system in general), shared interests in alleviating poverty in a financially sustainable way and beneficial to collaborating parties, and an encouraging social infrastructures in which common objectives can be discussed and advanced. Finally, early BoP scholars, among whom especially C.K. Prahalad and Stuart Hart, have outstanding reputations and can demonstrate the value of a new research to a wide audience, thus adding to the legitimacy of the Base-of-the-Pyramid phenomenon. Whether BoP research will actually establish itself as a separate field can only be determined in the future. At this point in time it has primarily been linked to the fields of social entrepreneurship and corporate social responsibility, both of which are also relative new fields. The following two sections discuss both fields and how they related to BoP thinking.

BoP and Social Entrepreneurship

Base-of-the-Pyramid research is often associated with the field of social entrepreneurship, and sometimes it is even specifically classified under this heading. In a handbook on social entrepreneurship, the editors Mair, Robinson and Hockerts (2006: 1) argue that the concept encompasses "a wide range of activities: enterprising individuals devoted to making a difference; social purpose business ventures dedicated to adding for-profit motivations to the nonprofit sector; new types of philanthropists supporting venture capital-like 'investment' portfolios; and nonprofit organizations that are reinventing themselves by drawing on lessons learned from the business world." BoP initiatives could very well fall within this range of activities but certainly not all because some BoP business ventures are simply not dedicated to "adding for-profit motivations to the nonprofit sector" despite cross-sector collaborative efforts on their part. Instead of looking at the range of social entrepreneurial activities, some definitions given by scholars in this field may be more useful. The definition that is most often quoted in academic literature stems from the essay 'The meaning of social entrepreneurship' by J.G. Dees (1998; 2001: 4) which holds that "social entrepreneurs play the role of change agents in the social sector, by:

- adopting a social mission to create and sustain social value (not just private);
- recognizing and relentlessly pursuing new opportunities to serve that mission;
- engaging in a process of continuous innovation, adaptation, and learning;
- acting boldly without being limited by resources currently in hand;
- and exhibiting heightened accountability to the constituencies served and for the outcomes created."

Despite its popularity, there are many problems with Dees' definition. Aspects like relentlessly pursuing, continuous innovation, acting boldly and heightened accountability may convey a too positive and hero-like image of the phenomenon and the social entrepreneur. Other scholars have come up with evidently better definitions of social entrepreneurship and social entrepreneurs. Some of these are quite general such as the one from Austin et al. (2006): "Social entrepreneurship is innovative, social value creating activity that can occur within or across the nonprofit, business, and public sector." Others are more specific, such as the one from Robinson (2006: 95) who defines social entrepreneurship as "a *process* that includes the identification of a specific social problem and a specific solution… to address it; the evaluation of the social impact, the business model and the sustainability of the venture; and the creation of a social mission-oriented *for-profit* or a business oriented *nonprofit* entity that pursues the double (or triple) bottom line."[5] And finally, Perrini and Vurro (2006: 78) specify the concept as: "a dynamic process created and managed by an individual or team (the innovative social entrepreneur), which strives to exploit social innovation with an entrepreneurial mindset and a strong need for achievement, in order to create new social value in the market and community at large."

All these definitions definitely show elements that are very applicable to BoP ventures. To start with Dees' definition, many such ventures have a clear social mission besides a financial objective, serve that mission by pursuing new opportunities, engage in innovation and learning, and pay attention to the needs of the serve stakeholders. Austin et al. their definition is very general and includes a broad range of activities with a social value-creating objective, including those in the business sector. One element that is missing, however, concerns the characteristics of the objective that can be found in Robinson's definition, namely the pursuit of a double or triple bottom line (economic, social and environmental). Perrini and Vurro's definition unambiguously state that the social innovation can be exploited with an entrepreneurial mindset. The question what actually concerns a BoP venture has not yet been defined well. However, London (2007) makes a serious proposal by

[5] *Italics* in original

arguing that BoP ventures should: (a) involve the entry of a external organization into the BoP market, (b) have a business model that is co-created with local partners, (c) connect the BoP with non-local markets, (d) patiently develop innovative business models, (e) demonstrate self-financed growth, and (f) focus on the BoP own rationale. This model will be described more comprehensively in later chapter and the four empirical cases in this dissertation will be scrutinized according to this framework. With regard to aspects of social entrepreneurship we can observe that London's definition of BoP ventures is in several ways more specific and thus goes beyond the definitions of social entrepreneurship. First, it deals with a particular market, namely the BoP, whereas SE ventures can take place virtually anywhere. Second, collaboration is precondition for co-creation, whereas some definitions only speak about engaging with stakeholders. Third, all BoP ventures involve financially self-sustainable business models, whereas SE models are not necessarily based on this principle. Still, the argument can be made that BoP ventures can be perceived as part of the social entrepreneurship paradigm because of their (partly) social mission, the exploitation of new opportunities, the focus on innovation and learning and the engagement with stakeholders. To conclude, BoP ventures fall under the broad range of social entrepreneurial activities. As argued by Seelos and Mair (2005: 53) "social entrepreneurs act as change agents that enable the poor to participate in economic life," which is often the case in BoP ventures, as we will see in the cases presented in this dissertation. Still, they also involve other specific elements setting them apart and necessitating a different perspective.

<u>BoP and Corporate Social Responsibility</u>

The Base-of-the-Pyramid phenomenon has also often been linked to companies' Corporate Social Responsibility (CSR) activities. Companies can undertake CSR initiatives for a number of reasons so as to take the interests of stakeholders into consideration, which include personnel, suppliers, clients, the company's neighbors and the society or environment at large. Without exhaustively reviewing the CSR background and literature it can be observed that companies undertake CSR initiatives for a number of reasons in order to take the interests of stakeholders into consideration, which include personnel, suppliers, clients, the company's neighbors and the society or environment at large. The CSR concept has been defined in several ways. For instance, the World Business Council for Sustainable Development has defined it as "the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large."[6] The International Finance Corporation has given the following definition: "Corporate social responsibility is the commitment of businesses to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development."[7] And the European Commission as: "A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis."[8] Issues that have been placed under the umbrella of CSR vary widely and include those taking place at the workplace, marketplace, environment, community, ethics and human rights (Moir 2001).

Following London's (2007) definition, as discussed in the introductory chapter and the previous section, BoP ventures only partially fit within the CSR paradigm because they involve financially sustainable business models that engage strategic local partners and focus on specific BoP markets. CSR initiatives, however, do not necessarily incorporate a business model but can be based on projects, policies, guidelines, and routines. Indeed, the underlying principle prescribes that companies are continuously committed to economic development and improving the lives of stakeholders. Thus, CSR becomes an element of the firm's DNA.

[6] Source: www.wbcsd.org, retrieved on 12 December 2007
[7] Source: www.ifc.org, retrieved on 12 December 2007
[8] Source: http://ec.europa.eu/enterprise/csr/index_en.htm, retrieved on 12 December 2007

While BoP ventures often have such outcomes, it cannot automatically be argued that companies are solely focused on such outcomes since they may only be a positive externality deriving from the pursuit of pure business objectives. Another important point concerns interaction with stakeholders. Although many companies which are active at the BoP often interact with grassroots groups and local populations, these relationships cannot be equated with the stakeholder engagement as originally proposed under the principles of corporate social responsibility since these do not involve contacts with individuals or groups who have had a direct or indirect stake in the company from the outset. After all, most companies that start BoP projects are located far away from these markets and their operations do not affect the actors. Put differently, companies in Europe or the United States for example that only do business in these markets and whose value chains do not reach beyond them either have no stakeholders in BoP markets.

As this dissertation will clearly show, partnerships between companies and nonprofits dominate in most BoP ventures. Brugmann and Prahalad (2007) argue that the strengthened relationship with non-governmental organizations results, at least to some extent, from the critical attitudes the latter entities have towards companies. By establishing relationships with them, the companies hope to improve their reputations. These pro-active strategies include social responsibility initiatives, voluntary self-regulation schemes and cause-related marketing. Regarding the BoP they believe companies collaborate with NGOs because they possess the knowledge, local infrastructure and relationships that can make projects work. In a response to Brugmann and Prahalad's (2007) article on co-creation at the BoP, Maleri (2007) argues that a better demarcation between CSR and business marketing is needed: "it is important that we define CSR more clearly, to distinguish CSR initiatives from top- or bottom-line-driven initiatives with a noble delivery mechanism." Cross-sector partnerships may show similarities with CSR principles and contribute to outcomes that are desirable in line with the social responsibility perspective for companies, but in fact they may be more a result of the firm's attempt to reach new categories of consumers and potential customers. As Maleri says (2007: 134): "The key differentiation between the two may be that vision drives a CSR activity, while business needs or compulsions usually drive a business initiative."

Still, it is unequivocally true that the BoP ventures from many companies resulted from leveraging their CSR initiatives, as observed by Brugmann and Prahalad (2007) who refer to examples such as ABN AMRO's micro-finance business that started from their cooperation with the NGO Accion International. The authors agree with Maleri's proposal to make a better distinction between the 'CSR partnerships' and partnerships that have a certain business objective, at least seen from the company. On that note, Prahalad (2004: 6) maintains that BoP ventures, which incorporate close interaction with a variety of stakeholders, cannot be build on CSR principles alone but should become an integral part of the business: "They must become part of the firms' core business; they cannot merely be relegated to the realm of corporate social responsibility initiatives". Still, in his article with Brugmann (2007) he writes that CSR has been very relevant for improving cross-sectoral relationships because it contributed to the convergence of three matters, i.e. of joint regulatory frameworks, of joint brands, marketing, and communications, and of professional cadres and career paths. The resulting rapprochement has contributed to the establishment of better BoP models (Brugmann & Prahalad 2007: 86): "Broadly speaking, CSR started as a way for companies to gather intelligence about NGOs and manage their reputations, and it has wound up providing them with the tools they need to pursue business opportunities in untapped markets."

*BoP case studies and cross-sector collaboration*

The previous chapter already mentioned that many BoP cases, if not almost all, show some level of cross-sector collaborative activity. In Prahalad's book (2004) a number of these cases are described, including one on CEMEX and Annapurna Salt. Some of these are commercial ventures, whereas others are more focused on reaching social objectives not driven by profit motives. This section briefly discusses a few of these cases to get an idea of the role cross-sector collaborations play in BoP ventures. It should be noted, however, that the cases chosen for this research do not necessarily compare to those below because of their diverging characteristics, e.g. in terms of scope, level of commercialization of the product and services and the extent to which they are already implemented.

Light Up the World Foundation (LUTW): the power to illuminate lives

The LUTW is an international humanitarian organization whose vision it is to provide affordable, safe, healthy, efficient, and environmentally responsible renewable energy based solid state lighting solutions to the two billion people worldwide currently without access to proper lighting." Its business model is split in three parts. First, it helps developing LED technology. Second, it brings the technology to poor people all around the world through its humanitarian efforts. And third, it advocates the usage and potential of the technology under its partners. To reach these objectives LUTW collaborates with many partners, including industrial supply chain partners (e.g. Philips Lumileds Lighting, Nemalux LED Lighting, Carmana Technologies and Kyocera Solar), business development and creation of social enterprise partners (Arcadis Greystone), financial partners, the University of Calgary and the United Nations Global Village Energy Program. The Foundation is active in a number of countries around the world, among which India, Sri Lanka, Ecuador and Mexico.

Patrimonio Hoy: CEMEX' program to aid the poor in improving their homes

CEMEX, a multinational cement manufacturer, launched an innovative experiment in 1998 called Patrimonio Hoy, which means 'savings/property today', allowing very poor people to upgrade their homes by saving on building services and materials. Patrimonio Hoy, for which CEMEX received the Corporate Citizen of the American Awards 2007, is a profitable venture with strategic importance for the company and which brings important social benefits. Over the years it has reached out to almost 100,000 families in Mexico. CEMEX' value-chain depends very much on concluding contracts with a group of customers, also known as socios, because this facilitates the enforcement of repayments. The company also works in close cooperation with 'promotoras', individuals with strong connections in the target group of the program, who are often socios themselves and who sell the credit-saving idea to the poor on a commission basis. Besides, CEMEX has been actively cooperating with Ashoka – which is a nonprofit that strives "to shape a global, entrepreneurial, competitive citizen sector" – to identify new ways in which the cement producer can leverage social networks to expand the distribution of Patrimonio Hoy among the Mexican poor. Over the years, Patrimonio Hoy has been expanded with additional programs that focus on building schools and upgrading neighborhoods for which cooperations with local governments. Also, it has leveraged the US$ 10 billion remittance flow from the United States by setting up a system that allows Mexicans in the United States to pay for building materials of their families back home.

Annapurna Salt: Hindustan Lever's contribution to a global health problems

It is estimated that 740 million people worldwide suffer from Iodine Deficiency Disorder (IDD), which can lead to goitre, mental retardation, brain damage, stillbirths and congenital abnormalities. Most people obtain the required iodine intake through iodized salt but in many places salt is still non-iodized, whereas "normal" iodized salt quickly loses its characteristics due to weather conditions or cooking style. To tackle this problem Hindustan Lever, the Indian subsidiary of Unilever Ltd, introduced a low-cost specially engineered iodized salt which quickly became a big business and social success due to four reasons: appealing product, affordability (5 cents per year per person), availability and awareness-raising. Regarding availability, Hindustan Lever started an innovative new distribution system, called Project Shakti. Its objectives are to "create income-generating capabilities for underprivileged rural women by providing a small-scale enterprise opportunity, and to improve rural living standards through health and hygiene awareness. In reaction to the many IDD cases in Africa, Unilever Ghana in partnership with the Ghana's Health Ministry and UNICEF launched Annapurna iodized salt in 2000. The partnership with and support of UNICEF and the Ghana government was essential to persuade people that buying and using iodized salt was a smart thing to do. One such joint effort was an education road show around the country with the message that iodized salt is 'for growing minds'. Within just a few years the success of the Annapurna strategy became clear as the consumption of iodized salt increased significantly.

<u>Health in your Hands: Another health initiative from Hindustan Lever</u>

Hindustan Lever Ltd. also teams up with public and nonprofit organizations with retrospect to combating diarrhoeal diseases. According to the WHO, 2.2 million people die annually of this preventable death. In India alone, 20% of the children suffer from diarrhoea and washing hands with soap reduces the incidents of diarrhoeal disease with 40%. As the largest soap producer in India, Hindustan Lever does not only use its own distribution channels to increase the usage of its Lifebuoy soap, including the Shakti system, but is also involved in the "Health in your Hands" program which is a public-private partnership that involves a number of national and international health organizations, the World Bank, and the WHO.

<u>PŪR water purifier: P&G's promise for delivering clean and safe drinking water</u>

Proctor & Gamble's offers the point-of-use water-purifying product PŪR at cost base to the lowest BoP income groups, namely those living on less than 1 dollar per day. It is solely offered in one-unit sachets with a powder that treats 10 liters of polluted water by countering bacteria, viruses, pathogens, heavy metals such as arsenic and lead, organics, and turbidity. The easy to use treatment lasts only 30 minutes and has been tested extensively and may therefore help preventing a number of water-borne diseases such as Typhoid, Dysentery and Diarrhea. In Pakistan alone 1.2 million people die annually from such diseases so the usage of this product has the potential to save many lives. Having been developed in close cooperation with the Centers for Disease Control at the turn of the century, PŪR is now brought to the final users through the help of a number of social partnerships. For instance, P&G works together with UNICEF which buys the product in large quantities at the cost price, which is about 3.5 dollar cents, and uses the product in its various aid programs. P&G's also collaborates closely with Population Services International (PSI), a nonprofit that that "harnesses the vitality of the private sector to address the health problems of low-income and vulnerable populations in many countries around the world." Through a social market approach, P&G sells the product at cost-base to PSI that supports a network of local entrepreneurs who resell it for about US$ 10 cents. Finally, the product is also sold at cost-base to emergency aid organizations, such as the Red Cross, to ensure the availability of safe drinking water in disaster situations, e.g. flooding and earthquakes. Since its inception, over 70 million sachets of PŪR have been used, adding up to 700 million liters of drinking water.

U-Specs: universal spectacles

Poor eyesight can have far-reaching implications for the poor. The World Health Organization estimates that 135 million people suffer from poor vision, whereas another 45 million are blind. It therefore established the program Vision 20/20 to pursue the objective that by 2020 poor vision and unnecessary blindness because of a shortage of glasses is a problem of the past. To contribute to this goal, the VU University Medical Centre in Amsterdam has developed universal adjustable spectacles with the aim "to help underprivileged children with poor vision in developing countries who have no access to proper eye care". The low-cost glasses are easily adjustable (from 0 to -6) and therefore don't require professional assistance from an ophthalmologist or optometrist. In 2006 both VU University MC and DOB foundation (a Dutch private nonprofit organization for development cooperation) created the Right On Sight foundation to run this project, with support from Philips DAP and the Scojo Foundation - the latter being another foundation involved in providing solutions to poor vision at the Base-of-the-Pyramid.

*Conclusions*

From these cases it becomes clear that companies and nonprofits collaborate for various reasons, such as technical design (e.g. LUTW and U-Specs), getting in touch with customers (Patrimonio Hoy), distribution (Annapurna and *PŪR*), awareness programs (Health in your Hands) and piloting (U-Specs). This is an indication that cross-sector collaborations play a role in BoP ventures and merit to be studied in detail to gain a better understanding of why they exist. The following chapters in this dissertation are dedicated to this goal.

## CHAPTER 3 – Methodology

This chapter presents the method that is used for conducting this research project. As written in the introduction, cross-sector collaboration concerns a relatively new and unstudied phenomenon. Although increasingly more research is conducted on these forms of cooperation – see chapter 6 – we know rather little about them, particularly when they take place at the Base-of-the-Pyramid. This study tries to identify the underlying theoretical explanation for the existence of cross-sector collaborations by devising a theoretical framework that is founded on the Resource Dependency Theory and the Resource-Based View. As Bailey argues (1994: 41): "*Theorizing* can be defined as the process of providing explanations and predictions of social phenomena [cross-sector collaboration], generally by relating the subject of interests to some other phenomena [introducing products and services at the BoP]."[9] Most empirical research, albeit mostly also qualitative, has focused on less-integrated forms of partnerships, such as corporate philanthropy or cause-related marketing, or was restricted to certain geographical areas as the United States or Latin America. More integrated forms of cross-sector collaboration have been studied to a lesser extent, e.g. as a central part of a business model. Despite the many scholars and institutions emphasizing the importance of collaborating across sectors at the Base-of-the-Pyramid (e.g. Prahalad 2004, Hart 2005, WBCSD 2004), the topic has never been the specific focus of a study.

Several scholars (e.g. Flick 2002; Yin 2003) argue that the use of inductive research strategies is necessary when traditional deductive strategies to theory building – i.e. empirical testing of hypotheses (Kuhn 1970) – fall short. In such cases, qualitative methods may provide new insights into critical research questions in strategy today (Barr 1999). For instance, Lee asserts (1999: 38) that "qualitative research may be the best choice when the identification of new theoretical propositions or managerial actions is deemed necessary, but

[9] *Italics* in original

the researcher is not fully knowledgeable about the details of the phenomena under immediate study." Tellis (1997: 1) says that "case study is an ideal methodology when a holistic, in-depth investigation is needed." And in the words of Schramm (1971) the case study "tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result." Miles and Huberman (1994) argue that qualitative methods are most suitable for research in which local grounding or substantial depth, longitudinal effort, or the perspective of the people involved is important, i.e. when it concerns (1994: 10) "naturally occurring, ordinary events in natural settings." They see three general purposes for qualitative research: data reduction, clarification in the presentation of the data, and expectations for new theoretical propositions or specific managerial actions. This dissertation therefore uses a qualitative research approach by studying four cases of cross-sector collaboration at the Base-of-the-Pyramid. In the words of Flick (2002: 5), studying a new phenomenon in this way "[does] justice to the complexity of the subject" and applying this method allows to study these forms of collaborations "in their complexity and entirety in their everyday context." In brief, the study's purpose is to contribute to the theory on cross-sector collaborations at the BoP, as show in figure 1.2.

This chapter subsequently deals with eight issues. First, it expounds upon the specific qualitative methodology used in this dissertation, i.e. the multiple case study approach. Second, it presents the main research question of this thesis and explains its meaningfulness regarding cross-sector collaborations at the BoP. Consequently, it presents a second question that serves to a certain extent as a proposition because it bends the research in a certain direction, i.e. it implicitly assumes certain underlying reasons for the existence of cross-sector collaborations. Third, it explains the unit of analysis and the principal reasons for choosing this choice. Fourth, it elaborates upon how data is gathered and how it is logically linked to the main research questions. Fifth, it describes how the data will be analyzed. Sixth, the methodological issues of construct, internal and external validity, as well as reliability, are clarified. Seventh, it substantiates the choices for the cases that have been studied for this research. Eighth, it briefly touches upon the use of a case study protocol. And finally it lays out the criteria used for interpreting the results and particularly explains what entails a successful case study research.

*Multiple case studies*

This dissertation applies a multiple case study approach. According to Yin (2003: 1) this choice is justified because "in general, case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context." Managerial processes, such as the collaborative efforts in a cross-sector partnership, fall under this definition. As researcher I namely have little control over the collaborate efforts of the companies and nonprofits I am studying, i.e. I can't really influence them. Also, the phenomenon of cross-sector collaboration is contemporary and is taking place in some real-life context. In each of the case studies I will encompass contextual conditions in my research, which include amongst others, market features, socio-economic conditions at the BoP, customer needs and organizational issues.

Case study research can have various aims; it can provide description, test theory or build theory (Eisenhardt 1989). This research comprehensively describes four real-life business cases at the BoP in which cross-sector collaboration played an important role and constructs a theoretical framework why this happens. This type of research has not been conducted before, and it therefore also expands the existing theory on cross-sector collaborations. It does in no way test a theory or intend to generalize findings (Yin 2003), although throughout the process the emergent theoretically propositions will be continuously tested against new evidence from the case studies. Dubois and Gadde (2002: 554) term this as *systematic combining*, which they define as “a continuous movement between an empirical world and a model world [during which] the research issues and the analytical framework are successively reoriented when they are confronted with the empirical world.” Put differently, the building of new theory can only be done by continuous reflection on theory and data, but does not imply formal hypotheses testing.

To answer the main research questions, this dissertation applies a two-stage iterative process with two cases in each stage, to compare an evolving framework with additional case data (Eisenhardt 1989). The choice for conducting multiple case studies versus a single case study stems from the belief that the evidence becomes more compelling and as a result the entire research project more robust (Herriott & Firestone 1983; Miles & Huberman 1994; Yin 2003). The underlying logic for this approach is that replication of studies in the first round may produce similar results and thus provide support for earlier developed propositions. If the results contrast explanations may be found with the objective of developing a richer theoretical framework. In the words of Barr (1999: 173): “theory that is developed through an analysis of the data from one case could be tested and elaborated upon through an analysis of subsequent cases.”

This dissertation therefore starts out with studying two exploratory cases to begin understanding the underlying reasons for collaboration and testing whether the construct of partner resources and knowledge plays a relevant role. If this is the case, the construct will be adapted and sharpened and subsequently be ‘re-tested’ in another round of two case studies by comparing it to newly acquired evidence. In the words of Eisenhardt (1989): “[This] careful construction of construct definitions and evidence produces the sharply defined, measurable constructs which are necessary for strong theory.” This replicative process of testing tentative theory will ultimately make it stronger as constructs are made stronger and relationships more explicit. Although Yin (2003) warns that this technique may let the researcher slowly drift away from the original research purpose, the maintenance of a research protocol should prevent me from doing so.

With regard to the number of case studies and rounds of case studies, Patton (2002) says there are no rules for the sample size in qualitative research. The number of case study rounds for this research is set to two. Although a third round could yield even more evidence, additional data was expected to be only of marginal value, whereas the financial burden for another field trip would be very high. Still, two rounds of two cases will provide a reliable theoretical framework with high construct and internal validity and relatively strong external validity, because the improvement to theory is minimal (Eisenhardt 1989).

*The main research questions*

The objective of the formulation of a research question is to clarify what field contacts will reveal (Flick 2002). Additionally, it is important to demarcate the boundaries of the research and not become overwhelmed with the data (Eisenhardt 1989). The case studies were exploratory in nature and driven by two questions. The first question is:

- Why do companies (and nonprofits) collaborate across the traditional business sector while introducing new products and services at the BoP?

This question is typically used for explanatory research (Yin 2003), i.e. to identify the reasons why companies collaborate with nonprofit organizations and vice versa. Although starting a case study research with a ‘clean theoretical slate’ is ideal because as it avoids being ‘theoretically’ biased, which may influence the findings, some a-priori theorizing about constructs and relationships may be useful. As Eisenhardt (1989: 536) says: “investigators should formulate a research problem and possibly specify some potentially important variables, with some reference to extant literature.”

Based on the literature on cross-sector collaborations, the Resource Dependency Theory and strategic alliances from a Resource-Based View, as well existing BoP case studies in which cross-sector collaboration seemed to be important, I would expect there are some identifiable groups of reasons why companies and nonprofits establish partnerships. The review of a broad range of extant literature is important because it may disclose conflicting findings which may direct the researcher into a more create, framebreaking mode of thinking. It goes without saying that literature with similar findings is also valuable as it improves the research's internal validity, its generalizability and the theoretical level of the case studies (Eisenhardt 1989).

One of the first observations from reviewing existing BoP case studies that involve some level of cross-sector collaboration is that organizations work together because their partners possess resources or have certain knowledge that is useful for reaching one's own objectives. Therefore the following question will be proposed to guide the case study research in a more specific direction:

- What are the partner's key resources and knowledge that companies (and nonprofits) want to obtain, have access to, or benefit from?

As such, the purpose of the first round of exploratory case studies it to identify some reasons why companies collaborate and what resources and knowledge they hope to find in their nonprofit partners, and vice versa.

*Unit of analysis*

Choosing the unit of analysis is often not easy within qualitative case study research because of the real-world character of the phenomenon under study (Lee 1999). Cross-sector collaboration is such a real-world phenomenon and since this study wants to identify the reasons why companies and nonprofits collaborate, as well as the resources and knowledge they are hoping to find with their partners, the main unit of analysis in this research is the collaborative efforts of companies that introduce products and services at the BoP. A secondary unit of analysis concerns the collaborative efforts of nonprofits (and organizations from other non-business sectors) to help introducing products and services at the BoP.

From the literature review on strategic alliances from the Resource-Based View (see chapter 5) it shows that the choice for this particular unit of analysis makes sense. Following Dyer and Singh (1998), analyzing alliances from the RBV has implications for the unit of analysis. Contrary to general RBV research it is not the firm but the alliance (i.e. a pair or network of firms) that becomes the unit of analysis, whereas the resources and knowledge that are brought into the partnership by firms and their partners are the specific variables of interest. In addition to the collaboration, this study will also pay attention to the companies' strategic objectives and business formulas. Without a good understanding of these matters it is difficult to analyze BoP cross-sector collaborations in the right context. Fortunately business formulas are often well explained in general documents and can be easily verified with some additional research and interviews. A company's strategic objectives are not always well defined and they therefore require some extra attention during the interviews.

*Data collection*

Case study research can draw upon several sources of data: documentation, archival records, interviews, direct observation, participant-observation, and physical artifacts (Eisenhardt 1989; Yin 2003). There are just a few archival records available which are primarily annual reports. Although for all case studies I have visited the sites where these new products and services are actually used, direct observation adds only to an understanding of how these work in practice but not much to the main topic of the research, i.e. cross-sector collaboration. The topic does not lend itself for participant observation as it takes place between organizations, not within them. Also, although I've gathered data on the newly introduced products and services and actually studied their underlying technology, collecting data on physical artifacts does not give much information about the core subject of the thesis. While using quantitative data is not inappropriate in qualitative studies, there is no relevant numeric data available on the cross-sector collaborations in this dissertation's case studies.

To describe the four cases I primarily rely on documentation and interviews. There are numerous different forms of documentation such as newspaper and magazine articles, administrative documents (e.g. annual reports, progress reports, PowerPoint presentations, existing case studies etc.), but also web-resources from the organization's home page or through third parties. In addition to documentation I rely heavily on the information gained from qualitative interviews with key stakeholders in each case. A qualitative interview is a conversation (Corbetta 2003: 285) that has the following characteristics: "it is elicited by the interviewer; interviewees are selected on the basis of a data-gathering plan; a considerable numbers of subjects are interviewed; it has a cognitive objective; it is guided by the interviewer; and it is based on a flexible, non-standardized pattern of questioning." Rubin and Rubin (2005: 4) describe them as "conversations in which a researcher gently guides a conversational partner in an extended discussion," and its purpose is to (Patton 1990: 290) "understand how the subjects studied see the world, to learn *their* terminology and judgments, and to capture the complexities of *their* individual perceptions and experiences. … The fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understandings in their own terms."[10]

The choice for sampling interviewees does not depend on statistical representativeness, but is driven by the search for substantive representativeness in order to grasp the subject's perspective and (Corbetta 2003: 268) to understand "his mental

[10] *Italics* in original

categories, his interpretations, his perceptions and feelings, and the motives underlying his actions [and to] cover all the social situations that are relevant to the research."[11] Therefore interviews were conducted with high-level decision-makers of the main companies and organizations involved in each of the four cases. These people have all been personally engaged in one or more important aspects of them.

The most important reason for conducting interviews is that it allows for absence of standardization. The objective of the interview is to collect information and to gain a better understanding of social reality, which should ultimately lead to the gathering of rich and thick data (Corbetta 2003) that provides the foundation for a good qualitative analysis and reporting (Patton 2002). For that reason the interviews were semi-structured, thus giving the interviewees ample opportunities to express their thoughts and point of views (Flick 2002; Corbetta 2003). In practice this means I have made an outline for each interviewing with a number of questions, although the interviews as such remained relatively unstructured. Thus, there were no standardized interview guides, because all interviews were different and intended to get interviewee specific information and insights.

To identify and formulate the most relevant and precise questions for these interviews I started with reviewing the literature on cross-sector collaborations. This does not only provide me with knowledge about what is already known about the topic, but also enables me to pose sharper questions and pay attention to potentially important aspects of cross-sector collaborations at the BoP. This style of interviewing enabled me to carefully listen to the answers and ask for elucidation if necessary. More important, it provided me with an opportunity to go deeper into interesting issues that were raised by the conversation partner or even raise new ones. Rubin and Rubin (2005) term this *responsive interviewing*.

[11] *Italics* in original

For the interviews I have visited companies and organizations in India, Kenya, Uganda, Tanzania and the United States and had conversations with senior level managers, often the CEO, Vice President or project manager. A few follow-up interviews were conducted over the phone. All of them lasted between 45 minutes and 1.5 hours and were semi-structured, i.e. there were some prepared questions about the major topics to be discussed but overall the conversations were rather fluid (Rubin & Rubin 1995; Yin 2003). Most questions were open-ended in which I asked the interviewees about plain facts and their views on a range of topics. This is important because cross-sector collaborations are social phenomena, and to make sense of them it is essential to get the opinions of key stakeholders. In the words of Yin (2003: 92): "These human affairs should be reported and interpreted through the eyes of specific interviewees, and well-informed respondents can provide important insights into a situation." Per case study I have conducted at least 5 interviews, totaling over 20 interviews.

All interviews were recorded digitally on a MP3 player and transcribed by myself and sometimes by a transcription service. Consequently I carefully listened to them several times and categorized interesting parts from them into groups of issues. All information will be as much as possible triangulated with other data resources, whereas data from interviews specifically is triangulated with data from other interviews. This satisfies the first principle of data collection (Yin 2003). The second criterion concerns the creation of a database for each case study which consists of all written documentation and notes, the transcripts of all interviews and digitally stored materials such as annual reports and MP3-files of the recorded discussions. The third criterion prescribes maintaining a chain of evidence. Although this means that findings and claims in the report should be easily traced back to the original data through citations, the data in this dissertation is thus limited that only the most important parts were specifically cited. The data-base does, however, include information about when and where interviews were conducted, with whom and their positions.

*Data analysis*

Yin (2003) argues the most important strategy for analyzing data is to follow the theoretical propositions that are guiding the case study. As outlined earlier in this chapter, my research is initially directed by two questions: one about the underlying reasons of companies (and nonprofits) for cross-sector collaboration, and one about the types of resources and knowledge companies and nonprofits want to obtain from their partners. Another analytical strategy Yin (2003) proposes concerns the definition and consideration of rival explanations. First, this research is driven by the search for explanations for the cross-sector collaboration phenomenon. As such, it does not from the start try to fit the data to a particular theory. Although the dissertation starts with two guiding questions, of which one is leaning towards the idea that collaboration takes place because firms and nonprofits want to gain from the resources of their partners, the open-ended nature of the interview questions gave the interviewees ample opportunities to respond in a way that was not congruent with this proposition-like question. And since the evidence from all interviews in the first round buttress the idea that companies and nonprofits indeed collaborate to gain from the others' resources, there is no reason to believe that a rival explanation can be of value here. From initial research and supporting evidence of the first case study round it also became clear that elements from the Resource Dependency Theory provide valuable insights for explaining the phenomenon at hand.

Although Yin (2003) finds following one of these first two strategies sufficient for appropriate data analysis, he also proposes a third one, namely the development of case descriptions to generate insight (Pettigrew 1988). This dissertation applies the 'within case' analysis (Eisenhardt 1989) by organizing all material well in individual case chapters, i.e. the documentation as well as the transcribed interviews. Subsequently, I search for cross-case patterns (Eisenhardt 1989) that allow for finding similarities and differences between them. This was initially done after the first round of case studies to ensure the link between the data and the proposed theoretical approaches was relevant for explaining cross-sector collaborations at the BoP. A potential danger of using this technique is that it may assume there exist general patterns for cross-sector collaborations at the BoP. However, by repeating this process through the inclusion of two additional cases general conclusions are strengthened. Chapter 11 presents the overall findings of the cases.

While specifically dealing with grounded theory, Strauss and Corbin (1990: 57) describe coding as "representing the operations by which data are broken down, conceptualized, and put back together in new ways" in order to build theory from data. According to Miles and Huberman (1994: 56) "coding is analysis" and it can be done in various degrees of detail (Flick 2002). For this research I coded all documentation and transcribed interviews in a number of specific categories in terms of reasons for cooperation, resources and types of knowledge. Consequently these categories are critically reviewed and ultimately merged in broader categories to obtain the major reasons and groups of resources and knowledge. Other interesting findings are put into separate categories and were reported individually. This strategy enables to identify precise answers to the main research questions that may serve as building blocks for a theoretical framework by which to explain cross-sector collaboration at the BoP.

In many qualitative research projects there is at least some overlap between collecting, coding and analyzing the data (Eisenhardt 1989), whereas some scholars believe these steps should be completely integrated (Glaser & Strauss 1967). This research initially aimed to be very structured, but the richness of the gathered information necessitates continuously looking back to the data, recoding it and re-analyzing it. As such the processes of collecting, coding and analyzing become more and more entangled, particularly after the first round of case studies. Additionally, a number of interesting aspects came to the surface during the analyses of the first cases. And even though these matters did not necessarily contribute to the main purpose of this thesis – i.e. the building of a theoretical framework – more data was gathered to ensure full descriptive cases. Also, the interviews became focused more on a few specific issues. Such adaptations are appropriate for case study research (Eisenhardt 1989: 539): "…this flexibility is controlled opportunism in which researchers take advantage of the uniqueness of a specific case and the emergence of new themes to improve resultant theory."

*Construct, internal and external validity, and reliability*

As with any empirical social research, the quality of this multiple case study research can be evaluated according to four tests, namely its construct validity, internal validity, external validity and its reliability. With respect to case study research Yin (2003) deals with each of these tests. Regarding construct validity he argues the researcher should use multiple sources of evidence which allows for data triangulation (Denzin 1989; Eisenhardt 1989; Flick 2002). Yin (2003) also mentions establishing a chain of evidence and have key informants review draft case study reports. For internal validity he advises to do pattern matching, explanation-building, use time-series, address rival explanations and use logical models. However, in contradiction to explanatory case studies, these techniques are not applicable to descriptive or exploratory case studies because there is no need for establishing a causal relationship. Still, pattern matching can be a helpful technique with regard to the idea that gaining access to a partner's resources and knowledge is central for a company's and nonprofit's motivations to collaborate. This technique compares an empirical pattern with a predicted one. The predicted pattern stems from existing literature on cross-sector collaborations and strategic alliances from a resource-based view and leads to the second guiding question on deriving benefits from partner resources. With retrospect to external validity in multiple case studies Yin suggests the use of replication logic. And for reliability he recommends the use of a case study protocol and to develop a case study database. Table 3.1 shows how this dissertation addresses these points.

**Table 3.1 – Establishing the validity and reliability of the case studies**

| *Tests* | *Case study tactic* | *Phase of research in which tact occurs* |
|---|---|---|
| Construct validity | a. use multiple sources of evidence<br><br>b. establish a chain of evidence<br><br>c. review draft case study report by key informants<br><br>d. sharpening of constructs (Eisenhardt 1989) | a. besides many semi-structured interviews with top-level managers of companies and nonprofits, the case studies are based on a range of other data sources, including internet and newspaper articles, reports and audio- and video data<br>b. evidence from data resources have been triangulated with evidence from all other resources. Furthermore wherever necessary follow-up questions have been asked to obtain richer and more precise answers or answers have been verified through questions to other interviewees.<br>c. all case studies have been sent to relevant interviewees and other key stakeholders for review and eventual remarks were integrated in the final text<br>d. constructs resulting from the cross-analysis of the first two cases were verified and sharpened with cross-analysis of the third and fourth cases and the literature on Resource Dependency Theory, the Resource-Based View and cross-sector collaborations |
| Internal validity | a. pattern-matching<br><br>x. other tactics are only relevant for explanatory case studies | a. from the literature review a predicted pattern of reasons for cross-sector collaborations emerged, which is tested against empirical evidence from case studies<br>x. only relevant for explanatory case studies |
| External validity | a. use replication logic | This research applies a multiple case study approach in two rounds of two case studies to replicate earlier collection and analysis of data and to refine theoretical findings |
| Reliability | a. sufficient citation to relevant portions of the case study database<br><br>b. use case study protocol | a. throughout this dissertation references are made to specific documents, websites, interviews and other sources I've documented all steps for this research in a case study protocol<br>b. A following section in this chapter provides further details on this matter |

Source: Yin (2003)

*The case studies*

The selection of appropriate cases is important for building theory that is based on the concomitant case studies (Eisenhardt 1989). In qualitative studies, cases are selected for theoretical reasons and not as a result of statistical sampling. Following Pettigrew (1988), Eisenhardt (1989) argues cases should preferably be polar to make the phenomenon of interest 'transparently observable.' Patton (2002: 230) argues for purposeful sampling and the selection of information-rich cases: "The logic and power of purposeful sampling lie in selecting information-rich cases for study in depth. Information rich-cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term purposeful sampling." This dissertation studied a variety of business cases at the Base-of-the-Pyramid in which cross-sector collaboration played a significant role. Due to the fact that such partnerships are a relatively recent phenomenon it is virtually impossible to select a number of similar cases. To obtain rich data this objective is even questionable.

The search for interesting cases mainly took place through the exploration of websites of several institutions and organizations dealing with the BoP, such as the William Davidson Institute at the University of Michigan, the World Business Council for Sustainable Development, and the World Resources Institute. Researching these websites yielded approximately twenty potentially interesting case studies that were further explored through online research and some additional exploratory telephone interviews. This resulted in about a dozen cases that seemed appropriate, from which eventually four were chosen.

Despite increasing information on an ever-growing number of BoP-cases, it is difficult to choose some that comply with strict criteria. Therefore this dissertation uses a convenience sample of cases originating from different companies, of different sizes, in different industries, and in different countries around the world. Also, companies are cooperating with various types of organizations, whereas the partnerships may have different objectives. This choice for these candidate cases is justifiable because each of them may provide additional relevant information that could contribute to the development of new theory. Still, the following list of flexible conditions for selecting the cases:

1. The company can collaborate with a nonprofit, public or international organization
2. The company should market one or more new products or services geared towards the needs of the poor
3. The products and services may either be donated, sold below-cost, sold at-cost or sold profitably at the moment of research, but should have the objective of becoming part of a financially sustainable business model in the long run
4. The cross-sector collaboration should have strategic value for all partners

The first round of two cases took place in India in February and March of 2007, and the two cases from the second round originate in Kenya and Uganda and were studied in September of the same year. Additional information about the choice of these cases can be found in the introductory section of Part III.

*The case study protocol*

Yin (2003) argues that having a case study protocol is essential for multiple case study research as it increases its reliability. The objective of a protocol is to better guide the data collection procedures, to standardize it in a way. It serves to stay focused on the subject and to prepare for potential problems. Complete standardization of this particular multiple case study research is unfeasible and undesirable because the cases vary too much and each interviewee represents a different company or organization. Besides, maintaining flexibility between cases is required because new insights from earlier cases may direct next cases. However, to practically organize this research, a case study protocol has been established and deals consequently with the following issues (Yin 2003):

1. *An overview of the case study* – This part was prepared for a dozen of potential case studies. The overviews for the actual case studies were extended with as much information as possible about the cases, including the companies' and nonprofits' objectives of introducing new products and services at the BoP. Relevant readings were listed, as well as potential interview candidates with their contact information.
2. *Field procedures* – Due to the variety in organizations to visit and the countries in which they are, it is virtually impossible to standardize field procedures. Most of the time, however, people were contacted by phone for an initial introduction followed by an email explaining the essence of the research and the request for an interview. Sometimes this was the other way around. Close before the field-visits the interviewees were contacted again to confirm the appointment and within a few days after the meeting interviewees were thanked by email for their time and efforts. Upon finishing the case study each interviewee received the full document for review.
3. *Interview questions* – As discussed in a previous section, a standardized set of questions would be inappropriate. In addition, due to the variety of organizations within each case, the topics and questions varied from interview to interview.
4. *A guide for the case study report* – All cases are written up as one of this dissertation's chapters. However, due to the specifics of each case there is no single format, although there contain some common sections.

*Criteria for success*

This dissertation contains descriptions of BoP cases with partial answers to the research questions. Still, Bacharach (1989: 497) warns "categorization of data – whether qualitative or quantitative – is not theory," which includes typologies. He argues that typologies bring abstraction to raw data, but answer primarily 'what' questions and not the 'why' and 'how' ones. Also Miles and Huberman (1994) acknowledge the importance of description to make a clear accounting of the phenomenon at hand. Theory, however, deals with explanation. Quoting Bernard (1988) they define this as (1994: 90) "making complicated things understandable by showing how their component parts fit together according to some rules." The goal of this dissertation's analysis is to understand core concepts and discover central themes of cross-sector collaborations at the BoP (Rubin & Rubin 2005). To reach that goal this work followed a step-by-step procedure to arrive at a point where the analyzed evidence from the case studies allows for drawing final theoretical conclusions that are parsimonious, testable and logically coherent (Pfeffer 1982).

I deem the exploratory round successful when I recognize a recurring pattern of answers from the people I interview about why collaboration takes place. This 'pattern matching' has the purpose to relate several pieces of information to some theoretical proposition (Campbell 1975; Yin 2003). Also the second question is typical exploratory due to its open-ended nature, i.e. I'm interested in what type of resources and knowledge companies want to acquire, have access to or benefit from when collaborating with their partners, and vice versa. Subsequent case studies will incorporate the findings of the exploratory round with the objective to improve the process of building theory, e.g. by focusing even more on specific aspects and by sharpening the interview questions. Although these rounds will keep on exploring the phenomenon by maintaining a broad approach, the analysis will be more interpretative in nature.

Besides the overall criteria for success, i.e. drawing up a theory on cross-sector collaborations at the BoP, the main individual parts of the research, i.e. the case studies, are deemed to be successful when (a) I have interviewed representatives of all major partners to the collaboration, (b) I have gained more insight into their company's or organization's reasons for collaborating, (c) I have been able to establish the importance of obtaining, gaining access to or benefiting from partner resources and knowledge, and identified which resources and knowledge are important for each partner, (d) have been able to get a clear picture of the entire business model, including contextual information. As building blocks of the research, these criteria must be met for each case study. This will be briefly discussed in chapter 11.

## PART II – LITERATURE REVIEWS

The second part of this thesis reviews three streams of literature that form essential components of the theoretical framework that will be developed in a subsequent part of this dissertation and through which the data on cross-sector collaborations at the BoP will be analyzed. These chapters thus serve to 'frame' the problem (Creswell 2003) and to provide a relevant starting point for further theoretical advancement on this topic. Chapter 4 briefly discusses the Resource Dependency Theory (RDT). This theory poses that organizations become dependent on their external environment for obtaining necessary resources and that they will try to minimize this dependency. Although resources play a critical role in the RDT, there exist only very few academic contributions that link this organizational behavior theory with the Resource-Based View (RBV), which will be discussed in chapter 5 and pays particular attention to strategic alliances. This dissertation explicitly links both theories because the literature on cross-sector collaborations shows there are many indications focusing on resources is useful. For instance, Berger, Cunningham and Drumwright (2004: 71) emphasize the importance of complementary skills and resources of cooperating partners: "As in any partnership, the more the partners need each other's resources and the better the joint endeavors are at providing them access to these resources, the sounder the foundation for an on-going relationship." And finally chapter 6 reviews all relevant literature on cross-sector collaborations. Although a coherent body of literature and research does not yet exist about these particular forms of alliances, already much has been written on the subject. The findings of the overviews in the following three chapters will be used in chapter 12 for devising a theoretical framework that will be helpful in gaining a better understanding of cross-sector collaborative efforts at the Base-of-the-Pyramid.

## CHAPTER 4 – The Resource Dependency Theory

The Resource Dependency Theory (RDT) portrays the connections between organizations as an arrangement of power relations that are based on the exchange of resources. Pfeffer and Salancik (2003: xi) argue that it is necessary to have an outside view to better understand organizational behavior: "if you wanted to understand organizational choices and actions, one place to begin this inquiry was to focus less on internal dynamics and the values and beliefs of leaders and more on the situations in which organizations were located and the pressures and constraints that emanated from those situations."

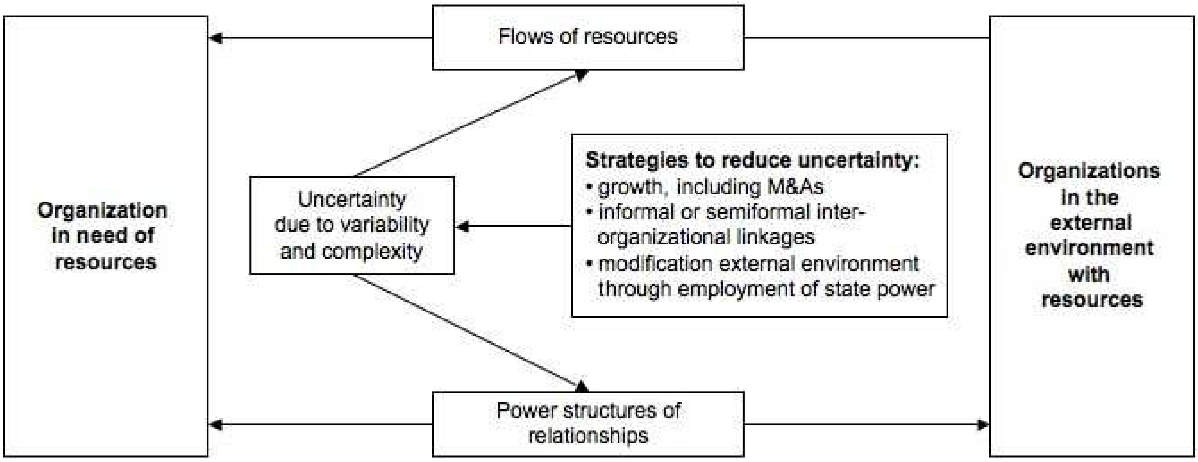
In their seminal book *The External Control of Organizations*, Pfeffer and Salancik (1978, 2003) pose that organizations are embedded in networks of interdependent and social relationships (Granovetter 1985). To survive, they require various resources from other organizations in the external environment such as (Pfeffer 1981: 101) "personnel, money, social legitimacy, customers, and a variety of technological and material inputs." Organizations are therefore dependent on this external environment, and the RDT therefore suggests that they will create links with, and become dependent upon, other organizations to obtain those resources. The RDT is based upon three assumptions (Pfeffer & Salancik 1978):

1. Organizations are comprised of internal and external coalitions that are formed to influence and control behavior, and which emerge from social exchanges.
2. The external environment contains scarce resources that are essential to an organization's survival. The variability and complexity in acquiring those resources from other organizations raises the problem of uncertainty (Aldrich 1999; Ulrich & Barney 1984; Pfeffer 1978).
3. Organizations try to obtain control over resources that minimize their dependence on other organizations, or they try to control resources that maximize the dependence of other organization on themselves (Pfeffer 1981).

Changing the power structures of an organization's relationships with other organizations and the maximization thereof forms the key to organizational success (Ulrich & Barney 1984) but also affects internal power dynamics because those factions inside an organization that can reduce an organization's dependence on external resources become important for its survival and success (Hinings et al. 1974).

Organizations can adopt various strategies to reduce the uncertainty they face within the external environment (Pfeffer & Salancik 2003). First, they can simply grow through capital investment to reduce dependence (Katz & Kahn 1966). This increases their chance for survival as larger organizations have more power over their environment and more external parties are interested in their continued existence. A specific form of growth can be accomplished through mergers and acquisitions. By absorbing part of the external environment, organizations can reduce uncertainty by restructuring (Pfeffer & Salancik 2003: 115) "environmental interdependence in order to stabilize critical exchanges." Examining patterns of industrial merger behavior, Pfeffer (1972) found a significant association between patterns of resource exchange and merger activities, which was later supported and extended by work of Finkelstein (1997). Second, if it is not possible to absorb part of the external environment there exist other forms of informal mechanisms and semiformal interorganizational linkages, including normative behavioral agreements, joint ventures, cooptation, and more centrally coordinated forms such as associations and cartels. "The basic premise in RDT is that both partners in the potential alliance lack key resources, which act as a driver in their seeking out partnerships," says Iyer (2003: 44). Pfeffer and Salancik (2003) argue that such interfirm activities can be best predicted by assessing the need for interfirm communication and the feasibility thereof. One way to improve communications can be the recruitment of executives. In a study measuring the effect of an organization's environment on the type and frequency of executive succession, Pfeffer (1973) found the existence of systematic contextual factors such as a high level of stability in executive positions in industries with many organizations. In another study in which he and Phillip Nowak (1976) studied American oil, gas and manufacturing companies that were undertaking joint ventures, they discovered that conditions of industrial concentration as related to competitive interdependence, accounted for a significant part of the variance.

**Figure 4.1 - Graphical representation of the Resource Dependency Theory**




Source: Pfeffer & Salancik 1978

Third, when all these strategies are not possible, or when resources are too widely dispersed to achieve efficient coordinated activities, organizations may alternate the power of the state in order to influence its external environment (Pfeffer & Salancik 2003: 222): "organizations are not only constrained by their environments but … law, legitimacy, and political outcomes somewhat reflect the actions take by organizations to modify their environments for their interests of survival, growth, and certainty." Ways in order to do so include the rationalization of the political process by aligning own interests with those of the political decision maker, ensuring legitimacy of the organization in the larger social system, through influencing regulatory procedures and government interventions, and being involved in political activities. Schuler et al. (2002) for instance argue that firms have great incentives to use such strategies and discover some drivers of such activity, e.g. firms have higher incentives in concentrated industries than in fragmented ones.

Although partly overlapping with Pfeffer and Salancik's framework (1978, 2003) Scott (1981) makes a division between buffering and bridging strategies. Buffering strategies are intraorganizational techniques to protect the 'technical core', i.e. the mechanisms for transforming input into output. Examples are coding, stockpiling, leveling and forecasting. Scott also categorizes growth under buffering. Bridging strategies, on the other hand, should enhance an organization's security in the external environment or improve its bargaining position, and include bargaining, contracting, cooptation, joint ventures, associations, governmental connections and institutional linkages.

**Table 4.1 – Categorization of strategies to reduce uncertainty**

| *Pfeffer & Salancik (2003)* | *Scott (1981)* |
|---|---|
| Reduce dependence through:<br>1. Growth strategies:<br>• Direct capital investment<br>• Mergers<br>• Acquisitions<br>2. Informal mechanisms and semiformal interorganizational linkages:<br>• Normative coordination<br>• Joint ventures<br>• Cooptation<br>• Interlocking directors<br>• Associations<br>• Coalitions<br>• Cartels<br>3. Law and social sanction<br>• Rationalization of political choice<br>• Organizational legitimacy<br>• Regulation<br>• Political activism | Reduce dependence through:<br>1. Buffering the technical core strategies:<br>• Coding<br>• Stockpiling<br>• Leveling<br>• Forecasting<br>• Growth<br>2. Bridging strategies:<br>• Bargaining<br>• Contracting<br>• Cooptation<br>• Joint ventures<br>• Mergers<br>• Associations<br>• Governmental connections<br>• Institutional linkages |

Sources: Pfeffer & Salancik (1973), Scott (1981)

Pfeffer and Salancik (2003) argue that the organization's manager his role is threefold. First, he is a symbol for the organization and its successes or failures, as well as a symbol of personal control over the organization's actions and their outcomes. Second, despite the constraints the external environment puts on the organization, managers do have some influence (Salancik & Pfeffer 1977). He can process and respond to the constraints of the environment (processor) or he can adapt the organization to the environment (advocator). In the latter case he tries to influence actions of other entities in the external environment in order to change one's own. In the former case the manager recognizes the social context and environmental constraints the organization has to work in and tries to steer the organization to deal with the dependence of the external environment and turn it to its own advantage. In the words of Pfeffer and Salancik (1978: 7) an organization's effectiveness is "its ability to create acceptable outcomes and actions."

Although Pfeffer and Salancik (2003: xvi) argue there is "a limited amount of empirical work explicitly extending and testing resource dependence theory and its central tenets," there exist a few studies that have addressed the existence and formation of strategic alliances from a resource dependency perspective. In general the RDT sees such forms of collaboration as a way to manage resource flows from the external environment and to reduce uncertainties stemming from it. Put differently, they serve as linkages between the firm or organization and external entities. For instance, Gulati and Gargiulo (1999) showed that the probability of alliance formation between specific organizations increases with the increase of resource interdependency between them and the organizations' history of collaborations within the alliance network. Iyer (2003: 44) believes that the outcome of an alliance should be higher than the addition of the two parts individually and says that this would be possible "if each partner had a particular resource or capability that was lacking the other, and the alliance would not only overcome that deficiency but also endow the partnership with enhanced strength." Put differently, from the RDT perspective both partners should lack one or more essential resources that drive them toward an alliance formation. On the other hand, he also adds that sometimes organizations only want to enhance strengths and capabilities

## CHAPTER 5 – The Resource-Based View

The number of alliances has grown substantially over the last few decades (Inkpen 1998; Tsang 1998). For instance, Dyer et al. (2001) argue that this indicates competition is increasingly taking place between a 'set of allied companies' instead of just single firms (Ireland et al. 2002). They observed that the top 500 of international firms maintain an average of 60 strategic alliances. Some scholars argue even that strategic alliances will be essential for the firm in the future. For instance, Das and Teng (2000: 34) write: "Success in the coming years lies in the creation of collaborative advantage through strategic alliances."

This chapter provides an overview of the literature on the Resource-Based View (RBV) and strategic alliances from this perspective. While research in the RBV tradition has grown exponentially over the past 15 to 20 years and has been acknowledged for its explanatory potential (Collis & Montgomery 1995), RBV studies on strategic alliances is a more recent phenomenon (e.g. Eisenhardt & Schoonhoven 1996; Dyer & Singh 1997; Das & Teng 2000; Lavie 2006). As argued by Dyer and Singh (1997: 676) "relationships between firms are an increasingly important unit of analysis for explaining supernormal profit returns." The emergence and nature of strategic alliances have traditionally been explained from a transaction-costs perspective (Coase 1937; Williamson 1991). But since this theory does not allow analyzing the managerial or strategic and social factors behind alliance formation (Eisenhardt and Schoonhoven 1996), the RBV offers an additional approach that could clarify many aspects of alliances. The logical link between the RBV and research on strategic alliances can already be observed in the definitions of these interfirm relationships. Eisenhardt and Schoonhoven (1996: 137) describe them as "cooperative relationships driven by a logic of strategic resource needs and social resource opportunities," Gulati (1998: 293) as "voluntary arrangements between firms involving exchange, sharing, or co-development of products, technologies, or services," and Inkpen (1998: 69) as "relatively enduring interfirm cooperative arrangements that utilizes resources and/or governance structures from autonomous organizations." The objective of alliances is to achieve mutual economic gain (Tsang 1998) and competitive advantage for partners (Das & Teng 2000). Following Tsang (1998: 208) this dissertation includes the following interfirm forms under the heading of strategic alliance: R&D coalitions, marketing and distribution agreements, franchising, co-production agreements, licensing, consortiums, joint ventures, but not mergers and acquisitions. To analyze strategic alliances from a resource-based perspective, this chapter is divided in two sections. The first section deals primarily with a general overview of the RBV. The second section deals specifically with strategic alliances studied from a resource-based perspective. The chapter ends with a brief summary and conclusion.

*Section I – An overview of the Resource-Based View as a firm theory*

After a brief discussion on how the RBV is a reaction to Porter's (1980) industry perspective for explaining competitive advantage, this section briefly describes the major foundational RBV contributions, including Penrose (1959), Wernerfelt (1984, 1995), Barney (1986, 1991), Amit & Schoemaker (1993) and Peteraf (1993). Subsequently it provides an overview of types of firm resources firms that have been identified in the literature.

*The RBV in historical perspective*

Up until the rise of the Resource-Based View, the leading theoretical framework for explaining competitive advantage came from Porter's industry perspective (1980, 1991). He argued that firms compete within an industry structure and that their profitability depends on how they position themselves against that industry. His 5-force model shows how the threats of substitute products, established competitors and new entrants on the one hand, and the bargaining power of consumers and suppliers on the other, affect the way the firm can do business and make a profit. However, as Dierickx and Kool (1989a: 1504) argue: “the fact that resource bundles need to be deployed to achieve or protect such privileged product market positions is often overlooked.” Contrary to the industry perspective, the RBV therefore emphasizes the importance of the resources that a firm owns and has developed over time in order to explain sustained performance differences among firms, even though it can not be perceived as a substitute for industry-level analytical tools (Barney & Peteraf 2003: 312). Grant (1991: 116) argues that making resources and capabilities the foundation of a firm’s long-term strategy is supported by two arguments: (1) internal resources and capabilities drive a firm’s strategic direction, and (2) they are the main sources for profits.

While the term ‘Resource-Based View’ was coined in the mid-eighties by Birger Wernerfelt (1984), who regards organizations as a ‘broader set of resources’, the roots of this theoretical approach to analyzing a firm’s competitive advantage can be found in work of various scholars (Coase (1937; Selznick 1957; Penrose 1959; Andrews 1971; Lippman & Rumelt 1982). For instance, Andrews (1971) believed that distinctive and superior resources relative to competitors may become the basis for a firm’s competitive advantage if they are matched appropriately to environmental opportunities. Lippman and Rumelt (1982) say that causal ambiguity makes the connection between a firm’s resources and competitive advantage less clear for competitors, and therefore the firm’s ability to imitate those resources or to find substitutes is constrained. However, reflecting on a decade of RBV scholarship, Wernerfelt (1995) says that it was not until the end of the 1980s until some other articles by Barney (1986), Dierickx and Cool (1989a) and Wernerfelt (1989) shed light on the nature of markets for resources. Only by then, Wernerfelt (1995: 171) admits, his initial paper started “to have an impact on the academic side of the field,” and so the number of citations increased. While not labeled as an RBV paper, and still not is, the managerial awareness of the resource-based perspective only picked up after Prahalad and Hamel (1990) published the article *The Core Competence of the Corporation* in the Harvard Business Review. With the growth in research and the increasing managerial attention, Conner (1991: 143) therefore puts the RBV to the test and compares it with other firm theories and concludes that the RBV is "reaching for a theory of the firm."

*Foundational works of the Resource-Based View*

Most strategy scholars would consider Penrose her seminal book *The Theory of Growth of the Firm* (1959) as one of the most important early contributions. Kor and Mahoney (2004) perceive her distinctive contribution as a nontrivial issue. Penrose her objective was to understand the growth process of the firm and how it is limited. She wrote (1959: 24): "a firm is more than an administrative unit; it is also a collection of productive resources … the disposal of which between different users and over time is determined by administrative decision. When we regard the function of the private business firm form this point of view, the size of the firm is best gauged by some measure of the productive resources it employs." Thus, she saw the firm as a collection or a bundle of productive resources that should be pooled with resources from outside the firm in order to produce and sell profitable goods and services. Thus, the manager's task is to coordinate and exploit the bundle of resources by examining the opportunities for the use of those resources.

After Penrose (1959) the idea of looking at firms as a broad set of resources received little attention, until the work of Wernerfelt (1984), Rumelt (1984) and Barney (1986, 1991). The RBV-tradition really took flight after Wernerfelt's article *The Resource-Based View of the Firm* (1984) in the Strategic Management Journal. He takes an internal view by exploring the usefulness of analyzing a firm's resources and argues that a resource perspective would give the firm a different perspective on its strategic options. He defines resources as (1984: 172) "those (tangible and intangible) assets which are tied semi-permanently to the firm" and which can be thought of as a strength or weakness. The possession of attractive resources, such as machine capacity, customer loyalty, production experience and technological leads, can create a resource barrier position which makes it directly or indirectly (1984: 173) "more difficult for others to catch up." Almost simultaneously Rumelt (1984) published an article in a book, in which he explored the rent generating and appropriating characteristics of the firm. He proposed that firms are bundles of productive resources that can have different economic values according to the context within which they are applied (Barney & Clark 2007). Furthermore, he suggested that the level to which such resources could be imitated depends on the isolating mechanisms. In an attempt to place the RBV within strategic management literature, Mahoney and Pandian (1992) sum up a long list of such mechanisms, including those found in organizational economics and industrial organization literatures. They mention for instance resource position barriers (Wernerfelt 1984), competencies that are difficult to replicate (Andrews 1971) and reputation and image (e.g. Klein & Leffler 1981).

In a reaction to research on mergers and acquisitions, which suggest that acquired firms' prices are approximately equal to their net present values, Barney (1986) introduces the concept of a strategic factor market, which is a market for buying and selling necessary strategic resources. Barney (1986) refers to existing research that such markets exist for a variety of resources, including market share, corporate reputations and research and development (Henderson 1979; Klein, Crawford and Alchian 1978; Thompson & Strickland 1980). However, in line with M&A markets it can be expected that the price of resources in strategic factor markets will be equal to their values once implemented, i.e. under perfect competition conditions. Since this is not the case, Barney (1986) argues that some firms must have different expectations about the future value of certain strategic resources. He believes there exist two possible informational advantages for companies that are consistently better in setting expectations, namely either the firm analyzes its external environment through nonsystematic means or it analyzes the resources already available within the firm that can disclose valuable product market strategies, e.g. manufacturing know-how (Williamson 1975) or managers' teamwork skills (Alchian & Demsetz 1972). Still, this does not increase competition, but will only optimize the usage of own resources (Peteraf 1993).

Reacting to Barney (1986), Dierickx and Cool (1989b) argue that many critical resources that are required for implementing strategies are not tradable in strategic factor markets. Such resources often lack well-defined property rights or 'bookkeeping feasibility'. In other words, it is hard to put a price on them. Examples of such resources are loyalty and personal relationships. Although they have real economic value, they are not easily appropriable in strategic factor markets by other firms. In general, these resources are characterized by time compression diseconomies, causal ambiguity (Lipman & Rumelt 1982), interconnected assets or asset mass efficiencies, and are therefore difficult to substitute. As such, Dierickx and Cool (1989a: 1507) maintain that non-appropriable assets should be built rather than acquired: "*Critical* or *strategic* asset stocks are those assets which are *nontradable*, … *non-imitable* and *non-substitutable*."

Although Barney claims that the four papers of Wernerfelt (1984), Rumelt (1984), Barney (1986) and Dierickx and Cool (1989a) have outlined the basic principles of the RBV (Barney & Clark 2007), it his article *Firm Resources and Sustained Competitive Advantage* (1991) that has been cited most frequently in strategic management literature. As the title suggests, in this article he studies the relationship between firm resources and competitive advantage. He argues that earlier strategic research, particularly Porter's industry model did not pay attention to the role firm resources play in its competitive position as it simply assumed similar strategies and resource homogeneity among competing firms, as well as a high level of perfect resource mobility. The RBV explicitly assumes strategic resource heterogeneity among firms as well as imperfect mobility across them in order to examine what this implies for SCA. Barney (1991: 101) defines firm resources as "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improves its efficiency and effectiveness," and groups them into physical capital resources, human capital resources and organizational capital resources. Barney (1991: 102) defines competitive advantage as a firm "implementing a value creating strategy not simultaneously being implemented by any current or potential competitors." He speaks about sustained competitive advantage when 'competitive duplication' is not possibly by other firms. This does not mean that sustained competitive advantage is eternal, but only that a firm's competitive advantage can't be taken away by competitors' duplication efforts and neither can they be bought in strategic factor markets (Barney 1986). Assuming firm heterogeneity and resource immobility, Barney's theoretical model (1991) suggests that strategic resources should have "VRIN" characteristics, i.e. they should be:

(a) valuable, i.e. opportunity exploiting or threat neutralizing,

(b) rare among current and potential competitors,

(c) imperfect imitability, and

(d) non-substitutable by equivalent strategic resources.

Regarding the third indicator, Barney (1991) sums up three reasons why firm resources are inimitable: (1) resources can be dependent on a firm's unique history, (2) ambiguity about the causal relationship between a firm's possessed resources and competitive advantage, and (3) the social complexity of resources (e.g. interpersonal relationships, culture, reputation etc.).

Peteraf (1993) grounds the RBV logic into micro-economic theory by developing a model that includes four conditions that should all be met in order for companies to obtain sustainable competitive advantage:

- heterogeneity of resources to capture Ricardian or monopoly rents
- ex-post limits to competition in order to prevent that rents are competed away once they are obtained, e.g. Barney's (1991) imperfect imitability and imperfect substitutability or Rumelt's (1984) isolating mechanisms. This also concerns potential future competitors (Baumol et al. 1982)
- imperfect mobility to keep valuable non-tradable resources within the firm
- ex-ante limits to competition, i.e. there can't be too many firms competing for the same superior resource position

At the business level, this model can help managers to analyze the firm's resource position and its influence on achieving a sustained competitive advantage. Since the model is publicly available, Peteraf (1993) argues that its mere application will not generate increased rents. However, it makes it possible to optimally utilize internally available resources.

Because the original RBV model did not allow for direct analysis of the firm's strengths and weaknesses, Barney (1997) understood the need for an overlying model: "Valuable, rare, and imitable resources can only be a source of sustained competitive advantage if the firm is organized to exploit the potential offered by these resources." His VRIO framework suggests four question with which such analysis becomes possible:

1. Is the resource *valuable*? To answer this question, however, the firm must understand the opportunities and threats in the external environment, as well as whether the resource value is dynamic over time.
2. Is the resource *rare*? Besides individual resources, sometimes only a set or combination of resources may create value for the firm.
3. Is the resource *inimitable*? When a valuable strategic resource is easy to copy or substituted, then this resource may not bring competitive advantage in the long run.

4. Can the resources be *organized*? This question was not part of Barney's original VRIN-model[12] but is important because the firm should also have the internal capabilities and systems, or what Selznick (1957) calls *distinctive competencies*, to obtain the maximum value from the 'VRIN' resources.

Although Barney (1991) identified organizational capital as a distinct resource group, it was only six year later when he introduced the VRIO model that explicitly included this element. While he acknowledges that a dynamic view is important and defines firms as sets of resources, the framework evaluates them as singular and distinct items (Black & Boal 1994).

*Resources from a RBV perspective*

Over the years RBV scholars have identified and classified different types of resources that are available in firms. Economists have often simplified such categorization efforts – e.g. land, labor, and capital – but Penrose (1959) argues that a detailed subdivision of resources can be useful for dealing with various business problems (1959). Wernerfelt (1984: 172) described resources as "anything which could be thought of as a strength or weakness of a given firm," but of course this is a pretty vague description. Also Barney (1991: 101) gives an all-encompassing description: "*firm resources* include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness."[13] Therefore, before entering into the discussion of strategic alliances from a resource-based perspective, it would serve to give a general overview of these classifications. As argued by Miller and Shamsie (1996) classifying resources and their concomitant distinctive advantages would be beneficial to resource-based research. In a later part of this chapter, as well as in subsequent chapters this may be helpful in identifying those resources

[12] Note: the characteristic of non-substitutability has become part of the inimitability characteristic
[13] Italics in original

which are exchanged, or of which the benefits of internally held resources are transferred to partners, such as often the case in strategic alliances.

Several scholars made the division between tangible and intangible assets (Wernerfelt 1984; Grant 1991, Eisenhardt & Schoonhoven 1996). Tangible resources are physical assets that can be subdivided into physical resources (e.g. buildings and machinery), financial resources and human resources (i.e. the workforce), while intangible resources include intellectual and technological resources, as well as reputation. Barney (1991) identifies three distinct resource groups:

1. physical – e.g. a plant or equipment
2. human – e.g. experience, judgment, intelligence, and relationships
3. organizational capital – formal reporting structure or controlling systems

Grant (1991) separates six groups resources: financial, physical, human, technological, reputation and organizational. Miller and Shamsie (1996) make a general distinction between property-based resources, which are protected by property rights, and knowledge-based resources (know-how and skills), which are both protected by knowledge barriers. Specifically regarding strategic alliance making process, Das and Teng (1998) argue that companies find that four categories particularly matter, namely financial, technological, managerial, physical. Noting that scarcity is related to the ease with which resources or sets of resources can be identified, and that this also underlies the level of imitability or substitutability, Black and Boal (1994) divide firm resources into contained and system resources. Contained resources, which are unlikely to lead directly to a sustained competitive advantage, can be identified by simple networks of resource factors and upon which a monetary value can be placed. System resources, on the other hand, consist of more complex resources and are normally socially created.

**Table 5.1 – Different divisions of resources into distinct groups**

<table>
<tr><th colspan="2">Wernerfelt</th><th>Barney</th><th>Grant</th><th>Miller & Shamsie</th><th>Das & Teng</th></tr>
<tr><td rowspan="3">Tangible</td><td>Financial</td><td rowspan="2">Physical</td><td>Financial</td><td rowspan="4">Property-based resources</td><td>Financial</td></tr>
<tr><td>Physical</td><td>Physical</td><td>Physical</td></tr>
<tr><td>Human</td><td rowspan="2">Human</td><td rowspan="2">Techno-logical<br>Human</td><td rowspan="4">Techno-logical<br>Human</td></tr>
<tr><td rowspan="3">Intangible</td><td>Intellectual</td></tr>
<tr><td>Technological</td><td rowspan="2">Organizational capital</td><td>Reputation</td><td rowspan="2">Knowledge-based resources</td></tr>
<tr><td>Reputation</td><td>Organizational</td></tr>
</table>

Sources: Wernerfelt (1984), Barney (1991), Grant (1991), Miller & Shamsie (1996), Das & Teng (2000)

Whereas the importance of physical or tangible assets is evident for firm performance, it was particularly the role of different types of intangible assets that have been discussed extensively in the RBV literature, as well as other literature streams. In particular the work of Itami (1987) is identified with such invisible assets that are, according to him, the real sources of sustained competitive advantage and should be perceived as inputs and outputs of firm activity. He distinguishes three forms, namely environmental assets (e.g. customer information), corporate assets (e.g. reputation, image), and internal assets (e.g. corporate culture or morale). Also the work of Prahalad and Bettis (1986) and Prahalad and Hamel (1990), despite never having been marked under the RBV label, deals with intangible assets of the firm. A firm's *dominant logic* and *core competence*, respectively, are both important conceptualizations of essential intangible assets for corporate strategies that help achieving a competitive advantage. The former (Prahalad & Bettis 1986: 491) is defined as "a mindset or a worldview or conceptualization of the business and the administrative tools to accomplish goals and make decisions in that business," and the latter as (Prahalad & Hamel 1990: 82) "the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies." Another 'knowledge-based' resource concerns a firm's capabilities (Stalk et al. 1992). Amit and Schoemaker (1993: 35) define these as "information-based, tangible or intangible processes that are firm-specific and are developed over time through complex interactions among the firm's *Resources* … [which] provide enhanced productivity of its *Resources*, as well as strategic flexibility and protection for its final product or service."[14] Makadok (2001: 387) defines them as "organizational embedded non-transferable firm-specific resources whose purpose is to improve the productivity of other resources." When these capabilities are focused on learning and evolving they become dynamic capabilities, which Teece et al. define as (1997: 516) "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments." Eisenhardt and Martin define them as (2000: 1107) "the firm's processes that use resources – specifically the processes to integrate, reconfigure, gain and release resources – to match and even create market change. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die." To better understand their impact on sustainable competitive advantage, more rigorous empirical research is necessary (Mahoney 2004). As such, they build on the definition of Teece et al. by including a firm's resources at large, not just competences. According to Barney and Clark (2007) these typifications have the same underlying theoretical structure. Therefore they simply divide all resources in four groups: physical, financial, human and organizational capital.

The introduction to this chapter already made clear that a categorization of resources is just one step into defining their value to the firm's level of competitive advantage. A second even more important step is to figure out the traits or the specific "value-enhancing" characteristics of those resources. Barney (1991) his VRIN-characteristics and Peteraf (1993) her four conditions for sustained competitive advantage – resource heterogeneity, ex-post limits to competition, imperfect mobility and ex-ante limits to competition – have been adopted as the core framework of research from a RBV perspective.

[14] Italics and capitalization in original

*Section II – The analysis of strategic alliances from the RBV*

Parallel to the first section, this section begins with briefly discussing the traditional theoretical explanation for the existence of strategic alliances, namely the transaction-costs perspective. Consequently it deals with an important discussion among RBV scholars that precedes resource-based scholarship on alliances about what resources could contribute to a sustained competitive advantage for the firm, i.e. internal or external resources. And finally, it discusses key conceptual works on strategic alliances from a resource-based perspective.

*Introduction*

Several scholars have emphasized the importance of alliances for creating and sustaining a competitive advantage (Doz & Hamel; Gomes-Casseres 1996; Yoshino & Rangan 1995). This form of interfirm collaboration has undergone an explosive growth over the past decades (Tsang 1998; Inkpen 1998). Research on alliances was often phenomenon-driven and scholars have therefore drawn on several theoretical frameworks, including transaction costs economics and social network theories (Lavie 2006). However, such theories could not adequately explain the behavior of alliances (Tsang 1998) and therefore they were called 'theoretical orphans' (Borys & Jemison 1989). Yet, alliances remained unstudied from a RBV perspective until the work of Eisenhardt and Schoonhoven (1996). Since then, several empirical studies have shown that alliance partners' resources are important for creating a competitive advantage (Stuart 2000; Rothaermel 2001) or have addressed other related issues from the resource-based perspective. For instance, Gulati (1999) studies the role of network resources in the alliance formation process and argues that firms' strategies are influenced by the existence of network resources. And this makes sense as strategic alliances make especially those external resources available that are non-tradable. This is primarily because they are non-tangible, such as knowledge-based resources and certain capabilities.

The RBV perspective rationalizes that a firm's value maximization can take place through the pooling and utilization of valuable resources. However, due to imperfect tradability of some resources this may not be possible, e.g. because they are too much embedded in the organization. The RBV then argues that other forms of exchanges, besides market exchanges can be employed, including strategic alliances (Das & Teng 2000: 36): "the RBV considers strategic alliances and mergers/acquisitions as strategies used to access other firms' resources, for the purpose of garnering otherwise unavailable competitive advantage and values to the firm." Wernerfelt (1984) already saw opportunities to obtain non-marketable resources through mergers and acquisitions. Based on earlier work of Salter and Weinhold (1980) he argues that acquiring related or supplementary resources can be of value to the firm. The RBV therefore perceives strategic alliances as well as mergers and acquisitions as ways to obtain otherwise unavailable resources, or to develop joint resources (Tsang 1998, Ireland et al. 2002). Tsang (1998) see key motives for strategic alliance formation: creation of rents, expansion of resource usage, diversification of resource usage, imitation of resources, and the disposal of resources. Barney and Clark (2007), however, argued that most of the research in this particular field focuses on the exploitation of existing resources or the development of new ones.

The second part of this chapter will take a closer look at strategic alliances from the resource-based perspective. First, however, it will briefly touch upon how these interfirm forms of collaboration have been analyzed from a transaction cost perspective. Consequently it will take a step back in time by taking a closer look at a major discussion that took place between RBV scholars about the question whether critical resources could actually be appropriated from outside the firm.

*Strategic alliances from a transaction-cost perspective*

Traditionally, strategic alliances have traditionally been explained from a transaction-costs perspective (Hennart 1988, 1991; Pisano & Teece 1989; Williamson 1991). This approach states that firms' ownership decisions, which ultimately determine the governance structure of the firm, depend on the total of transaction and production costs. Transaction costs are those costs that are necessary to make an economic exchange and include search and information costs, bargaining costs and policing and enforcement costs, e.g. commissions and the costs for writing a contract. Put differently, firms will try to minimize these costs. As such, if exchanges in the market place bring along high transaction costs, firms will prefer to internalize parts of their business process through mergers, acquisitions or internal development (Das & Teng 2000). However, when such costs are intermediate and not high enough to justify vertical integration (Gulati 1995) or when various constraints prohibit full internalization (Ramanathan et al. 1997), then firms may choose to partially internalize exchanges, e.g. through joint ventures or strategic alliances. Hence, the transaction-costs approach does not analyze the resources of partnering firms, neither does it pay attention to value-creating strategies in strategic alliances (Das & Teng 2000).

However, as argued by Eisenhardt and Schoonhoven (1996), mere minimization of transaction costs and production costs (Coase 1937; Williamson 1975) as the explaining variable does not increase our understanding of the firm's underlying strategic rationale to enter an alliance. Such strategic considerations could be obtaining legitimacy in the eyes of customers, rapid entry to emerging markets or access to a variety of resources that could serve these and other purposes. Resource-based theory could therefore be a very useful tool to analyze different aspects of alliances, because they (Eisenhardt & Schoonhoven 1996: 138) "*improve the strategic positions of firms in competitive markets by providing resources from other firms that enable them to share costs and risks.*" Additionally, alliances may enhance legitimation and create flexibility. As such, in the second half of the nineties, several scholars began to offer explanations for various aspects of strategic alliances from a resource-based perspective, such as the motivations behind alliance formation (Tsang 1998).

While the analysis of strategic alliances from a resource-based perspective is a relative recent phenomenon (e.g. Dyer & Singh 1998; Das & Teng 2000; Lavie 2006), Wernerfelt (1984) already asserted the possibility for acquiring non-marketable through mergers and acquisitions. Referring to earlier work of Salter and Weinhold (1980), he argues that from a resource-based perspective acquisition strategies are often founded on two criteria, namely whether the additional resources are supplementary or complementary, i.e. whether they will provide the firm with either more of the same valuable resources or with resources which are valuable in combination with already available resources, respectively. Nonetheless, dealing only with the internalization of resources, either by vertical or horizontal integration through mergers and acquisitions, indicates that Wernerfelt only considers resources within the firm valuable. This position, however, is very much debatable, which indeed forms the key issue of a long internal debate.

*Discussion on critical resources in the RBV community*

Although the analysis of strategic alliances from a resource-based perspective began with the work from Eisenhardt and Schoonhoven (1996), it was preceded by a discussion about whether critical resources could actually be acquired from sources in the external environment and thereby lead to sustained competitive advantage. Wernerfelt (1984) focused on how resources that are semi-permanently tied to the firm could contribute to high returns. He further suggested that mergers and acquisitions could provide the firm with otherwise non-appropriable resources. Thereby he implicitly said that only internal resources could contribute to a firm's competitive advantage.

In his article on strategic factor markets, i.e. “a market where the resources necessary to implement a strategy are acquired,” Barney (1986: 1231) asserts that strategic factor markets will develop whenever companies require resources that are currently not internally available to implement strategies. However, since in perfectly competitive markets the costs of such resources will approximately equal their economic value it won’t be possible for the acquiring firms to achieve above normal returns through the acquisition of those resources. But if a strategic factor market is imperfectly competitive because the acquiring firm has better knowledge about the potential future rent of a resource, then it may be possible to obtain above normal rents. Barney namely assumed that resources could only be valuable if they reside within the firm, which explains the existence of mergers and acquisitions but which cannot explain the existence of strategic alliances.

In a reaction to Barney (1986) Dierickx and Cool (1989a) argued in a later issue of *Management Science* that strategic factor markets are incomplete because some strategic resources are unique and therefore non-appropriable. Asset stocks such as *reputation* are not ‘freely tradable’ but are accumulated or built internally through ‘consistent time patterns of expenditures or flows’ rather than acquired in strategic factor markets. Sustainable competitive advantage is therefore a function of the easiness of replication of the strategic resource, i.e. whether it can be imitated or substituted, which can be better understood by distinguishing the strategic asset ‘stocks and flows instead of the strategic factor market perspective (1989b).

In the same issue of *Management Science* Barney reacted to the critique of Dierickx and Cool (1989a). His rebuttal focused on his view that asset stock accumulation extends and complements the strategic factor market model. Dealing in particular with the issue of non-tradable resources, Barney (1989) claims that these time-accumulated resources also incurred opportunity costs that should be perceived as the economic costs for building up the non-appropriable assets. The supranormal rent generation of such assets is, according to Barney (1989), therefore a result of strategic factor market imperfection. Put differently, firms may have different expectations about a resource its future value. This could be because managerial capabilities are just other firm resources. In other words, 'non-appropriable' assets which have been developed over time consist of several other resources which were, at least one point in time, also acquired by the firm and therefore subject to the logic of strategic factor markets. In a short reply in yet the same issue of *Management Science* Dierickx and Cool (1989b) refer to a footnote in their article (1989a: 1506) which says that "Barney's fundamental argument about competition for resources may be extended in a straight-forward manner from competition in factor markets to competition in resource accumulation."

The discussion between Barney (1986, 1989) and Dierickx and Cool (1989a, 1989b) forms an important starting point for expanding the resource-based perspective to strategic alliances because up until this point in the debate scholars assumed resources only to be of value to the firm if internally available, i.e. if the firm owns the resource. In a strategic alliance, which is a softer type of integration relative to a merger or acquisition, firms do not acquire new strategic resources but do somehow benefit from them. Hence, the theoretical underpinnings of the RBV framework did, up until that time (1989) not offer a satisfying explanation for the existence of strategic alliances, as well as other relevant aspects.

The debate in the RBV literature ended in 1989 and was not restarted until the publication of Dyer and Singh (1998) who claimed that also external resources could be of benefit to a firm's competitive advantage. However, also major RBV publications in the period 1989 – 1998 choose sides on the issue. Barney's influential article in the Journal of Management (1991) also explicitly assumed that only those resources 'controlled by a firm', i.e. owned by the firm, can contribute to competitive advantage, while the nature of those resources determine whether this competitive advantage is sustainable. Although Grant

(1991) acknowledges that several firms can jointly own resources, e.g. industry standards that can function as entry barriers, he also takes an inward looking view by arguing that a firm's should exploit its existing stock of resources, but that it may be necessary to acquire complementary resources externally. Similarly Peteraf (1993) adopts Barney's assumption (1991) that firms have heterogeneous resource bundles and capabilities that are internally accumulated, and that therefore only internal resources can bring competitive advantage. Finally, Amit and Schoemaker (1993: 35) clearly state that resources are "stocks of available factors that are owned or controlled by the firm." The managerial challenge is therefore (1993: 33) "to identify, develop, protect, and deploy resources and capabilities in a way that provides the firm with a sustainable competitive advantage and, thereby, a superior return on capital." While they assert that interactions, combinations and complementarities between resources within the firm can influence its competitive advantage, they don't say anything about how similar benefits can be achieved through interfirm collaborations.

To sum up, the central question of the debate was whether externally held resources, i.e. those controlled and owned by other firms, can also generate supranormal rents without internalizing those resources through mergers and acquisitions. Considering the existence of strategic alliances, the answer to this question should be unequivocally positive. After all, firms should enjoy some benefits from the cooperation otherwise they wouldn't exist. But the main problem here is that resource-based theory only allows for internal resources to be rent generating. As Lavie (2006) justifiable observes, the traditional RBV framework (i.e. Barney 1991; Amit & Schoemaker 1993) assumes that only those resources owned and controlled by the firm can be rent-generating. The solution to this paradox is that not only the resources as such can generate rent. Indeed, also the benefits that are brought about by those resources can generate rent, and it is exactly these benefits that are transferred within strategic alliances besides a flow of actual resources.

*Conceptual RBV scholarship on strategic alliances: the debate continues*

Research on alliances has developed almost independently from traditional firm theories (Lavie 2006), even though a range of aspects were studied, e.g. motivation for alliance formation, partner identities, alliance management etc. (see page 639). The study of the interfirm collaboration phenomenon from the RBV perspective, however, started only in the mid-nineties. Some studies already dealt with extra-firm resources, such as Harrison et al. (1991) who discovered that dissimilarities in resource patterns may result in a unique and valuable synergies after a merger or acquisition.

The first RBV examination of strategic alliances comes from Eisenhardt and Schoonhoven (1996). Having conducted a longitudinal study on product development alliances in the semiconductor industry, they claim the existence of alliances cannot be explained from a transaction costs perspective alone. Instead, also strategic and social factors should be taken into consideration, and so they assert the formation process is driven by:

- a *resource need* by firms in vulnerable positions, such as new market entry or pioneering technology, with the objective of improving a strategic position by garnering resources from other firms to share risks and costs.
- a *capitalization on existing firm assets* regarding social opportunities, such as high status top-management teams.

They also discover (1996: 137) that "firms must have resources to get resources" and therefore they conclude that the resource-based view can be applied to strategic alliances as they (1996: 138) "provide both the needs and opportunities for alliance formation," and that failing to include such explanations for alliance emergence will only tell half the story.

As explained above, past work in the RBV tradition solely explained competitive advantage from resources owned by the firm itself. Dyer and Singh (1998) are the first who explicitly state that a firm's critical resources can in fact cross the boundaries of the firm and as result become embedded in interfirm resources and routines. Spurred by the proliferation of strategic alliances and research on it suggesting productivity gains for cooperating firms, they argue that idiosyncratic interfirm linkages can yield relational rent. They define (1998: 622) such rent as "a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint idiosyncratic contributions of the specific alliance partners." Consequently they present four ways for interfirm rent-generation (i.e. routines and processes):

1. investing in relation-specific assets (e.g. to lower value chain costs or create larger product differentiation)
2. establishing of interfirm knowledge-sharing routines, e.g. to improve existing technology or boost innovation.
3. leveraging complementary resource endowments between alliance partners, which they define as (1998: 666) "distinctive resources of alliance partners that collectively generate greater rents than the sum of those obtained from the individual endowments of each partner." Yet, they cannot not be available in strategic factor markets, should concern intangible resources, and combined they should gain more VRIN characteristics as before.
4. choosing a governance structure, either with formal third-party enforceable or informal self-enforcing contracts, in order to minimize transaction costs and provide incentives for value-creating initiatives.

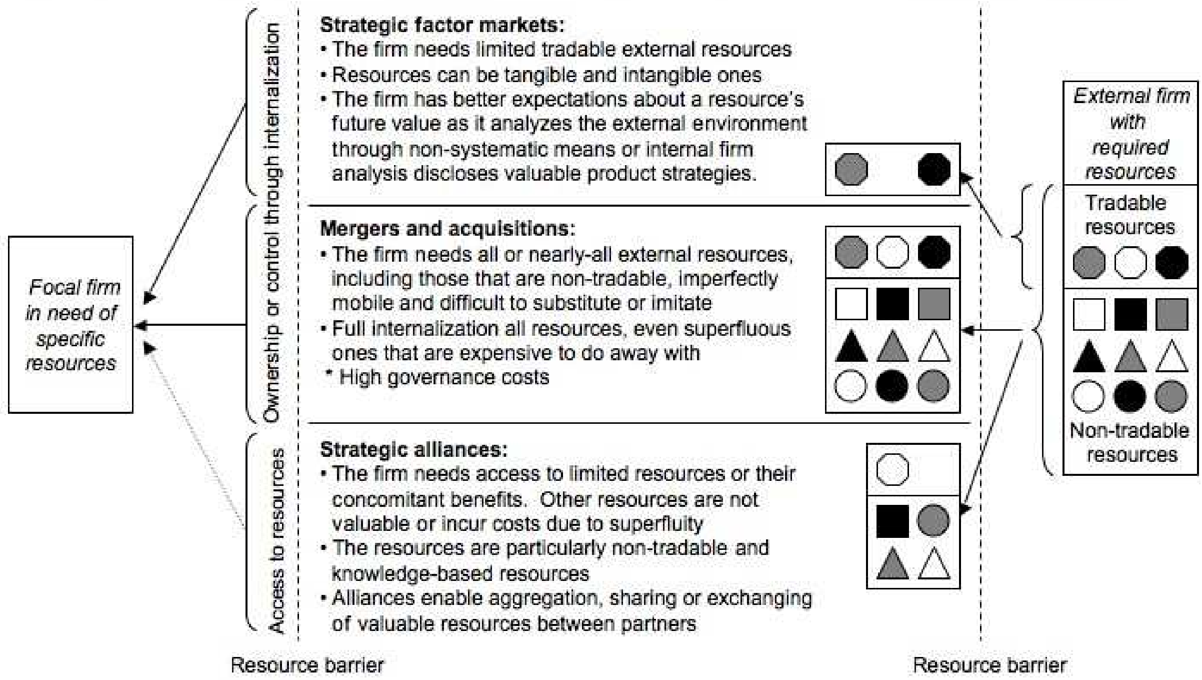
A second line of argumentation put forward by Dyer and Singh (1998) concerns the preservation of relational rent. Besides two familiar isolating mechanisms from a RBV viewpoint, namely causal ambiguity and time compression diseconomies, they mention four other rent-preserving mechanisms, namely interorganizational asset interconnectedness, partner scarcity (in terms of strategic resources and relational capabilities), resource indivisibility (co-evolution of capabilities) and complex institutional environment (legal or social controls directing opportunism and encourage cooperative behavior).

The relational view is an extension of the RBV, although there are important differences, among which the unit of analysis (firm versus alliance), the sources of supernormal rent (RBV resources versus knowledge sharing routines, complementary resource endowments and effective governance structures), and the mechanisms that preserve those profits (resource barriers to imitation versus alliance barriers to imitation). Dyer and Singh's argument (1998) that resources may actually span firm boundaries takes the debate about which resources can be of value to the firm a step further. Although much has been written subsequently about strategic alliances from a resource-based perspective, it was not until Lavie (2006) that this debate was reopened.

Together with Eisenhardt and Schoonhoven (1996) and Dyer and Singh (1998), the long and dense work of Das and Teng (2000) can be perceived as another foundational work on strategic alliances in the RBV tradition. Assuming that firms collaborate to gain access to valuable resources of other firms, these scholars want to build a more encompassing resource-based theory of strategic alliances. They argue the rational behind strategic alliances is to (Das & Teng 2000: 37) "aggregate, share, or exchange valuable resources with other firms when these resources cannot be efficiently obtained through market exchanges or mergers/acquisitions." The rationale to favor an alliance over a merger or acquisition lies in the advantage that not all the resources of the acquired firm are internalized, either because they are not valuable or incur costs due to superfluity. With respect to the resource itself, they extend Barney's (1991) idea that VRIN resources contribute not only directly to a firm's competitive advantage, but also make a firm a more interesting alliance partner. Furthermore they posit that the resource profiles held by partnering firms have consequences for the structure of alliances. Due to imperfect knowledge barriers (Miller & Shamsie 1996), knowledge-based resources are more prone to transfer than property-based ones. As such they say that the governance structure – e.g. equity joint ventures or bilateral contract-based alliances – should balance two considerations, namely the obtainment of valuable resources from other firms while keeping control over your own. Finally they argue that alliance performance depends on the resources held by the parties and how they are aligned.

Lavie (2006) asserts there is theoretical gap in traditional firm theories to explain the strategic behavior and performance of interconnected firms. In an attempt to address this gap he builds on Dyer and Singh's (1998) relational view model, as well as social network theories, in order to expand on the traditional RBV – he perceives Barney (1991) and Amit & Schoemaker (1993) the traditional RBV framework – by integrating the effect of network resources on a firm's competitive advantage. A mere focus on resources owned or controlled by firms would namely not pay appropriate attention to the contribution of alliance partner resources. Following Gulati (1999), Lavie defines network resources (2006: 638) as "external resources embedded in the firm's alliance network that provide strategic opportunities and affect firm behavior and value." Thus, he opens a frontal attack on the theoretical underpinnings of the RBV, which claims that firms can protect their competitive advantage by putting up resource barriers to outsiders. "The fundamental assumption of the RBV, according to which firms must own or at least fully control the resources that confer competitive advantage, turns out to be incorrect," says Lavie (2006: 641). Regarding existing work on alliances he for instance strongly criticizes the contributions of Eisenhardt and Schoonhoven (1996) and Das and Teng (2000) for still conforming to the original assumptions of the RBV, i.e. heterogeneity (strategic asset idiosyncrasy) and resource immobility. Building on the concept of network resources (Gulati 1999) and other research that showed firms could benefit from the resources of alliance partners, he advocates the idea (2006: 241) that firms do not need to own superior resources but just need to have access to them “which establishes the right to utilize and employ resources or enjoy their associated benefits.” Figure 5.1 depicts three alternatives that firms have when in need of specific resources that are available with external firms.[15]

**Figure 5.1 - Three alternatives for a firm in need of VRIN resources from the external environment**



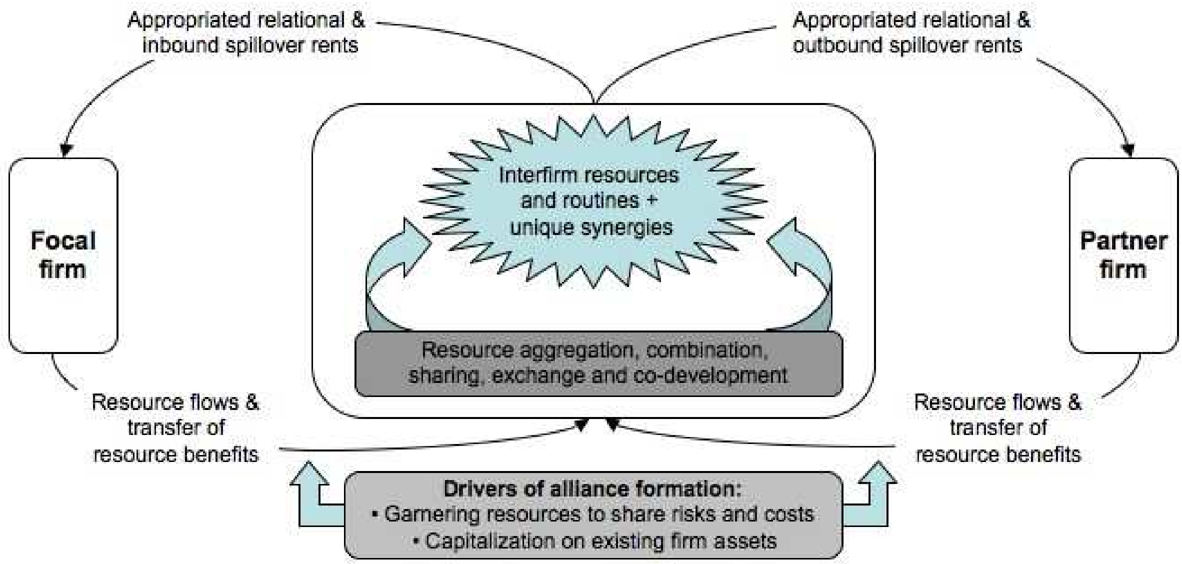

Sources: Wernerfelt (1984), Barney (1986), Eisenhardt & Schoonhoven (1996), Miller & Shamsie (1996), Dyer & Singh (1998), Das & Teng (2000), Lavie (2006)

Upholding Barney’s (1991) original sources of competitive advantage – resource heterogeneity and imperfect mobility, despite that alliances don’t augment heterogeneity and may in fact transfer immobile resources (e.g. reputation) – Lavie (2006) expounds upon four different rents that may be generated: internal rent, appropriated relational rent (Dyer & Singh 1998), inbound spillover rent and outbound spillover rent. Internal rent comes from shared and non-shared resources internal to the firm, i.e. the original rent-generating resources in the RBV (Peteraf 1993). Appropriated relational rent refers to the common benefits that alliance partners enjoy through the combination, exchange, and co-development of idiosyncratic resources (Dyer & Singh 1998). The latter two types of rent are private benefits for the firm and its partner, respectively, (2006: 647) that are “exclusively derived

[15] Note: resources in strategic factor markets do not have to reside in one firm

from network resources and pertains to unintended gains owing to both shared and non-shared resources of the alliance partners."

**Graph 5.2 - Value creation through strategic alliances**




Sources: Harrison et al. 1991; Eisenhardt & Schoonhoven 1996; Dyer & Singh 1998; Das & Teng 2000; Lavie 2006

Lavie's framework, as well as recent empirical work (e.g. Gulati 1999), shows that network resources, i.e. resources of alliance partners that are transferred through direct interactions, can affect firm performance, as shown in graph 5.2. Hence, the RBV falls short in explaining why firms cooperate in alliances. Lavie therefore argues the RBV be adjusted (2006: 641): "A weaker condition of resource accessibility, which establishes the right to utilize and employ resources or enjoy their associated benefits, may suffice." This is, he claims, also in line with Penrose's suggestion (1959) that not resources but their benefits generate value for the firm. Dollinger et al. (1997) for instance claim that reputation is not substitutable – and obviously cannot be acquired – but can be transferred to alliance partners.

*Conclusions*

By looking at the internally controlled resources of the firm, the RBV opposes traditional industry perspective that suggests firms should find a strategic fit between its internal characteristics and the external environment. Instead, it suggests that a firm's competitive strategy depends more on the accumulated resources (Dierickx & Cool 1989a) than on its competitive environment (Porter 1980). Or in the words of Rumelt (1984: 557): "a firm's competitive position is defined by a bundle of unique resources and relationships." The mere existence of strategic alliances confirms in a way this idea because if strategic resources were in fact easily mobile, imitable and substitutable, then firms could simply obtain them in strategic factor markets, build or develop them on their own, or find alternative resources (Das & Teng 2000). The formation of a strategic alliance is then superfluous. Indeed, they are also expensive due to the governance costs involved as well as the chance of loosing organizational control. But because of the existence of resources with VRIN characteristics (Barney 1991), merging, acquiring or collaborating with other entities becomes an attractive opportunity for firms wishing to have access to them. However, several scholars have observed a research gap on alliances in the RBV literature and have contributed to our conceptual understanding of the underlying motivations for alliance formation (Eisenhardt & Schoonhoven 1996; Dyer & Singh 1998; Das & Teng 2000; Lavie 2006). In particular Dyer and Singh (1998) their observation that strategic resources can move between firms and that the relational rents derived from such movements differ fundamentally from the Ricardian or monopoly rents as put forward in the traditional RBV model, and Lavie's (2006) reformulated RBV model for interconnected firms and his argument that firms need not to control or own strategic resources to generate rent from them, add to our thinking about the strategic importance of alliances. As will be formulated later, the resource-based view of the firm can be of great help in explaining several aspects of cross-sector collaborations.

**CHAPTER 6 - Literature review on cross-sector collaborations**

This chapter reviews the literature on cross-sector collaborations. Contrary to traditional business alliances, which has exploded in the last two decades of the last century (Contractor and Lorange 2002) and has been studied extensively (Das & Teng 2000; Wymer & Samu 2003), collaborations between firms and nonprofits are a relatively new phenomenon. However, also these forms of partnerships have grown in number recently (Austin 1998, 2000a&b; Fiszbein and Lowdin 1998; Elkington and Fennel 2000; Googins & Rochlin 2000; Iyer 2003; Pfeiffer 2003; Klitgaard & Treverton 2003; Berger, Cunningham & Drumwright 2004; Wymer & Samu 2003; Spar and LaMure 2003, Austin, Reficco et al. 2004) and will most likely continue to grow in the future.

The growth in the number of cross-sector collaborations may be strengthened due to globalization (Sagawa & Segal 2000) and the fact that governments, international organizations and civil society organizations themselves are promoting such partnerships (Googins & Rochlin 2000). It may also be the result of the realization that actors from different sectors should solve contemporary problems. As argued by The Center for Corporate Citizenship (2004): "finding solutions to many social, environmental, and economic problems often requires that corporations become actively engaged with their stakeholder communities and work closely with government and civil society organizations." Moreover, mankind is making a transition from an economy that is based on matter to one based on ideas (Contractor & Lorange 2002), and since cross-sector collaborations often serve as vehicles which provide partner organizations with specific knowledge about such things as new technologies and consumer information this argument is likely to stimulate the number of these partnerships in the years to come.

In his article *Turning Gadflies into Allies* Yaziji (2004) expounds upon the natural suspicion between businesses and nonprofits. In their attempts to thwart multinationals, nonprofits use a variety of strategies to affect public opinion, from boycotts to sabotage. Companies on their part often strongly collided with civil society organizations by confronting them head-on. Yaziji (2004) argues that both strategies may not be the most effective ones. Instead, teaming up with nonprofit opponents or companies may prevent costly measures and at the same time bring many benefits. In their book *Cradle to Cradle* McDonough and Braungart (2002) argue that in dealing with the world's environmental problems, companies and environmental nonprofits should work together to design products which have a positive effect on the environment, e.g. packages that return valuable nutrients to the soil instead of poisonous ones. This strategy is often criticized as questioners of McDononough and Braungart's thesis (2002: 149) "believe that the interests of commerce and the environment are inherently in conflict, and that environmentalists who work with big businesses have sold out. And businesspeople have their own biases about environmentalists and social activists, whom they often see as extremists promoting ugly, troublesome, low-tech, and impossible expensive designs and policies. The conventional wisdom seems to be that you sit on one side of the fence or the other."

A great deal has been already written on traditional business alliances in a variety of scholarly disciplines, including economics and management. However, several scholars question the usefulness of previous research on traditional alliances for gaining a better understanding about cross-sector alliances because the underlying motivations for partnering are very different. Whereas business alliances focus on the development of new products and technologies or the exploitation of new markets, cross-sector alliances are formed by organizations with entirely different missions (Andreasen 1996). Berger et al. (2004) claim cross-sector alliances differ from traditional strategic alliances in two ways. First, they involve at least one nonprofit partner. Second, they also have not only economic objectives. It is important to note that these scholars do also identify fund-raising by nonprofits as an economic objective. Austin (2000b) sums up differences between traditional alliances and cross-sector alliances: performance measures, competitive dynamics, organizational cultures, decision-making styles, personnel competencies, professional languages, incentive and motivation structures, and emotional content. And Warner (2004a&b) identifies differences in experiences, perceptions, aspirations, objectives, values, relative power and capabilities to negotiate, as well as different organizational objectives, staff incentives, methods of working, behavior and attitudes, institutional culture and perceptions of the other partner. The claim that business alliance literature may not be useful for studying cross-sector collaborations is supported by the observation that researchers in the latter field only rarely refer to traditional alliances studies. Although the objective of this dissertation is not to delve into the differences and similarities between traditional and cross-sector alliances, a further exploration surely deserves attention. For instance, having studied failures of traditional alliances, Brouthers et al. (1995) and Medcof (1997) believe companies should consider four criteria before establishing an alliance, namely the partner's capabilities, the compatibility between partners, the commitment of the partners to the alliance, and the control mechanisms of the new governance structure.

The chapter's objective is to review existing literature because it may be helpful to foster future research in the business and management fields (Selsky & Parker 2005). It subsequently deals with the following topics:

- Defining cross-sector collaborations
- Categorization of existing literature and the need for more research
- The motivations for the formation of cross-sector collaborations and the benefits for companies and nonprofits
- The risks of being involved in cross-sector collaborations
- The identification of potential problems and how to solve them

- Typologies of cross-sector collaborations
- The nature of collaborating across sectors
- Stages in building cross-sector collaborations
- Managing the partnerships and parameters for success

*Defining cross-sector collaborations*

As with any phenomenon that is being studied for the first time, collaborations between businesses and nonprofits have been termed in a number of ways, such as cross-sector or intersectoral partnerships (Waddock 1991; Selsky & Parker 2005; Waddel & Brown 1997), cross-sector collaborations (Austin 2000), new social partnerships (Copenhagen Center 2000), collaborative alliances (Grays & Wood 1991), New Value Partnerships (Sagawa and Segal 2000) or simply social alliances (Berger et al. 2004). For clarity purposes this work uses primarily the term cross-sector collaboration (CSC), although it may sometimes refer to cross-sector partnership or alliance. Besides different terms, there are also many definitions. The first real definition came from Waddock (1988: 18) despite that it is exaggeratedly long and all-inclusive:

> "A [cross-sector] partnership is a commitment by a corporation or a group of corporations to work with an organization from a different economic sector (public or nonprofit). It involves a commitment of resources – time and effort – by individuals form all partner organizations. These individuals work cooperatively to solve problems that affect them all. The problem can be defined at least in part as a social issue: its solution will benefit all partners. Social partnership addresses issues that extend beyond organizational boundaries and traditional goals and lie within the traditional realm of public policy – that is, in the social arena. It requires active rather

than passive involvement from all parties. Participants must make a resource commitment that is more than merely monetary."

After Waddock's initial work (1988) it has been defined in various ways by several scholars, including Waddock herself:

- "voluntary collaborative efforts of actors from organizations in two or more economic sectors in a forum in which they cooperatively attempt to solve a problem or issue of mutual concern that is in some way identified with a public policy agenda item." (Waddock 1991)
- "partnerships between two or more organizations with fundamentally different governance structures and missions – include collaborations between a corporation and a non-corporate entity such as a nonprofit organization, government agency, or quasi-governmental organization." (Rondinelli & London 2003)
- "Cross-sector projects formed explicitly to address social issues and causes that actively engage the partners on an ongoing basis." (Selsky & Parker 2005)

Although these definitions are similar in many respects, they also differ in others. This dissertation adopts the following definition:

> "Cross-sector collaborations are voluntary collaborative efforts between organizations from two or more sectors to solve a social, economic or environmental problem that is of mutual concern and which brings benefits to all partners."

The first part of the definition is quite uncontroversial; it is some form of collaboration between organizations from different sectors. This means that an alliance between a nonprofit and a public organization also falls within this definition, although this dissertation focuses primarily on business-nonprofit collaborations. The partnership efforts should also be 'voluntary', i.e. the relationship cannot be based on government pressure. A more contentious aspect of the definition concerns the objective. Strictly speaking a mere cooperation between organizations from different sector suffices in order to speak about cross-sector collaboration. However, virtually all cases show the pursuit of solving some sort of social, economic or environmental objective, which is inherent to the cooperation of the nonprofit or public organization whose missions are inherently linked to achieving such goals. Reversely, solving the problem should also be of concern to the company involved. Its interests, however, may not be purely financial but should serve strategic objectives. This means the definition does cover strategic philanthropy but not ordinary donations.

*Existing literature and research*

Despite the novelty of the cross-sector collaboration phenomenon, there exists an array of literature on the topic which can be divided into four distinct categories. First, a limited number of academic and managerial articles has been published on different aspects of such partnerships. In the scientific business and management literature there doesn't exist a real stream of research as only single articles have appeared in a variety of journals, including the Journal of Management, the Academy of Management Journal and Review, and the Strategic Management Journal. Some of these can be typified as Corporate Social Responsibility publications, such as the Business and Society Review or the Journal of Corporate Citizenship. Moreover, more recent studies don't really build on previous research by going deeper into specific issues. Similarly, the research in the nonprofit and public affairs field is dispersed as well and is published in journals such as the Nonprofit and Voluntary Sector Quarterly, the Journal of Nonprofit and Public Sector Marketing, Nonprofit World and Administration and Society. Practitioners' journals have published more articles on the topic or closely related topics, in particular the Harvard Business Review, the California Management Review and the Business and Society Review. Finally, just a few articles can be found in development journals, such as World Development and Development in Practice, and some in other journals or research reports of institutions like the United Nations.

Table 6.1 shows that the number relevant published articles in the field is dispersed and limited. Over the past few years, also a number of books or book chapters have been dedicated to the topic, e.g. Austin 2000; Sagawa & Segal 2000; Warner & Sullivan 2004). And finally, there exists a great number of handbooks, guides and reports which are compiled

**Table 6.1 – Relevant scientific and managerial journal publications**

| | |
|---|---|
| Scientific business and management Journals | |
| *Journal of Management* | 2 |
| *Academy of Management Review* | 1 |
| *Academy of Management Executive* | 1 |
| *Entrepreneurship: Theory & Practice* | 1 |
| *Administrative Science Quarterly* | 1 |
| Managerial / practitioner journals | |
| *Harvard Business Review* | 7 |
| *California Management Review* | 3 |
| *Business & Society Review* | 3 |
| *Academy of Management Executive* | 2 |
| *Sloan Management Review* | 1 |
| *International Business Review* | 1 |
| *Journal of Corporate Citizenship* | 1 |
| *Corporate Governance* | 1 |
| Nonprofit and public affairs journals | |
| *Journal of Nonprofit and Public Sector Marketing* | 3 |
| *Nonprofit and Voluntary Sector Quarterly* | 1 |
| *Nonprofit World* | 1 |
| *Journal of Public Policy and Marketing* | 1 |
| *Nonprofit Management and Leadership* | 1 |
| *Administration and Society* | 1 |
| Development journals | |
| *World Development* | 3 |
| *Development in Practice* | 1 |
| Other outlets | 3 |

by practitioners, consultants, academic- and non-academic research institutes, such as the Copenhagen Center or the International Business Leaders Forum. All these contributions deal with a number of specific aspects of cross-sector collaboration, some of which overlap and allow for some level of comparison. Despite this dispersed literature the research field to date is rather slim. Still, several academic institutions have started research projects. For instance, the Center for Corporate Citizenship at Boston College published the report *Enduring Partnerships: Resilience, Innovation, Success* and a partnership tool kit. The

Programme for Industry at the University of Cambridge offers a postgraduate certificate in cross-sector partnership and publishes the magazine *Partnership Matters*. And in 2001, the Social Enterprise Knowledge Network (SEKN) was established, which is collaboration between Harvard Business School and a group of leading Latin American business schools to "address the need for generating social enterprise intellectual capital developed in the region itself" and which has published the book 'Social partnering in Latin America: lessons drawn from collaborations of businesses and civil society organizations."

Notwithstanding increasing attention for the cross-sector collaboration phenomenon, studies on the topic are often very descriptive. This also explains the relatively large number of practitioner oriented journal articles. However, there are virtually no quantitative studies, whereas the qualitative studies often take a very broad approach and don't narrow down on specific issues to empirically test propositions or build new theory based on thorough fieldwork. Although some scholars have contributed greatly to our understanding of cross-sector collaborations (e.g. Austin 2000a, 2000b, 2003; Austin et al. 2004; Berger et al. 2004; Googins & Rochlin 2000) the number of scientific studies is rather limited, especially in business and management literature. This is unfortunate for a number of reasons. First, the number of cross-sector collaborations has increased and is 'becoming part of business as usual' and will be even more common in the future (Waddell 1999). For instance, Weiser et al. (2006) refer to statistics from the Center for Corporate Citizenship that show 38% from 515 American SMEs formed partnerships with local nonprofits, 22% with national nonprofits and 20% with state and government agencies. Cross-sector alliances have also emerged in a number of non-Western countries (Austin, Fericco et al 2004). As claimed by Lodge and Wilson (2006: 61) "large numbers of smaller NGOs or local branches of international NGOs work at the country level with MNCs in developing countries." Thus, we are dealing with a phenomenon that is happening worldwide. Second, existing research focused on specific forms of cross-sector alliances (Andreasen 1996) such as corporate philanthropy or slightly more integrated forms of collaboration in which both partners give and receive from each other such as cause-related marketing projects. However, the past few years there is a clear shift observable to more integrated forms of collaboration which involves “more and different types of bilateral resource flows and generate greater value to businesses, nonprofits, and society than the traditional approach“ (Austin, Reffico et. al 2004: 3). Although such highly integrated forms of collaborations have been studied by some scholars (e.g. Austin 2000a/b; Googins & Rochlin 2000; Berger et al. 2004) these forms are getting so complex that oversimplified conceptualizations are not sufficient. Third, the characteristics of cross-sector collaborations differ substantially from traditional business alliances (Himmelstein 1997; Austin 2000b; Weimer & Samu 2003). Therefore, existing research on traditional strategic alliances may not be fully applicable and may thus need to be adapted. For instance, whereas business alliances focus on the development of new products and technologies or the exploitation of new markets, cross-sector alliances are formed by organizations with entirely different missions (Andreasen 1996). Fourth, as argued by Weiser et al. (2006) doing business in ‘untapped markets’, i.e. underserved markets in the developed and underdeveloped world, requires collaboration. They argue that companies that successfully tapped from these underserved markets had collaborated across sectors to gain access to knowledge, skills, resources and connections. Additionally, Waddell (1999) asserts that cross-sector alliances will become more important because nonprofits posses knowledge about low-income communities and of developing countries, and that companies should focus more on these markets due to the pressures of increasing competition and globalization. Weiser et al. (2006: 179) say that cooperation with nonprofits makes sense as they possess valuable information about such new markets, have worked in them and are connected to influential individuals who can make a difference because they enjoy respect among the constituents due to their reputation, and finally because they possess exceptional expertise. Fifth, becoming more familiar with cross-sector collaborations will help business and nonprofit managers span the boundary between sectors, especially since they are the ones who should actually work across sectors and thus should know how to cross these borders (Berger et al. 2004; Goerzen 2005). This argument is strengthened by the fact that socio-economic problems become increasingly more complex and go beyond the capabilities of single organizations (Googins & Rochlin 2000; Manga & Shah 2004; Berger et al. 2004). Particularly with regard to some of the world's most pressing problems, partnerships with business has become a necessity as becomes clear from a study on the United Nations: "in order to induce change and improve the living conditions of billions of people in a sustainable manner, partnering with business and civil society is more than just an option. In many ways, it has turned into a necessity for the United Nations in order to get the job done" (Witte & Reinicke 2005: 2). Although the UN system will certainly become more effective from increased integration with multinationals and the forprofit sector in general, this dissertation repudiates that it is the task of the UN-system or bilateral development agencies to solve the world's problems.

In summary, there are several reasons why more research, and particularly empirical research, on cross-sector collaborations is necessary. In the words of Austin (2000a: 93): "{It] … is an important and expanding phenomenon that merits further study. There is a need for further field-based research to expand the empirical database on such collaborations."

*Why do alliances form: motivations and benefits*

Traditional alliances generally create business opportunities, whereas the growth of alliances in the social sector is more likely to be a response to threats such as decreasing funding or escalating needs and they intend "to reform, to eliminate duplication, to break down walls between organizations serving the same community" in order to be better able to respond to social needs (Sagawa & Segal 2000). But there is no single reason why companies and nonprofits collaborate, although the growth in partnerships in both the business and nonprofit sectors may actually have inspired organizations from both sectors to cooperate. Thus, the recent increase in cross-sector alliances can be explained by a number of reasons. Austin (2000a) makes a division between macro forces and micro forces. Regarding macro forces he reasons that powerful political, economic and social forces generate rapid structural changes. As examples he mentions the diminishing trust in trust in government as problem-solver, the decreasing governmental aid for an ever-increasing number of nonprofits (Porter & Kramer 2002; Berger et al. 2004), and the inability of nonprofits to deal with the ever-growing complexity of social problems. Organizations from the civil society sector are therefore turning toward the corporate world for support in achieving their missions (Wymer & Samu 2003; Berger et al. 2004). But also at the micro-level there are ample reasons why both nonprofits and companies are reaching out to each other. In general terms, Segawa and Segal (2000: 237) write that "*the business and social sector have a common interest in working together and much to learn from one another,*" and argue that the social sector should learn to be more competitive, customer driven, results-oriented, enterprising and market-oriented, whereas the business sector should learn to be more mission-driven, board-lead and become more attractive employers.

In more generic terms Austin, Reffico et al. (2004) argue that both nonprofits and companies can be driven by altruistic and utilitarian motives when engaging in a cross-sector partnership. As altruistic motives they identify risk-management and the creation of competitive advantage. Concerning the former, they found that nonprofits primarily want to diversify their revenue sources and become less dependent on public funding. Although companies are most often driven by utilitarian motives (Iyer 2003), they identified that altruistic motives related to risk-management varied from obtaining an 'operating license' to a top-down obligation from their multinational headquarters to communicate with the community. Also regarding the creation of competitive advantage the research group observed that organizations from both sectors leveraged the cross-sector partnership to improve market positioning (Austin, Reficco et al. 2004: 37). One conclusion they draw from the studied cases is that an organization's initial motivations for a partnership do not really matter as long as the collaboration serves both partners.

Regardless whether the motivation of companies and nonprofits is based on utilitarian or altruistic principles, for both types of partners there exists a wide variety of benefits. Several scholars and representatives of organizations involved in studying and promoting cross-sector collaborations have described these benefits. The following two sections discuss them for companies and nonprofits when they cooperate across sectors.

<u>Benefits for companies</u>

Many scholars have discussed the benefits companies can enjoy while collaborating with partners from the nonprofit sector. First, through cross-sector partnerships companies can lift on the good image, reputation and brand of the nonprofit (Andreasen 1996; Yaziji 2004). This can improve the reputation of the company itself (Austin 2000b; Sagawa & Segal 2000; Warner & Sullivan 2004; Weiser et al. 2006) and lead to increased consumer patronage and investor appreciation (Austin 2000b). In times a company faces external criticism or in times it is searching for approval from external stakeholders, it may draw on its balance of good deeds and its image of a socially responsible company (Austin 2003), i.e. the partnerships can create legitimacy (Yaziji 2004). Googins and Rochlin (2000) and Warner and Sullivan (2004) speak about a 'license' or 'freedom' to operate, which can give support during times of crisis. A partnership may also even head off troubles (Yaziji 2004) as companies negotiate about potential problems before problems arise. Second, it can expand the corporate network (Yaziji 2004; Millar et al. 2004) or benefit from a nonprofit's charismatic leader, which can both enlarge the company's market. Particularly when a company wants to enter a new market, leveraging a nonprofit's network can aggregate small markets into meaningful larger ones (Waddell 1999; Burlingame & Young 1996; Googins & Rochlin 2000; Warner & Sullivan 2004) or reduce its costs, e.g. through lower advertising expenses, and thereby lead to increased sales (Weiser et al. 2006). Another benefit is that nonprofits are sometimes very sensitive to changes in the market and can foresee shifts in demand even before the company does (Yaziji 2004). Third, volunteering for a nonprofit can lead to strengthened organizational commitment by building an improved service-oriented mentality, strengthen employee loyalty and morale and increase job satisfaction (Waddell 1999; Austin 2000b; Googins & Rochlin 2000; Sagawa & Segal 2000; Rondinelli & London 2003). Furthermore it may increase the management, leadership and teamwork skills of the employees (Austin 2000b). All these benefits together can increase the productivity of employees and serve as organizational glue, which can benefit the company in difficult times and form the basis for assessing whether potential business partners share similar values (Austin 2000b). Fourth, companies can make use of the nonprofit's technical expertise and ability to innovate (Weiser et al. 2006; Yaziji 2004), particularly since they have knowledge about their communities (Waddell 1999; Googins & Rochlin 2000). They can in fact accelerate innovation by providing their business partners with an impetus to develop their technologies even further than what the companies would have done without the nonprofit partner because they are given reassurance about existing but unmet needs (Yaziji 2004). Particularly with regard to the Bottom-of-the-Pyramid, nonprofits are much closer to the end users than companies and they are therefore able to influence the design of new products. Besides actual development, nonprofits can also help testing new technologies (Austin 2000b; Kanter 1999). Fifth, cross-sector collaborations can enrich corporate strategy through meaningful community engagement (Austin 2000b). For instance, Waddell (1999) and Yaziji (2004) believe that partnerships can serve as a vehicle through which stakeholders outside the corporate structure can be represented. As such, the involvement of external stakeholders can provide the company with an early warning network through which potential problems of corporate activities can be signaled. It can thus function as a way to manage and reduce risks, which is a primary reason for why companies are hesitant to deal with the BoP markets (Kanter 2007). Finally they can benefit the process of corporate social innovation when nonprofits uncover assumptions that are so deeply embedded in companies that they are not even recognized (Waddell 1999; Kanter 1999). The idea that the BoP is not a viable market for companies is such an assumption (Prahalad 2005). Sixth, Sagawa and Segal (2000) expound on the level of effectiveness of marketing exchanges. Although focusing on the United States, they explain that cause-related marketing reaches many more people at much lower prices than with traditional marketing methods. The nonprofit's cause and its level of appeal to the target audience of the company is a strength from which the company can benefit as well, particularly when the cause is deemed especially urgent (Andreasen 1996). Despite the positive contributions of marketing exchanges, they mention that collaboration may also bear risks as they can be time consuming or may cause damages to the company if the nonprofit receives negative press coverage.

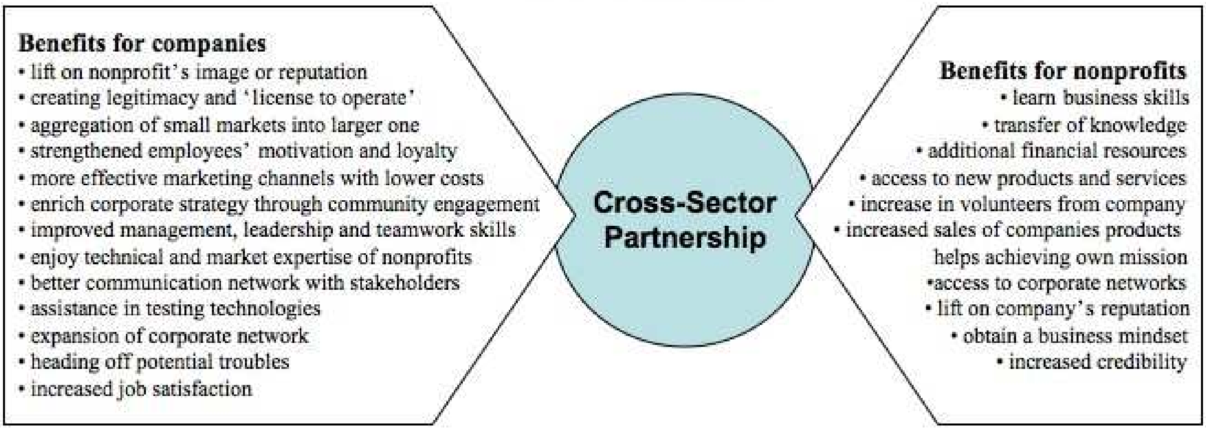
<u>Benefits for nonprofit organizations</u>

Besides the benefits enjoyed by companies, also nonprofits can gain much by cooperating with companies and often they perceive such partnerships as a necessary strategy (Murphy & Bendell 1999). Obviously in many cases the nonprofit benefits in financial terms or get access to new products and services when it starts collaborating with a forprofit entity (Smith

1994; Andreasen 1996; Austin 2000b, 2003). Second, the size of the company or its brand recognition (Andreasen 1996) may enhance the nonprofits image and credibility (Austin 2000b), thereby opening up access to additional financial resources and partnerships with other companies (Austin 2003). For instance, Porter and Kramer (2002: 64) say that companies "can publicize the most effective nonprofit organizations and promote them to other donors, attracting great funding and thus creating a more effective allocation of overall philanthropic spending." According to them there exist three underlying motivations:

1. the reputations of companies command respect, so they instill credibility
2. they can influence a large network, which gives the nonprofits a wider reach
3. companies have access to communication channels and expertise to disseminate information widely, quickly and persuasively

**Figure 6.1 - Benefits for companies and nonprofits through cross-sector collaboration**




Third, Weiser et al. (2006) believe nonprofits can benefit from the companies' core competencies and the ability to transfer knowledge and technologies (Smith 1994; Austin 2000b), including their capabilities to innovate, decision-making and communication skills (Smith 1994). Fourth, they can learn new business-like approaches from companies, thereby becoming more efficient and able to offer better products and services (Smith 1994; Austin 2000b). Through cooperation, nonprofits can often share facilities, services or activities that may reduce or eliminate duplicative costs or excess capacities (Austin 2000b). Similarly it spurs economies of scale through the combination of similar focus markets, client bases or purchased inputs. Fifth, nonprofits may benefit from company volunteers (Smith 1994; Austin 2000b) which fosters the transfer of knowledge to the nonprofit.

*The risks of cross-sector collaborations*

Although cross-sector collaborations can bring substantial benefits to the business and nonprofit partners, they also carry along certain risks. When partnerships fail or have been very unproductive, partners from both sectors could potentially loose many valuable resources, including much staff time. This is a potential problem when unrealistic and unachievable goals are set for the partnership or when one of the partners shows a lack of fulfillment of the agreements (Warner & Sullivan 2004) or even breaks promises. For instance, it can disturb external relations or cause problems to comply with environmental and social obligations and those towards its investors and regulators (Warner & Sullivan 2004). Organizations from both sectors may also experience their partners are putting too many restrictions on their own activities. In particular companies sometimes adopt a paternalistic attitude towards their counterparts (Warner & Sullivan 2004) and can put a lot of restrictions on their nonprofit counterparts who thereby loose a lot of flexibility and autonomy. Nonprofits also run specific risks when cooperating with partners from the nonprofit sector. It may loose valuable resources, including manpower, when the collaboration fails. As a result it may also loose credibility and face a reduction in donations. When a partnership with a company fails it may lead to an immediate halt of financial resources. Nonprofits may make the strategic error to cooperate with a company that is associated with superficial campaigns, overpriced and inferior products and services, or which pursues a mission that is antithetical to the nonprofit's one (Andreasen 1996). And finally, a partnership may become such a success that the nonprofit is not able to deal with potential consequences such as structural atrophy (relying to much on the funding of one major donor) or loosing donors or other partners and supporters when the major partner falls away (Andreasen 1996). During the partnership itself the nonprofit may find itself loosing flexibility as the company imposes restrictions on its activities, whereas a loss of credibility of the partner, e.g. due to an environmental scandal, may have serious consequences for the nonprofit (Andreasen 1996). For instance, its own mission may be tainted or become diverted from its original one (Austin 2000a). Finally, by teaming up with nonprofits, companies can provide them, and by extension also their competitors and regulators, with valuable or sensitive information, such as certain technical knowledge, strategic plans and financial information (Yaziji 2004). Additionally, the partnership may bring along greater scrutiny by the public, the press and regulators (Warner & Sullivan 2004; Yaziji 2004) and thereby lead to consequences that the company initially tried to prevent from happening.

*Problems in cross-sector collaborations*

Besides several risks there are also some problems that can confront both types of organizations. These problems can be divided into two broad groups: internal organizational problem and intra-organizational problems. The first group concerns those problems which businesses and nonprofits can experience while considering, starting up or managing a cross-sector partnership. For instance, Waddell (1999) says initiators and managers of cross-sector partnerships often face organizational barriers because their projects are downgraded to non-core business departments. He argues this is a result of existing stereotypes and poor understanding of the clear benefits such alliances could bring. "*Some assumptions,"* he says (1999: 11/15)*,"are so embedded in the way an organization works, that they are not even recognized.*" Specifically with regard to the Bottom-of-the-Pyramid, Prahalad (1999, 2005) mentions several paradigmatic assumptions that live strongly within companies and which prevent them from doing business with the poor. For instance, it is often assumed that the poor cannot afford western-style products or have no need for new technologies. Weiser et al. (2006) claim that partnerships can challenge such orthodoxies. Setting the objectives of a partnership often start with having great ideas about solving a social, economic or environmental problem. Although it is mostly only the nonprofit pursuing such goals, partnerships can help businesses overcoming assumptions about the achievability of such objectives while still adhering to their own missions.

The second group concerns problems between organizations. It was already mentioned that organizations from both sectors differ substantially from each other. Several scholars identified important differences between businesses and nonprofits that become particularly prevalent in cross-sector collaborations. Differences have been noted in a number of areas, including world views and status, decision-making styles, personnel competencies, emotional content, organizational structures and staffing, competitive dynamics, incentive and motivation structures, performance measures, professional languages and organizational cultures, and finally strategies, operating approaches and management styles (Austin 2000a, Sagawa & Segal 2000, Googins & Rochlin 2000; Rondinelli & London 2003; Berger et al. 2004; Selsky & Parker 2005; Weiser et al. 2006).

Berger et al. (2004) argue that due to such differences it is not easy to span the boundaries between companies and nonprofits. Based on 69 interviews with representatives of partners to eleven social alliances, they identify six predictable problems that stem from the inherent differences. First, the partners may have simplistic understandings of each other's endeavors and contexts which may lead, for instance, to unrealistic objectives, expectations and time-frames of the partnership. This problem has also been acknowledged by others (e.g. Yaziji 2004), but once the possibility for stereotypes has been recognized it can form the beginning of an upwards spiral: "*The cultural differences between these groups* *make individuals from each of these constituencies foreigners in a foreign land when they cross over into one another's territory, and thinking about these differences in these terms can be a powerful means of understanding and navigating them successfully*" (Laufer Green Isaac 2004: 17). Second, differences may lead to a misallocation or unfair distribution of the costs and benefits of the partnership. For instance, companies may feel that their benefits are too low in comparison with their nonprofit partner. Linked to this is the fear of loosing control while in the partnership (Rondinelli & London 2003). Third, it may lead to a mismatch of power. Typically the stronger partner, most often the partner bringing more resources to the table (Wymer & Samu 2003), which can also be the nonprofit, assumes that its timelines, priorities, structures, and processes should take precedence, resulting in unreasonable demands. Fourth, a variety of differences can ultimately lead to the conclusion that partners do not match. This mismatch is particularly probable when partners do not have sufficient complementary skills and resources which can prevent a value-creating synergy to happen. Fifth, the lapsing of time can lead to serious obstacles for alliance partners to continually renew their relationship. And sixth, differences may ultimately lead to mistrust among the partners, which is also recognized by Weiser et al. (2006) and Yaziji (2004).

*Solving problems in cross-sector collaborations*

Despite the substantial differences between nonprofits and businesses, and the problems they can lead to in cross-sector alliances, they do not have to be problematic as long as the partnering organizations are aware of them on understand what influence they can have on themselves (Waddell 2000; Covey & Brown 2001; Selsky & Parker 2005). Berger et al. (2004) put forward two sets of issues that can serve as a tool to anticipate and mitigate potential problems. The first set consists of nine dimensions of fit between the partners to a cross-sector alliance, i.e. fits on the dimensions of mission, resources, management, work force, target market, product-cause, culture, cycle (whether agendas meet, i.e. time) and evaluation criteria. The better the partnership fit, the likelier the results are more positive. For instance, with a high level of mission fit the partners are more likely to give a high priority to collaborative activities. Similarly, when there is a target market fit both partners are more likely to understand and support each others missions, e.g. through volunteering. The second set of issues concerns structural characteristics of the company, the nonprofit and the social alliance. Variations in structural characteristics of both partners may have significant consequences for the alliance. A nonprofits' structure depends to a large extent on the following characteristics: whether it carries out its own projects or raises funds for other nonprofits; whether it is centrally controlled or by local and regional units; whether it is a large and well-known established organization or small and entrepreneurial; whether it is involved in revenue-generating activities or not; and finally whether it is inherently embracing collaboration with the forprofit sector or not. A company's structure depends upon the following characteristics: whether it flat or hierarchical; whether it has a broad consumer market or a more specific target market; whether it has a direct sales force or a retail presence; and finally whether is pre-eminent or less eminent. And to conclude Berger et al. (2004) identified six structural characteristics of an alliance that can help mitigating or even preventing problems during the collaboration. These dimensions are: whether the alliance is on a brand-level versus the company-level; whether it has a dedicated alliance manager or not; whether it has a dedicated marketing budget or not; whether the company gives the nonprofit fixed or variable donations; whether the alliance provides opportunities for grassroot engagement of company employees and customers; and finally whether there are few or many marketing initiatives. These structural differences of the companies and nonprofits, as well as the alliance, may lead to a large number of combinations. None of these combinations is by definition better than the other, but identifying them may contribute to preventing unrealistic expectations.

Referring to cause-related marketing, Andreasen (1996) offers advice to nonprofits in order to prevent potential problems. First, they should be explicit about the goals of the partnership, the expectations of the partners and the resources they commit. Also they should spell out how results will be measured. During the actual collaborative efforts they should communicate clearly with their partners, meet with them routinely, and look at the results of the partnership as honestly as possible.

*Different forms of strategic alliances*

The literature shows there are multiple ways to categorize cross-sector collaborations, as summed up in table 6.2. Some scholars make a distinction between the type of organizations that are involved in the partnership. For instance, Selsky and Parker (2005) make the obvious but still important distinction between four arenas: nonprofit-business collaborations, government-business collaborations (i.e. public-private partnerships), government-nonprofit collaborations and finally tri-sectoral collaborations. As said before, this dissertation primarily focuses on nonprofit-business partnerships.

A second way to distinct different types of partnerships is along the line of partnership characteristics. Sagawa and Segal (2000) subdivide cross-sector alliances into three categories: philanthropic exchanges, marketing exchanges and operational exchanges. In philanthropic exchanges companies donate resources, including goods and services such as staff time and free products. There are many different ways in which companies can offer these resources. They can restrict it to certain beneficiaries or geographic areas and align donations to the company's profile. When philanthropic efforts have a clear strategic purpose it is often referred to as strategic philanthropy. Porter and Kramer (2002: 58), however, argue that most corporate charitable programs have no relationship with the firm's strategy but "*are primarily aimed at generating goodwill and positive publicity and boosting employee morale,*" whereas "*true strategic giving … addresses important social and economic goals simultaneously, targeting areas of competitive context where the company and society both benefit because the firm brings unique assets and expertise.*"

Marketing exchanges are more recent and take place when a company associates with a nonprofit to satisfy consumer or distributor needs (Sagawa & Segal 2000) or, more comprehensive, it plans or executes "the conception, pricing, promotion or distribution of goods and services to create exchanges that satisfy consumer, franchisee or distributor needs and wants."[16] Examples of marketing exchanges include event sponsorships. Cause-related marketing is a particular form of cross-sector alliances in which companies associate with a particular cause, e.g. lowering cholesterol intake or promoting designated drivers. Andreasen (1996) sees three forms of marketing alliances:

1. *transaction-based promotions*: donation of cash, food, equipment
2. *joint issue promotions*: tactics such as distributing products and promotional materials, and advertising
3. *licensing* of the names and logos of nonprofits to corporations in return for a fee or percentage of revenues.

Austin (2003) distinguishes four forms of marketing alliances: institutional marketing, cause-related marketing, market development and internal organizational marketing.

In operational exchanges companies are helped by nonprofits to improve the capacity to produce goods and services more competitively. Sagawa and Segal (2000) note that such exchanges closely resemble traditional business alliances, but still differ because they include a philanthropic dimension, offer interesting marketing opportunities and, most importantly,

[16] Dictionary of marketing terms, 2nd edition, edited by Peter D. Bennett and published by the American Marketing Association, © 1995

further a social mission. Clearly, the case studies dealt with in this dissertation should be categorized in this group, because all the nonprofits (and public sector organizations) enable the company to introduce new products and service on a competitive basis at the Bottom-of-the-Pyramid market. Sagawa and Segal's division is somewhat fluid as some exchanges may fall into two categories. Wymer and Samu (2003) present a typology of business-nonprofit organization relationships.

**Table 6.2 – Categorization of cross-sector collaborations**

| Author(s) | Key variable | Categories | Remarks |
|---|---|---|---|
| Selsky & Parker (2005) | The different sectoral backgrounds of the partners to the collaboration. | 1. nonprofit-business<br>2. government-business<br>3. government-nonprofit<br>4. tri-sectoral | This dissertation focuses primarily on the first group of cross-sector collaborations, although in some case studies public-private partnerships play an important role. Otherwise, this division is too obvious to add any value to our understanding of the phenomenon. |
| Sagawa & Segal (2000) | Primary partnership characteristic | 1. philanthropic<br>2. marketing exchanges<br>3. operational | Although useful as a generic categorization of cross-sector partnerships, this static division does not allow for additional analysis. |
| Rondinelli & London (2003) | Level of intensity of the collaborations between the partners | 1. arm's length intensity<br>2. moderate intensity<br>3. high intensity | The division makes sense, and the authors use empirical data from collaborations between companies and environmental nonprofits to devise a framework that can assists executives in assessing the feasibility of a partnership. |
| Googins & Rochlin (2000) | Level of dependency between partners | 1. reciprocal exchange between partners<br>2. joint value creation<br>3. joint value creation to achieve higher goals | This division neglects lower-intense "one-way" collaboration such as strategic philanthropy. However, these authors make a clear distinction between group 2 and 3 and thus acknowledge that some value can only be created when partners are strongly connected and thus dependent on each other. |
| Austin (2000a) | Intensity of the collaboration along a continuum | 1. philanthropic<br>2. transactional<br>3. integrative | The Collaboration Continuum allows for deeper analysis of the underlying dynamics of collaborations and provides starting points for under-standing how to change relationships to a higher intensity level. |
| Davy (2004) | Level of integration in terms of ownership and control | 1. nominal added value<br>2. subcontracting<br>3. build-operate-transfer<br>4. shared work-plan<br>5. shared responsibilities<br>6. independent community development institutions | While this division is justifiable, the categories may be too rigid and not allow for deeper analysis about the underlying dynamics of the collaborations, as is the case with Austin's model. |

They identify seven categories – corporate philanthropy, corporate foundation, licensing agreements, sponsorship, transaction-based promotions, joint issue promotions and joint ventures – and order these along two dimensions. The first dimension concerns the degree a business pursues its own benefits versus furthering the cause of the nonprofit, and the second dimension deals with the proportion of power sharing.

A third way to distinguish partnerships is not by looking at the sectors from which the partners come or by making a division between internal characteristics, but by observing the level of partnership intensity. Austin (2000a) introduces the Collaboration Continuum in which he identifies three stages: philanthropic, transactional and integrative. In a philanthropic relationship the partnership between company and nonprofit is typified by charity from a company to the recipient. Transactional relationships are characterized by an exchange of resources between partners and concern activities such as cause-related marketing, event sponsorship, licensing, and paid service arrangements. Moreover, it is much more a two-way relationship between company and nonprofit. In integrative relationships, the partners' missions, people and activities are more collectively organized. Similarly Rondinelli and London (2003), although focusing specifically on collaborations between companies and environmental nonprofits, identify three types of cooperation divided by their level of intensity: (1) low 'arm's length' intensity, such as voluntary participation in nonprofit environmental activities, corporate contributions and gifts to nonprofits, and corporate nonprofit marketing affiliations; (2) moderately-intensive interactive collaboration; and (3) highly intensive formal environmental management alliances. Finally Googins and Rochlin (2000) acknowledge a division in partnerships based on ascending levels of dependence between the partners, which is quite similar to Austin's classification (2000a). The first stage consists of reciprocal exchange that simply refers of a traditional transactional relationship such as cause-related marketing projects and strategic philanthropy programs.

The second stage is developmental value creation that requires that the partners work jointly on value-creating projects. In order to do so they will have to draw up a common partnership plan that meets the objectives of both partners. And in the final stage both partners create value in a symbiotic way through a mutually dependent exchange of ideas, resources and efforts, in order to achieve more ambitious goals.

A fourth way to differentiate between different types of partnerships is to look at them from the perspective of ownership and control, as is done by Davy (2004). This 6-model approach progresses from loosely integrated forms to highly integrated ones:

1. *nominal added value*: a promoter of one organization owns and is in control of the outcomes of a program but is supported by the contributions of one or more partners which makes innovation and synergies possible.
2. *subcontracting*: the responsibility for the outcomes of the partnership project is in the hands of only one of the partners, normally a service-delivery organization (e.g. an NGO), whereas the other partners finance the project or advice and consult.
3. *build-operate-transfer (BOT)*: in these partnerships nonprofits, but possibly also private-sector parties, are subcontracted and paid for by public agencies to develop certain projects which are ultimately transferred to the public sector.
4. *shared work-plans*: these partnerships are characterized by sharing control over the tasks of planning and implementing the activities, thereby engendering a feeling of ownership instead of simply participation.
5. *shared responsibilities*: this type of collaboration is one step more integrated than shared-work plans because partners share the responsibilities of the outcomes. Therefore the collaborations are characterized by mechanisms on joint decision making, grievance and accountability.

6. *independent community development institutions (trust funds and foundations)*: these are highly integrated forms of partnerships which provides all partners with a share ownership and control, and which offer institutional flexibility and independence and potentially enjoy equitable representation in strategic decision making.

*The nature of collaborating across sectors*

The partnership categorization of scholars such as Rondinelli and London (2003), Googins and Rochlin (2000) and Davy (2004) are useful because they acknowledge different levels of partnership intensity. However, it is Austin's (2000a) Collaboration Continuum with the seven concomitant partnership aspects that offer most opportunities for further elaboration. His three-stage continuum – philanthropic, transactional and integrative – is a fluid framework that enables the partners to the collaboration to define the type of relationship they have and how it is developing. Moreover, it can help them to evaluate what changes are necessary to move to a higher stage on the continuum. The following seven partnership characteristics all reflect different levels of intensity and this explains also the dynamics of partnerships between the three stages: level of engagement, importance to mission, magnitude of resources, scope of activities, interaction level, managerial complexity, and strategic value. This framework thus moves beyond other frameworks and enables better analysis of the partnership. Moreover, Austin (2000) introduces three other useful tools that can be useful for the analysis of cross-sector partnerships. The first one concerns the Collaboration Value Construct which has four dimensions: (1) the definition of expected benefits to the partners before an alliance begins, (2) the creation of value during the alliance, (3) the balance of value during an alliance, and (4) the renewal of value creation during an alliance. The second tool concerns the identification of four alliance drivers that determine the alliance dynamics:

1. alignment of strategy, mission, and values – the more these aspects are aligned between the partners, the higher the probability for success.
2. personal connection and relationships – partnerships depend to a large extent on such relationships as they glue the organizations together
3. value generation and shared visioning – combined resources and capabilities can generate much value, particularly when the partners envision enriching and powerful engagement opportunities.
4. continual learning – the partnership can benefit much from partners that engage in a process of continual learning on how to generate more value.

Austin's (2002) fourth tool concerns those factors that enable the effective management of partnership. There are four: (1) focused attention, i.e. engagement by the partners' key decision makers and giving the partnership high internal visibility and priority, (2) communication, i.e. establishing multiple channels for formal and informal communication which allows for honest and constructive criticism, (3) organizational system, i.e. defining the tasks and responsibilities, as well as incentives, for the partnership managers, and (4) mutual expectations and accountability, i.e. making clear what each partner expects in terms of deliverables.

*Stages in building cross-sector collaborations*

Besides conceptualization of why partnerships form, the benefits that business and nonprofits derive from them, the concomitant risks and problems, and the different forms of such strategic alliances, several scholars have also studied more practical questions of what the different stages are in building cross-sector partnerships and how they should be managed. Several scholars argue that starting an alliance across sector begins with critical self-assessment (Sagawa & Segal 2000; Warner & Sullivan 2004). Elements of such an internal evaluation include the consideration of your needs and the cataloging of your own leverageable assets, such as your staff, products, networks and technical knowledge, as well as an examination of your organizational culture (Sagawa & Segal 2000). Austin (2000b) argues that it is important to understand what a cross-sector partnership exactly entails. His four frameworks – the Collaboration Continuum, the Collaboration Value Construct, the Alliance Drivers and the Alliance Enablers – can be very helpful in gaining such knowledge. And finally it includes determining those issues that are probably managed best by the organization within a partnership, and consequently finding a champion to run the process and the development of a negotiation strategy (Warner & Sullivan 2004).

Finding a partner that meets the needs of the organization is described by several scholars as a next step (e.g. Sagawa & Segal 2000; Austin 200b). In doing so, Weiser et al. (2006) advice that potential partners are approached with due diligence, i.e. it is important to review the partner's experience, ability, resources, trade record, management, reputation, capabilities, trustworthiness, as well as those aspect not as clearly visible, including technical expertise, existing relationship and the ability to innovate, because these aspects are often most valuable in partnerships. Warner and Sullivan (2004) also argue that assumptions about external stakeholders be validated in order to prevent problems such as described by Yaziji (2004). The earlier mentioned nine dimensions of partnership fit (Berger et al. 2004) may be useful additional tools in making these analyses.

Making the connection means that two potential partners become engaged in a shared process of exploration about what the alliance will look like, how it will run, and what results it will produce (Sagawa & Segal 2000; Austin 2000b; Warner & Sullivan 2004). In this process I it is important to ensure that partners find a strategic fit (Austin 2000b, Berger et al. 2004), in which motivations of both partners are made clear (Sagawa & Segal 2000). This is also the moment when partners to the alliance should start building trust among each other.

Regarding the partnership between Nokia and the International Youth Foundation, Weiser et al (2006: 187) refer to importance of building up trust: "*It takes a lot of time up front, but creating this kind of social capital pays off by making the partnership more effective, more efficient, and more sustainable.*"

After a successful connection with a potential partner, both organizations should put efforts into building up the partnership. Developing organizational capacity has been mentioned by several researchers (Warner & Sullivan 2004). Weiser et al. (2006) specifically argue that companies should invest in improving the capacity of their nonprofit partners because they often lack the financial and human resources to scale up projects. The partners should also agree on principles for building consensus of a common vision and the objectives of the alliance, as well as agree on the resources, roles and responsibilities of each partner (Warner & Sullivan 2004). And finally the partnership should be tested to learn whether partners can work together effectively for mutual gain (Sagawa & Segal 2000). Also in this stage Austin's (2000b) Collaboration Value Construct can be of great help to assess whether the partnership can potentially create value for both partners, how it can be balanced between them, and how it can be renewed.

The final stage is to further build up the alliance and extend the relationship beyond the initial exchange by resolving potential differences and by developing additional activities (Sagawa & Segal 2000). Weiser et al. (2006) argue that having ambitious visions can have a positive effect on goal setting and the realization of them. Maintaining an initial success, however, is not easy. As described by Warner and Sullivan (2004) many causes could cause a change in the partnership, including unanticipated behavior of partners, the notion that partners have insufficient capacity to fulfill commitments, changes in the external environment, and the completion of milestones in projects. Therefore, they argue it is important to always maintain an ongoing, candid and reciprocal communication (Warner & Sullivan 2004; Sagawa & Segal 2000).

*Managing partnerships and parameters for success*

Once the partnership has gone through the start up phase, it will have to be managed further in order to enlarge its chances for success. Several scholars have given an outline of the different actions to be taken by the partners to manage the partnership well. Weiser et al. (2006) believe there are four steps in successfully managing a partnership: (1) apply entrepreneurial management strategies, (2) innovate on the existing business model, (3) institutionalize the partnership through the establishment of multiple points of contact, ensuring internal organizational support, aligning the operating assumptions of partners, and phasing in measurement, and (4) knowing when to end the partnership. Warner (2004a) gives six principles for maintaining a partnership: recognizing reciprocal obligations, having clear work-plans, maintaining internal communications, adapting to internal and external events, measuring added value and reflecting on and learn from the experiences. Despite these ideas, and the plethora of practical managerial guides and toolbooks, there is a relative large gap in the scientific research on how to manage cross-sector collaborations. One exception concerns the research of Rondinelli and London (2003). Based on interviews with managers in a small sample of environmental business-nonprofit alliances, they identified six strategic criteria that contribute to the effectiveness of environmental management alliances: the identification of projects and resources, the formulation of criteria for partner selection, the development of mutually acceptable criteria for collaboration, the clear definition of problems and the exploration of feasible and measurable solutions, the willingness to focus on a manageable set of tasks, and finally the maintenance of confidentiality. Drawing upon his research with cross-sector collaborations in the United States, e.g. between Starbucks and

Care, Austin (2000b) identified five key areas in relationship management: organization, trust, communication, accountability, and learning.

Shaw (2003) writes that the literature on strategic alliances identified eight main characteristics for success in collaborative projects in the for-profit sector, namely: trust, flexibility, understanding, balance of power, shared mission and enthusiasm about the expect outcomes, compatibility and good personal relationships, communication or the sharing of information, and finally the commitment of top-management (Bergquist et al. 1995, Child & Faulkner 1998, Lober 1997). Although these characteristics appear to be logical determinants for the outcomes of an alliance, in and of themselves they are not actual parameters of success.

Weiser et al (2006) argue that pure transactional relationships are not win-win partnerships (Austin 2000a). Thus, charitable activities don't make a partnership successful. For that they propose some other considerations. First, partnerships should at least have shared goals and objectives (Lober 1997; Child & Faulkner 1998; Bailey & Koney 2000; Austin, Reficco et al 2004). Second, Weiser et al. (2006) argue that in successful partnerships there exist mutual expectations to produce specific products and services for all partners, i.e. each partner should help the other to each their goals (Austin, Reficco et al. 2004). Third, there should be a division of labor and resources. Especially the provision of talented staff, skills and competencies is important, not just financial resources. Fourth, successful partnerships should be formalized in a formal or informal agreement, e.g. a memory of understanding. And fifth, the partners should be committed to a long-term relationship.

Despite the relative paucity on empirical research about the actual outcomes of cross-sector partnerships, Selsky and Parker (2005) identify three levels of measurement: 1) the direct impact on the issue and its stakeholders, (2) the impact on building capacity, knowledge or reputational capital that can attract new resources, and (3) the influence on social policy or system change. They add that measurement takes most often place in businesses and is underdeveloped in nonprofits. They argue that multidimensional social goals are difficult to gauge (Weisbrod 2005). Brown and Ashman (1996) propose four aspects of measurement, namely program reach, the number of people directly affected, the resources committed for future program sustainability and the successful alliance basis of trust for future alliances (Iyer 2003). Kanter (1999) identified six characteristics for successful private-public partnerships: a clear business agenda, strong partners committed to change, investment by both parties, rootedness in the user community, links to other community organizations, long-term commitment to sustain and replicate the results. Warner and Sullivan (2004) propose four aspects for successful partnerships: (1) firmness about compliance requirements and deadlines, as well as meeting values, (2) flexibility in how the underlying interests might be delivered (3) acceptance that there will be deviations from prescribed detailed social management or community development plans and (4) effort spent keeping investors and regulators informed of these changes.

Mitchell et al. (2004) propose some tools to measure the ‘added value’ of a partnership approach in comparison to alternative approaches, e.g. firms carrying out social programs on their own. It consists a few consecutive phases, starting with the scoping phase during which partners jointly determine key indicators of partnership impact and how these will be measures. In the second phase partners collect data and use them for identifying the magnitude of change in the indicators. In the third phase these changes are ascribed either to the partnership or to external factors. In the fourth and final phase each partners isolates its costs for the partnership and compares it to the benefits obtained. Although this method enables partners to measure the added value and way these against the costs, it does not offer parameters for success.

*Conclusions*

Although there are many publications on cross-sector collaborations, the scientific literature as such is still rather limited. Additionally, empirical studies are dispersed over a number of business, marketing, public affairs, nonprofit and international development journals, and they are often practitioner oriented. Moreover, such studies deal with an array of issues that can only be categorized under the broad research focus on cross-sector collaborations but fundamentally have little to similarities. For instance, disclosing the underlying motivations for cooperation makes no direct and obvious contribution to research on dispute resolution between partners. For that reason, this literature review dealt more with a diverse range of aspects than that it offers an integral overview of past research. Armstrong and Wilkinson (2007) list key criteria for appropriate reviews for the *International Journal of Management Reviews*. The first criterion is whether there is sufficient literature to warrant a literature survey. Although a lot has been written about the phenomenon, as said before, the number of peer-reviewed journal articles is very limited. Probably the review presented here does not qualify for a publication in an esteemed journal like IJMR, but an examination of existing literature forms a good starting point for understanding cross-sector collaborations at the BoP. Another criterion the IJMR editors make concerns whether the surveyed literature has been completely analyzed. Particularly they require authors to pay attention to a discussion of contrasting methodologies applied in the literature. As cross-sector collaborations are a relatively recent phenomenon most literature is descriptive in nature, i.e. one or more cases are described, although often not very extensively. Providing an overview with different methodologies that are applied is therefore rather pointless at this stage in time. Similarly, the topic has never been linked to any major economic or firm theory. For instance, traditional strategic alliances have been analyzed from a transaction costs perspective as well as from a resource-based view perspective. This dissertation makes an effort to link the literature on cross-sector collaborations to the latter theory of the firm. Still, as with any starting field of research, the search for specific focus areas and the establishment of a stream of related research takes time, which is strengthened by the calls of several scholars for more empirical research on the broad subject. Besides that objective, this chapter also provides the basis for a roadmap for my research on cross-sector collaborations at the Bottom-of-the-Pyramid. By identifying important aspects it is easier to focus on the likely most important questions that should be addressed in the five proposed cases. Thus, this review does not serve as a tool for distilling testable hypotheses but for gaining insight into the research landscape.

## PART III – FOUR BASE-OF-THE-PYRAMID BUSINESS CASES

This chapter presents four empirical business cases of cross-sector collaborations at the Base-of-the-Pyramid. The first case concerns the Breathing Space program from the Shell Foundation in India. This project aims to reduce Indoor Air Pollution by designing more efficient stoves with lower emissions, and by bringing them to the market through an innovative partially commercial business model. The second case deals with an automated milk collection system (AMCS) called Akashganga by Shree Kamdhenu Electronics Private Limited (SKEPL), a small technology company based in Gujarat, India. This product aims to make the process of collecting milk at the village level more efficient and transparent. The third case is about how AIG Uganda (American International Group) collaborates with micro-finance institutions to provide MFI clients with a short-term micro-insurance on outstanding loans. And the fourth case concerns a mobile payment system from Vodafone that is being rolled out first in Kenya in collaboration with Safaricom, the country's largest mobile communication provider. Besides desk research, all cases were studied in the field through conducting multiple interviews with key decision makers. The field trip to India took place in February and March 2007, and the field trip to Eastern Africa in September 2007. Additionally, several interviews were done by telephone.

**Table P3.1 – Overview of the case studies**

| Case study | Country | Product | Industry | Primary social impact |
|---|---|---|---|---|
| *Shell Foundation Breathing Space* | India | Improved cooking devices | Health | Lower Indoor Air Pollution |
| *SKEPL Akashganga* | India | Automated Milk Collection Systems | Dairy processing | More efficient and transparent milk collection at local cooperative level |
| *AIG Uganda* | Uganda | Micro-insurance | Insurance | Less negative consequences after death for borrower/MFI |
| *Vodafone-Safaricom M-Pesa* | Kenya | Mobile payment | Telecom / Finance | Safer and more efficient transfer and storage of money |

The first objective of this chapter is to elucidate the role of cross-sector collaborative efforts in developing and marketing four specific BoP products. In doing so, it pays attention to the background of the particular consumer needs the product wants to address, the development history, the partnering companies and organizations, the business model, the actual product, and especially the various partnerships between the company and nonprofit or public organization. Each case will be closed with summing up the findings. The second objective of this chapter is to provide the empirical data for answering the two guiding questions:

- Why do companies collaborate across the traditional business sector while introducing new products and services at the BoP?
- What are the partner's key resources and knowledge that companies want to obtain, have access to, or benefit from?

Once these questions are answered, the results will be used for devising a theoretical framework on cross-sector collaborations at the Base-of-the-Pyramid that is grounded on the Resource Dependency Theory and the Resource-Based View.

The choice for these particular cases results from a number of considerations. On the one hand there are several reasons why the number of appropriate cases for research on cross-sector collaborations at the BoP is rather small. First, BoP venturing as such is a relatively new phenomenon and therefore there exist only a limited number of identified BoP cases. Second, several of these cases have become quite known over the past years, e.g. CEMEX' Patrimonio Hoy in Mexico, GrameenPhone in Bangladesh and Hindustan Lever's Annapurna Salt in India. Third, it is very difficult to obtain basic information about the product or business model, which makes it difficult to ascertain whether it's potentially an interesting case for further, particularly when it is unclear to what extent cross-sector collaborative efforts are important for bringing goods and services to the BoP market or when not even the major partners can be identified. On the other hand, there are also reasons why the cases in this dissertation have been chosen. First, it was relatively easy to gather basic information about the products, business models and collaborating partners. Second, all cases deal with innovative products that potentially have a big impact on the lives of the users at the BoP.

Third, they seem to have interesting business models that provoke further study. Fourth, all cases show an apparent strong elements of cross-sector collaborative efforts. Besides these reasons, the paucity in research on this topic requires a broad approach at this point in time. Identification of the main issues and constructing an initial theoretical framework necessitates picking cases with varying backgrounds. They are therefore chosen from different industries and geographies, and deal with different products and services. Also the reasons for and intensity of cross-sector partnerships appeared to vary before the actual 'deeper' studies were conducted. As a result, it is expected to obtain both reinforcing and complementary data. Finally, all cases appeared to be successful after initial study and reach a large number of people, i.e. 1 million or more, or have the objective to do so over the next few years.

All four cases can be typified as actual 'BoP ventures' according to London's framework (2007). He argues that existing research shows there are six principles that set the BoP perspective apart from other poverty alleviation strategies. All cases that were studied for this research will be evaluated along the lines of this framework in chapter 11.

1. External participation: it involves the entry of an external company, organization or entrepreneur into the informal BoP economy
2. Co-creation: the business model and technology should be co-created with various local partners at the BoP to integrate the voices of the poor
3. Connecting local with non-local: it involves connecting BoP consumers to non-local products and services or taking local BoP products and services to non-local markets. In addition, London (2007) argues that BoP ventures involve partnerships with local organizations, community institutions and entrepreneurs at the BoP.
4. Patient innovation: the development of a successful BoP business model is paramount and should be seen as a long-term innovative process which involves a critical rethinking of existing ways to understand, evaluate and explore new opportunities.

5. Self-financed growth: sustainable BoP ventures should be based on self-financed profitable growth and competitive advantage, which derives from establishing mutual beneficial partnerships with local partners at the BoP.
6. Focusing on what is 'right' at the BoP: it encompasses the idea that the informal economy at the BoP has its own rationale in terms of existing resources, expertise and social infrastructure and that a venture's strategy should reflect that.

Although the cases are described in detail, the level of comprehensiveness of these descriptions, however, is limited due to a number of reasons. First, there is relatively little public information available on all cases I'm studying, which makes it really difficult to actually put the 'basics' together before going deeper into the practical issues of cross-sector collaboration of each case. This problem is exacerbated as each case takes place in a developing country in which many companies, nonprofits and public organizations do not have well-developed websites or happily give out standard information, such as year reports. Also, as the products and services are relatively new, additional third party information is often lacking. Second, it was sometimes difficult to contact key decision makers of the relevant partner organizations, either due to unavailability, unknown contact information, or initial hesitation to cooperate with interviews about their role and knowledge. Third, due to limited resources, including financial, and time restrictions of most managers of the key partner organizations, it proved difficult to go really deep into each case. Although all cases are certainly comprehensive, they are unfortunately not all-encompassing. Also, since virtually all interviewees were conducted with senior level managers, most of them project managers or otherwise higher echelon decision makers, additional interviews could only be conducted with lower-level managers who would unequivocally be less informed about the case in general and certainly the cross-sector collaborative efforts. Additional information would only have marginal value and would incur extra costs. Finally, by and large interviewees didn't want to share much financial or otherwise sensitive information, probably because of competition reasons due to the innovative character of the products and services. For instance, one manager remarked to a request for specific information “It is not my authority to disclose such a document.  You know why?  We’re in competition,” whereas another said “it’s probably not something we want to share” to the question on the profitability of one product.

## CHAPTER 7 – Case study 1: The Shell Foundation Breathing Space Program

*Introduction*

The Breathing Space project from the Shell Foundation focuses on offering a market-based solution to Indoor Air Pollution (IAP). [17] IAP affects a staggering 500 million households worldwide and leads to premature deaths of 1.6 million people, of which 450,000 in India. Breathing Space aims to achieve significant long-term reduction in IAP in two steps, namely:

- designing stoves that are more emission- and fuel efficient
- developing a sustainable way to get them into people's homes

Although not involved for financial gain, the Shell Foundation understands there is a market opportunity by providing the bridge between traditional ways of cooking and improved cooking stoves. The notion that these stoves should be offered in a sustainable way, instead of through traditional development initiatives is well captured in a quote from the Shell Foundation's Chairman Kurt Hoffman in a small film on Breathing Space: *"The problem of IAP is so large that there is not enough charitable money in the world to give away clean stoves to all the households*."[18] Therefore, the Breathing Space approaches IAP through a market-oriented and commercially viable method. The Foundation argues that governments and NGOs have only a limited impact because they don't reach enough people and that further spread of these technologies stops when the available budget is gone. On the other hand, the Foundation also recognizes that this particular market carries too much risk for a single company because of the high costs to establish an entire value chain whereas the final users cannot afford very much. It has therefore devised a partially commercial, albeit market-driven, business model in which both the forprofit and nonprofit sectors collaborate closely. The Foundation believes its role is (a) to provide training and seed capital, (b) to

[17] Unless otherwise indicated, information in this section is from www.shellFoundation.org on May 24, 2007.
[18] Available on www.aprovecho.net/media/shell/SF_Breathing_Space_wm8.wmv

support stove design and innovation, and (c) to activate its network to gain support from partners capable of removing barriers[19]

The Breathing Space program clearly shows how cross-sector collaborations are essential to solve health problems such as IAP. One manager of a nonprofit partners says: "Obviously, (…) for MNCs and for NGO's to come together, it makes complete sense, because the NGOs have the sensitivity of understanding what the people want [and] it is believed that the MNCs obviously have the capability to develop the solutions and responses." After several years of pilot projects in several countries, the program is currently scaling up and about to implement programs in five countries and has a vision to sell 10 million stoves over a period of 5 years. This section deals with the Breathing Space Program in India. It first expounds upon the problem of IAP, followed by a brief introduction of the Shell Foundation and the partners to the Breathing Space Program. Consequently it gives a comprehensive overview of the actual program in India by discussing the following aspects:

- the target group
- the technical design, testing and standard setting
- the business model
- the financing of the model
- the pilot projects, particularly those of the Appropriate Rural Technology Institute
- the plans for scaling-up the program
- the cross-sector collaborations in the Breathing Space program.

[19] Retrieved from a PowerPoint presentation "HEH Strategy Review" on July 10, 2007: www.vrac.iastate.edu/ethos/files/ethos2006/IHEHP/Shell%20Foundation%20Breathing%20Space%20Programme%20--%20Sharna%20Jarvis.ppt

*Indoor Air Pollution: a problem from the Stone Age*

The problem of Indoor Air Pollution (IAP) is caused by burning biomass fuels on open fires or traditional stoves, e.g. wood, dung, coals and agricultural waste. The smoke subsequently fills the often poorly-ventilated houses with noxious particles and chemicals, sometimes reaching 100 times the agreed international standards which can have a very harmful effect on the human body: "*The lung is the most common site of injury by airborne pollutants. Acute effects, however, may also include non-respiratory signs and symptoms, which may depend upon toxicological characteristics of the substances and host-related factors.*"[20]

**Table 7.1 - Basic information Indoor Air Pollution (IAP)**

| | |
|---|---|
| Causes IAP | Indoor burning of coal or traditional biomass (e.g. wood, dung, crop residues) on chimney-less open fires or low-quality stoves |
| IAP-pollutants | • Particles (mixture of solid form chemicals and droplets)<br>• Carbon monoxide<br>• Nitrous oxides<br>• Sulphur oxides (mainly from coal)<br>• Formaldehyde<br>• Carcinogens (increasing risk of cancer) |
| Health effects | • Acute lower respiratory infections<br>• Chronic obstructive pulmonary disease<br>• Lung cancer<br>• Other diseases for which there is emerging evidence of being IAP-related: low birth weight and perinatal mortality, asthma, otitis media and other acute upper respiratory infections, tuberculosis, nasopharyngeal cancer, laryngeal cancer, cataract, cardiovascular disease |
| People affected | 2-3 billion worldwide |
| Premature deaths per year | 1.6 million worldwide (estimated) |
| Global burden of disease IAP[21] | 2.7% (World Health Report 2002), 1 of 10 most important public health threat |
| Risk groups | Women and children |

Sources: World Health Organization, retrieved on November 6, 2007: www.who.int/indoorair/en/ and the publication "Designing principles for wood burning cook stoves" by the Aprovecho Research Center, the Shell Foundation and the Partnership for Clean Indoor Air.

It is estimated that still half of the world's population cooks in such ways and is unable to afford more expensive but cleaner fuels such as electricity, gas and kerosene. IAP receives relatively little attention, although according the World Health Organization its harmful

[20] Co-publication of the American Lung Association, American Medical Association, the U.S. Consumer Product Safety Commission and the U.S. Environmental Protection Agency. Year unknown. *Indoor air pollution: an introduction for health professionals.*

[21] Global Burden of Disease (GBD): A comprehensive demographic and epidemiological framework to estimate health gaps (q.v.) for an extensive set of disease and injury causes, and for major risk factors, using all available mortality and health data and methods to ensure internal consistency and comparability of estimates. Source: World Health Organization, www.who.int.

effects make it the most lethal killer after malnutrition, sexual transmittable diseases (including AIDS) and the lack of safe drinking water and sanitation. About 1.6 million people die annually as a result of breathing unhealthy indoor air, among which especially woman (59%) and children (<5 is 56%) as they spend a relatively large amount of time at home, light fires and do the cooking. IAP is responsible for about 2.7% of the global burden of disease, making it a top ten global health risk. India counts more than 400,000 IAP-related deaths per year.

**Table 7.2 – Burden of disease India due to IAP from solid fuel use, 2002**

| | |
|---|---|
| % Population using solid fuels | 82% |
| ALRI deaths attributable to solid fuel use (<5 years) | 251,560 |
| COPD deaths attributable to solid fuel use (≥ 30 years) | 155,250 |
| Lung cancer deaths attributable to coal use (≥ 30 years) | 340 |
| Total deaths attributable to sold fuel use | 407,100 |
| Total DALYs attributable to sold fuel use | 10,646,500 |
| Percentage of national burden of disease attributable to solid fuel use | 3,5% |

Source: World Health Organization, Burden of Disease Report 2007, retrieved on November 6, 2007: www.dcp2.org/pubs/GBD

Eva Rehfuess from the WHO says a link exists between IAP and pneumonia in young children, chronic obstructive pulmonary disease (e.g. bronchitis in adults and the elderly) and lung cancer. Additionally IAP is believed to be related to a number of other health problems, including tuberculosis, lung cancer and asthma among children, as well as low birth weight, stillbirth, cardiovascular disease and cataracts although scientific evidence is not yet available. One of the reasons why IAP receives just little attention is that the solutions, such as vaccines and treatments, are not as clear as with other diseases. Another reason is that the problem is not as acute and does not have a high profile such as HIV/AIDS or malaria. Also, it is argued that national plans do not recognize the economic contribution of those who suffer the most from indoor pollution, particularly because they often have a low status in society. As such, clean cooking is not acknowledged as important. Moreover, contrary to other diseases, IAP needs a variety of technical solutions, simply because people use different types of biomass fuels to cook (e.g. dung, wood, coal) and have different cooking traditions. Therefore a high number of stoves should be designed to reflect this diversity.

A solution to IAP does not only depend on attention from policy makers and engineers, but another obstacle to success is that the population at risk does not see the necessity for obtaining an expensive stove when open fires serve the purpose just as well. Besides the health benefits, doing away with cooking on inefficient stoves – often nothing more than a "three-point" open fire – there are other benefits for the people. Two of them are a reduction in the necessary fuel which has the advantage that less time is needed for collection and may give (especially) women alternatives to spend their time as is well captured in the following quote from a woman from Khanav, a village South from Mumbai: "I used to burn 10kg of wood each week but now I only need 5kg. It used to take me three days to collect this wood but now it takes only half that time."[22] On a more macro-level a reduction in fuel usage has serious consequences for the environment as well, namely a slowing down of the deforestation process.

A final difficulty to introduce these technologies concerns the remoteness of the target population in rural areas. This barrier makes it hard and expensive to get the stoves where they are needed most. But once this hurdle is overcome and proper health education efforts and improved ventilation are in place, businesses could potentially benefit from this untapped market. Despite many national and international IAP initiatives, as well as ample attention from numerous organizations (government institutions, nonprofits, international organizations, research centers etc.) a sustainable solution remains elusive, which is why the Shell Foundation is putting efforts and resources towards finding a solution to this problem. In short, the adoption of improved cooking devices has the following benefits:

- Cleaner indoor air that lead to better health, cleaner houses and less stinky clothes

[22] "The smokeless village", retrieved from www.shellFoundation.org/index.php?newsID=125 on 18 July 2007.

- Shorter food preparation times
- Higher fuel efficiency, and possibly higher usage of reusables (e.g. briquettes made from agricultural waste), which has an indirect effect on deforestation
- Job creation at different levels in society, but primarily at the local level
- Greater trust between the business and nonprofit sectors and increased social cohesion

*The market for improved stoves and technological design*

With a virtual untapped potential of hundreds of millions of potential consumers, one would expect a flourishing and profitable market in improved stoves. Still, the market for un-subsidized stoves is relatively small due to a number of reasons:

- Since thousands of years people have been using a 3-stone fire. Thus, the question is raised why they would suddenly have to pay for something that has always been free.
- The profit margin, as a consequence, has always been and still is very low and thus not very enticing for large scale manufactures to enter this market. On the other side, the stoves that were produced came mainly from small artisans who didn't have the chance of growing larger.
- Generally the quality standards for improved stoves were too low with the result that people couldn't see the real benefit in purchasing one.
- The malignant health effects were not clearly visible. This is particularly a result of the fact that the consequences are only visible after a long time. Moreover, since women and children are the main risk groups finding a solution becomes even less pressing, because (a) children die all of the time and the cause is not easily related to IAP, (b) women often have a low status in societies with a high incidence of IAP.

Another explanation why current stove-producers have not jumped into this market is that they primarily focused on the development and production of cooking-technologies for higher market segments, i.e. gas, kerosene and electric stoves. While very basic, it is therefore important to realize that the improved wood-stove technology (i.e. biomass fuels) as such is rather new and further development is still ongoing. Improved stoves have the potential of making cooking easier, safer and faster. Additionally it can enhance the aesthetics and cleanliness of the kitchen. The Partnership for Clean Indoor Air (PCIA), a program of the United States Environmental Protection Agency, believes that earlier developed stoves may not have been effective enough and that this situation continued because actors involved were not exchanging their ideas on appropriate technologies and how they could be marketed. As a platform for 150 involved companies, nonprofits and public agencies, the PCIA tries to foster debate among the partnering organizations by maintaining an informative website with many links to documents, reports and its partner organizations, a quarterly bulletin, and the organization of a bi-annual forum.

From a technical viewpoint, much research on wood burning stoves has been carried out over the past decades, both by companies, universities and research institutes. Within the Breathing Space program, the Foundation collaborates with the Aprovecho Research Center and ARTI to design stoves that are adapted to the environment and cooking habits of each customer. Two issues seem to lead the development for improved stoves: combustion efficiency and heat transfer. Although open fires are 90% efficient in turning wood into energy, and the remaining 10% is not very much to gain additional energy to heat transfer, achieving higher combustion efficiency is essential to lower smoke and harmful emissions that cause IAP.[23] Heat transfer is percentage-wise a much bigger issue because open fires transfer only 10-40% of the heat to the pot. Thus, improvements in this area can have significant effects on fuel use and thereby contribute to slow down deforestation. In brief (Aprovecho et al. 2006: 7) "… *the stove designer's job is to first clean up the fire and then*

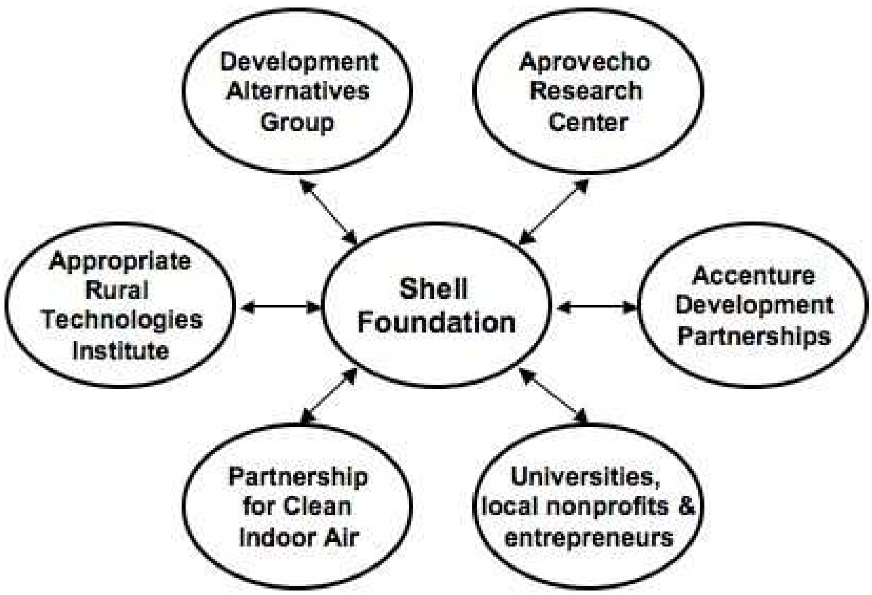
[23] It goes without saying that all ways to increase ventilation of the house or the usage of a chimney reduces the level of air pollution.

*force as much energy into the pot or griddle as possible.*" However, there are some additional issues to be taken into consideration when designing a stove, such as its level of heat-absorption and heat-resistance, its air supply, the pot's measurement and safety. There are no universal performance measures yet, which means that each organization adopts its own benchmark. "There is no particular consent of having one benchmark for the world (…) they all have their own criteria to assess the stove performance," says Ajit Abraham from the Shell Foundation in Chennai. The Foundation, however, wants to be sure their stoves meet Aprovecho's criteria. A joint-report from this research center, the Shell Foundation and the PCIA reveals the best stoves comply with the designs by Winiarski and Baldwin, which are characterized by small air channels between the pot and the stove to increase heat transfer.

*Breathing Space partners*

The Shell Foundation collaborates with several organizations in its Breathing Space program. As this case study particularly focuses on India it will now briefly describe the following partners involved in this particular country: the Shell Foundation, the Aprovecho Research Institute, the Development Alternatives Group (DA), the Appropriate Rural Technologies

**Figure 7.1 - Partners in the Shell Foundation Breathing Space program in India**



Institute (ARTI). In addition the Foundation is involved in the Partnership for Clean Indoor Air and, eventually through its partners, it maintains relations with several universities, smaller regional nonprofits and local entrepreneurs. The Foundation's main partners are DA and ARTI. Both organizations have been involved in India's National Program for Improved Chulas (NPIC), a government-led initiative that distributed about 32 million improved stoves between 1983 and 2000 nationwide. When this program was discontinued both nonprofits contacted the Shell Foundation, which was coincidentally looking for partners to work with as well.

<u>The Shell Foundation</u>

The *Shell Foundation* is an independent charity based Foundation in London, even though it is not involved in pure philanthropic activities, i.e. giving away money. Established in 2000, it applies a 'business' or 'enterprise-based' approach to "deliver self-financing solutions with measurable social benefits that can be replicated, to achieve large-scale impact." Its mission is "to develop, scale-up and promote enterprise-based solutions to the challenges arising from the impact of energy and globalization on poverty and the environment – and the impact of globalization on vulnerable communities." While the Foundation is separate from the Shell Corporation, it deploys the companies' value-adding assets (i.e. people, knowledge and infrastructure) to achieve its mission as a 'social investor'. It leverages its strong international network: "Its *raison d'ètre* is to fight global poverty through backing local energy initiatives either solo or in conjunction with other agencies, banks or fellow business Foundations."[24] Committing $20 million per year, completely funded by the Shell Corporation, the Foundation also focuses on support for SMEs in Africa, traffic congestion

[24] The Daily Telegraph "One Shell of a fight against poverty: the head of the oil's giant's charitable Foundation tells Robert Miller how enterprise is helping the Third World." – 14 April 2005. *Italics* added.

and air pollution in cities in developing countries, and providing producers in poor countries access to world markets.

The Development Alternatives Group

Established in 1983, the *Development Alternatives Group* (DA) is a nonprofit and national research institution based in New Delhi with a mission to create sustainable livelihoods in large numbers by designing and disseminating (a) appropriate technologies, (b) rational environmental management systems and (c) effective people-oriented institutions and policies. DA finances its work through sponsored research activities, royalties and to a small extent through donations and grants. One division of the DA Group is TARA, i.e. Technology and Action for Rural Advancement, which manufactures and markets the products designed by DA and other sources. TARA works like a business, but does not have shareholders, and therefore its income is used for furthering the work of the DA Group. TARAhaat Information and Marketing Services Ltd. is a subdivision of TARA. It has as its specific mission to connect rural India to the Global Village by delivering relevant information, products and services through the internet and other technologies in order to create economic efficiency, environmental protection and social equity. TARAhaat does so by setting up franchises, which are run usually by young men, all across the country through which skill-building techniques are disseminated. At the moment there are about 150 persons, but the target is 6 to 7,000 in a few years. By taking this approach, the DA Group "calls for a new dynamics of partnerships between the public, the private and the people's sectors," and has already done so by collaborating with numerous governmental, academic, research, financial and nonprofit organizations, as well as businesses and foundations in India and worldwide.

The Appropriate Rural Technologies Institute (ARTI)

ARTI is a registered scientific society with a primary objective to "develop, standardize, popularize and commercialize innovative rural technologies aimed at improving the quality of life and standard of living of the rural inhabitants of India." Its founding members consist of technical and social scientists, technologists and social workers. They had worked together since 1980 on the government project "Application of Science and Technology for Rural Development" and officially founded ARTI in 1996. Based in Pune, it has standardized and field-tested almost 25 technologies for rural entrepreneurs through its Rural Entrepreneurship Development Center (REDC). Although the institute's activities started in its home-state of Maharashtra, it is now active in a number of additional Indian states and some other developing countries. Regarding IAP, ARTI has developed a number of low-cost, efficient cooking systems. Besides being involved in the development, testing and marketing of improved stoves, it works on a number of other technologies. To introduce the institute's products on a commercial basis, ARTI ran into problems regarding tax issues due to its income and profit generating activities. Therefore a company was set up by some of its members, the Samuchit Enviro-Tech Pvt. Ltd (SET).

The Aprovecho Research Center[25]

Aprovecho is a nonprofit organization which has the purpose "to research, develop, and disseminate technological solutions for meeting the basic human needs of low income and impoverished people and communities in third world countries, in order to help relieve their suffering, improve their health, enhance their safety, and reduce their adverse impact on their environment." In doing so, it particularly focuses on creating appropriate technologies to

[25] Unless otherwise indicated, all information is taken from www.aprovecho.org on May 24, 2007

biomass cooking and heating. It is based in Creswell, Oregon, but also has an office in Pondicherry, a town close to Chennai.

Partnership for Clean Indoor Air[26]

Although the Partnership for Clean Indoor Air (PCIA) does not play a direct role in the Breathing Space Program, the Shell Foundation is an official partner to this international platform in which about 150 partners from the public, private and nonprofit sectors "contribute their resources and expertise in a collaborative effort to find long-term solution to reducing smoke exposure in households around the world from cooking and heating practices." Founded at the World Summit on Sustainable Development in Johannesburg in September 2002 its mission is to "improve health, livelihood and quality of life by reducing exposure to air pollution, primarily among women and children, from household energy use."

*The Breathing Space Program in India*

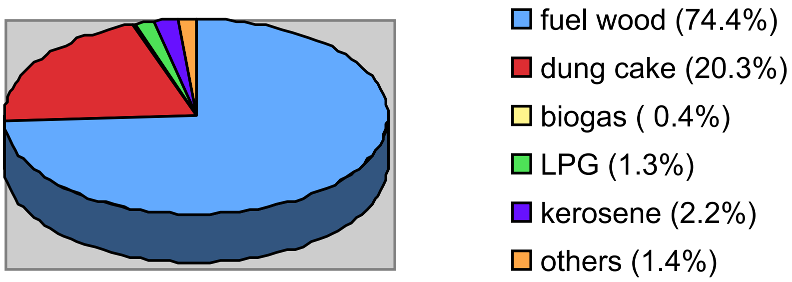
Breathing Space was established in 2002 after the publication of the WHO "Burden of Disease" report showing that IAP causes a high number of deaths in developing countries. It also showed cleaner fuels, such as LPG and electricity, are not widely available in rural areas. Breathing Space aims to introduce market-based solutions by designing improved stoves and developing a sustainable way to get them into people's homes. Having reviewed all previous initiatives to address the problem, partnerships were set up with IAP-specialists around the globe and pilots were launched in Kenya, Guatemala, Mexico, Ghana, Ethiopia, Brazil and India. Together with Accenture Development Partnerships (ADP) these were evaluated and the markets for efficient stoves were assessed. Subsequently the Foundation initiated scale-up projects in five countries in 2006: India, China, Brazil, Kenya/Uganda and Guatemala.

[26] Unless otherwise indicated, all information is taken from www.pciaonline.org on May 24, 2007

*Target group*

The program focuses on middle-income rural households that can afford the stoves without further financial support.[27] By not focusing on the lowest income groups, i.e. those earning less than a dollar per day, the program prevents the need for further subsidies. The lowest income groups may be served by other nonprofits, international organizations or government

**Figure 7.2 - Fuel sources for cooking in % (source: Winrock International 2004)**




projects. Over 70% of the Indian population lives in rural areas, and over 90% of the total energy used within this population comes from biomass fuels, whereas 62% of household energy consumption is accounted for by cooking (Lefevre et al. 2003). This group forms a large potential market because it has easy access to cheap or virtually free biomass fuels. On the other hand, this group is too poor to afford cleaner gas, electric or kerosene cooking technologies, and may also have difficulties to have access to these types of fuels in comparison with urban populations. Cleaner fuels make up only for a little over 5% of the total fuel sources used for cooking in India and are primarily used in urban areas. Although not a core target group, Breathing Space may focus on some urban populations. With a large percentage of this population living below the poverty line, the use of residual fuels such as scrap paper and plastics, which have even worse health effects if burned for cooking, this may be an important target group for the introduction of improved cooking stoves.

[27] In India, people in the middle-income group earn between 1 and 3 USD per day and are therefore still considered to be part of the Base-of-the-Pyramid.

*Business model*

During the pilot phase, the partially commercial business model proved to be viable. The Shell Foundation wanted to organize the entire supply chain in such a way that some parts would be delivered by businesses and other parts by NGOs or a hybrid between the two.[28] This thesis specifically focuses on this point as Breathing Space has the objective of "*bringing together a unique coalition (...) – and injecting some seed-capital and capacity building resources – it is possible to sell stoves on a partially-commercial basis to millions of households.*"[29] In other words, the Shell Foundation's role is also to remove barriers in this model, for instance in providing training or seed capital, supporting the design and innovation process or use its networks to obtain support from other partners, including financial institutions which can provide necessary capital to local entrepreneurs. Thus, those parts that can be commercially viable will be done by the private sector. Other parts will be done by nonprofits, eventually indirectly financed through for-profit entities such as local entrepreneurs or manufacturers (e.g. through licensing or royalties). The supply-chain model consists of five inter-related stages:

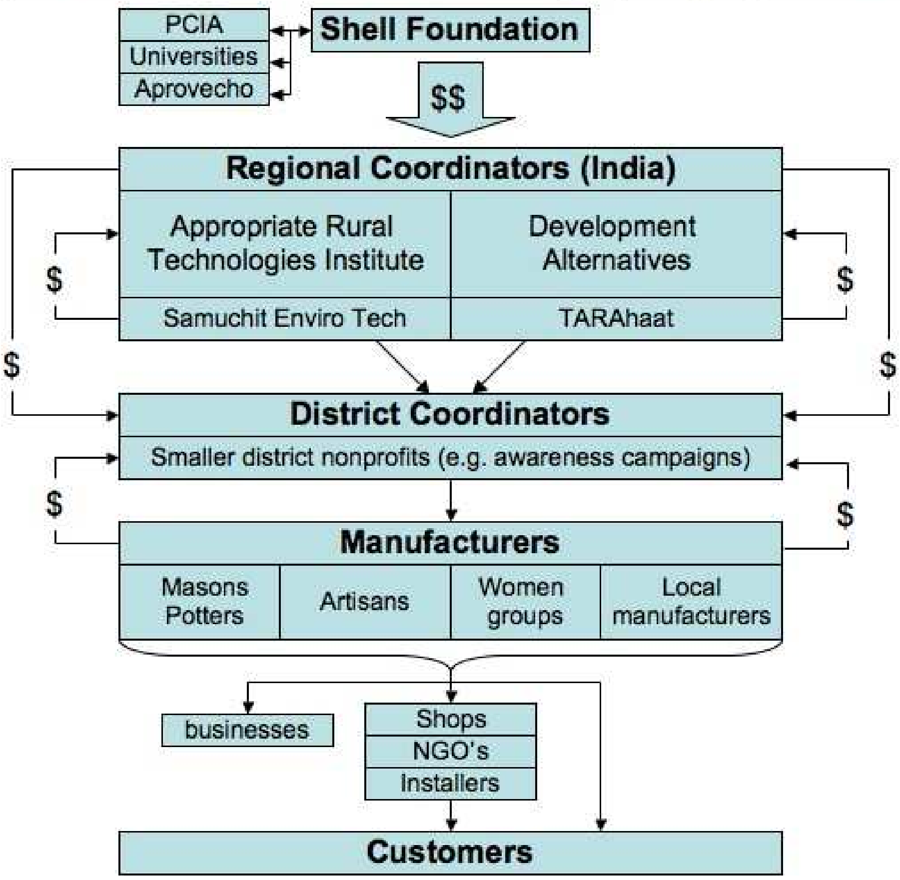
1. The customer → meeting the cooking needs of end users and communicating the benefits of improved stoves
2. Local groups → cooperation with such groups to communicate benefits of stoves, install trial stoves and give presentations. Eventually they can also help financing the stoves through payback plans.
3. Regional NGOs → often organizations with IAP experience that coordinate local groups and private sector operators. In India this concerns both ARTI and Development Alternatives.

[28] Note that the Shell Foundation is a charity and is independently run from the Shell Corporation and as such has no direct financial stake in the commercial success of Breathing Space.
[29] "The Basics" retrieved from www.shellFoundation.org/index.php?newsID=361 on 18 July 2007.

4. Private companies → availability of infrastructure and manpower to manufacture and distribute stoves (different sizes of companies)
5. International NGOs → conducting research on IAP and stoves and their designs.

The value chain is depicted in the figure 7.3. Some of the above mentioned actors do not appear in this scheme because they are external partners that are responsible for specific support functions. Raising awareness is one such function that be carried out by a great number actors, among which international organizations (e.g. UN, WHO), local/district/regional/international NGOs, local shops and manufacturers, social marketing companies etcetera. Due to the specific features of the IAP problem and the products, raising awareness is also closely related to marketing. This function is often performed by local entrepreneurs or shops, but can also be done by larger companies.

**Figure 7.3 - Value chain of the Breathing Space program in India**



*Financing the model*

The role of the Shell Foundation is to create a business model that can become completely self-sustainable. Some parts of the model are not yet financially sustainable. For instance, much of the awareness raising and training efforts are done by nonprofit organizations that, to a large extent, depend on charity money. The Shell Foundation therefore tries to make these nonprofits less dependent on donations and encourages the development of new ways to raise money. One way is that the expenses of nonprofits are partially paid for by the profits made from sold stoves by the small manufacturers. However, the Foundation currently still funds different parts in the model, e.g. it pays Aprovecho for the work it carries out for ARTI but also funds ARTI to enable their financial support to district coordinators. Simultaneously manufacturers can take over awareness activities from nonprofits, thereby saving money on the nonprofits' side.

*Pilot projects*

ARTI and DA have been involved in Breathing Space's pilot projects. Both nonprofits involved in the heavily subsidized National Program on Improved Chulas (NPIC) in the eighties and nineties. Thirty million stoves were distributed, although only ten million remain in service. During this period they performed research on cooking habits and fuel types and accordingly designed a variety of improved stoves. Also they organized training camps for local manufacturers, and awareness projects and publicity programs in rural areas. Being poorly administered and plagued by several problems, NPIC discontinued in 2002. This resulted in many nonprofits finding themselves without sufficient funds. At the same time the Shell Foundation became engaged in the issue and got in touch with DA and ARTI who wanted to continue their work. After having exchanged ideas on how to combat IAP, the Foundation sent out a request for proposal for projects that would contribute significantly to improving indoor air. Both nonprofits won the bid.

Soon after the Foundation began its commercialization approach and started pilot projects with ARTI between January 2003 and December 2005, which was quickly followed by similar projects with DA. At the same time it began projects in other countries and worked closely with Accenture Development Partnerships (ADP) and ARTI on the development of a toolkit for directing regional or national scale up strategies, which would provide concrete ideas on how to deal with markets, customers, promotion, sales, potential partners, costs and logistics. Besides, the Foundation collaborated with academic institutions, such as the University of California at Berkeley and the University of Liverpool, to design methods for evaluating the impact of Breathing Space.

**Table 7.3 - Timeline of Breathing Space India**

| Pre-phase: | Pilot phase: | Scale-up phase: |
|---|---|---|
| • Establishment Breathing Space 2002<br>• Evaluation stove markets with Accenture Development Partnerships | • Jan 2003 – Dec 2005<br>• Building up a large network of nonprofits, local groups and entrepreneurs<br>• Designing and testing stove models<br>• Developing and testing business models<br>• 75,000+ stoves sold | • Jan 2006 - Dec 2009<br>• Selling 5-7 million stoves<br>• Reduce financial contribution of the Shell Foundation<br>• Increase profitability with market growth |

Source: The Shell Foundation

*ARTI's pilot projects*

Having knowledge about different types of stoves and having contacts with many NGOs in the State of Maharasthra, ARTI started its pilot projects in early 2003 in five regions and appointed two NGOs for each of them. During ARTI's involvement in NPIC, the Indian government required ARTI to have 25% of the program's stoves be installed by smaller NGOs. As such, it had been building up contacts for many years. After having selected ten NGOs it organized a three-day workshop on the Breathing Space pilot projects during which the 'ins and outs' were explained. Consequently the NGOs in each region appointed a staff member for each region who was funded by ARTI. Second, it introduced a few available stove models for market testing. The choice for a model depended on its suitability and market potential in each region, which was decided in conjunction with the local NGO and entrepreneurs. After the first phase of 6-8 months ARTI trained over 250 entrepreneurs in each region on how to fabricate the stove molds and its final construction. Also they were instructed on how to prepare charcoal from biomass and how to install biogas units. Simultaneously, ARTI started a publicity campaign by organizing user camps and creating TV and video programs in local languages. This part of the program continued for about 18 months. Despite a high degree of autonomy in the first years of the program, the Shell Foundation made some important additions to the pilot program. One concerned the Entrepreneurship Development Program that served to select the best and most reliable local entrepreneurs. They were further supported by being supplied with raw materials for the stoves, e.g. the molds, grates and chimneys. After installation, ARTI collected the money to cover its costs while leaving part of the income to the local entrepreneurs as their earned profits. This way they were incentivized to sell as many stoves as possible, which also stimulated the stove promotion through, for instance, locally organized awareness programs.

During the entire three-year pilot-phase about 75,000 stoves were sold through the ARTI network. While this number may not seem to be a great success, it should be noted that it is a substantial amount for a pilot in which different technological models were tested through various business models. To update itself on ARTI's development, the Foundation held bimonthly teleconferences and requested quarterly reports. The reports contained information on the number of installations and trained entrepreneurs, the organization of development camps, seminars and of course the projects' financial status.

During the pilot phase the Foundation provided funding to ARTI and Development Alternatives while designing a new commercial model and building a network of suppliers. In collaboration with ten grassroots level nonprofits in Maharashtra, ARTI's involvement in the pilot phase lasted from January 2003 to December 2005. It began with market testing of some of the products, as well as with the technical and entrepreneurial training of potential entrepreneurs. In the final 16 months ARTI had established a network of one hundred local entrepreneurs who had collectively sold over 75,000 stoves. Besides the direct success of improving the indoor air quality of tens of thousands of households, it learned the valuable lesson of how to approach the problem of IAP in a commercial way. The success of the pilot and the opportunities for further expansion due to the vast market size, ARTI continued its involvement in Breathing Space. Similarly, although on a much smaller scale, Development Alternatives sold 1,500 stoves in 2005 in its designated testing region Bundelkhand.

*Plan of Action to scale-up the Breathing Space program*

Already during the final stages of the pilot phase, the Foundation approached ARTI and Development Alternatives to prepare projects for the scale-up phase that runs from January 2006 until December 2009. During this period Breathing Space aims to sell up to 10 million stoves worldwide, with 5-7 million in India of which DA and ARTI each plan to sell one million pieces. During the scale-up phase, the Foundation will gradually lower its contribution to zero. Currently it funds 1/3 of the entire project, and expects the NGOs to find external funding for another 1/3 (which should also be lowered to zero by 2009), while the remaining third should be covered with profitable sales. At the end of the scale-up phase, all expenses should be paid for by sales and it is expected that this should become easier when the stove market is strengthened and sales have increased.

The entire model involves hundreds of actors, among which local manufacturers, installers and retailers. Many of these small entrepreneurs need help to finance their ventures. Although the Foundation is not into the business of micro-finance, it plans to assist these partners by linking them with self-help groups. To reach the scale-up objectives, the Foundation wants to ensure the commercialization approach will be successful. Therefore it strongly advised ARTI to set up a company. After some reluctance, the NGO accepted and founded Samuchit Enviro-Tech Private Limited. Henceforth this company would take care of the commercialization process while ARTI remained in charge of the overall planning and nonprofit activities, such as organizing awareness camps. Managed and owned by ARTI leadership, the firm plays an important role in the entire model because it is in charge of providing the materials needed to local entrepreneurs for different technological solutions. During the scale-up phase, the profits of SET will be utilized to finance the activities of ARTI and its network. But after the scale-up phase when the entire program will have become self-sustainable, SET may make the decision to become completely independent. For the scale-up phase, the Foundation wants to target two of India's most Southern states, Tamil Nadu and Karnataka. This phase can be divided into several parts:

1. Identifying most appropriate stoves, regarding acceptability, performance and price
2. Designing plans for commercial implementation by Aprovecho and EnterpriseWorks[30]
3. Identifying implementation, manufacturing and distribution partners
4. Organizing large-scale IAP awareness-raising programs, which initially emphasize user benefits such as faster cooking, less coughing and higher efficiency

Based on the pilot, ARTI aims to reach about 1,500,000 rural households in Maharashtra through the establishment of sustainable business chains while actively fostering synergetic

[30] EnterpriseWorks is a nonprofit organization from Washington D.C. which tries to combat poverty by helping small producers and other entrepreneurs build sustainable business that create jobs and increase productivity, market opportunities and incomes. For more information see www.enterpriseworks.org.

collaboration between involved rural entrepreneurs, Self Help Groups (SHG) and NGOs. The objective is to create a network of 300 entrepreneurs in Maharashtra who will be self-sustainable and who can also sustain the expenses of the nonprofit network. During the scale-up phase, however, the Shell Foundation financially supports this unique alliance, enabling ARTI to implement a number of tasks:

- optimization of suitable business models for each region
- providing technical support to beginning enterprises
- developing and implementing promotion and marketing campaigns for entrepreneurs through raising awareness of the dangers of IAP
- providing long-term professional support for the supply of reliable raw materials
- building a concentrated and coordinated campaign for product marketing

In Gujarat, ARTI intends to establish a smaller but similar network of 30 entrepreneurs while reaching 50,000 households. Studies will also be conducted on indoor air quality and the health benefits of improved stoves to users, whereas the sustainability of this unique commercial approach through a network of business and nonprofit organizations will be demonstrated. About 900,000 USD is needed to fund the entire model during the scale-up phase, which includes salaries and administrative costs of ARTI and the rest of the network. The Foundation is partially funding the project, but requires ARTI also to find additional funding while encouraging the nonprofit to become fully self-sustainable by the end of 2009.

*Cross-sector collaborations in the Breathing Space program*

The Shell Foundation understands that fostering a business model that includes collaboration across traditional sectors is imperative to successfully combat IAP. It contributes to the work of the nonprofit partners by applying its managerial expertise, both within the Foundation and the entire Shell Corporation. Regarding Breathing Space Mr. Abraham feels that one of the most important things the Foundation can contribute concerns the inducement of business values, i.e. to give them a better understanding of a commercial approach to the issues they are dealing with. This includes business aspects such as making the business profitable, accounting practices, maintaining business data and stocks, developing key performance indicators for staff and concomitant reward schemes, marketing strategies, techniques to approach suppliers, or maintaining expenses within limits. Since all partners have signed up to the market-based approach of Breathing Space, they are aware of it and therefore look forward to be supported in instilling business skills among their staff.

The decision to cooperate with certain partners depends on a number of factors. As in many cross-sector collaborative efforts, nonprofits understand better what the ground level conditions are: how people are organized, how local markets are organized, and how communities are organized. This knowledge allows for implementing dovetailed solutions in the most cost effective manner because dealing with people at the BOP is 'in the DNA' of local NGOs. With retrospect to the Breathing Space program, the Shell Foundation maintains some other criteria that potential partners should comply with. The most important one is that they can become financially self-sustainable and agree with a partially commercial approach to the IAP problem. Put differently, both ARTI and DA, the two main partners (regional coordinators) in the program, have underwritten the Foundation's philosophy to combat indoor air pollution, i.e. a market-based approach to introducing improved stoves and the idea that somebody must benefit in all stages of the value chain. Besides this essential point, the Foundation also searches for organizations that have certain infrastructures in place, work according to high professional standards and have gained relevant experience in previous projects. Additionally they should possess certain manpower strengths and be viable as an organization. Finally, potential organizations and commercial entities should be satisfied with earning just minimal profits.

After a successful scale-up phase, the entire value chain should be commercially sustainable and the nonprofit parts to it, e.g. awareness programs, financially self-sustainable. However, this doesn't mean the Shell Foundation's involvement will end when this objective is reached. It will keep on supporting the entire program to make sure the partners to the projects are in the right track, to give them support in non-financial ways, e.g. being involved in the training or launching of new products. Also, the Shell Foundation has similar projects running in other countries around the world. Therefore it will use its experiences in India for improving programs in other places.

*Summary*

This Breathing Space program aims to introduce a market-based solution to Indoor Air Pollution (IAP), a health problem which affects several billion people worldwide and which leads to the estimated premature death of 1.6 million people. The program tries to foster a partially commercial market-based business model in which better stoves are brought into the homes of the poor in a sustainable way. It encourages the development of partnerships between nonprofit and for-profit partners throughout the entire value chain. For the design and further innovation of the stoves it works together with the Appropriate Rural Technologies Institute (ARTI) and the Aprovecho Research Center. While several organizations test the stoves, the Foundation maintains the standards of the latter organization for all the stoves sold under the Breathing Space program.

Since parts of the business model are not (yet) financially self-sustainable, the Shell Foundation provides seed capital to ARTI and Development Alternatives. This money is used for creating awareness programs, setting up training sessions for manufacturers and building and maintaining a network of nonprofits. For instance, in every smaller region ARTI works together with two NGOs to which it gives funding for one staff member working on Breathing Space. However, the Shell Foundation understands that simply closing the financial gaps in the unprofitable parts of the model will not be sustainable. Therefore it encourages its nonprofit partners to find additional ways to finance these parts of the value chain. The Foundation itself has contributed substantially to this objective by starting up the Entrepreneurship Development Program. This program aimed to identify reliable and promising local entrepreneurs. Such partners are essential, because they are not only responsible for actually manufacturing the stoves, but can in due time also finance the loss-making parts of the value chain. Similarly, ARTI is involved in creating a large collaborative network of entrepreneurs, self-help-groups and nonprofits in Maharashtra during the scale-up phase. Additionally both regional nonprofits can in fact take over awareness raising or training activities and thereby reduce the need of more funding by ARTI and Development Alternatives. Moreover, these nonprofits have been encouraged by the Foundation to obtain additional resources through SET and TARAhaat, respectively, which are two forprofit organizations directly linked to the nonprofits. The Breathing Space program has been experimenting with pilot projects in India in the years 2003-2005 during which about over 75,000 stoves were installed. In close cooperation with ARTI and the Development Alternatives Group, the Foundation started early 2007 with the scale-up phase with the intention to sell 5-7 million stoves in India. The objective is that at the end of this period the entire model should have become self-sustainable and the financial contribution obsolete.

## CHAPTER 8 - Case study 2: Akashganga Automated Milk Collection

*Introduction*

This section discusses the introduction and spread of an Automated Milk Collection System (AMCS) developed by Shree Kamdhenu Electronics Private Ltd (SKEPL), a small company from a village near Anand, Gujarat. Their AMCS product called Akashganga, which means 'Milky Way' in Hindi, is an IT-based milk collection system. When implemented by small local cooperatives, Akashganga can have several benefits for its users. The traditional process of collecting milk in India namely has various disadvantages. Besides being inefficient and very time-consuming for farmers – costing up to 1.5 hours per day – it is also prone to fraudulent activities due to high levels of intransparency.

This case study deals with Akashganga and the cross-sector collaborative efforts of the main parties involved in introducing this product on a large scale throughout the Indian cooperative system, as well as across the Indian borders. It consequently discusses the process of milk collection without AMCS, the partners to the cross-sector collaboration, and the specificities of the Akashganga product including its key benefits.

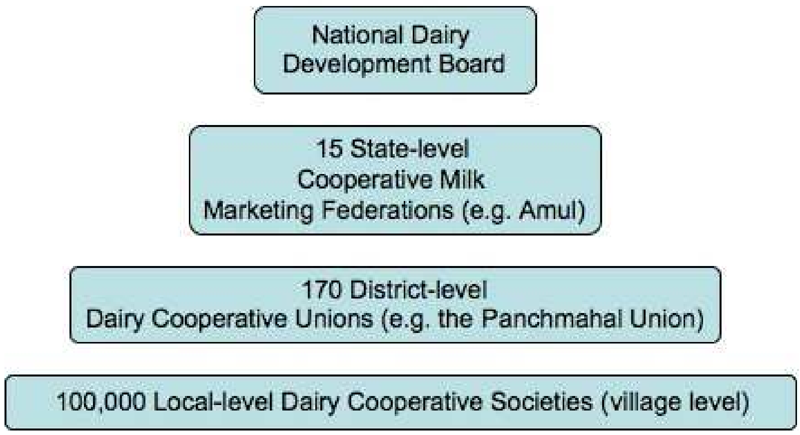
*Milk collection in India*

With an annual milk output of 100 million tons, India is the world's largest dairy producer.[31] Although most farmers are very poor and often illiterate, the country has a professionally run cooperative system with about 100,000 local dairy cooperatives representing over ten million farmers. This system was put in place by the Indian government through the National Dairy Development Board (NDDB) and consists of four layers, as figure 8.1 shows:

[31] Retrieved from the website of the National Dairy Development Board in India, www.nddb.org.

1. the local Dairy Cooperative Societies or DCS (about 100,000): collecting milk and selling it to District Unions
2. District-level Cooperative Unions (about 170, such as the Panchmahal Union): processing and marketing the milk
3. State-level cooperative milk marketing federations (15, such as Amul): supporting district unions in marketing and planning, branding, advertising, and conducting strategic research.

**Figure 8.1 - The Indian cooperative system**

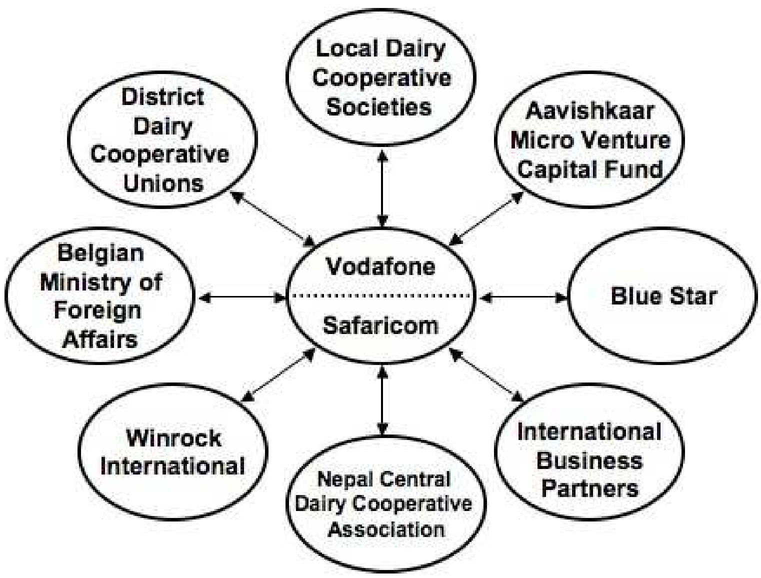



Despite this well-working cooperative system, the actual milk collection process in India has been very inefficient, and to a very large extent still is in many places. Traditionally the entire process of collecting and administering milk has been done manually by local dairy cooperatives, making it very prone to mistakes and purposeful modifications with the result that illiterate farmers are severely disadvantaged. Manual operations also slow down the payment process to farmers and reduces trust in the cooperative system. Due to external pressures, of which particularly the opening up of the domestic dairy market for foreign competitors, this inefficient and often also unhygienic way of milk collection, processing and administrating, forms a threat to the profitability and survival of the dairy industry. Additionally, the low quality of the milk and the high operating costs of the supply chain make these dairy products internationally uncompetitive. For these reasons, the Indian dairy industry should invest in modern technological solutions and improved management methods while keeping the very specific characteristics of the supply chain in mind, such as different languages, distance to the markets and low literacy levels.

*Partners to Akashganga*

As figure 8.2 illustrates, a number of partners are involved in bringing the Akashganga product to the market. This section provides a brief introduction of the different partners which were interviewed: SKEPL, Aavishkaar and the Panchmahal Union. Although these are not all partners involved, they form the core of the cross-sector collaborative activities regarding Akashganga. Other partners are Winrock International, the Belgian Ministry of Foreign Affairs and the Nepal Dairy Association.

**Figure 8.2 - Partners in the Akashganga business model**




<u>SKEPL</u>

Based in Vallabh Vidyanagar, a town close to India's dairy capital Anand in the State of Gujarat, Shri Kamdhenu Electronics Private Limited (SKEPL) was established in 1996 to bridge the existing technology gaps among Indian dairy-cooperatives. Seven young entrepreneurs founded the company with less than 500,000 INR (about 10,000 USD) as seed capital. Currently the same founders own it, whereas the Micro-Venture Capital Fund Aavishkaar has a minority stake in SKEPL since 2002. Soon after having won a prestigious award at the Agricultural Fair in 1997, SKEPL received its first large order from Amul Dairy, India's largest dairy producer.

Aavishkaar India Micro Venture Capital Fund[32]

Providing equity finance to address the root causes of rural and semi-urban poverty, Aavishkaar is a forprofit blended value investment fund that applies innovative micro venture capital approaches to meet an over-riding social mission. Aavishkaar, meaning innovation in Hindi, was founded in 2001 on the belief that sustainable development can be achieved by encouraging entrepreneurship. However, the fund also noticed that micro-entrepreneurs often lack access to substantial capital as their projects are unattractive for debt-financing due to unpredictable cash flows. Therefore such companies require risk capital during the startup and growth phases. Having noticed a large gap between micro-finance solutions (i.e. usually loans up to $1,000) and traditional venture capital investments (normally beginning with investments of $1 million), Aavishkaar takes on equity ventures in the range of Rs. 1,000,000 to Rs 5,000,000 ($20,000 to $100,000) in order to finance socially relevant, commercially viable and environmentally friendly micro enterprises in rural and semi-urban areas. Others have recognized this gap as well (e.g. Hammond & Kramer 2006). Besides providing suitable and adequate risk capital, the Fund also provides relevant mentorship through its experienced staff. The fund's initial investors were its founders and their friends or (former) colleagues. Nowadays, Aavishkaar India consists of two parts: the Aavishkaar India Micro venture Capital Fund which is regulated by the Securities and Exchange Board of India

[32] Unless otherwise stated, all information is retrieved from the brochure "A venture fund unlike any other…"

(SEBI), and the Singapore-based Aavishkaar International Private Limited (AIPL) which invests aggregated individual funds of foreigners and non-resident Indians in Aavishkaar India. To date it has raised over $6,000,000, invested in 5 projects and aims on a IRR of 32% for each project, whereas it aims on a return on investment of 6-7% in dollar terms in overall investments. In generic terms Aavishkaar's mission is to:

- provide venture capital to sustainable commercial ventures otherwise excluded from access to capital
- achieve commercial returns for its investors to grow and strengthen the chain of innovation, financing and commercialization
- leverage the fund's India network to maximize the growth of employment, productivity and ROI.

Regarding the Akashganga product, Aavishkaar invested Rs 1,800,000 in May 2003 (about US$ 39,225) thereby taking a 26.47% stake in the company. Besides it has taken an option for a further investment of Rs. 900,000 in Optionally Convertible Debenture (OCD) if necessary. As a result it has also taken one seat in the SKEPL Board. Although it has been struggling for money, Aavishkaar has not accepted grants or philanthropic money because this may dilute their mission of creating commercially sustainable businesses. "*It's an outright commercial model, whereas microfinance has literally received billions of dollars of free money,*" as one of its staff members says.

<u>The Panchmahal District Co-operative Milk Producers' Union Ltd.</u>[33]

Established in 1973 by the Gujarat Dairy Development Corporation Ltd., the Panchmahal District Cooperative Milk Producers' Union Ltd. (Panchmahal) consists of 1650 village Dairy Cooperative Societies (out of almost 2,000 villages) covering well over 200,000 milk

[33] Unless otherwise stated, all information is retrieved from the Panchmahal District Co-operative Milk Producers' Union Ltd website www.panchamrutdairy.org/home.html) or the 33rd Annual Report 2005-2006.

producers across the Panchmahal and Dahod District in the State of Gujarat (to the North of Mumbai). Headquarted in Godhra, the objectives the Union are "to carry out activities for the economic development of agriculturists by … gaining effective production, processing and marketing of commodities" in order to uplift its member producers by continuously putting tireless efforts through delighting its customers at all levels. To reach these objectives the Panchmahal Union carries out a number of activities, including amongst others (1) purchasing, pooling, processing, manufacturing, distributing and selling commodities from its members; (2) owning or holding on lease movable or immovable properties; (3) buying animals, and (4) providing technical, financial or administrative assistance to its members. The Panchmahal Union is one of twelve district cooperative milk producers' unions of the Gujarat Cooperative Milk Marketing Federation (GCMMF). This federation, which is better known as Amul Dairy, is India's largest food products marketing organization and aims to provide remunerative returns to farmers and serve the interests of consumers by providing quality products.[34] Per village, the Union collects on average 195 liters per day, for an average of 40-50 farmers, about 300,000 liters per day. There are about 122 villages where Panchmahal collects more than 500 liters per day.

*The Akashganga product*

Although developed markets had been using ICT-based products in the dairy industry for many years, these modern technological solutions had not yet penetrated rural India. This market segment had been ignored by larger companies under the assumption that no money could be made of poor local cooperatives and that they would not have the need for modern technologies to improve their activities. However, after having carefully researched the milk collection and handling processes, SKEPL conceptualized the Automated Milk Collection

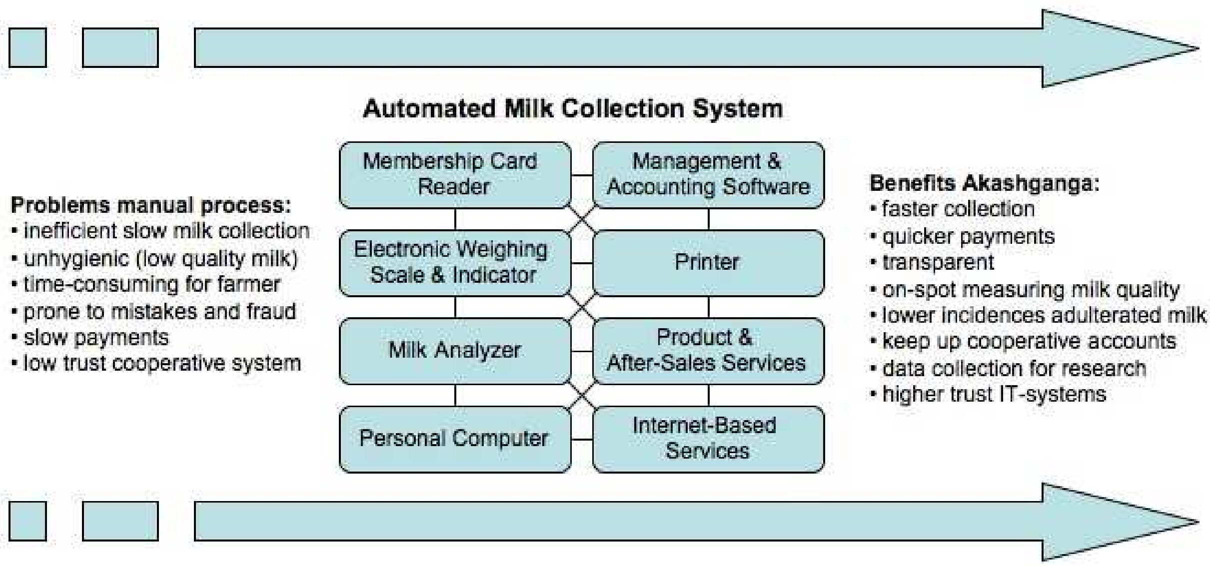
[34] Information retrieved from www.amul.com (07 June 2007)

System *Akashganga* ("milky way" in Hindi) at the end of the nineties. It obtained a seed capital off 500,000 Indian Rupees (about 10,000 USD).

The current business model of Akashganga focuses on the provision of technology-based products and services that aim at making local dairy cooperatives more efficient and productive. Akashganga consists of a few linked devices plus some specific related services. Although the devices work together in a system, they can also be used independently:

- Membership Card Reader – to identify farmers and administer daily milk turnover
- Electronic Weighing Scale and Indicator – to weigh and show collected milk quantity
- Milk Analyzer – to measure the fat, non-fat solid and protein content of the milk
- Personal Computer and accounting/management software – to register all transactions, to generate various reports and to maintain a payment register
- Printer – to give small pay slips to farmers
- Product and after-sales services – to ensure correct and sustained usage of the system
- Internet-based services: communication models, auditing options, and dairy portals

**Figure 8.3 – The Akashganga system: from problems to benefits**



When the Akashganga system is installed at the collection point of the local cooperative a farmer is now identified by his personal card. Then a small milk sample is tested for fat content and non-fat solids. Consequently the milk is thrown into a container and weighed. The quantity and quality are automatically saved in the PC by the specially designed Akashganga software. Finally, the farmer receives a print out of the milk he has handed in and is eventually paid out on the spot, depending on the cooperative. The entire process, including waiting, lasts only a few minutes instead of up to 45 minutes in the traditional collection process. Thus, the use of an AMCS saves the farmer over one hour waiting time every single day.

*Key benefits*

The advantages of using the Akashganga system instead of traditional collection and administration systems are multifold for all stakeholders. First, it speeds up the collection of milk in villages. This not only frees up scarce time of the farmers but also allows for faster milk processing which prevents milk spoilage and creates higher returns. Second, due to shortening the administrative process, it also allows for quicker payments that are sometimes done immediately after the milk is collected. Third, it measures all major elements of the milk, including non-fat solids that partly form the basis on which the local dairy cooperatives are being paid by the district unions. This also has as a benefit that farmers are less inclined to adulterate the milk. Fourth, the system makes it less prone to corrupt practices such as changing of quantities of collected milk by middlemen, thereby creating more trust in the cooperative system. Fifth, it allows for regular and timely maintenance of cooperatives accounts. Sixth, it provides much relevant data on the quantity and quality of the milk which can help farmers and cooperatives improve upon it by, for instance, changing cattle feeding etc. Seventh, it instills a trust in IT-based and other modern technology-based solutions among rural populations. In August 2005, Akashganga had already benefited about 1.5 million farmers on a daily basis.[35] Despite some competition, this number is likely to grow over the next few years as the market remains unserved, particularly outside Gujarat.

*Introducing Akashganga and enlarging its area of sales*

As with most BoP-related products, introducing the Akashganga system is more than just a technical solution. Due to the vast diversity in populations, weather, educational levels etc, SKEPL should adapt each AMCS to the specific local conditions. Also it requires some strategic planning to actually get the products to the markets and have them accepted by and sold to local users. Akashganga faces much competition at the moment because the product it offers is fairly basic and can therefore be copied easily by competitors. But, as one of the directors claims, one of the most important aspects that will keep them in the market concerns the value-added services that come with the product. To begin, SKEPL falls back on the local population for the design of different Akashganga versions because they have the knowledge and language skills needed to make a useful product. In order to meet local needs, the system can namely be customized by including or excluding certain components or adapting the software and interfaces. To market the product it not only offers free trial periods to local cooperatives in order to increase the acceptability among the actual and potential users, but also provides credit options to finance the investment. And to ensure correct and continued usage it provides rigorous training to a few members of the local cooperatives, whereas it has a number of maintenance and service staff members in each area to deal with more technical problems. Furthermore the after-sales services are very important. SKEPL has for instance three technical people specifically working for the Panchmahal District to help cooperatives experiencing problems. For these purposes,

[35] Source: “Simple ICT solutions for livelihood” retrieved from www.i4donline.net/aug05/akashanga.asp

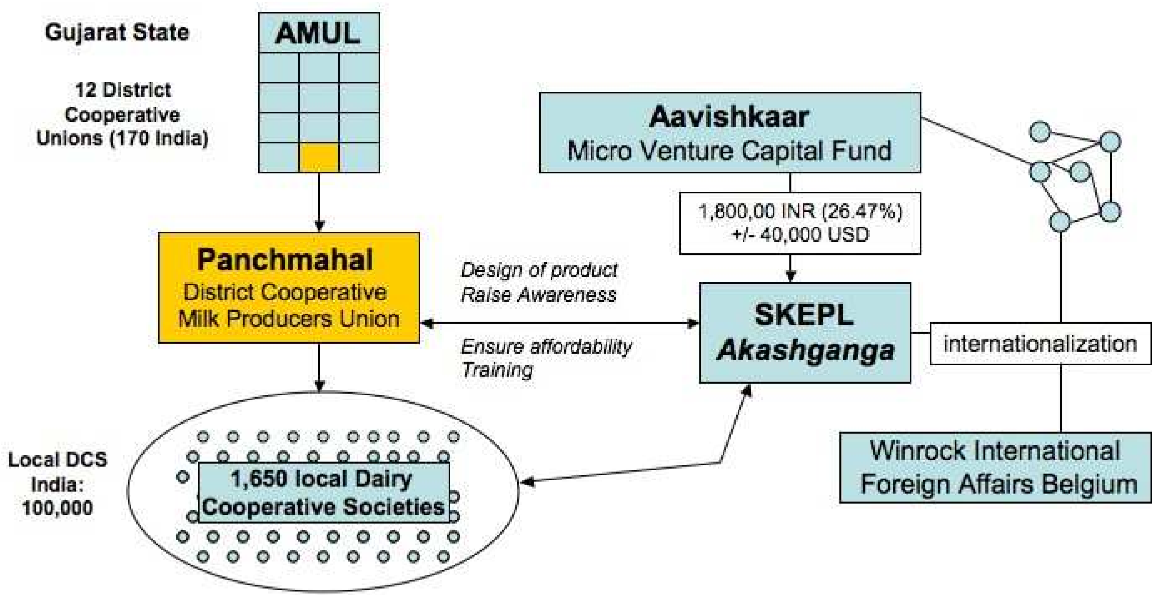
SKEPL always tries to find a local person who becomes responsible for the sales and after-sales services within a certain region. By selecting a villager, they are sure he speaks the local dialect, is trusted by the local population, and knows the local logistical situation. In case, however, that the delivered product does not fully meet the new users' needs, SKEPL sends out some of its staff members to the site in order to better understand the specific hardware and software requirements.

Up till now Akashganga has primarily been successful in the states of Gujarat, Jharkhand, Maharashtra and Rajasthan, but recently SKEPL has started exporting the systems to other countries such as Kenya, Uganda, Nepal, and Vietnam after involvement of Aavishkaar and international development organizations. Also for its internationalization plans SKEPL relies on a similar strategy. In Kenya, for instance, local companies try to introduce the Akashganga products, while SKEPL provides such companies with their technologies and products. Some items are actually procured locally because this is cheaper for the users, such as the personal computer and the printer, whereas the core items of the systems, such as the software and the milk tester, are produced and shipped by SKEPL. To make the product successful such strategies are simply a necessity according to a SKEPL Board member. But to really capture these markets, as done in Gujarat and the rest of India, as an incentive SKEPL always places a few machines free of costs. This way, local users can become acquainted with the system and learn about its benefits while representatives of surrounding villages and districts can come to these places and get introduced to automated milk collection systems.

*Cross-sector collaborations in the Akashganga model*

SKEPL's automated milk collection system Akashganga forms an outstanding case for studying how cross-sector collaborative efforts come about when designing and introducing products that are specifically geared towards the needs and financial abilities of BOP customers. The graph below shows the relationships between the main partners in the model. In this model we can also observe the necessity of working across the boundaries of traditional sectors. SKEPL alone would not be able to sell their products to the final users, in this case the local Dairy Cooperative Societies, but has to closely cooperate with District Cooperative Unions, such as Panchmahal, to have Akashganga accepted and sold.

**Figure 8.4 - The Akashganga network model**




Similarly it should cooperate with Aavishkaar to obtain equity funding as well as business skills that are necessary to improve the product's sales. As one decision maker says: "*It is a very nice arrangement… there is an enthusiastic entrepreneur [SKEPL] which provides some business solutions to the community… and there is a company to finance [Aavishkaar] that business plan… and there is an organization [the Panchmahal District Cooperative Union] where you have to provide your solution. If this cycle works well, then all the stakeholders are at the receiving end! Everybody is gaining of this, nobody is loosing of this.*" This section discusses the collaborative efforts between the different partners in the Akashganga model in a more profound way. It respectively describes the involvement of Aavishkaar and Amul / the Panchmahal District Union.

Aavishkaar's collaboration in the Akashganga model

The Akashganga system became somewhat known after it was the winner of the Global ICT Stories Competition 2001 in Stockholm. The Dutch International Institute for Communication and Development (IICD) jointly sponsored the competition with the World Bank's Information for Development Program (InfoDev) to bring out the best ICT applications. Also the company had been selected as finalist in Category e-Business in The Stockholm Challenge Award 2002. As a result SKEPL was known in the development community with the result that Aavishkaar also heard about the product. Since the mission of Aavishkaar is to provide equity capital for sustainable entrepreneurial initiatives for those companies that are otherwise excluded from capital, it asked SKEPL for a business plan. At that moment SKEPL made a profit and was financially sustainable. However, it was not well organized which would obstruct further potential growth. As one Aavishkaar manager said: "It was a company always stuck at 200,000 dollars turnover, before we invested. Now it's doing almost half a million dollars." Aavishkaar encouraged SKEPL to focus more on expansion of their sales, i.e. to scale-up faster, by internationalization and by identifying, designing and launching new products. As a result the company's sales in 2003 and 2004 initially dropped as they began concentrating on their strengths, but the year 2005 was already better and 2006 was even good. SKEPL's profile was consistent with the criteria that Aavishkaar was looking for, namely motivated and skilled individuals with a good innovative product that can make a potential profit.

To get the support of Aavishkaar, SKEPL's founding members had to accept its financial offer. However, they were not familiar with the concept of equity financing. Only after some people in the company's network explained about this financial structure and how it could be beneficial for the growth of the company, both in size and the development of new products, SKEPL's Board accepted Aavishkaar's offer. They were convinced that

Aavishkaar's resources, experience of its managers and investors and its broad international network could also help the company achieve those goals. At the same it was very hard for a company like SKEPL to receive financing for its business, simply because it was too big for a micro-credit and too small for traditional venture capital. "Money is the biggest constraint to taking these products to the markets," as one Aavishkaar manager says. For SKEPL, certainly the investor came at the right moment.

Besides the financial investment, one director of SKEPL also stated that the very experienced people working for Aavishkaar helped his company with improving its management approach. For instance, Aavishkaar designed a reporting format and started an interaction with SKEPL's leadership to improve its decision-making capabilities. For instance, they advised on a division of tasks between the directors and recommended to meet regularly for improving the quality of communication. Also SKEPL's leadership meets monthly with an Aavishkaar representative to evaluate ongoing activities and to discuss how to improve them.

**Table 8.4 – Basic information on SKEPL**

| | |
|---|---|
| Seed capital SKEPL | Rs. 500,000 (US$ 10,000) |
| Initial investment Aavishkaar in SKEPL | Rs. 1,800,000 (US$ 39,225) |
| Initial stake Aavishkaar in SKEPL | 26.47% |
| Annual turnover before investment | US$ 200,000 |
| Current turnover | US$ 500,000 |

Source: Aavishkaar (unknown publication year); Sharma & Yadav 2003

Aavishkaar can help SKEPL also with internationalizing its business. Automation of the milk collection process is not only useful in India, but can also significantly benefit other countries throughout the developing world. Particularly Aavishkaar's network of investors proved to be useful in these endeavors. When one investor learned about the investment in SKEPL he also wanted to introduce Akashganga in Vietnam. Such network partners can be especially useful for gaining a better understanding of the local business conditions, institutions and laws, and language.

Besides helping SKEPL internationalize their technologies, another Aavishkaar investor from India, albeit living in Singapore, encouraged the company to introduce a new product that it thought of in 2006, namely an instant milk chiller. This highly new technology would enable small cooperatives to instantly cool milk upon collection instead of just at the district factories, thereby preventing a decrease in quality and reducing the need for electricity to chill the milk at the factory level. The market for chilling machines is huge, because when successful, SKEPL could grow to 5-10 million dollar turnover annually. As the driving force behind the creation of this partnership, Aavishkaar connected SKEPL to Blue Star, a company that is able to design and manufacture the product. Moreover, the company is willing to take on complete liability for the project as the development costs are simply too high to be born by a small firm like SKEPL, which, on their part, will have to take care of channeling the necessary information to the final users, such as the specificities of the models as well as the awareness and marketing campaigns. In fact, SKEPL has the opportunity to become a Blue Star dealer or put the product in the market under its own name brand Akashganga. Although this partnership cannot be classified as cross-sector collaboration, it certainly shows that even bigger companies, such as Blue Star, need to connect with the Bottom-of-the-Pyramid through reliable partners with a large grass root network. Since the automated milk collection system Akashganga is already used in 1,000 villages it will be relatively easy to introduce the Akashganga chiller in these areas as well. And since these local dairy cooperatives have positive experiences with the AMCS, SKEPL has a big advantage to raise awareness and convince users of the benefits of a chiller.

AMUL's collaboration in the Akashganga model

The narrow cooperative relationship with Amul and its District Unions, such as the Panchmahal Union, becomes clear in the development phase of SKEPL's products. As one director puts it, when they enter into a relationship with a large cooperative they are not just trying to sell a product. Instead, they have to sell a solution. Collaborating with the cooperative system is particularly important to design products that meet the needs of the farmers it represents.

Already in 1992, Panchmahal experimented with a few AMC systems. The Union was not sure whether it would work in villages or not, because adverse conditions such as unavailable electricity, black outs, dust, uneducated people and not being receptive to new technologies, made it problematic to install these technologies. At the end of the nineties, however, when the AMCS technology was widely used, the Panchmahal Union didn't just want to purchase from any provider, but was looking for a company that could really relate with the cooperative farmers. So, when SKEPL approached the Union and offered to install the technology in one or two villages to see how it would work, the Union was happy to cooperate. After some time the two parties came together to talk about the different problems users were facing. As a result, for instance, changes were made in the user-friendliness of the software and the language was adapted. Also the introduction of the mobile phone has had a positive effect on the introduction of AMCS systems. This technology connects all villages in Gujarat and 10 out of 50 million people, which makes it possible to stay get in contact with technical support units, such as those of SKEPL that are strategically concentrated throughout the State. Another positive development can be found in the energy sector. Solar energy panels, with strong batteries to store daylight energy, also enable the operation of computers in those areas that are not connected to electricity networks (a generator is also a possibility).

For the Panchmahal Union it was hard to convince the people: "there, the mindset is that computers cannot work in villages, they think it is a very sophisticated technology." District cooperatives can therefore also play an important role in convincing local cooperatives of the benefits of using automated milk collection systems, such as Akashganga.

The Panchmahal District Union has been promoting the use of AMC systems in order to increase the confidence in the cooperative system. Transparency is very important, since farmers sometimes pour only 1 or 2 liters in the bucket. Figuratively speaking, a difference of one glass of milk in the actual quantity and the registered quantity could make a huge difference for the farmers' incomes. The same principle goes for the quality of the milk as adulterated milk has a negative effect on the cooperative system at large. As the Managing Director of the Panchmahal District Union says: "[the farmer] knows you cannot manipulate, neither in quantity or price. Using a milk analyzer makes also this much more transparent. That's the kind of transparency we want to bring. Transparency at the lowest level." In February 2007, 260 villages in the Panchmahal district, which were responsible 46% of the collected milk, had installed automated collection systems. Among the smaller cooperatives that collect up to 200 liters of milk per day or 27% of the total milk in the district, 324 local cooperatives had introduced electronic weighing. Although this system does not include an electronic milk tester, this measure does increase the level of transparency at the local level at least partially. In the remaining villages, 728 societies accumulate only 100-150 liters per day, which is only 25% of the total milk is collected in the district. Despite the very small amounts of milk that farmers can gather, sometimes not even more than 500ml, the Panchmahal Union wants to be there for them to make sure they earn something from their work. One conclusion that we can draw from this data is that the systems are primarily installed in the more productive and bigger local cooperatives, but that even partial installation of all the Akashganga components can have major benefits, such as quicker processes or improved transparency.

Regarding the costs of the product, District Cooperatives can make large orders and thus cut the prices that SKEPL or other providers offer for the hardware and software. Even a small reduction in price can be a great advantage to poor cooperatives. For that matter, the

Panchmahal Union always keeps two vendors for a particular product, including the AMCS, because it will "keep companies at their toes." SKEPL Directors feels positive about this policy, because it makes them work harder and gives them spirit. Additionally, hardware items such as computers and printers can be bought in bulk, thereby lowering the total price for the AMCS even more. SKEPL understands the importance of lowering the price as much as possible to enable as many local cooperatives to use automated collections systems.

The AMCS technology did not get accepted overnight among local cooperatives. A major obstacle was the lack of education of the users. Therefore the Panchmahal Union and SKEPL collaboratively started training a few people from a small number of villages on how to use the system. Consequently, after having it introduced successfully, representatives from other cooperatives were invited to the initial villages to receive the same training from actual users. This way the use of the system grows exponentially during the years. Also if SKEPL wants to expand its activities to other regions, it tries to get in contact with local or district cooperatives first in order to find a local vendor, i.e. someone who champions the product. One SKEPL director says that the cooperatives are very helpful in finding such a person because "if they are going to get a good product at a relatively lower price, that will encourage such kind of collaborations." Likewise Amul was very helpful to SKEPL when it wanted to introduce a new product under the Akashganga brand, namely an automatic milk dispenser. These machines can offer fresh milk in exact quantities (e.g. 500 ml) to the many customers who want fresh milk, whereas the quality of the product will be better due to improved hygiene. Such dispensers can be placed in small villages, but also in private shops in urban areas. For instance, in Mumbai alone there are 500 shops that sell fresh milk. At the moment SKEPL is waiting for Amul to give a first reaction to the prototype that is being used in some test markets before it produces them on a large scale and rolls out the introduction to other markets. Similarly, Amul became interested in the instant milk chillers and wants to take the project forward by testing models, followed by a commercial introduction.

Collaboration with other parties

Besides Aavishkaar and different levels in the cooperative system, including the Panchmahal Union and local cooperatives, SKEPL is cooperating with several other organizations. For instance, in Nepal it works together with Winrock International, a nonprofit from Arkansas that is committed to building human capacity, creating long-term relationships, managing effectively, communicating openly and promoting teamwork in order to create lasting solutions based on good science and sound economics. Winrock became interested in the Akashganga products and contacted SKEPL. After having visited the company and having seen the system work in practice, the development organization decided it could be replicated in Nepal. In this country Winrock explained to local farmers that the system would save much time and could dramatically enhance the transparency of the milk collection process. As a result, SKEPL signed a Memory of Understanding with the Central Dairy Cooperative Association of Nepal (CDCAN) to introduce the product. Since Winrock has a global network spanning 65 countries in Latin America, Africa, and Asia, this partnership may become an important step in scaling-up the Akashganga model in several other countries. Also it has started to cooperate with the Belgium Ministry of Foreign Affairs that wants to introduce the Automated Milk Collection System Akashganga into the Vietnamese Dairy system. In doing so, it hired two young engineers who received comprehensive training on the technology and will in the future form the backbone of further expansion.

*Summary*

This case study showed how SKEPL, a small company from Gujarat, established effective partnerships with the dairy cooperative system in Gujarat, financial investors and nonprofit organizations in order to introduce an automated milk collection system specifically designed for small dairy cooperatives. The process of milk collection in India has traditionally been done by hand, and to a very large extent is still done manually. It is therefore characterized by high inefficiency, highly time-consuming, low hygiene standards, intransparency, fraud and low trust in the cooperative system. The Akashganga system consists of a set of devices with which the quantity and quality of the milk is instantly measured and communicated to the farmers. Additionally, all information is immediately stored in specifically designed computer software, which can also be used for research purposes. Besides that this system makes the milk collection process much faster, it also decreases fraud and mistakes, increases hygienic conditions and boost trust in the cooperative system.

In order to introduce this system on the market on a large scale, SKEPL had to work closely together with Aavishkaar, a venture capital fund focused on investing in small entrepreneurial firms which require a level of funding that is too high for micro finance but too low for traditional venture capital. Besides the necessary financial investment, Aavishkaar also helps SKEPL with the development of its business plans, its internal management and organization, and its internationalization strategies. On the other end, SKEPL works closely together with the District Dairy Cooperative Unions, such as the Panchmahal Union, to design the most appropriate AMC systems. Other forms of cooperation with the Unions include the organization of training sessions and the development of new products such as the automated milk dispenser and the instant milk chiller. Concerning the latter, the involvement of Aavishkaar is also here important as it uses its network of investors and business relations for connecting SKEPL to a multinational in cooling and chilling systems, whereas the knowledge, network and reputation of SKEPL is essential for bringing such new products to the market and thereby generating additional profit for the micro venture capital investor. Finally, SKEPL has started cooperating with a number of other nonprofit organizations that want to export the product to other regions in India and even other countries. Although these relationships have not been specifically studied in this case, it shows that for scaling-up this business and its internationalization efforts, cooperation with nonprofits is of paramount importance and essential to success.

## CHAPTER 9 - Case study 3: AIG Uganda's micro-insurances

*Introduction*

In the mid-nineties, microfinance was mushrooming in Uganda. Many micro-finance institutions (MFI), however, experience problems dealing with the consequences of a borrower who pays or is unable to repay his loans for another reason. As a result the MFI often came in to confiscate possessions of the family including motorcycles, radios and beds. Although MFIs could sometimes sell these items, frequently they ended up simply storing them in their own office buildings. On the other hand, by confiscating goods from the person who defaults on the loan, the MFI regularly took away essential means to make a living, thereby causing even more misery to the family. At the same time, competition between MFIs grew rapidly and clients could borrow from several institutions simultaneously, giving them an incentive to switch. Retention of clients was therefore a big problem for the MFIs.

This case study describes how the American International Group Uganda (AIG) offers a solution to this problem by providing a micro-insurance to micro-finance borrowers in collaboration with major MFIs in Uganda. End users are virtually all living on US$ 2 per day and work in the informal rural or urban economy. Micro-insurance is defined as (McCord & Osinde 2003) "the protection of low-income people against specific perils in exchange for premium payments proportionate to the likelihood and cost of the risk involved." Micro-insurance should be designed in such a way that it reflects the needs of the poor in terms of coverage, timeliness, accessibility and affordability (Cohen & Sebstad 2003).

Over a decade ago, one of the largest MFIs in the country (Finca Uganda) approached the insurance company with the question to develop an insurance scheme that would avoid recovery problems arising from a borrower's death during a loan period, such as described above. AIG Uganda had extended its business to this market segment after successfully developing and piloting the product with Finca and since the late nineties it is selling its micro-insurance policies to increasingly more MFIs and other financial institutions, including banks. Sebageni (2003) identifies six specific risks lower-income groups are vulnerable to: death, disability, loss of assets due to idiosyncratic risks (e.g. fire, theft, loss of goods in transit), health-related risks, loss of assets due to widespread disaster (e.g. earthquakes, floods and draughts), and finally crop and animal disease. Although not only the BoP population is vulnerable to these risks, the consequential impact on them is much larger and may have a devastating effect. AIG's micro-insurance covers the first three risks, albeit depending on the specific MFI it is cooperating with. This chapter discusses the following issues: historical background, AIG Uganda's partners, the market for micro-insurance, dealing with problems through partnerships, cross-sector collaborations in AIG's micro-insurance model, and findings.

*History of AIG micro-finance in Uganda*

In 1996, one of the micro-finance institutions, Finca Uganda, wanted to deal with recovery problems by offering some kind of insurance. The MFI therefore approached AIG to create such a product. Although the company initially rejected the idea, AIG took on the project when a new Managing Director came in. He conducted several informal discussions with potential clients and understood he faced two tasks. The first one was to learn how AIG could create a product that was affordable and could actually reach the poor. Second was how AIG could simultaneously help MFIs with recovery issues. Despite the preparations and the minimal impact offering insurance to this additional group would have on the company, it was not easy for Patrick Rujumba, Manager Eastern Region with AIG in Kampala, to persuade his colleagues: "I can tell you I had a very big problem in this building to convince management here that this thing would work." Eventually, however, they agreed and the project would continue. AIG did not conduct any formal research on the project's feasibility for a number of reasons: the company didn't perceive it as a new product, the insurance would be valid only during a 4-month loan cycle and AIG possessed over sufficient resources to deal with losses.

The initial insurance was the AIG Disability Plan that cost 1% of the total loan. The insurance would run only during the period of the loan and would therefore not qualify as a life insurance. As a registered non-life insurance company, AIG could avoid problems this way. The Disability Plan included coverage for the client's death (natural or accidental), permanent disability, temporary disability, and hospitalization as a result of an accident. After a few years several aspects of the insurance were changed. First, the insurance was initially optional and therefore credit officers had to constantly convince clients to buy this additional service. Also, these insurances were paid for separately, which made it hard for the officers to actually collect the money. Therefore Finca Uganda made the insurance obligatory in 1998. It does not only provide extra safety for the MFIs and its clients, but it is also automatically included in the loans because it is very difficult to explain the reasons why one has to pay extra money for a loan that the borrower will lose if nothing happens. Robert Lule, Marketing Officer with Finca Uganda says on this: "Initially it was optional, but that would not work very well. Now it is mandatory … when they [clients] take the loan, it is included with that package. So we don't have to sell it to them. We package it as a benefit, but we cover our premium costs in the fees and the interest rates that are charged to our clients." Second, Finca wanted AIG to lower the premium the MFI had to pay due to the extra work required in order to offer the insurance. Subsequently, it was lowered from 1%, the entire initial premium, to 0.5%. Third, AIG cancelled the temporary disability coverage and hospitalization from accident coverage due to the fact that hospitalization requests were often forged as people faked illness. Fourth, a request from Finca to cover also fire and theft was denied by AIG due to moral hazard and fraud. And fifth, AIG expanded the coverage to the accidental death benefits for spouses, children and dependants (i.e. non-biological children), because the family often finds itself shattered after such incidents. In 2003, catastrophes affecting the client's business, such as fires and floods, were also covered.

**Table 9.1 – Basic information AIG's micro-insurances**

| | |
|---|---|
| MFI partners | 26 (by April 2005) |
| Policy premium | 1% of the loan |
| Compensation in case of death | For all MFIs in 2005:<br>Policyholder: US$ 280-670<br>Spouse: US$ 170-380<br>Child/dependant: US$ 80-190<br><br>For Finca Uganda in 2007:<br>Borrower: USh 1,200,000<br>Spouse: USh 600,000<br>Child/dependant: USh 300,000 |

Source: McCord et al. (2005)

The insurance completely changed the way the MFI approached survivors after someone in their family died. Instead of asking for money to repay the loan, credit officers could now offer financial assistance. Rujumba of AIG says on this: "It would need someone to have a stone heart to go to the funeral of a client and demand for money. The story changed when these credit officers of Finca would go to a funeral now and could say *we have a token*." Depending on who died and the nature of death, the outstanding balance would be acquitted and a compensation of USh 300,000 per child or dependant would be paid, USh 600,000 for a spouse and USh 1,200,000 for the borrower (about US$ 189, 378 and 755, respectively).[36] This would not only have a positive effect on retaining existing customers, but also attract new ones. AIG would pay out the remaining loan plus lost interests, i.e. their profit, to the MFI. Also in case of natural calamities, such as a flood or lightning, or permanent disability of the borrower, outstanding loans will be cleared.

A few years after AIG had joined hands with FINCA and had piloted the micro-insurance product, other MFIs started looking for ways to offer insurance along with their

[36] Note: the actual payouts differ per policy and per MFI, and change on a regular basis.

loans in order to stay competitive. "Other micro-insurance institutions woke up to find FINCA leading with a comparative advantage over them," says Rujumba. In 1999, AIG began to offer the insurance also to a Tanzanian MFI and in 2000 other MFIs in Uganda started providing the insurance to their clients as well. Finally, in 2003 the product was also sold in Malawi. By April 2005, 26 MFIs offered AIG's micro-insurance in three countries covering 1.6 million lives (McCord 2005).[37]

All participating MFIs, with one exception, offer the insurance automatically in their loans to their clients. When an MFI disburses a loan, the interest rates include the premium the borrower has to pay for the obligatory insurance. The insurance runs as long as the loan period; if it is six months, the insurance will be valid for six months, if it is a year then the insurance runs for a year. Although this additional amount differs per MFI and over time, the MFIs that were interviewed for this particular case study all agreed on a premium of 1% of the total loan. Half of this amount is consequently passed over to AIG, which happens on a monthly basis to decrease administrative costs. The other half is for the MFI itself to pay for additional administrative costs that comes along with offering the insurance.[38] Depending on the specific agreement between AIG and the MFI, premiums are paid on a regular basis. For instance, Finca Uganda calculates the total premiums on a monthly basis by simply adding up all the loans that have been disbursed in that particular month. "We give them a copy of all our documents, because those loan documents actually constitute the contract that we have with the beneficiaries," says Robert Lule, Marketing Officer with Finca Uganda.

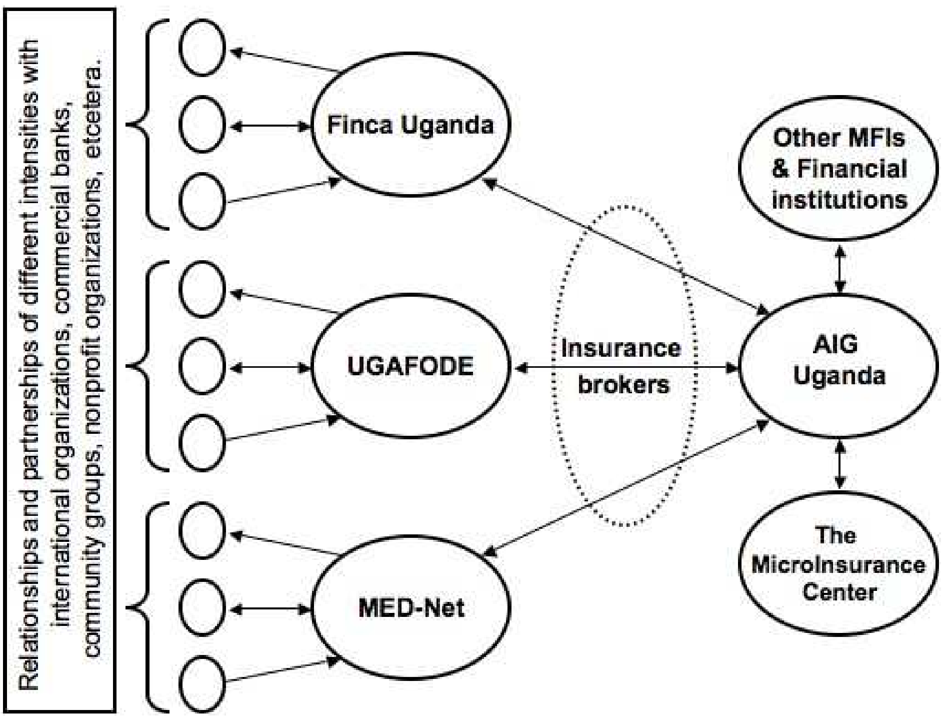
*Partners in AIG's micro-insurance*

The partnership model of AIG's micro-insurance products is straightforward because the company simply collaborates with MFIs on a one-to-one basis, eventually with an insurance

[37] Note: current numbers are unavailable.
[38] Note: this division depends on bilateral agreements between the MFI and AIG Uganda.

broker between them, as shown in figure 9.3. For this particular case study representatives of three MFIs have been interviewed: Finca Uganda, MED-Net and UGAFODE. While there are many more, not all of them were available for a meeting, whereas others have ceased their cooperation with AIG. When the company offered the insurance for the first time, several MFIs were still nonprofit organizations. And over the past few years, increasingly more MFIs have been actively taking deposits and have therefore practically turned into Micro-finance and Deposit-taking Institutions (MDI). It is expected that several of these MDIs will soon change into actual commercial banks.

**Figure 9.1 - AIG Uganda's micro-insurance network model**




American International Group, Inc. and the American International Group Uganda[39]

Having its roots dating back to the 1920's, the American International Group, Inc. (AIG) is the world's largest international insurance organizations with operations in more than 130 countries and jurisdictions. It serves commercial, institutional and individual clients through a global property-casualty and life insurance network. Also, the AIG companies are leaders in

[39] Sources: www.aig.com (general and Uganda sites) and Wikipedia

offering retirement and financial services, as well as asset management. AIG's has stock listings in New York, Paris, Switzerland and Tokyo. In 2006 it had revenues of over US$ 113 billion. AIG Uganda has been active in Uganda for more than 20 years. It offers insurance products for individuals (accident and health, motor and travel insurance) and businesses (e.g. accident and health insurance, business property coverages, crisis management, employers and management liability and a range of other insurance products). Additionally, it offers financial professional products, such as mutual funds and retirement services. By 2006, AIG Uganda had a premium of USh 21 billion (appr. US$ 12.3 million).

Micro Enterprise Development Network[40]

Beginning operations in 1997, the Micro Enterprise Development Network (MED-Net) is a Kampala-based commercial micro-finance institution that is incorporated as a company limited by guarantee and not having share capital, and is registered as a Non Governmental Organization. The MFI is affiliated with World Vision, "a Christian humanitarian organization dedicated to working with children, families and their communities worldwide to reach their full potential by tackling the causes of poverty and injustice."[41] MED-Net's vision is to be the "leading institutions in transforming livelihoods with high quality financial services" through providing "sustainable gender sensitive microfinance services to the economically active poor in Uganda for the enhancement of socio-economic development." MED-Net's loans to more than 15,000 poor clients in Uganda vary between 100,000 USh and 990,000. As of 31 December 2006 it had 5,748 active borrowers, of which 66.1% female, with an average loan of about US$ 183 running between 4-12 months, serving them through seven branches. Furthermore it has 36 credit officers who work in the field. Besides offering business training and consulting services, as well as HIV/AIDS training, the MFI has four

[40] Sources: The MIXMarket at www.mixmarket.org, the MED-Net Report of the Directors for the year ended 30 September 2005, and the interview with Edward Kanji, Operations Manager of MED-Net.
[41] Source: www.worldvision.org

products: Community Banks (or community loans), individual loans, agriculture loans and village phones in partnership with MTN Telecommunication. As of 30 September 2007 it had long-term loans outstanding for the amount of USh 3,437,310,053 (approximately US$ 2 million). The MFI's loans are funded by, among others, NOVIB, Post Bank and Vision Fund International.

Uganda Agency for Development[42]

Founded in 1995 to help the poor create self-employment and generate income through micro-credit and financial training, the Uganda Agency for Development (UGAFODE) is affiliated to the Opportunity International. The MFI's mission is to "provide micro credit, savings services, training and counsel to micro-entrepreneurs to enable them to expand their businesses, increase their household incomes and to create new, or sustain existing, employment in their communities." UGAFODE operates as a Company limited by Guarantee and serves over 9,000 borrowers through individual and group loans. It has seven branches in south and southwestern Uganda and has a loan portfolio of US$ 1,786 million as per July 2006. Currently being a microfinance institution, its intention is to transform into an MDI, a microfinance and deposit-taking institution. About 85% of UGAFODE's clients are women and are mostly involved in agricultural and agro-processing trading and semi-skilled services.

Finca Uganda[43]

Founded in 1992, Finca Uganda's vision is "to provide financial services to Uganda's lowest income entrepreneurs so that they can create jobs, build assets and improve their standard of living." Being affiliated with Finca International, the microfinance deposit taking institution (MDI) describes its mission as "to serve more low income entrepreneurs than any other MDI

[42] Source: Planet Rating, the Impact Assessment Summary Report
[43] Sources: Finca website: www.villagebanking.org, the Annual Report of Finca Uganda Ltd.

while operating on commercial principles of performance and sustainability." The organization serves nearly 45,000 clients in 2,101 village banking groups through 157 field credit officers. The average group loan is USh 450,000 (about US$ 260) and is for a period of 4 months. Individual business loans tend to be much higher, namely USh 1,7 million (about US$ 980), and are for a period of 12 months. Finca has a total of US$ 9,242,408 outstanding loans and client savings of US$ 4,599,697. It offers a variety of financial services, including village banking and working capital, solar loans, village phone loans, saving accounts, and money transfers.

<u>Commercial banks</u>

Commercial banks have recognized that there is business in offering microfinance products and most of them therefore have a microfinance department. Rujumba says on this: "Commercial banks have realized that they have lost part of their catchments. So they have also introduced desks for micro-financing, where you get money without collateral, where you get money without hassle. And along with that came micro-insurance." No banks were interviewed for the purpose of this research.

*The market for micro-insurance in Uganda*

Collaborations with MFIs form the main channels to offer micro-insurance products. Through a combination of factors, the micro-finance market grew strong in the nineties. With a population of about 26 million, 86% is self-employed and almost 90% of the non-farming active population – about 1.5 million – work in micro and small enterprises, which represents a significant market for micro-finance (Goodwin-Groen et al. 2004). By the end of 2003, Uganda counted approximately 1,500 MFIs serving almost 400,000 borrowers and 935,000 small savers (Goodwin-Groen et al. 2004). This growth was a result of several factors, among which intensive stakeholder collaboration developed by a network of MFI leaders, government ministries and donor agencies.

**Table 9.2 – Key market data Uganda**

| | |
|---|---|
| Population Uganda | About 26 million (end 2004) |
| Economically active population | About 15.6 million (end 2004) |
| MFIs in Uganda | About 1,500 (end 2003) |
| Micro-finance borrowers | About 400,000 (end 2003) |
| Population under national poverty line | 38% |

Sources: Goodwin-Groen et al. 2004

Having performed research on the demand of micro-insurance by poor urban and rural households in Kenya, Tanzania and Uganda, Cohen and Sebstad (2005) argue there are clear opportunities to help the poor manage financial risk, which cannot only be met with credit and savings services alone. Still, as argued by Churchill et al. (2003), the rural and urban poor may not consider micro-insurance as a risk management strategy. Referring to a study performed in peri-urban compounds in Lusaka, they found 38% had no understanding of the concept, 30% a limited understanding and only 32% a strong understanding. As reasons they identified a lack of education, a negative perception of the insurance concept, regional variations in demand for different types of insurances, and the hesitation to spend their very limited money on insurance products. Other reasons are that the poor also have other risk-managing strategies in place, such as group savings and credit schemes.

AIG now sells micro-insurances in Uganda, Tanzania, Malawi, Zambia, and is also conducting trial programs in the Democratic Republic of the Congo. This clearly shows that there exists demand for the product in other countries as well. Besides serving a need at the Base of the Pyramid, AIG makes a profit with its micro-insurance product. Although current earnings and profits have not been shared for the purpose of this research, McCord et al. (2005) calculated projected premiums of almost US$ 800,000 and projected net profit of almost US$ 200,000 for the year 2004. In 2003 almost 17% of AIG Uganda's net income was received through its micro-insurance product. Besides the company's policy of not disclosing financial and customer data, up until 2005 it did not track its micro-insurance policy separately from its personal accident line.

*Dealing with problems through partnerships*

Over the years, several problems arose which affected a smooth functioning of the partnership approach. McCord et al. (2005) found that clients often have no access to information about the policy and don't know very well how the claiming process works. Indeed, sometimes MFI clients aren't even aware they have insurance, which is often a result of the mandatory nature (McCord 2005, Churchill 2006). There was also ambiguity of what contingencies the policy actually covers and who can be the beneficiaries. These problems may very well influence the perception MFI borrowers have of the product and therefore also indirectly their idea about the MFI itself, which obviously affects the level of retention of clients. The following quotes of two clients shows how different people may think about micro-insurance and how they perceive the MFI (McCord et al. 2005: 19). "To me the insurance is very good. I have experienced it. I lost somebody and they were able to help me … The insurance will come up and pay for you the balance of the loan. So I feel it's a very good policy," and "I think the insurance is to their advantage. It's the moneymaking project for the organization. They are trying to get more money out of the public…" Churchill and Cohen (2006) offer some solutions to the problems resulting from the mandatory nature of micro-insurance schemes through MFI loans. For instance, they argue that credit officers can show how much borrowers would have to pay for the product on an individual basis and by showing testimonials of beneficiaries. Another problem concerns the difficulties in the claims process. McCord and Leftley (2006) mention a number of instances that make the claim processes of micro-insurances different from ordinary insurances, such as the need to settle speedily, the difficulty of obtaining requirement documentation and the necessity to have a simple process.

If somebody dies, the MFIs and their credit officers assist the family to fill out all the forms as required by AIG, obtain the correct documents. For instance, clients of MED-Net have to provide a death certificate, a doctor's report, a letter from the chairman of the local council, the loan agreement, a letter from the group announcing the death (in case of a group loan), police abstract report for accident related deaths and any other evidence, such as photos, newspaper articles, and passbooks. Once all these documents have been gathered, a MED-Net Loan Officer compiles a file, including a standard claim form, and forwards this to AIG for further processing.[44] However, sometimes getting the necessary documents is very costly due to the specific local conditions, e.g. an ineffective public administrative system or corruption. Such constraints make the AIG insurance less attractive for borrowers. Although AIG still requires these documents, it made an important change regarding the inclusion of spouse and children on the policy. At the start of the policy, the MFI client now has to pre-identify them so the provision of marriage or birth certificates has become obsolete. McCord et al. (2005) reported that the claiming process took about three months due to the incompleteness of many files. The collaboration with MFI staff and providing them with proper training and information is thus important to ensure a speedy processing of the claims and concomitant payment.

For MFIs it is of paramount importance to work together with AIG to solve any problem that arises, which becomes clear from the quote from Edward Nkangi, Operations Manager with MED-Net: "If there are issues that we want to be addressed, we inform them, because this is their product at the end of the day. But in the eyes of the client it is not AIG. It is MED-Net, because it is you, the micro-finance, selling the product to the client."

[44] Note: the procedures and level of support differ per MFI

*Cross-sector collaborations in AIG's micro-insurance model*

There are several reasons why micro-finance institutions, or for that matter any other organization offering financial services (such as SACCOs), collaborate with AIG Uganda to offer micro-insurance products to clients. One the one hand, as explained earlier, there is a need among them for extra security. Despite this need, the entire concept of insurance is virtually unknown among lower income groups. Still, practical positive experiences of borrowers will increase enthusiasm and support for the obligatory additional payments. On the side of the MFIs themselves, survival and growth depends to a large extent on how successful their clients are in recovering after a family member dies. MFI's are therefore surely interested to collaborate. But also AIG, as a large insurance company, was very much interested in working with an MFI to increase its customer base. These financial service organizations have large volumes of financial transactions with low-income people. McCord argues that the efficient transactions and operations are critical for successful micro-insurance schemes and that collaboration with an agent, usually an MFI, provides the insurance company with an effective interface with the low-income market (2006: 358): "The strength of the partner-agent model is that the agent … generally has an existing effective interface with the low-income market that can enhance efficiency."

McCord and Roth (2006: 2) sum up the reasons why MFIs form a good interface: "They are actively working in low-income areas, train their clients about financial products, serve a market of clients that tend to be more future oriented, and have efficient mechanisms to hand cash and information transactions." For AIG these partnerships are a natural consequence of mutual interests in each other's strengths. "Communication was obvious and cooperation automatic," says Rujumba from AIG. Commenting on the benefits for MED-Net regardING its collaboration with AIG, Operations Manager Edward Nkangi says: "It has two advantages; one on the side of the micro-finance, the other on the side of the clients. So on the side of the institution it is mitigation of risk. The insurance we have is termed *death and total disability*. The main purpose for us is when a client dies we do not lose our money… We are in a position to recover through AIG. We are partnering with AIG."

Each microfinance institution is different. Some are big, others small. Some lend to women, some to all. Some only finance the smallest micro-initiatives, some also to larger ones. Some only lend money to groups, whereas others also offer individual loans. And some do not pay cash, but give the final products immediately. For that reason it is virtually impossible for AIG to offer a standard product. The insurance does have a basic structure, but the premiums, payouts and rules may be different. The company therefore determines the final premium and policy in collaboration with each MFI. McCord et al. (2005) show there are significant differences between MFIs in payouts after an accidental death, ranging from US$ 280-670 for the death of a policyholder, US$ 170-380 for a spouse and US$ 80-190 for a child. They also show that 14 out of 22 active MFIs offer disability coverage and 17 out of 22 catastrophe coverage, whereas eight of these offer both and only one also offers 'last expense coverage' to pay for funeral costs.[45]

In order to educate MFI staff on the details of the insurance and the claim procedures, AIG trainers visit all branches and meet with all field officers. The company pays for these training sessions and it has to do so every time its policy changes. This serves two purposes. First, through this they become the promoters of the insurance. Although insurance is obligatory, it requires some convincing talk from the MFI staff to potential borrowers why they will have to pay extra for obtaining the loan. Promoting it as an additional benefit, it will also help the credit officers personally as they often work on a bonus basis. Second, by helping the MFI's staff to understand the policy and procedures, the entire process of filing claims can be sped up and will therefore improve the product.

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[45] Note: amounts are in rounded US$ and refer to a 2005 exchange rate

When potential loan clients are approached, field officers explain about the benefits of the insurance and eventually, depending on the MFI, they provide them with brochures with further information. Sometimes, such as in the case of MED-Net, there are no specific leaflets, because a large part of the population (32.2%) is illiterate.[46] Also, it is rather expensive to hand out copies to everyone. Thus, it boils down to explaining the reasons, benefits and procedures by personal efforts of the MFI staff. "At the end of the day, it is the credit officer, or the credit staff in the field, including branch managers, to explain the insurance to their clients," say Edward Nkangi, operations manager with MED-Net.

Over the years, micro-finance institutions have been communicating closely with AIG about a variety of problems borrowers were facing. McCord et al. (2005) found that already during the pilot phase a number of issues came to the surface. For instance, the public regarded the product negatively from the very beginning due to poor claims payments of other insurances. AIG, therefore, started with a setback beyond its control. Despite increasing understanding of the insurance, the clients only began to really see the benefits when people died and payments were actually made. Another problem during the pilot phase was that Finca staff obtained different information from Finca management and AIG agents. Organizing more joint-information and training sessions solved this problem. And finally, during the pilot it appeared that the credit officers were not sales oriented, and AIG and Finca jointly solved this problem by setting up special sales training sessions.

AIG's micro-finance partners collaborate with a number of additional partners in the private, nonprofit and public sectors as well, as shown in figure 9.1, which substantially expands the reach of AIG. Within the country, Finca Uganda works together with smaller nonprofits through which it offers its micro-finance products. For instance, it collaborates with the Namugongo Fund for Special Children (NFSC). This rural-based nonprofit's

[46] Source: Human Development Index 2006/2007. United Nations Development Program

mission is to reach “over 1,000 orphans and vulnerable children each day through multi-site breakfast centers, after school programming, nursing supports, school scholarships and child sponsorships.”[47] This organization approached Finca because it wanted to provide loans to the parents or benefactors of the children so they could start up or expand a small business. “We have just finalized the memorandum of understanding with them … we are still in the process of group formation,” comments Robert Lule, Marketing Officer with Finca Uganda. Also MED-Net cooperates with a number of partners. Besides finding new clients by sending out its credit officers to rural communities, it also approaches them through its affiliation with World Vision. Being affiliated to this large international Christian humanitarian organization, it has access to the target group of World Vision’s Area Development Programs (ADP). These programs are integrated rural and community-based development projects with a long-term involvement of 12-15 years spanning across a large area of 20-50 villages. ADPs aim to empower the people so that they can eventually manage their development process on their own. MED-Net goes into those areas, with the approval of World Vision, and provides the people in these areas with loans. The other way to identify new clients is by sending out its credit officers, especially to areas where there is no World Vision, to promote the micro-loans. Additionally, the MFI collaborates with community-based organizations (CBO).

*Summary*

Micro-finance can be a powerful means to provide the poor at the Base-of-the-Pyramid with an opportunity to develop on their own and get out of the poverty trap. Still, repaying micro-loans can become very difficult once someone in the policyholder’s family dies. This case study showed how a multinational created a way to deal with this problem. Cohen and

[47] Source: www.nsfchildren.org

Seberstad (2005: 469) say: “Without more effective precautionary and loss management strategies in place, the poor remain locked in a vicious circle. In the face of a shock, asset build up is interrupted and quickly gives way to asset depletion and increased debt.”

The development and marketing of this micro-insurance product could not take place without a strong collaboration between AIG and a number of MFI partners, commercial banks, and the networks of those MFIs. McCord et al. (2005: 15) state that this distribution channel is very effective, particularly because without the collaboration with MFIs the insurance company would never be able to reach so many people in the low-income groups: “AIG Uganda has client/provider relationships with twenty-six MFIs within Uganda, Tanzania, and Malawi. These relationships are specifically designed and managed so that AIG Uganda can sell its micro-insurance products to low-end markets.” McCord (2006: 359) comments on this particular partnership: “… this model is usually the simplest, cheapest and quickest way for an MFI to start offering risk-management services outside traditional credit and savings products to its clients.” To ensure reaching the low-income groups, AIG decided to use its network on insurance agents to start collaborations with micro-finance institutions in Uganda, as well as one in Malawi and Tanzania. The agent receives a commission for all insurances he sells to MFIs, e.g. 0.1% of the loan. MFIs on their part also charge the loan recipient a commission of up to 0.5% to cover administration costs and a small profit, whereas the rest of the premium goes to AIG. The loan officers are particularly essential as they are the ones who actually communicate important information to the final beneficiaries, including information on the value, costs, benefits and needs for the insurance.

AIG began to consider selling micro-insurances in the mid 1990’s. In particular the company’s partnership with Finca Uganda was essential in the development of the product. “The collaboration between AIG and Finca is the prototype for the ‘partner-agent’ model in the emerging field of micro-insurance."[48] Since the inception of the micro-insurance product, AIG has benefited in several ways by cooperating with its MFI partners. First, the policy itself has been adapted several times in dialogue with Finca Uganda to make it an interesting product for the MFI's micro-loan recipient. "We are more to the ground than the companies," says one MFI manager. Second, AIG worked together with its partners throughout the entire period to find ways to convince borrowers on the usefulness of the additional insurance. Third, the partners devised training programs to ensure MFI field staff would understand the policy and procedures well. Fourth, AIG collaboratively developed ways of making the claiming process easier and more efficient. In short, the collaboration with the micro-finance institutions was fundamental at all stages and for all facets of the micro-insurance product. As McCord et al. say (2005: 22): "Without these MFIs, AIG Uganda would not have entered this market."

By going into the field of micro-insurance, AIG has made a strategic decision. Not only is this market very profitable, but it provides the company also with an expanded client base, which can eventually help them in their other lines of business as well. "They [AIG] believe we have enough critical mass to support their services," says Robert Lule from Finca Uganda. The success does apparently not go unnoticed, as Patrick Rujumba argues: "You know, other insurance companies were shunning this product, because they couldn't believe that the poor who were borrowing an equivalent of $10, $50, can afford to pay for insurance. So the syndrome for someone looking for a fat check from a … big group … is now populating deeper into the minds and the operations of all other insurance companies. Because with the numbers eventually, will pick the good check." One of those companies is MicroCare, a small company that was founded in 2000 as a nonprofit. MicroCare collaborated closely with AON for a few years, another insurance giant, to obtain knowledge

[48] Source: AIG Leaflet "Finca international announces 1.5 million grant from AIG to expand micro-insurance product development and delivery"

about the insurance field. Since recently MicroCare provides health care products and insurances for low-paid employees in the formal and informal sectors. Although there may be a large unmet demand for health insurance at the BoP, some remain sceptical about the chances for commercial success: “I foresee danger ahead as they promise more than can afford to do actually.” Surely the micro-insurance will develop over the years to come and successful models will be picked up by competitive forces within and outside Uganda.

## CHAPTER 10 - Case study 4: Vodafone's M-Pesa mobile payment service

*Introduction*

This case study describes M-Pesa, a mobile-banking service from Vodafone being operated by Safaricom, a subsidiary of Vodafone in Kenya and the country's largest mobile network operator. Developed, hosted and owned by Vodafone, and operated by Safaricom, the service addresses a basic market need for millions of un-banked people. Without the need for a bank, it allows registered subscribers to easily and quickly deposit and withdraw cash, and transfer money to other cell phone users. Pauline Vaughan, head of M-Pesa with Safaricom says: "In Kenya there are a number of people with no access to formal means of financial services, especially in some more rural areas where there is no access to a bank or ATM machine. This gives them an alternative. It just opens the opportunity for them to send money transactions."[49] Such transactions are especially beneficial for a country like Kenya. Susie Lonie, head of M-Pesa at Vodafone says: "It's a miserable business in this part of the world not having a bank account. You have to queue for everything for hours."

Although the technology behind M-Pesa is not new – it is based on SMS or text messaging – the application is certainly innovative. The system is secure, allows for rapid expansion within countries and replication to other countries, and has enjoyed an overwhelming number of registrations since its launch in March 2007. The service is officially only for subscriber-to-subscriber transactions, deposits and withdrawals and buying Safaricom airtime, but people are very inventive in using M-Pesa. Vaughan says: "the ways in which people use the service are absolutely limitless."

M-Pesa, which stands for Mteja-Pesa or "Mobile Money" in Swahili, is not the world's first cell phone-based banking service. In India a similar service has been available since 2002 through Suvidha's Beam, although it has never become popular. In the

[49] Source: Kenyans embrace new way of banking. IOL Technology, 7 November 2007.

Philippines, a country with 41 million cell phone users, two mobile operators have been active with comparable products since 2004.[50] Globe Telecom's *GCash* and Smart Communication's *Smart Money* are already serving 5.5 million Filipinos who use their phones as virtual wallets. Through GCash US$ 100 million is approximately transferred monthly, and by partnering with foreign banks and mobile operators, both companies have also tapped into the US$ 12.7 billion remittance flows coming from 8 million migrants working overseas.[51] Finally, a few months after the launch of M-Pesa, competitor network Celtel also launched a comparable payment service called Soko Tele.

The M-Pesa case study is an outstanding example of how a multinational cooperated across other sectors to introduce a new service: "A partnership approach was at the centre of the project," says Susie Lonie (Hughes & Lonie 2007: 80). To better understand how important cross-sector collaboration was in this particular case, this chapter subsequently deals with the following issues:

- how the service works
- partners in the project
- historical background
- the impact of the service
- the market for M-Pesa
- the legal framework
- M-Pesa for MFIs, banks, companies and the government
- collaboration in the project

This chapter closes with a discussion of this case's findings and draws some general conclusions about the development, introduction and further expansion of M-Pesa.

[50] Source: Cell phones double as electronic wallets in Philippines, making transferring money easy. International Herald Tribune, 29 September 2007.
[51] Source: Hold on, my wallet is ringing. Los Angeles Times, 7 October 2007.

*How the M-Pesa service works*

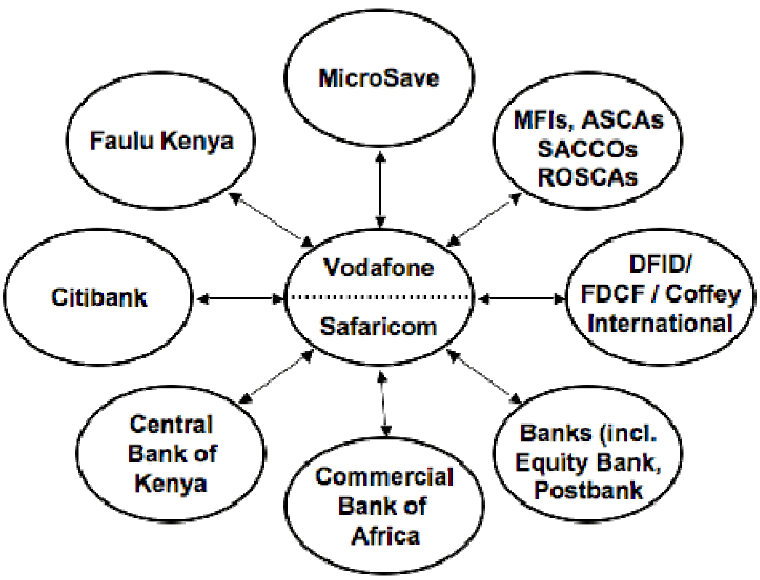
The purpose of M-Pesa is to allow someone to transfer money using a standard mobile phone that has SMS functionality and accepts a SIM toolkit that supports menu-driven access to M-Pesa. Using the system is quite easy. First, the client upgrades his Safaricom SIM or gets a new one. Then he registers himself for the service with an M-Pesa agent, most of the time an ordinary Safaricom dealer, by showing a National ID-card or passport. The dealer subsequently sends an SMS to the new user that automatically downloads the M-Pesa menu on the cell-phone. Once these steps are taken the service is ready to be used. He can now deposit cash to his mobile account free of charge at the M-Pesa agent and other users can transfer money to his account as well. Once this is done both the agent and the new client will receive an SMS that confirms the deposit. Now the new client is able to send money with his mobile phone to any cell-phone in Kenya. In the menu the client has to choose the "send money" button, enter the phone number of the recipient, the amount and his secret PIN-code. Once the transfer is confirmed, both the recipient and the sender will receive an SMS. This service costs 30 Kenya shillings for the sending party when the recipient is also an M-Pesa user or a minimum of 75 shillings if it is not a registered user. To withdraw money, one should go to an official agent, give the phone number and show an ID-card or passport. Subsequently the withdrawer chooses the option "withdraw money" in the menu, enter the agents number, the amount to withdraw and the secret PIN-code. After the transfer has been confirmed both the agent and the withdrawer will receive an SMS after which the money is handed over. This service costs a minimum of 25 shillings for registered M-Pesa users and nothing for non-registered users, although the sender pays an additional fee to transfer money to a non-registered person. Additional services of the system are either free (receiving or sending M-Pesa related SMS's, updating the menu, changing the language, or buying Safaricom airtime) or cost only one shilling (showing balance or changing the PIN). All charges are automatically deducted from users' accounts.

M-Pesa agents play a crucial role in the model because they are not only responsible for registering new clients, depositing money into and withdrawing money from clients' accounts or withdraw cash from non-registered M-Pesa users who received a money transfer, but they are also responsible for the recruitment of new customers as well as retaining them. In their ongoing research Morawczynski and Miscione (2008) tentatively conclude that agents are often blamed for problems with the system and thus have to convince users of the proper functioning. As with any network, it gets stronger when more people are connected. Finally, Safaricom and the Vodafone Group have a 24/7-support service.

*Partners in the M-Pesa project*

To launch M-Pesa, Vodafone and Safaricom had to establish a large network of companies, public, nonprofit and community organizations. Figure 10.1 depicts all partners of the collaboration. This section briefly describes each of them, which is necessary to better understand the dynamics between them.

**Figure 10.1 - Partners in the M-Pesa model**



Vodafone, Safaricom Limited and Telkom[52]

The UK-based Vodafone Group Plc is one of the world's largest mobile telecommunications company with 232 million customers in 27 countries and a market capitalization of £88 billion.[53] Founded in 1997, Safaricom was a fully owned subsidiary of the government-owned Telkom Kenya Limited until May 2000 when Vodafone AirTouch acquired a 40% stake in the company that it still has up until today.[54] Safaricom's Headquarters are in Nairobi and it has a nation-wide dealership to guarantee accessibility across the country. The company has over 7.5 million subscribers; most of them based in the major cities. For the fiscal years that ended on March 31 for the years 2004-2007 it showed net profits of about US$ 51.8, US$ 88.1, US$ 126.7 and US$ 180, respectively (in millions).

Department For International Development & Financial Deepening Challenge Fund[55]

DFID is the United Kingdom Government's Department for International Development. It is responsible for managing Britain's aid to poor countries and working towards the eradication of extreme poverty. With the Financial Deepening Challenge Fund (FDCF), DFID tries to combat poverty by improving access to financial products and services for low-income communities, because it believes that "*providing basic financial products, such as banking and borrowing, directly supports poverty reduction by helping poor individuals and communities to manage risk and access essential services like health care and education.*" Since its inception in April 2000, it has funded 28 projects throughout Asia and Africa with grants varying between £500,000 and £1,000,000 with a total of £15 million. However, the FDCF does not simply donate money but always works with private sector organizations,

[52] All information is retrieved from www.safaricom.co.ke, www.telkom.co.ke, www.vodafone.com and www.wikipedia.com on August 8, 2007.
[53] On 30 June 2007 and 3 July 2007, respectively. Source: www.vodafone.com
[54] See message on wikipedia about IPO and 5% stake of unknown person/company.
[55] Unless otherwise stated all information is retrieved on 13 August 2007, from www.dfid.gov.uk and www.financialdeepening.org

such as banks and multinationals, which should share at least 50% in the costs of the project. To date it has attracted over £56 million in private sector contributions through bids for funding. The main criteria of the FDCF are that the companies propose projects that are financially sustainable, replicable, innovative and improve the income and opportunities of poor people.

Coffey International Development: specialists in developing communities[56]

Spurred by the rapid growth in emerging markets, population growth and climate change, Coffey International believes there is a need for sustainable environmental development and new approaches to eliminate poverty. Previously known as Enterplan, its mission is to be one of the world's most effective development organizations that really make a difference in the communities it is working with. Coffey delivers consulting and training services, as well as outsourced service delivery solutions that contribute to economic growth. With regard to this case, it is the fund manager of the Financial Deepening Challenge Fund on DFID's behalf. In this role it is responsible for promoting the fund, managing the bidding process, contracting bidders, monitoring and evaluating their progress and reporting on the progress to DFID.

Faulu Kenya Ltd: Enabling people to succeed through small business loans[57]

Although Faulu Kenya started as a nonprofit microfinance institution, it is now a public company with limited liability. Its majority stakeholder is Food for the Hungry International (FHI), a Bangkok-based Christian relief and development organization with worldwide operations that "answers God's call to meet the physical and spiritual needs of the poor."[58] In 1991, FHI established the Faulu Africa Network in order to offer micro finance services in Kenya and Uganda. Beginning in the Nairobi slums the activities of the network evolved

[56] Unless otherwise stated, all information is taken from www.coffey.com on 13 August 2007.
[57] Unless otherwise indicated all information is retrieved from www.faulukenya.com on August 7, 2007.
[58] Information about Food for the Hungry International is retrieved from www.fhi.net on August 8, 2007

into the Faulu Loan Scheme a year later which further developed into Faulu Kenya in 1994 and which turned into a limited liability company in 1999. The company describes its mission as: "to be a leading provider of financial services to further holistic nation building and maximize shareholder value." To achieve this mission it pursues a number of strategic objectives such as fostering an improvement in business ethics among clients, encouraging women to be involved in micro-enterprises and influencing public and economic policy in Kenya. In carrying out its activities, Faulu works together with several communities, including smaller solidarity and self-help groups.

Commercial Bank of Africa Limited (CBA)[59]

CBA was originally founded in Tanzania in 1967, but after the nationalization of banks in that country, the Kenya branch reincorporated itself. Initially it was a subsidiary of a consortium of Western banks, but from 1984 it became fully owned by the Bank of America. Eventually, BoA offered most of its shares to local investors while maintaining a minority stake in the bank, but later it sold all remaining shares. CBA is now the largest privately owned bank in the country that focuses on Corporate and Institutional Banking (e.g. foreign missions, international organizations, NGOs and professional firms). It also provides investment banking services, as well as personal and e-banking services. In 2003 it had a total income of about US$ 26.7 million with a net profit of about US$ 6 million.

MicroSave: market-led solutions for financial services[60]

Based in Nairobi and Kampala, MicroSave is a nonprofit organization that envisions "a world in which all people have access to high-quality affordable market-led financial services" by "strengthening the capacity of financial service providers to deliver market-led

[59] Unless otherwise indicated, information is retrieved from www.cba.co.ke on August 7, 2007.
[60] Unless otherwise indicated, information is retrieved from www.microsave.org October 8, 2007

financial solutions." MicroSave believes that better services can help customers improve their household finances, and their lives. It wants to move microfinance from a product-driven good to one on a market-led basis, which incorporates (a) product development, (b) product delivery systems, (c) customer service strategies and (d) corporate brand and identity. To achieve its objectives, MicroSave conducts primary field-level and action research, develops curricula and disseminates extensive information.

Citibank[61]

Founded in 1812 and serving over 200 million customers in more than 100 countries, Citibank is the world's largest bank with shareholder equity of US$ 112,5 billion.[62] As part of its microfinance initiatives, Citibank works closely with MFIs, investors and commercial partners to "expand access to financial products and services to individuals that are not currently reach or are underserved by financial institutions. Lending through MFI partners and remittances are a few of such products.

The Central Bank of Kenya (CBK)[63]

CBK was established in 1966 after a desire for monetary and financial independence from Uganda and Tanzania. The Bank's main task is to maintain "price stability and fostering liquidity, solvency and proper functioning of a stable market-based financial system". As such, its responsibilities are to formulate and execute monetary policy, supervise and regulate depository institutions, assist the Government's financing operations and serve as the Government's banker. The Central Bank's mandate was enhanced in 2003 to include formulation and implementation of such policies and to promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems.

[61] Unless otherwise indicated, all information is retrieved from www.citigroup.com
[62] Source: The world's largest banks in 2006. Euro money 2006
[63] All information is retrieved from www.centralbank.go.ke

SACCOs, ROSCAs and ASCAs[64]

Besides micro-finance institutions, there are three other financial institutions that can be of help to unbanked people: SACCOs, ROSCAs and ASCAs. The Savings and Credit Cooperative (SACCO) grew out of the cooperative system in the 1970s. These are formal nonprofit financial institutions that are democratic in nature and enable members to save money collectively and offer loans at reasonable interest rates. As of December 2005 there were 3,000 active SACCO Societies throughout Kenya representing 3 million people, with a total share capital and deposits of Ksh 120 billion and Ksh 90 billion in outstanding loans.[65] Many of these have offices with good infrastructure, such as electricity and phone connections, which are potentially good outlets for a service like M-Pesa. A Rotating Savings and Credit Association (ROSCA) consists of a group of people who agree to meet for a defined period of time in order to save and borrow together. The entire sum of money rotates among the equal-contributing members, whereas all transactions are transparently disclosed during group meetings. As with MFIs, participation is based on trust. Accumulating Savings and Credit Associations, or ASCAs, work almost the same way as the funds are normally entrusted to a single member only for the entire, albeit limited, duration of the agreement. Both ROSCAs and ASCAs are informal financial institutions.

*Historical background of M-Pesa*

M-Pesa's history dates back to the World Summit for Sustainable Development in Johannesburg in 2002 where Vodafone executive Nick Hughes learned about the Financial Deepening Challenge Fund (FDCF), a fund run by the Department of International Development of the UK Government (DFID) that fosters private sector involvement in new projects that expand the provision of financial services in developing countries. Money out

[64] Sources: Wikipedia and the website of Arid Lands Information Network-Eastern Africa (ALIN-EA)
[65] Information retrieved from www.kuscco.com

of this fund is awarded after a competitive bid process and matches the company's investment. Before starting the official application process, Vodafone had several conversations with Coffey International up until June 2003 about whether the initial idea made sense or not. Also, Coffey explained the requirements of the fund and also the complexity of developing financial services for low-income customers in Africa since Vodafone had no experience in this area. Jonathon Ridley from Coffey says: "[We tried] to help them understand how they might exploit the opportunity … with a grand fund represented to help them look at partnerships in Kenya and Tanzania and to support them when they need help internally selling the idea to colleagues that it was something that was worth Vodafone doing." Consequently it decided to hand in a 4-page concept note that was reviewed by an independent panel of experts from the financial sector. Upon approval Vodafone was invited to hand in a full application, which it handed in a few months later and was approved in the fall. DFID awarded a grant of £ 910,000 in the fall of 2003 that approximately matched Vodafone's investment of £ 990,000. Soon after, several exploratory workshops were organized in Nairobi and Dar es Salaam where various organizations came together, including banks, MFIs, NGOs, regulators, and telecoms representatives, to discuss the question how to increase access to financial services. The outcomes were that unbanked customers should have very simple access to finance and that the internal management of MFIs should be improved to increase efficiency. Coffey played an important role as it introduced Vodafone to various parties in the financial sector and helped with the selection of potential partners and the facilitation of relationships with donor bodies in the market.

In February 2005 Vodafone assigned Susie Lonie as manager of the M-Pesa project in Nairobi. Besides making sure the project team understood well the specifics of the service and its requirements, Lonie made fundamental decisions about whether Vodafone would have to build M-Pesa itself or outsource it. It chose the former strategy because existing mobile banking technologies were all based around banking and then simply extended to mobile telephony. Lonie says on this: "we would have loved to buy something of the shelve and just deploy it, but there is nothing much really … that would do the job." She continues saying that most mobile banking technology start from the premise of moving money around between bank accounts. Also she observes a different mindset between conservative banks and an entrepreneurial telecom company such as Vodafone. For instance, whereas banks make a small number of high value transactions, telecoms make many low value transactions. "Our customers are just the men on the street. Therefore we decided that we had to build from the bottom up, rather than from the top down," says Lonie. After issuing an RFP, the M-Pesa software was developed by Sagentia, a British company specializing in "blue sky" strategic development. This company had to create a very configurable system and thus had to be very flexible and creative itself. Another issue that had to be solved concerned the location of the servers. Shortly after they were installed, it was decided to move them to the U.K. due to inefficient bandwidth in Kenya.

In the fall of 2005, Vodafone and Safaricom ran a pilot study in collaboration with the MFI Faulu Kenya and the Commercial Bank of Africa. Faulu Kenya's task was to provide customers who would receive and repay their micro loans by using their cell phones. Due to the cumbersome process of giving out, collecting and depositing money, Vodafone assumed there was a real market need for the borrowers and the MFI to make these procedures more efficient. The service was tested with 500 Faulu borrowers in three different settings: Nairobi's city centre, the Mathare slum and the market town Thika, an hour away from Nairobi. Although only eight M-Pesa agents were active at that point, Vodafone had potentially access to hundreds more through Safaricom's existing airtime dealer network. In the Mathare slum, the absence of agents was soon solved when a clever entrepreneur opened a Safaricom airtime and M-Pesa shop in a petrol station.

At the beginning of the pilot project, it wasn't entirely clear what the role of CBA would be. Lonie says on this: "… we thought we might have to host the service in the bank, or the bank may have to do certain transactions or so on. We very quickly realized that … this wasn't necessary and wasn't desirable either… But we did have this bank in our partnership, and they were of some help to us in our approaches to the regulator later on when we decided to launch." In the end, the role of CBA was more advisory, although the M-Pesa settlement account is held at CBA. Also MicroSave took on an advisory role because it knew the market very well and could give advise both to Vodafone/Safaricom and Faulu Kenya on how to improve the way the service would be used.

Although the pilot officially ended on 1 May 2006 – at that point Vodafone and Safaricom had simply gathered all necessary data to make decisions – the service continued to be in operation because users simply wanted to continue using the service. "We actually left the switch on until October … because the customers didn't want us to switch off and it was pretty low maintenance and we were always learning new things," says Lonie. Despite problems to integrate M-Pesa in Faulu's business, Vodafone and Safaricom were convinced of its potential success. Therefore the system was commercially introduced in March 2007, and plans were immediately made to implement the technology in other countries as well, namely Tanzania and Afghanistan.

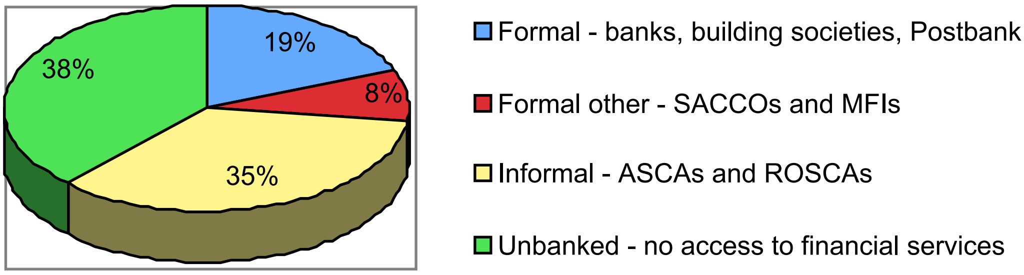
*The impact of M-Pesa*

M-Pesa can bring many advantages for its users. Robert Katz from the World Resources Institute says: "Considering how many people have access to a mobile network, and how many don't have access to a bank account, I'd be willing to bet that the impact could be considered world changing."[66] Indeed, unbanked people with access to a cell phone can

[66] Source: Retrieved on November 7 from www.worldchanging.com/archives/006381.html.

benefit in several ways. But also banked customers find M-Pesa on occasion an attractive product for transferring money, because the need to carry cash decreases, thereby lowering the chances loss and theft.

**Figure 10.2 - Access of Kenyan population (18+) to financia services (source: Finacess study 2007)**




In Kenya, and in a bid to enhance safety of money transfer, M-Pesa can be of great help to those travelling as money can be deposited at the beginning of the trip and again withdrawn at the end. As Susie Lonie says: "The biggest benefit that M-Pesa is delivering to consumers is security." Likewise taxi drivers can benefit by offering the payment service to their passengers and thereby carry less cash. Sending money up-country is another big benefit. Lonie: "It is very difficult in the developing world to send money up-country. Everybody sends money from the cities up-country to their relatives."[67]

Many people that are excluded from the official banking system do enjoy financial services through social groups such as ASCAs and ROSCAs. While important to poor people, these informal financial institutions also exhibit several weaknesses. For instance, some group members don't pay their contributions, don't cooperate or simply pull out of the arrangement entirely. These problems certainly don't disappear with M-Pesa, but the service can make such transactions more efficient and effective and therefore more attractive to its members.

[67] Source: Podcast with Susie Lonie from Hyperion Consultants, retrieved on 27 June 2007 from: www.chyp.com/consulthyperion_feed_podcasts_mp3.php

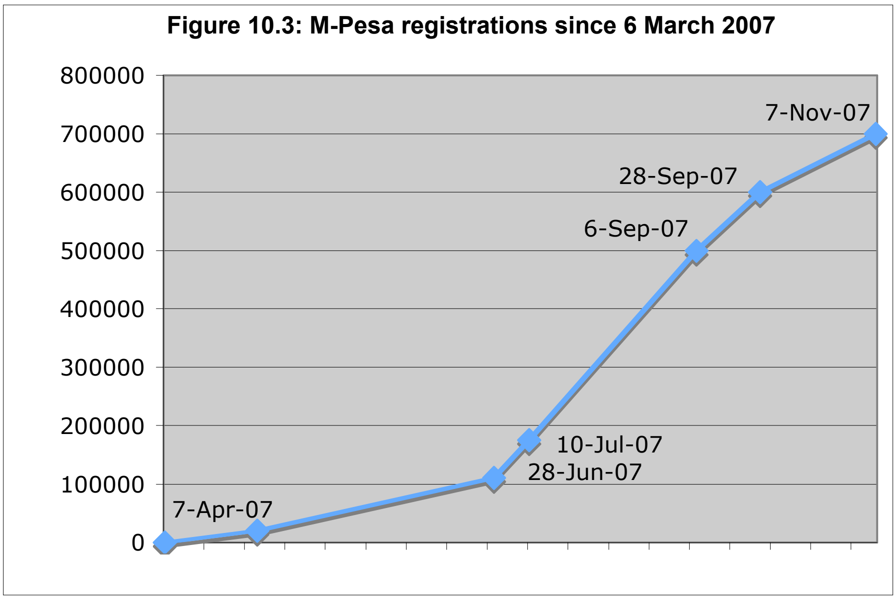
The formal banking sector can also benefit from M-Pesa. Kapoor et al. (2007) argue that on the one hand it may allow banks to become more efficient, and on the other hand it may actually change the nature of banking relationships. A report from Bankable Frontier Associate (2006) states that mobile-banking products such as M-Pesa will become transformational because:

1. existing mobile infrastructures are being used by many unbanked people
2. it is driven by new players, like telecoms, that have different target markets
3. it may create cash distribution networks, instead of banks or ATMs
4. it may be cheaper than traditional banking products

It may be too early to understand well how transformative M-Pesa will. Improved access to financial services has been on the agenda of governments, developing agencies and international organizations for a very long time. But only now, the spread of advanced mobile telecommunications technology may offer an opportunity that can really have an impact on millions of poor people around the world.

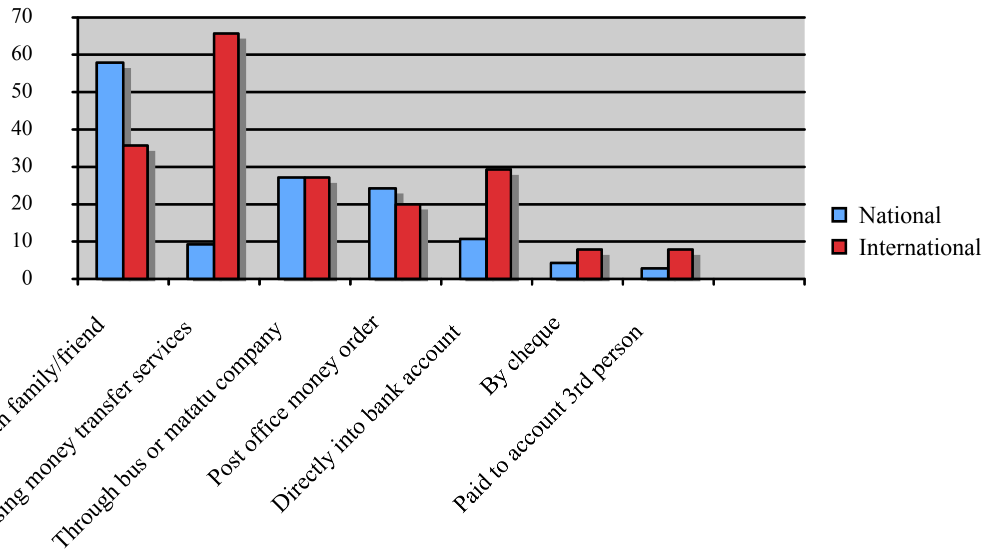
*The market for M-Pesa*

Safaricom officially launched M-Pesa in March 2007. Within only eight months, the total number of Safaricom subscribers that had registered for the payment service had grown to 700,000, as shown in figure 10.3. In June the number of M-Pesa agents was 450, which grew to over 1,000 by early November. In the beginning, only existing Safaricom airtime dealers were agents. Later all 80 Postbank branches and Uchumi supermarkets were added, as well as a number of petrol stations and some SACCOs. Although this number may not seem very high they should be seen against the number of ATMs and Western Union agents, which is 600 and 350 respectively. In other words, within 6 months M-Pesa had about the same number of outlets as traditional money sending/receiving services.




Every day 20,000 money transfer transactions take place across Kenya, of which 48% through informal channels (friends, relatives), 26% through bus companies and only 24% through Postbank.[68] Put differently, there exists a big market for transfer transaction. Over the first few months about US$ 6 million has been transferred through M-Pesa with an average amount of $45 per transfer and 3.5 transfers on average per month. As the service grew in acceptance, the number of registrations increased, and the user base expanded to

**Figure 10.4 - Usage of money transfer services in %**
**(source: Finaccess)**




[68] Source: Celtel enters partnership to provide money transfer solution. The Sameer Group. Date unknown.

include all of Kenya, this amount was expected to increase. And so it did, because in July Ksh 850 million[69] was transferred through the service, and by September this amount had risen to over Ksh 2 billion, with a monthly transfer over more than Ksh 500 million (approximately US$ 13.3, US$ 31.28 and US$ 7.8, in millions respectively). There is also a divergence in type of usage observable. M-Pesa is now used for salary payments, sending allowances and expenses for field staff (e.g. truck drivers and farming transfers), payments of school fees, rents or for goods that are purchased from distanced retailer. It is expected that Safaricom will soon offer an international payment service for sending money home from abroad. Research from the International Monetary Fund shows that Kenya is the second largest receiver of overseas remittances[70]. With an annual remittance flow of US$ 93[71] billion from overseas migrants to Africa,[72] and an estimated KSh 3.9 billion to Kenya (± US$ 61 million in June 2007)[73] Vodafone and Safaricom want to tap into this market that is currently dominated by Western Union, MoneyGram and Postapay. A pilot project is currently underway in the UK, and plans have been made to launch it in the US, France and Germany. "Kenyans in the UK deserve an efficient and speedy means of sending money home and this is what we are offering," says Pauline Vaughan. To achieve this objective Vodafone and the Citibank's Global Transaction Services have started a worldwide mobile financial remittance venture. The partnership combines "Vodafone's global reach, brand recognition and operational mobile money transfer service with Citibank's worldwide network, international payments capabilities and existing global remittance solution."[74]

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[69] Source: Postbank adopts Safaricom's M-Pesa. Business Daily Africa, 18 July 2007.
[70] Source: Trend-setting M-Pesa goes international. Business Daily (Nairobi), 3 August 2007.
[71] Note that there is debate on the total amount of remittances, partly because commercial services like MoneyGram and Western Union treat their financial data as competitive information and don't disclose it.
[72] Source: Money transfer service wows Kenya. BBC News, 3 April 2007.
[73] Remittances by Kenyans abroad reach new high. Business Daily Africa (Nairobi), 5 September 2007.
[74] Source: New adventures in symbioses. The Banker, 1 October 2007.

The above shows there exists a large 'qualitative' market opportunity for M-Pesa in Kenya, i.e. there are a lot of reasons why the population in this country as well as others would like to use the service. But also in quantitative terms there is an enormous potential market for mobile payment services. Kenya has a population of 36 million – the majority still under the age of 18 – of which about 10 million have a cell phone and 7.5 million being registered with Safaricom (the rest with Celtel). Since the product is easy to replicate in other countries, the actual market size is much larger. In Africa alone, one has estimated cell phone penetration at 160 million subscribers by mid 2006 (Kapoor et al. 2007) and 225 million by mid 2007 (World Bank). Worldwide there are twice as many people who own a cell phone as people who have a bank account.[75]

M-Pesa is a particularly valuable product in developing countries because of the existence of the large number of un-banked people. With an ever-increasing part of these populations gaining access to mobile phones, the market size of this technology is therefore virtually unlimited for the years to come. Additionally, with innovative schemes such as Grameen's Village Phone Program in Bangladesh, which offers mobile access to millions of rural people through 260,000 village phone ladies, M-Pesa's financial services can potentially become available to many more people than the number of existing cell phones because SIM cards can easily be swapped.

**Table 10.1: Basic statistics Kenya (estimates)**

| | |
|---|---|
| Kenyan population | 36 million |
| Total cell phone subscriptions | 10 million |
| Total Safaricom subscriptions | 7.5 million |
| Population excluded from formal banking services | 73% (26.8 million) |
| Population excluded from financial services | 38% (13.7 million) |

Source: FSD Kenya, Finaccess Study 2007

Statistics on cell phone use and growth alone do not suffice to understand the potential for M-Pesa. With retrospect to Kenya itself, only 19% of the population is formally 'banked' through regulated banks, building societies or the Postbank. Another 8% is formally

[75] Source: Mobile banking aids economic growth. The Gen Newsletter (Sagentia), Autumn 2007.

'banked' through SACCOs and MFIs. This means that almost three-quarters of the population are excluded from official banking services. A little over half of this group is informally served financially served through ASCAs and ROSCAs, whereas the rest is completely excluded from financial services. This group amounts to 38% of the total population, whereas this percentage is even higher in urban areas and among youth.[76]

Of the un-banked Kenyan population of 13.7 million, 17% had sent and received money, which accounts to approximately 2.3 million potential customers. With a fast growing young adult population and great visibility, the prospects of M-Pesa are promising. Also the cumbersome ways of sending and receiving money for this group makes M-Pesa an interesting alternative. Traditionally people sent money through friends or family, used an expensive money transfer service, gave it to a bus driver or a passenger or paid it by check, money order or a third person's account. Finally, data on cell phone usage shows a promising trend. Although the majority of phone owners currently belong to the banked population, namely 69%, while only 16% of the un-banked population has a cell phone, a larger number of the un-banked population has access to mobile networks through friends and family. Moreover, mobile telephone usage is still increasing fast in Kenya.

*The legal framework*

Laws on deposit-taking institutions are currently focused on banks and therefore there is not yet a specific law regulating specific money transfer services like M-Pesa, besides common law. However, due to increased transactions on the internet and with mobile communications means, the government decided in 2006 after an UNCTAD meeting on legal aspects of e-commerce in Nairobi that was organized for the East African Community (EAC) Partner States, and various Government of Kenya (GOK) previous legislative efforts, that a new e-

[76] Source: Finaccess: results of a national survey on access to financial services in Kenya 2007. A co-publication of Financial Sector Deepening and a number of other private, public and civil-sector organizations

policy should be drafted. With funding from USAID, in close collaboration with GOK's Directorate of e-Government, under the coordination of Afrika ICT Strategies, a consulting and research company based in Washington D.C. and Nairobi, a new Electronic Transactions Bill – or simply e-Transactions Bill – has been developed, which will be tabled and discussed by Kenya's Parliament early 2008. Dr. Mary Muiruri, Chief Executive Officer of Afrika ICT, believes that the law will be a boon for the country because it may expand markets, productivity and competitiveness. Also, she continues the law "is critical to the Central Bank of Kenya (CBK) as it will regulate M-Pesa and other electronic transactions like Business Process Outsourcing (BPO) and Contact Centers in which the government is currently involved in promoting the country as a competitive destination."[77]

Stephen Mwaura Nduati, Head Oversight of National Payment Systems at the Central Bank of Kenya, shares this view: "A broad e-Transactions law that allows for electronic transactions should be a big plus for Kenya." Still, there is no specific law regulating the service: "Kenya's Central Bank tolerates it, as long as M-Pesa does not pay interest or invest the float," writes the Economist.[78] The main regulatory issues CBK is interested in regarding M-Pesa concerned (a) whether it would be a deposit taking institution, (b) money laundering, (c) consumer protection and (d) competition. Considering the first issue, Safaricom convinced the Central Bank early in the process that it would not take deposits, as all funds are kept safe in a CBA account.

Concerning money laundering, as with any financial entity, CBK wants Safaricom to keep adequate information of all money transfers as a means to combat terrorism. "So if you need to know how money is moving, and who it is moving to and moving from, the record should be very clear on that," says Matilda Onyango, Associate Director and Head of National Payment Systems. With regard to competition, CBK does not (yet) have any strict

[77] Source: Kenya's cyber law being developed. The East African Standard, 5 August 2007.
[78] Source: Dial M for money. The Economist, 28 June 2007.

rules, but surely it is very happy with that customers are able to transfer money to Celtel users. Also with respect to consumer protection, the Bank does not yet have any clear guidelines. Although it is keen on reaching as many customers by keeping the prices low, it does not want to determine maximum prices. Understanding that laws always come after the development of new products and services that may require regulation, the Bank will closely follow M-Pesa's growth and its regulatory implications. "If they grow into very large volumes and they are touching the whole country, then the dynamics change, because they then would be moving quite a substantial amount of money and that comes under the purview of the central bank," says Mwaura Nduati. In any case, the Central Bank has to ensure that the country's payment system developments are in line with international standards.

During the pilot phase, the Vodafone/Safaricom combination kept in regular touch with CBK. This communication increased when M-Pesa was ready for its commercial launch. Susie Lonie, Head of M-Pesa with Vodafone says (Hughes & Lonie 2007: 80): "There followed a series of product demonstrations, requests for documentation, compilation of information, more questions, meetings of clarification, submission of a formal legal opinion, and so forth." In the end, CBK was positive about the new service and gave permission for the commercial launch in February 2007.

*M-Pesa for MFIs, banks, companies and the government*

Implementing M-Pesa could potentially bring many benefits for micro-finance institutions. Duncan Goldie-Scot from Mobile Microfinance Ltd. (MML), a nonprofit consultancy that focuses on implementing mobile banking in East African MFIs, sums up a long list of advantages. For the customers it means they can save several hours on weekly meetings where loan officers manually collect and administer the money of all individual group members, a lengthy and mistake- and fraud-sensitive process. Lonie states: "People found it a convenient way of repaying their loans, so they didn't need to turn up at the group meetings to hand over their money." Instead, by using M-Pesa borrowers can simply and safely transfer their loan repayments with their mobile. During the pilot phase, the service was not only used for receiving and repaying loans, because users soon discovered other useful ways, such as transferring money to each other, paying salaries and buying airtime. On the MFI side it means that loan officers do not have to make the often dangerous and time-consuming trip to the bank anymore, where they often had to wait in line. Besides that hiring security staff is expensive, the consequences for loss and theft fall on the shoulders of the borrower because without an actual bank deposit slip the loan is not repaid. In addition, loan officers become more efficient because they can now also visit villages in the afternoon for meetings during the time the treasurer of a micro-borrower group would normally have to deposit money. Of course it may be true that people prefer holding group meetings because the social control and help from group members may be a stimulant for them. However, as such meetings cost much time, the trend in the micro-finance world is towards more individual loans and holding individual borrowers liable for their loans (Kapoor et al. 2007). Still, Goldie-Scot argues that by saving time to collect the money and deposit it at the bank, as well as the concomitant savings on security and transaction fees, the group meetings could be held every 2 weeks or even every month and primarily deal with business issues. M-Pesa may be very useful in fostering this process and expand the reach of MFI's. As Susie Lonie argues, just about 3% of the demand for microfinance around the world is currently being met, and only 8% in Kenya. Finding ways to make MFIs more efficient and have a better reach is therefore essential and can have a big impact on the micro-finance industry.

Vodafone has also developed M-Pesa web screens that monitor e-payments. Such systems can have substantial advantages as loan (re)payments can be automatically processed in the MFI's administrative system, including emergency payments. As a result, the cash flow goes much faster while the number of office personnel and field officers can be reduced. Referring to data published in the MicroBanking Bulletin, Kapoor et al. (2007) argue that costs savings can be significant for MFIs as they account for 50% of their operating costs while these costs are already 50% higher in comparison with banks focusing on higher market segments (as % of assets). By introducing mobile payment services, they believe that such banks can (a) focus more on problems and opportunities, (b) cut costs of loans and (c) expand services to more remote areas.

Despite its initial success, it appeared to be very difficult to fully integrate the service into the operations of Faulu Kenya and other MFIs. The MFI models are traditionally based on group meetings and peer pressure, whereas administrative procedures are normally done manually. For instance, Faulu re-entered M-Pesa's electronic documents into its system by hand. Even though Vodafone offered multiple times to pay for a business analyst to streamline the MFI's processes and to collaborate with its IT department to harmonize systems and electronic output, Faulu did not take Vodafone up on the offer. At the moment, Vodafone and Safaricom are talking to some MFIs to see whether integration of M-Pesa is possible. Still, the companies believe that these institutions should come to them because they are the ones who need to make the organizational changes that are necessary to enable growth through increased efficiency.

Susie Lonie expects that "financial institutions of any size would want to do some kind of integration." An online real-time feed of data from M-Pesa allows banks to expand their business to the micro-finance segment. At the moment Vodafone is still working on developing an API (Application Programming Interface) for M-Pesa, but Lonie definitely sees opportunities for banks. First they can become M-Pesa agents, whereas additional banking services can be introduced later. The Kenya Post Office Savings Bank is already a partner since July 2007, thereby becoming the first formal financial institution to adopt M-

Pesa, and with 80 branches it significantly expanded the service to its network. Soon people may be able to withdraw cash from an ATM rather than from an agent.

For other companies Vodafone has already developed a salary payment functionality, which will be particularly useful for paying out salaries to lower-income groups, such as field workers in the plantations or flower farms. Additionally, several Kenyan insurance agencies have shown an interest as they struggle to collect the many small payments for their policies. And for other companies, Vodafone is developing a bill-payment service for consumers and a concomitant M-Pesa business account for companies or organizations offering the service.

Finally, Vodafone and Safaricom are also talking with different government institutions to use the service for pension and social security contributions and payments. Likewise it is involved in the development of mobile payment solutions for rural people who live in areas without cell phone coverage. Financial Sector Deepening Kenya (FSD Kenya) and the Consultative Group to Assist the Poor (CGAP), under the Kenya Social Protection Payments Challenge Fund, awarded the Vodafone-Safaricom combination a grant to foster this process. Particularly the system can be used for the distribution of social and emergency payments. Although this group concerns the very Bottom-of-the-Pyramid, Lonie expects that serving these customers "will not be just about social payments… but can be potentially commercially interesting as well." Coffey International facilitated linkages with this fund, as well as with financial regulators in Kenya, because as a telecom, Vodafone didn't have much more experience with communications regulators.

*Collaboration in the M-Pesa project*

Although the technology behind M-Pesa, i.e. the actual product, unmistakably belongs to Vodafone, it is quite clear that the service would not have come into being without close collaboration between the telecom company and a number of partners, including some organizations from the nonprofit and public sectors. This section discusses the partnerships that Vodafone, independently or in combination with Safaricom, has established over the past few years to develop, pilot test, launch and further expand its spread in Kenya, among different socio-economic groups, and additional countries.

Vodafone , the Financial Deepening Challenge Fund and Coffey International

Although the collaboration between Vodafone and DFID's is primarily financial in nature, the importance of this private-public partnership cannot be underestimated. Lonie says on this: "That million pounds from DFID has allowed us to discover a whole new business opportunity which is very good for my company and the partners markets that we work with in the developing world, because new business is a great new way for us to meeting new customers and simultaneously meet a market need that is not being met by any conventional means at the moment." Put differently, M-Pesa would not have been developed at that stage without the financial support of DFID. As a high-risk project for a relatively low-value market in a developing country, Hughes believed (Hughes & Lonie 2007: 66) "that challenge funds have a strong role to play" to raise executive-level interest and get corporate funding for the development of a product that would be non-core and long term. "The project would never have happened without the FDCF funding. Not that Vodafone can't afford it … but it simply wasn't a priority for us," says Lonie. "Until now, development never came into my consciousness. Nobody looks at such opportunities within Vodafone's Group Marketing division, but the FDCF grant gives us an opportunity to think outside the usual paradigm."[79] Although it is still too early to determine whether M-Pesa is also a commercial success, one Vodafone manager notes that "The FDCF has contributed to Vodafone's understanding that mainstream commercial products can originate from CSR beginnings …" Besides being

[79] Source: www.financialdeepening.org/default.asp?id=77&ver Retrieved on 14 August 2007.

awarded development capital for a product with unclear commercial potential, Vodafone and Safaricom also benefited from the partnership with Coffey International. At several points it gained access to local knowledge and expertise on micro-finance in Africa. Also, interesting and important MFI partners were identified in Kenya and Tanzania and relationships with financial regulators were facilitated.

Vodafone and Safaricom

Although Safaricom is a commercial subsidiary of Vodafone, and we therefore cannot speak about a cross-sector collaboration, it is important to understand this partnership was essential in making the M-Pesa project successful. Vodafone, as the developer behind the technology was namely looking for an suitable partner to pilot test and subsequently launch the product with. This made European partners inappropriate and therefore Vodafone had to search for a partner in the developing world. "It's a partnership agreement, where Vodafone provides the service, host the equipment and do the development, and we from Safaricom operate it on the ground in Kenya," says Pauline Vaughan, head of M-Pesa with Safaricom. During the entire collaboration, which started in 2004, both telecoms have been actively engaged in the development of an appropriate business model for (a) implementing M-Pesa with MFIs and other (in)formal financial institutions and (b) to launch it at large for commercial purposes.

Vodafone, Safaricom and Faulu Kenya

After Vodafone and Safaricom had organized some workshops in Nairobi in 2003 to identify the main obstacles to implement M-Pesa, it identified Faulu Kenya as the MFI with which it wanted to collaborate in the pilot project. "The pilot was an absolute partnership," says Susie Lonie from Vodafone. In close cooperation with Faulu, both telecoms began in the fall of 2005 with the pilot after the MFI had identified and recommended three places for testing the service. Vodafone believed that their complementary resources would improve access to potential users, i.e. the un-banked population. It experimented with a platform with which users could receive and pay small-loans through a cell phone. By using the Safaricom distribution network and a simple menu it should become easy for Faulu customers to use M-Pesa. Vodafone and Safaricom their original intention of the collaboration was to make the MFI more efficient, and thus effective, as loans could be easier disbursed and repaid, even to and from very remote locations. Faulu, on its end, would provide Vodafone with hundreds of customers to pilot test the service and, potentially, later on with thousands of additional customers – primarily small business owners – when M-Pesa would be launched. Pauline Vaughan from Safaricom says on the partnership: "[Vodafone] was very much working with Faulu, understanding the needs, understanding how the MFI model of Faulu worked and how to effectively replicate that with M-Pesa, so we could ensure customers used it." Faulu chose not to integrate M-Pesa fully in its own business operations, despite its expected benefits for the MFI's efficiency. Vaughan says on: "They have [manual] processes in place to run their current business. And to use M-Pesa they would have to change some of these processes and the technology behind it." The main problem was that during the pilot phase, Faulu Kenya never actually integrated the information from M-Pesa into their Management Information System. "They were actually taking the information of the M-Pesa system and re-entering it into their own," she continues. Despite this unforeseen development, Vodafone and Safaricom have continued their conversations with other micro-finance institutions, SACCOs, ASCAs and ROSCAs. Moreover, during the pilot phase Vodafone and Safaricom learned many valuable lessons on how the service could improve the efficiency of MFIs as well as on how the product could be launched commercial for individual customers.

Vodafone, Safaricom and the Commercial Bank of Kenya (CBA)

The issuance of currency is traditionally a task of the government. Safaricom, as the first telecom company that implemented Vodafone's technology, therefore had to prevent acting as a bank itself, i.e. issuing currency. This problem was known before the pilot project started, but because it was not clear how to deal with other financial issues it began to collaborate with the Commercial Bank of Kenya that would provide all necessary conventional banking services. The main question was what role an ordinary bank would have to play in establishing a service like M-Pesa. Pauline Vaughan: "A lot was still questionable to the way we would proceed as to whether every customer would need a bank account or not. So a banking partner was there for the pilot. As things progressed it was clear that all we needed was a bank account. They were partners in the pilot and part of the core team but their actual input, the way that it turned out, was a bank account. So their input was less than expected. … So what we have from CBA is a standard current account in which the money from the customers is kept…. So at all stages, the money in that particular CBA account matches the amount of electronic money." Although the role of the bank during the entire post-pilot phase has been much less than expected, at several points in time the knowledge and network of the bank has been useful to deal with discussing regulatory issues with institutions of the Kenya government, such as the Central Bank.

Safaricom and SACCOs

Partnerships between Safaricom and some Savings and Credit Cooperatives reach beyond some of them becoming M-Pesa agents. The partnerships have also been formed to facilitate the standard services of these financial cooperatives. Sometimes these organizations have many independent members whose payments cannot be simply taken out from their pay-checks. By using M-Pesa such members can simply transfer their savings contributions to the SACCO, and vice-versa their loans or contributions can be repaid by the SACCO to the members. “So beyond acting as a cash in – cash out point, we see a big opportunity there for SACCOs to actually use M-Pesa to make the payments to their customers and collect payments for their customers,” says Pauline Vaughan from Safaricom.

Vodafone-Safaricom and the Central Bank of Kenya

As a regulatory governmental institution, the Central Bank has to be involved in the development of M-Pesa to ensure adequate oversight. For this reason it may not be correct to speak about a partnership. Under its earlier stated mandate, the Central Bank has a keen interest in the development of technologically driven payment services like the mobile payment system that would enable a substantial part of the population to gain access to financial services. “Generally our role as the Central Bank is to encourage innovation, innovative ways of circulating money in the economy, and M-Pesa is one of those. The government initiative is to reach out to the very small person down in the village with financial services,” says Matilda Onyango, Associate Director of CBK and Head of the National Payment Systems. But also Vodafone and Safaricom understood that it had to collaborate with CBK in order to get M-Pesa on the ground. “We didn’t start the pilot without telling what we were doing. We are in communication with CBK regularly and certainly during the pilot. Before launching the product we did consult with CBK and advised them on what we wanted to do and asked them for their opinion of no objection. They gave us their advice before we launched and we did get their official stand on this,” comments Vaughan on this issue. But also the upcoming e-Transaction law and other laws that will affect M-Pesa, stimulates both companies to maintain a good working relationship with CBK by providing information on the usage of the service. “We’ve been very proactive in providing them with all the information on M-Pesa, and certainly people at CBK are very interested in M-Pesa, because they need to be sure everybody's money is safe … [and] to make sure people have access to financial services."

*Summary*

M-Pesa's roots can be found in Vodafone's Corporate Social Responsibility efforts. The mobile payment system was considered a low yield project and therefore the development could not be paid for through traditional investment departments such as Research & Development. The funding from the Financial Deepening Challenge Fund was essential to get the project of the ground. One of DFID's requirements for the grant would be that the final product would be financially self-sustainable. Susie Lonie says: "it was fundamental to being awarded funding that whatever we developed was not charity, it was self-sustainable." After having won the award, Vodafone decided to put the project first on the ground in Kenya and to collaborate with its subsidiary Safaricom.

Vodafone's next step was to organize a number of workshops in Nairobi and Tanzania to consult on how to expand access to financial services could be expanded among the Kenyan population, or in the words of Vodafone's Head of the Social Enterprise Team (Hughes & Lonie 2007: 65): "getting money into the hands of those who need it the most." It invited various parties from the private, public and nonprofit sectors. As a result the Vodafone – Safaricom alliance identified the Commercial Bank of Africa as its banking partner and Faulu Kenya as its micro-finance partner. Furthermore, it kept ongoing contacts with other essential parties such as the Central Bank of Kenya.

The collaboration with Faulu Kenya was key in the development of M-Pesa. For the pilot project the MFI identified 500 of its borrowers, living in three different areas, to receive and repay their loans entirely through M-Pesa. At the same time, Vodafone and CBA figured out the financial requirement, often in collaboration with CBK. Hughes writes on this

(Hughes & Lonie 2007: 68): “Network operators bring connectivity and a huge reach through the airtime reseller distribution network. A micro-finance organization understands the market need for micro-loans and other financial services but is typically not a regulated bank. A commercial bank brings the discipline and compliance aspects of storing and managing customers’ funds.”

After the pilot was run successfully, the direct collaboration with Faulu Kenya stopped. Despite many advantages for Faulu and its borrowers, it appears that adapting the business operations would be to disruptive. Still, Vodafone and Safaricom continued to stay in touch with other MFIs, SACCOs, ROSCAs and ASCAs, and continued designing M-Pesa software based on the group-lending philosophy. The pilot study also formed the basis for further collaboration with the Citigroup in order to offer the possibility of sending money home to Kenya: “… Vodafone’s international money remittance venture with Citigroup to assist migrant workers send money home conveniently and safely using mobile technology, would not be possible without the Kenya trials which have led to the successful launch of M-Pesa,” says Gavin Darby, CEO Non European Affiliates at Vodafone.[80]

Based on the lessons learned from the pilot, Vodafone and Safaricom decided to launch the product commercially, which was fully paid for by the companies and didn’t involve any third party funding. Already soon after launch, tens of thousands of Safaricom subscribers registered for the service and within only eight months this number reached 700,000. Pauline Vaughan says on this: “Clearly it is very early to say whether it’s a commercial success or not… we’re pretty sure we will be … It’s just a matter of when it will start to turn into a profit and that’s hard to tell and probably not something we would like to share.” Besides pure financial gain, Vodafone also benefits in other ways from the development of M-Pesa (Hughes & Lonie 2007). First, since the project started as a CSR

[80] Source: Safaricom & Vodafone launch M-Pesa, a new mobile payment service. Press release from Vodafone on 13 February 2007.

initiative it has reputation benefits. Second, it can use M-Pesa as a learning experience in data transmission services. And finally, M-Pesa provides technical benefits with respect to business development for its partner companies, such as Safaricom, giving them a competitive advantage over other companies.

# PART IV – FINDINGS AND CONCLUSIONS

This final part presents the findings of the four cases that have been extensively described in the previous chapters and draws the final conclusions. Chapter 11 first analyzes each of them along the lines of 'real' BoP initiatives as proposed by London (2007). Consequently it presents the identified reasons for collaboration and the resources that companies are looking for when partnering with nonprofit organizations. Finally, it also pays attention to the same issues, but then seen from the nonprofits viewpoint. Chapter 12 presents a theoretical framework that is built up from major elements of the Resource Dependency Theory and the Resource-Based View and that helps understanding cross-sector collaborations at the Base-of-the-Pyramid. The final chapter is completely dedicated to the conclusions of this research project. It presents the theoretical and managerial lessons that can be learned as well as the roads for further research.

# CHAPTER 11 – Overall findings of the case studies

All four cases in the previous chapters showed models that relied on cross-sector collaboration. First, each of them fits well within the definition of a cross-sector collaboration (a voluntary collaborative effort between organizations from two or more sectors to solve a social, economic or environmental problem that is of mutual concern and which brings benefits to all partners). Second, referring to the criteria mentioned in the methodology chapter, they are deemed successful because (a) all key stakeholders of the major collaborating parties have been interviewed, (b) the interviews yielded much relevant data about the underlying motivations of the partners to collaborate across sectors, (c) the interviewees disclosed what resources and knowledge they were looking for with their partners, and (d) the desk study and interviews provided a comprehensive picture of the case and its larger context, as well as the companies' business models. This section briefly discusses the findings of these cases while paying extra attention to answering the two guiding questions as explained in the chapter on methodology.

- Why do companies (and nonprofit organizations) collaborate across the traditional business sector while introducing new products and services at the BoP?
- What are the partner's key resources and knowledge that companies (and nonprofit organizations) want to obtain, have access to, or benefit from?

But before doing so, each of the cases is analyzed according to London's (2007) framework. A sharp definition of BoP ventures is important to prevent that simply any project at the BoP is classified under this label. The chapter finishes with briefly discussing the underlying reasons for nonprofits to collaborate with businesses that are active at the BoP.

**Table 11.1 – Application of London's (2007) framework for real BoP-ventures**

| *Case* | *Evidence from the data applied to the six components* |
|---|---|
| Shell Foundation Breathing Space | 1. The Shell Foundation and its direct other partners, are external parties. Even ARTI and Development, as large NGOs, cooperate with smaller local nonprofits and community groups at the BoP.<br>2. The technology behind the new stoves has been rigorously tested among actual users. The broad objective of Breathing Space is to create a sustainable model in collaboration with local groups, among which manufacturers and entrepreneurs.<br>3. The actual technological design and testing has been done by non-BoP organizations, including Aprovecho. Once stoves are manufactured it is very well possible that they are sold in other BoP markets.<br>4. The pilot phase lasted several years and was used for properly testing stove models and different business models.<br>5. The ultimate objective is to put a financially self-sustainable value chain in place once the scale-up phase is over. While it is not the Shell Foundation's intention<br>6. Together with its partners the Shell Foundation devised the business model in such a way that it incorporates the specific landscape at Indian BoP markets. |
| SKEPL Akashganga | 1. Although SKEPL is a small Indian company, it cannot be considered a BoP company and such, certainly since its markets are sometimes far away from its own location, including other countries. Also, it is collaborating with a micro-venture capital fund and a multinational.<br>2. SKEPL is closely cooperating with village-level cooperative societies to ensure the product design and interfaces are appropriate. SKEPL also stays in regular touch with the cooperative unions on a district level to share insights for Akashanga or new products, e.g. chiller.<br>3. Akashganga is non-local product for small farmers that enables them to improve the efficiency of the milk collection process.<br>4. Setting up the Akashganga business model did not happen overnight. Also with regard to its internationalization efforts, SKEPL is closely cooperating with knowledgeable international partners as well as local partners on the ground.<br>5. SKEPL is a forprofit company that derives its competitive advantage from mutually beneficial close partnerships with the Indian cooperative system, including local small cooperative societies.<br>6. Akashganga is a flexible system which can be adapted to fit with local circumstances, including language and level of computer literacy. |
| AIG Uganda | 1. AIG Uganda is part of the American International Group and was mainly active in the upper-markets of Uganda before it started with micro-insurance products.<br>2. Over several years, the company worked closely together with Finca to understand the needs of the poor.<br>3. Insurance products weren't available at the BoP before AIG got involved.<br>4. Although the pilot with Finca was not (financially) risky for AIG, the company took many years to develop the product in collaboration with Finca before it started selling the service to other MFIs as well.<br>5. The AIG micro-insurance is a profitable product that is offered in conjunction with micro-loans from a number of MFIs.<br>6. AIG has learned to understand the specific characteristics of its products' end users' markets and has adapted its product accordingly. |
| Vodafone / Safaricom, M-Pesa | 1. Vodafone is an external company. Also Safaricom has primarily been serving the top market segment in Kenya, although this is slowly changing with the expansion of its subscribers' base and because many M-Pesa users are unbanked.<br>2. M-Pesa was locally created in a pilot project with Faulu Kenya.<br>3. M-Pesa is a new financial services for the unbanked in Kenya.<br>4. It took Vodafone several years and an external Challenge Fund award to develop a product that was finally launched in Spring 2007.<br>5. Although it is too early to determine whether M-Pesa is commercially a successful product, the prospects are positive. Although Safaricom is currently not (anymore) collaborating with MFIs and other financial institutions, the Vodafone technology allows for highly efficient automated web-based services.<br>6. M-Pesa inherently includes the reality at the BoP in its design and business model as it acknowledges the constraints of the poor to send money around. |

*London's model for real BoP initiatives*

The introduction chapter presented London's (2007) framework that identifies real BoP ventures and separates it from other poverty alleviation strategies. Table 11.1 analyzes the four case studies in the light of these six components: 1) external participation, 2) co-creation, 3) connecting local with non-local, 4) patient innovation, 5) self-financed growth, and 6) focus on what is 'right' at the BoP. Table 11.1 shows that all companies entered the BoP as an external party and co-created their products and services with local parties, such as MFIs and nongovernmental organizations. Also all cases show that BoP consumers were connected with new products and services, e.g. M-Pesa for the unbanked and automated milk collection systems for micro-farmers. Essential for this particular research is the observation that all ventures involved several partnerships with different organizations, also for non-development issues. The four cases are also good examples for patient innovation as the product and business model development process took several years in each of them. With regard to self-financed growth three of the four cases are clearly commercial already. The Breathing Space program aims to develop a sustainable commercial model to introduce improved cooking stoves, but has been and still is to a great extent not viable without financial donations from the Shell Foundation and other donors. Finally, all cases clearly show that the companies and their partners are well aware of the specific conditions at the BoP and put much effort into adapting their strategies to this.

*Findings of the cases*

The Shell Foundation's Breathing Space, SKEPL's Akashganga, AIG's micro-insurance, and Vodafone-Safaricom M-Pesa case studies show that cross-sector collaborations contribute significantly to successfully introducing products and services at the Bottom-of-the-Pyramid in a profitable way. Indeed, virtually every key decision maker that was interviewed for these four cases deemed such partnerships a necessity. The study of these four cases started with posing two driving questions, namely:

- Why do companies (and nonprofit organizations) collaborate across the traditional business sector while introducing new products and services at the BoP?
- What are the partner's key resources and knowledge that companies (and nonprofit organizations) want to obtain, have access to, or benefit from?

This chapter proceeds with discussing the data from the case studies along the lines of these two questions. Obtaining clear answers to them will later on be helpful in analyzing cross-sector collaborations at the BoP from the resource dependency and resource-based view.

*Reasons for collaboration*

With regard to the first question, there are many reasons why companies collaborate across the traditional business sector while venturing into the BoP. Evidence from these four cases suggests that these reasons can be divided into several groups and subgroups, which will be discussed in detail in this section:

a) Gaining knowledge about local market conditions and consumers
   - Identify test markets for pilot projects
   - Product development, testing, standard setting
   - Marketing development

b) Making the connection
   - Organize awareness raising and education campaigns
   - Set up user training and salespeople training
   - Reaching a broad group of BoP consumers

c) Creating alternative distribution channels

d) Enabling a partial profitable or risky business model

e) Disclosing hitherto unseen opportunities

f) Legitimizing forprofit business ventures

g) Enjoying financial benefits

<u>Gaining knowledge about local market conditions and consumers</u>

The conditions in Bottom-of-the-Pyramid markets differ significantly from other markets, even the upscale markets in emerging economies. Multinationals or big companies, which are virtually always based in larger urban areas, cannot simply use existing channels to reach this potential new consumer group. For instance, making TV commercials has no effect if the target group does not possess a television set. Likewise, selling such through traditional retail outlets like supermarkets may have no effect at all if there aren't any branches. It goes without saying that adapting an entry strategy is always necessary, but with regard to BoP markets such a strategy is likely to include a partnership with organizations that are not part of the business-sector. They may namely much better understand the specific needs of these new consumers because they are better connected with them and sometimes even well integrated. With a lack of institutions such as the Chamber of Commerce, the local nonprofits may be the best organizations available to pick up new opportunities or foresee problems. Also they can help developing the products, set standards, identify the best prototypes and distinguish useful test markets. As one nonprofit manager says: "Obviously, … for multinationals and NGOs to come together, it makes complete sense, because the NGOs have the sensitivity of understanding what the people want [and] it is believed that the MNCs obviously have the capability to develop the solutions and responses." The evidence from the four case studies supports this. For instance, to build up a value chain for delivering improved cooking stoves to the poor the Shell Foundation cooperates with two large non-governmental organizations that on their turn also cooperate with many smaller local nonprofits and community groups. These grassroot organizations know very well the local market conditions such as income levels, specific needs of the population, levels of literacy, weather and climate constraints and a number of other issues. As a result, these organizations were helpful in identifying specific pilot markets to develop and test the product and the business model. The Vodafone-Safaricom combination initially talked to a number of organizations during a few workshops to better understand the market conditions in Kenya and to get an initial idea about the feasibility of introducing a mobile payment system. Later on they worked very closely together with the micro-finance institution Faulu Kenya in three simultaneous pilot markets that the MFI identified to gain knowledge about how actual users would use and value the product, as well as the problems they would experience. And to identify new regions to introduce Akashanga, SKEPL benefits from the networks of the district dairy unions to recognize the best villages. Piloting BoP products and services are important for two reasons. First, it helps companies in developing the technology of the products or the design of the services. Vodafone adapted the M-Pesa interface several times during the pilot phase. SKEPL communicated closely with local cooperatives to make appropriate automated milk collection system, whereas it took AIG Uganda several years of piloting to constantly improve the insurance products in cooperation with Finca. And finally, for introducing improved stoves the Shell Foundation's partners developed various models. Additional to technological development, partnering also helps for creating an appropriate design, the testing of new technology and setting standards. The second reason why piloting is important concerns the design of marketing models. With partners having much knowledge about what the local population needs and which marketing techniques would work and which not, companies find great partners in nonprofits. For instance, SKEPL staff goes into villages together with representatives of district unions to demonstrate the Akashganga system among local cooperatives. In partnership with the district cooperatives, such as the Panchmahal Union, the company installs its systems for free in a few local cooperatives to promote it among adjacent localities. AIG provides sales training to MFI field officers and understands showing actual pay-outs of compensations to surviving families is an essential tool in reaching new customers.

Making the connection

Companies that want to sell their products and services at the Bottom-of-the-Pyramid often face difficulties in actually connecting with this potential market. As we have seen, nonprofit and other organizations that are not from the business sector possess valuable knowledge about these markets. Thus by reaching out to these organizations companies can make an initial connection. An important reason why Vodafone and Safaricom piloted M-Pesa with Faulu Kenya was to better understand local conditions and to further develop the product. But there are other reasons for connecting with BoP consumers through nonprofits as well. First, most BoP products and services will not be adopted overnight since potential customers don't see the benefits in it, don't know how to use or outright distrust companies that want to sell these products. Cross-sector collaboration can help overcoming such problems by organizing awareness programs and education projects. The improved stoves from Breathing Space do not sell easily without such education programs. Instead, ARTI and Development Alternatives closely worked together with local groups to organize special meetings during which the advantages of cooking with such stoves explained. Second, many products require rigorous training of its users and those who sell it. The Akashganga case study showed that computer illiterate people were successfully trained by SKEPL in close cooperation with the Panchmahal District Union. Also the Shell Foundation collaborated with the nonprofit ARTI to train small entrepreneurs for manufacturing the improved cooking stoves. And AIG organized special meetings to train the credit officers of the micro-finance institutions about the background of micro-insurance, the sales process and claiming procedures. Third, in order to connect with a broad group of potential customers at the BoP, companies can use the extensive networks of the nonprofits that often extend beyond traditional geographical areas. This network can consist of various other nonprofits, self-help or women's groups, as well as small companies, entrepreneurs and craftsmen. Vodafone and Safaricom therefore wanted to work with Kenya's micro-finance institutions in order to obtain a critical mass for M-Pesa.

Creating alternative distribution channels

Reaching the Base-of-the-Pyramid markets is a major challenge for companies. After all, efficient and effective distribution channels do virtually not exist and thus have to be created. In India, Hindustan Lever Ltd. created its own direct-to-consumer sales distribution network consisting of many women and community groups, called Shakti. In order to connect with a broad group of potential customers at the BoP, companies can use the extensive networks of the nonprofits, community- and self-help groups. Through such collaborations companies can reach beyond the geographical span of traditional retail channels and actually access the smallest and most remote communities. The Breathing Space is probably the clearest example of building a network of organizations that can serve as a distribution channel. To attain critical mass for M-Pesa, Vodafone and Safaricom therefore started working with Faulu Kenya, which was already present at the BoP. Although their initial plan was to fan out to other micro-finance institutions as well, there are currently no MFIs that have implemented the service to improve its own business process. And finally, AIG collaborates with a great number of significant micro-finance institutions for selling its micro-insurance products as an add-on to micro-loans. Such distribution channels are not only used for sales purposes, but also serve as after-sales or feedback networks. For instance, AIG's partners play a critical role in collecting all necessary materials for processing claims and discuss eventual problems that clients have with the insurance company to improve the service.

Enabling a partial profitable or risky business model

The Shell Foundation unambiguously says that the business model it tries to foster in the Breathing Space program cannot be completely profitable. Although the entire model is market based, some parts of it cannot be self-sustainable. Introducing improved cooking stoves will incur much awareness raising efforts among eventual users and training of entrepreneurs, and thus cost much money. Whereas the program's objective is to have these actors supported by profitable parts in the model, e.g. the manufacturers and salesmen, as such these parts will never be financially self-sustainable in and of themselves. Also in the Akashganga model the awareness and training programs are not profitable. But it is evident that these unprofitable parts, which are mostly carried out by the nonprofit partners in the two cases, form an essential part in the entire model. As such they enable the existence of the profitable parts in the business models. The Financial Deepening Challenge Fund in a way also enables devising models that are uncertain to be profitable. By matching Vodafone's investment of nearly one million pounds, the company could start the process of developing the sms-based mobile payment service. As evidence from the data shows, this service would never have been developed, at least not at that time by this company, without this financial incentive to reduce the risks involved.

Disclosing hitherto unseen opportunities

The underlying philosophy of Base-of-the-Pyramid thinking, at least as initially advocated by Prahalad and Hart (2002) and later more by Prahalad alone (2005), is that there are good business opportunities in BoP markets. However, such opportunities are often unknown unseen by companies, of which the reasons have already been discussed. Evidence from the studied cases shows that nonprofits and other non-business organizations can help disclosing these opportunities. Again, the Financial Deepening Challenge Fund is very much focused on fostering sustainable projects that are focused on increasing access to financial services for the poor. And it was precisely a representative of this fund who convinced a Vodafone manager to start thinking about utilizing mobile telecom technology for giving people at the BoP a chance to enjoy the safety, security and convenience of an innovative payment services like M-Pesa. Similarly, AIG would never have thought of entering the BoP market in Uganda without the persistent attitude of the micro-finance institution Finca Uganda to design a tailor-cut micro-insurance product. Finally, although somewhat outside the scope of this research, through cooperation with the dairy union system and the micro venture capital fund Aavishkaar, SKEPL is currently designing new products for their client bases, including a milk-chilling machine for local cooperatives.

Legitimizing forprofit business ventures

The literature on cross-sector collaborations revealed companies sometimes need to cooperate with nonprofit organizations to somehow legitimize their business operations. Making a profit of certain groups or issues is often negatively perceived by stakeholders, whether this is justified or not. Nonprofits, on the other hand, often provide valuable services to vulnerable groups for free or very little money. They are therefore trusted and often very well respected and received by these groups. As such, they can serve as a intermediary agent between the target group (people in BoP markets) and the company in order to legitimize the company's intention. For instance, AIG Uganda suffered from the bad reputation insurance companies had in the country. By collaborating with an esteemed micro-finance institution like Finca Uganda, whose operations had contributed much to improving the lives of the poor, it could lift on the reputation of its partner and obtain a fair chance to sell its products.

Enjoying financial benefits

A final reason, but certainly also very important one, is that companies sometimes collaborate with nonprofit and public organizations for financial motivations. The M-Pesa case evidently shows how Vodafone partnered with Coffey International, and thus indirectly also with the British government, in order to obtain a financial award for their plans to develop a mobile payment system. Although not mentioned by any of the interviewed decision makers, it can also be argued that obtaining necessary resources and knowledge costs money and that through cross-sector collaborations these costs can be partially covered by nonprofit and public partners. For instance, to understand the legal and institutional framework of Kenya (and Tanzania) Vodafone may have had the chance to hire a consulting firm to do the necessary research. The availability of partners from other sectors with such knowledge, however, made this decision unnecessary.

*Identifying resources: what are companies looking for?*

The second guiding question concerns the identification of key resources and knowledge that companies want to obtain, have access to, or benefit from while collaborating across the business sector at the BoP. The case studies provide evidence that the companies are indeed looking for a number of specific resources and types of knowledge or skills with their partners. First, companies are looking for partners with field experience in their product areas. For instance, when the Shell Foundation was looking for partners to help introducing improved cooking devices it choose both ARTI and Development Alternatives because they have been involved in the National Program on Improved Chulas. Similarly, Aavishkaar wants to invest more in SKEPL because of its experience with the automated milk collection systems in order to bring instant milk chillers on the market, another complementary product for dairy cooperatives. AIG Uganda clearly benefited from the experience of its micro-finance partners in selling financial products. Including an additional financial service like AIG's profitable micro-insurance would therefore be not too difficult. And finally, Vodafone and Safaricom initially partnered with an MFI due to its experience with small transactions.

Second, companies are interested in the networks of nonprofits and other non-business organizations that can be useful for introducing products and services or scaling up their activities at the BoP. This concerns the direct networks of staff members, volunteers and users, as well as their broader network of related organizations on a local, regional, national and international level. SKEPL cooperates closely with the District Cooperative Unions, such as Panchmahal, because of their vast networks of relationships with thousands of local village-level cooperatives. AIG is fully aware of the many contacts MFIs have with grassroot organizations throughout the country, whereas Safaricom tries to establish partnerships with micro financial institutions such as ROSCAs and ASCAs to gain access to a large network of end users. And the Shell Foundation wants to have access to the large networks of local and district level cooperatives from ARTI and Development Alternatives, whereas it also reaches out to organization in the same field (introducing cooking stoves) through the Partnership for Clean Indoor Air (PCIA). The establishment of a large grass-root network can be a very effective means of selling more than through traditional marketing channels. For instance, a nonprofit manager said that it may be better to train a large number of local people to repair cell phones. This may bring positive publicity because the company would create many brand managers that would also function as an after-sales network.

Third, companies want to benefit from their partners' reputations among potential clients and other stakeholders that could be helpful in achieving their objectives. In tying up with the PCIA the Shell Foundation enjoys the standing of a large international network of a number of organizations from the public, multilateral, non-government, academic and private sectors. By collaborating with the Panchmahal Union SKEPL can lift upon Amul's reputation, i.e. the largest dairy brand in India to which the Panchmahal Union belongs. Although not a cross-sector initiative, Vodafone found a great partner in Safaricom to launch M-Pesa because of this company's great reputation within Kenya. The companies' cooperation with Faulu, however, was a way to gain legitimacy among the unbanked population and to prevent M-Pesa being judged from the outset as another way of making a profit from the poor. As argued in the previous section, by enjoying the benefits of the intangible resource 'reputation' companies in a way legitimize their business at the BoP.

Fourth, collaboration with nonprofit partners can give companies access to essential knowledge about appropriate technologies, markets, local habits, institutions, laws and a number of other issues. This aspect is probably one of the most important reasons, because knowledge of local partners is essential for appropriate designs of the products and crafting the right business strategy. Without the help of ARTI and Development Alternatives the Shell Foundation would not know which types of cooking stoves are appropriate for which particular region. Similarly, SKEPL would not be able on its own to understand the needs of all the potential customer villages without its cooperation with the higher levels in the Indian cooperative system. Vodafone and Safaricom organized workshops in Nairobi for various nonprofit and public sector organizations to learn about regulatory issues, micro-finance, the banking system, the problems of accessing financial services for a large part of the Kenya population, and a number of other issues.

Fifth, companies are looking for organizations in other sectors with high organizational capacities, i.e. organizations that can be relied on to actually make certain parts of the business model work. For instance, ARTI develops awareness raising campaigns and training sessions and carries them out as well. Similarly, Aavishkaar believes SKEPL has improved its organizational capacity in such a way that it is deemed a reliable partner for further investing in regarding the instant milk chilling machines. In the Panchmahal Union the company has also found a serious partner that has the ability to spread the usage of automated milk collection systems. As a business partner, Safaricom obviously possessed high organizational capacities and was therefore a great Partner for Vodafone. And even though this company did not initiate the partnership with Coffey International, i.e. the fund manager of the Financial Deepening Challenge Fund, it proved to be a useful partner for getting on the ground in Kenya. One lesson that Safaricom has learned from the cooperation with Faulu is that a service like M-Pesa can only be successfully integrated in the business processes of a micro-finance institution if they have the organizational capacity and audacity to do so. And although the benefits for MFIs are clear, Safaricom also understands that partnerships will have no effect if these organizations are not ready for it themselves.

Sixth, companies want their nonprofit partners to agree with their commercial approach. Both the Breathing Space and Akashganga models strive for a market-driven financially sustainable model, although the former pursues only a partially profitable model. To achieve this objective the companies require their nonprofit partners to understand the importance of this approach and develop a commercial attitude themselves. For instance, the Shell Foundation encouraged ARTI to set up the commercial entity SET and to let it take in a central role in the model in order to make the entire model become financially self-sustainable. Also AIG Uganda understands the importance of a commercial attitude. It agreed with most partners that they could also charge a small fee for selling the insurance and the concomitant administrative procedures. Thus, AIG's partners also profit a little from adding this financial service to their micro-loans. However, several sources of data indicate that the commercial attitude of Kenya's MFIs lacks due to their indifference of making their operations much more efficient by using M-Pesa as a means of saving valuable staff time and administration costs.

*Motivations for nonprofits to collaborate with businesses*

Although not directly the purpose of this chapter, it will now briefly discuss the resources and knowledge that nonprofits want to obtain, have access to, or benefit from while collaborating across the nonprofit sector at the BoP. The most obvious resource they want to obtain concerns money. As any nonprofit organizations, those active at the BoP are in a perpetual search for financial resources to safeguard their activities. As we have seen, the Shell Foundation gives substantial funding to ARTI and Development Alternatives for their IAP-related work. One nonprofit manager, however, said that such money should not come from CSR or other philanthropic corporate budgets but from its core business line because that shows greater commitment on the company's side. Also non-financial donations such as voluntary staff- or management time can contribute much to this end. Besides these direct forms of resources, companies can also transfer other types of resources and knowledge. Reputation is one of them. Cooperating with the Shell Foundation, which has build up a good reputation over the past few years, gives much credibility to the work of nonprofits such as ARTI and Development Alternatives. MFIs wanted to work together with AIG Uganda for competition reason, because once the benefits of the insurance became clear to micro-loan clients these MFIs felt retaining became a problem. Another major reason was that by adding a micro-insurance to the loans the problem of recovery after someone defaulted on his loan would dramatically decrease. Thus, cooperation is a means to access a company's products and services, which in the AIG case was focused on managing financial risks. Additionally, selling insurances also adds to the financial strength of the MFIs because of the fee-based structure and also improves their image as they can lift on the reputation of a large and well-known multinational like AIG. Finally, the insurance company AIG enables MFIs to gain access to highly specialized and knowledgeable financial professionals from whom they may learn a lot. In the words of McCord (2006: 359): "An expanded product line, a source of fee-based income, protection for the MFI and its clients, little risk and virtually no financial input – how could it get any better?" In the case of M-Pesa it was explained that micro-finance institutions could work much more efficient by using the payment system, but that for some reason they are not using it. Still, Safaricom is collaborating with some Savings and Credit Cooperatives. These institutions do not only serve as agents in some cases, but also integrate the system to facilitate their internal processes and make it easier for their members to join this financial mechanism. One of the most recurring reasons why nonprofits cooperate with companies concerns their knowledge about doing business and how to manage an organization. For instance, the Shell Foundation uses its internal network of professionals to improve the workings of nonprofits. Also, Vodafone-Safaricom offered to help out with the business processes of Faulu Kenya, although the MFI never followed up on that offer.

Resources that were mentioned by the nonprofits in the these exploratory cases included the attitude towards a market-based approach and profitability, working styles, accounting practices, communication procedures, maintaining stocks, gathering and using business data, defining strategies and a range of other business skills. Through cooperation with the Shell Foundation ARTI and Development Alternatives proclaimed to have gained a better feeling about doing business and about combating the problem of Indoor Air Pollution through a market-based approach. As one nonprofit manager in the Breathing Space program said that "the knowledge of large corporations is crucial because they know how stuff can be manufactured, they understand things about distribution."

## CHAPTER 12 – Theoretical findings, the building of a framework

Having reviewed existing literature on the resource-dependency theory, the resource-based view and cross-sector collaborations, and having conducted four case studies on collaborations between businesses and nonprofits at the BoP, it is now time to draw the theoretical lessons from all this information. The primary 'theoretical lens' through which the data is viewed in this dissertation focuses on the role of resources. Although some publications have touched upon certain aspects that are in line with such an approach to cross-sector collaborations, there exists no research on these alliances explicitly from a resource-dependency or resource-based perspective. For instance, while focusing on the extractive industries, Warner and Sullivan (2004: 17) say the following about companies that work together with the public and nonprofit sector: "The partnership approach involves the 'pooling' of resources, competences, capacity and expertise, thereby achieving outcomes that add value to what each party could achieve alone."

The data collection process – i.e. the four cases described in chapters 7 to 10 – was therefore guided by two general guiding questions that can be useful in gaining a better understanding of the phenomenon of cross-sector collaborations at the Base-of-the-Pyramid, namely:

- Why do companies collaborate across the traditional business sector while introducing new products and services at the BoP?
- What are the partner's key resources and knowledge that companies want to obtain, have access to, or benefit from?

Chapter 11 already answered these questions based on the empirical evidence from the four cases. This chapter provides a more theoretical answer to the first question by devising a framework that is build upon two leading theories, namely the Resource Dependency Theory and the Resource-Based View. To do so it subsequently deals with the following aspects.

First, it touches upon the theoretical linkages between the two theories. Second, it applies the core elements from the Resource Dependency Theory to cross-sector collaborations at the BoP. Third, it turns to the Resource-Based View of the firm, and in particular its application to strategic alliances, and extends it to cross-sector collaborations at the BoP as well. In both parts references will be made to the empirical evidence from the case studies to achieve a close alignment between theory and data.

*Building a framework for cross-sector collaborations at the BoP*

The theoretical link between the Resource Dependency Theory and the Resource-Based View comes naturally because of their shared focus on resources and the flows of resources between organizations. For instance, the concept of value is nearly identical between RDT and RBV (Medcof 2001). Valuable resources are those that form the basis for a firm's survival and success, and therefore the firm depends on them. Indeed, the more important the resource, the more dependent the firm becomes. Medcof (2001) also links the RBV concept of uniqueness (or rareness) to resource dependency. Because unique resources have no alternatives, they form the basis for organizational power. Besides this work, however, the link has not been put into writing in other academic publications. And there may be an important reason for it. The RDT namely argues that organizations are constrained by their external environments in obtaining the necessary resources for their survival and growth, and it therefore focuses primarily on input-output exchange relationships and the manipulability of them by managerial action through the active shaping of the environment. The RBV on its turn concentrates on the nature of firm resources and their effect on a firm's competitive advantage. As such, the RBV offers a valuable tool for managers in designing the firm's strategy by coordinating bundles of resources that are internally available and to exploit them when opportunities thereto arise. Additionally, from the RBV literature on strategic alliances we have seen that firms can also benefit and gain rents from resources that they do not own and control, namely by accessing them through partnerships.

*The Resource Dependency Theory: a first necessary element*

The RDT prescribes that organizations require resources from organizations in the external environment and that they therefore have to establish relationships with them (Pfeffer & Salancik 2003). From the RDT perspective it was noted that managers should process and respond to the constraints of the external environment in their role as a processor. From several streams of literature, including the ones on Base-of-the-Pyramid thinking, development economics and institutional economics, we can observe that companies face a multitude of constraints in their external environment if they venture out into BoP markets. Chapter two briefly discussed how effective institutions or 'rules of the game' are often lacking at the BoP such as a property rights regime or enforcement mechanisms. This increases the costs of transacting in these markets for companies. Constraints can also be imposed by organizational interdependence as becomes evident from the empirical data gathered in the four case studies, and as shown in table 12.1. For all cases apply that the limited financial resources of the consumers constrain the companies in introducing their products and services. Additionally, the poor may not have a favorable attitude towards western companies or multinationals. And due to a lack of efficient infrastructure, companies are further restrained to actually reach potential clients. In RDT terms, this leads to a complex resource supply with high variability, which causes high uncertainty.

Other constraints that companies face originates from their internal environment as paradigmatic thinking – or 'dominant logic' (Prahalad 2004) – obstructs viewing the BoP as a profitable growth market, such as the belief that the poor cannot afford western quality products. Also, companies may think that the BoP is not important for long-term growth.

And finally, those managers within the firm that have the power to make a decision whether to venture out into the Base-of-the-Pyramid may not be intellectually challenged by the idea

**Table 12.1 – Constraints in the environment: evidence from the case studies**

| | |
|---|---|
| *Shell Foundation Breathing Space* | • Despite being a top ten global health risk, Indoor Air Pollution receives relatively little international attention<br>• The technology of improved stoves is relatively new and is still developing<br>• There are no universal performance measures<br>• The target population is not aware of the negative effects of IAP and therefore doesn't see the necessity to buy expensive stoves<br>• Local manufacturers often lack the skills to produce stoves on their own<br>• Local manufacturers and tradesmen often lack the financial means to buy raw materials or finished products for production or sales, respectively<br>• For awareness raising campaigns and educational programs, both vital parts of the business model, the Foundation depends to a large extend on nonprofits that often have unreliable income flows<br>• Financing the unprofitable parts of the business model depends on the voluntary commitment of the entrepreneurs in the profitable parts |
| *SKEPL Akashganga* | • Lacking micro-venture capital to start up small businesses<br>• Corrupt leaders in the cooperative system may retard modernization<br>• A large part of the users is computer-illiterate and not used to modern technology for improving business operations. To train new users the cooperation from the district Unions is essential, as well as the voluntary dedication of current users<br>• As a key mediator between SKEPL and local cooperatives, the Panchmahal Union moderates demand by buying AMCSs from two suppliers<br>• Demand for Akashganga may be moderated by poor power infrastructure<br>• Weather conditions and dust threaten the proper working of the technology |
| *AIG Uganda* | • Insurance had a bad image among Ugandans<br>• Potential clients did not understand the concept of insurance<br>• Regional differences in need of insurance products<br>• AIG did not have a life-insurance license, although this apparently didn't cause problems regarding this micro-insurance<br>• Moral hazard and adverse selection<br>• Difficulties in obtaining appropriate documents for the claim process<br>• Some MFIs have outdated internal operational procedures in place<br>• MFI field officers were not sales oriented |
| *Vodafone-Safaricom M-Pesa* | • Kenya does not have legislation in place for mobile payment services<br>• Obtaining critical information from actual users is necessary for development<br>• Long-term success depends to a large extent on the willingness of Safaricom agents to collaborate<br>• Although M-Pesa is not a deposit-taking institution, long-term success also depends on macro-economic and monetary developments<br>• The success of the service depends on the level of penetration, i.e. the number of customers, and the level of acceptance, i.e. trust in the system<br>• MFIs, as interesting partners for reaching critical mass and (later on) expansion, often have outdated operational procedures in place<br>• Resistance to work more with MFIs may also come forth from the preference to continue holding group meetings |

An additional managerial role concerns that of an advocator or implementer of a bridging strategy (Scott 1981), which means that he can help adapting the organization to the constraints of the environment and steer it to manage the resource dependency, i.e. to achieve a reduction in the level of uncertainty. As argued before, this can be done through growth, the establishment of informal and semiformal interorganizational linkages and the modification of the external environment through the employment of state power (Pfeffer & Salancik 2003; Scott 1981). With regard to growth, insights of Penrose (1959) on diversification – and thus another link to RBV-related ideas – apply very well to thinking about BoP ventures. Almost by definition it can be said that firms that introduce their products and services to the poor diversify from their traditional business. Such introductions can take place in three ways, namely either they enter new markets with new products that are based on existing or new technology, or they enter the same markets with new technology (Mahoney 2004). Diversification takes place because firms entering BoP markets indicate their wish for expanding their business to untraditional markets, enlarging the customer base, increasing products and service portfolios. The empirical data was not specifically gathered on this issue, but still there are some clear indications that companies diversify to the BoP for growth purposes. Africa, and the entire developing world, is already an important growth market for Vodafone. By further diversifying into additional telecom services, it can expand its market reach even further. Although the market for AMCSs is still growing, SKEPL understands that its home market is getting increasingly more saturated. Growing through diversification into a new product area like milk-chilling machines may provide the company with a good opportunity to reduce uncertainty stemming from increasing competition and market saturation. Regarding interorganizational linkages, all case studies in this dissertation clearly show how companies tied up with multiple organizations from other sectors to ensure obtaining the required resources, i.e. to lower the uncertainty to obtain them. For instance, the Shell Foundation has joined the Partnership for Clean Indoor Air to strengthen the coalition that wants to increase international attention for the underestimated impact of IAP.

To a certain extent SKEPL works together with higher levels in the Indian cooperative system to put pressure on local cooperatives to introduce automated milk collection systems and thereby reduce corruption at the village level. To prevent moral hazard and adverse selection, AIG Uganda adapted its policy in consultation with Finca. And to reduce uncertainty in acquiring customers, Vodafone and Safaricom approached several MFIs for obtaining quickly a critical mass, although the collaboration with Faulu Kenya ended after the pilot phase. There is no evidence from the case studies that shows firms tried to modify their external environment through the use of state power. However, the decision to become a member of the Partnership for Clean Indoor Air may give the Shell Foundation better access to governments. And to ensure M-Pesa would not run into any regulatory roadblocks, Vodafone and Safaricom consulted extensively with the Central Bank of Kenya.

As noted earlier, for alliance formation to happen, both partners should lack key resources (Iyer 2003). Eisenhard and Martin (1996) found that firms in vulnerable strategic positions – i.e. those in need of resources – are likely to form an alliance. Although the studies originate from RBV scholarship, this discovery offers a valuable insight into this particular element of the Resource Dependency Theory. With regard to BoP ventures it often shows that companies are in need of resources. The evidence from the case studies shows companies want to obtain, have access to or benefit from, amongst others, networks of nonprofits, their reputation, organizational capacity and experience in the field, and finally technological and market knowledge. At the same time the collaborating nonprofit partners from the four cases searched for, wanted to have access to or benefit from various firm resources in order to reach their own social missions, including but not limited to financial and non-financial donations, company reputations and knowledge about managerial and operational practices to improve ones own. When turning to India for founding the Breathing Space program, the Shell Foundation was looking for nonprofit partners with the appropriate resource-base. In Development Alternatives and the Appropriate Rural Technology Institute the Foundation found reliable and experienced organizations with large networks and other relevant resources. At the same time, these nonprofits were trying to find alternative sources of income for the ceased government-led program for introducing improved cooking stoves. After a few years of cooperating with Finca, AIG Uganda realized the profitability of micro-insurances and looked for additional micro-finance institutions to enlarge its customer base. Simultaneously, these MFIs were looking for AIG's micro-insurance product to offer to their customers and to mitigate risks of recovery. Eisenhard and Martin (1996) also discovered that organizations with a strong social position, so organizations that possess many valuable resources, are interesting partners to collaborate with. However, the case studies data did not reveal any instance of such underlying motivations for collaborations at the BoP. Finally, they found that the level of innovativeness of a strategy is related to the rate of alliance formation. Even though they only looked at innovative technology, which require substantial resources and a high level of competencies, a similar hypothesis can be made for innovative business models. The idea is that successful business models for the BoP are by definition innovative and therefore necessitate the use of many resources that can be obtained through collaborations with those organizations that do possess them, i.e. nonprofits.

*The Resource-Based View: a second necessary element*

The question why firms choose for a collaborative relationship with organizations from other sectors can be reasoned from a resource-based perspective as well. But first, the transaction costs perspective cannot explain such cross-sector governance structures. Strictly speaking, nonprofits are not making exchanges in the market place for creating their products and services. Hence, they are not trying to lower their transaction and production costs. Moreover, firms cannot simply acquire or merge with nonprofits – let alone public sector organizations – to decrease these costs coming forth from market exchanges with them. Still, nobody would deny that the resources nonprofits own and control often have VRIN characteristics and that they have the organizational capacity to exploit them, despite that the exploitation is not focused on making profit. For that reason, it makes much more sense to look at cross-sector collaborations from a resource-based perspective and thus to analyze the type of resources that companies and their partners are looking for with each other and to understand why they are collaborating. If firms cannot integrate their potential partners and take control of their resources, or if they don't even need all those resources – e.g. because of high asset specificity that can cause high disposing costs – then, similarly to the resource-dependency perspective, alternative governance structures may become interesting. In the words of Das and Teng (2000: 37) "the distinct advantage of strategic alliances is to have access to precisely those resources that are needed, with minimum superfluity." From the literature on cross-sector collaborations it was shown there are a number of reasons why firms would cooperate with nonprofits, including lifting on a good image or reputation, enjoying technological or market expertise and gaining access to additional networks. It therefore seems that cross-sector collaborations are often started to gain access to intangible resources and tacit knowledge, which is in line with previous research on strategic alliances (e.g. Grant 1996; Mowery et al. 1996; Grant & Baden-Fuller 2004) and the Base-of-the-Pyramid (Seelos & Mair 2007). Moreover, such resources are by and large unavailable in the market place. Put differently, strategic factor markets (Barney 1986) will not develop for those resources that are embedded in organizations and cannot easily be expressed in monetary values. Often these resources are intangible, inimitable and non-substitutable, and building them is therefore either impossible or very expensive. Moreover, uncertainty in accurately valuing resources and limited knowledge about how resources have to be configured to disclose their value in other contexts, such as at the BoP, form additional constraints to the firm (Seelos & Mair 2007). Thus, obtaining valuable resources that are not obtainable through markets can now become available through a semiformal or informal interorganizational linkage (Pfeffer & Salancik 2003), without the need for a full integration of firms or organizations such as with mergers or acquisitions.

Understanding why firms want to cooperate with organizations from other sectors, and primarily the nonprofit sector, does not yet explain why those partner organizations are interested in collaborating. Taking into consideration the expansions of Dyer and Singh (1998) and Lavie (2006) to the traditional RBV framework, it is obvious that superior rent generation and achieving a sustainable competitive advantage are not the objectives of nonprofits. This does certainly not mean, however, that nonprofit organizations are not interested in ensuring reliable income flows. For instance, because of decreased government aid for nonprofit activities they are often forced to bring in additional money through selling certain products and services (Austin 2000a). The debate among RBV scholars about what resources can generate rents for firms is fundamental to understanding the emergence, existence and structural preferences of strategic alliances. Moreover, it has also been an important discussion regarding the existence of cross-sector collaborations. While Lavie's (2006) framework offers valuable insights into strategic alliances from a resource-based view, it cannot explain their existence because they serve two purposes, namely a financial and a social one (eventually environmental). It's explanatory power stops when we further look at what rent actually encompasses. All in all, nonprofits are not interested in maximizing profits. Lavie's (2006) RBV framework for strategic alliances can therefore, strictly speaking, not be applied without making a small albeit fundamental adjustment. Instead of perceiving the generation of rent a nonprofit's primary objective, it makes more sense to look its mission and the 'social rents' or 'environmental rents' it creates. The pursuit of these rents is in more or less words captured in the organizations' missions. Still, the following quote from a MCI WorldCom manager (Austin 2000a: 79) makes clear that even in cross-sector collaborations, firms can earn inbound spillover effect rents besides appropriated relational rents, giving additional value to Lavie's framework: "We have received wonderful benefits in working with our nonprofit partners. And we wouldn't know about half the opportunities if we didn't have a true partnership. We wouldn't know about their distribution channels, their memberships. They have unbelievable assets, but they don't necessarily know how to exploit them all. When you work with them in a really close partnership, they will let you use those assets." Similarly, besides 'relational social rents' nonprofits can also gain much more than expected from collaborating with the business sector. For instance, donor agencies may alter their impression of a nonprofit that has cooperated with an esteemed multinational and consequently raise its financial contribution. Seen from the firm, this type of rent can be named as outbound social spillover effect. Warner (2004)

The RBV literature review extensively dealt with the division of different firm resources as is summarized in table 5.1. Partnering firms contribute all these types of resources to alliances, and these flows of resources can either be supplementary or complementary depending on the strategies the firms pursue. For instance, similar firms that want to gain a larger market share often pool similar resources to economize and thus supplement each other's resources. However, research shows that it has been mainly complementary resources that create a synergy and strengthen the resource base (Harrison et al. 1991; Hill & Hellriegel 1994; Medcof 1997; Das & Teng 2000). Also in cross-sector collaboration resources from basically all these different groups are being transferred between firms and nonprofits in a complementary way, as shown in figure 6.1. For instance, having researched social partnering in Latin America – thus not specifically focused on the BoP – Austin, Reficco et al. (2004: 351) conclude that "the strongest social purpose alliances are those that combine their resources and deploy their core competencies so as to generate significant benefits for the partners as well as for society."

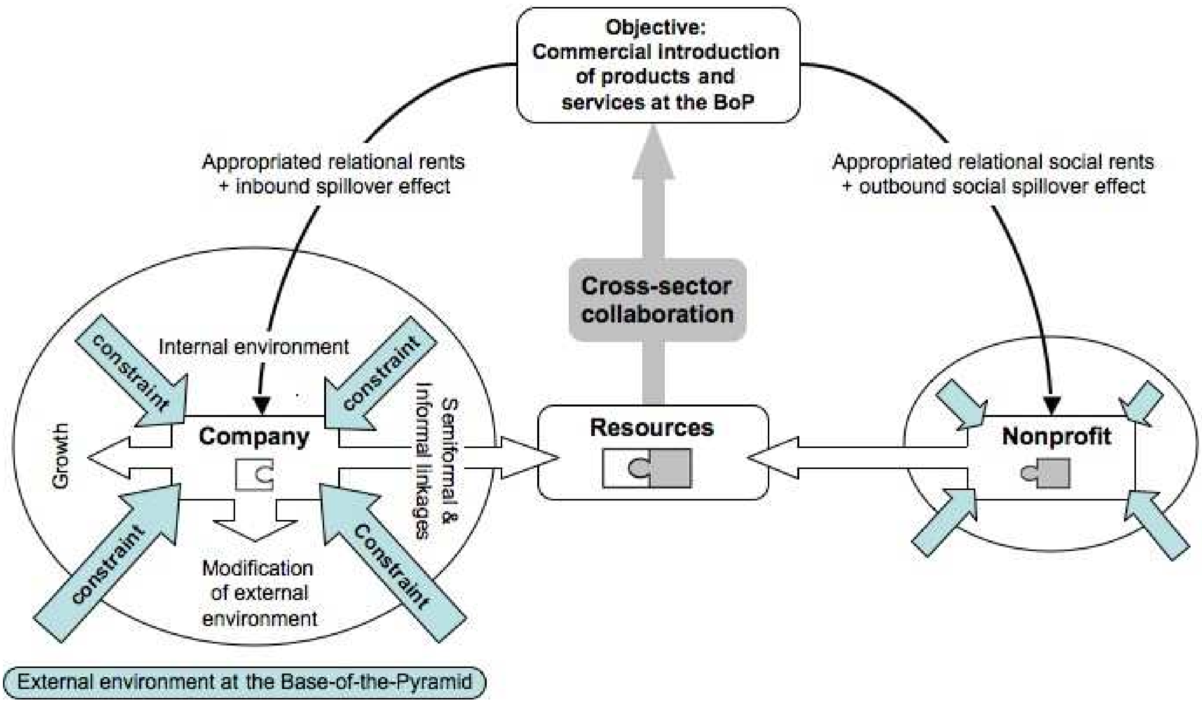
Warner and Sullivan (2004) argue that each sector possesses some core competency and that these can be complementary within cross-sector collaborations if arranged appropriately. For instance, having studied Monsanto's cooperation with local nonprofit organizations, Austin (2003: 34) observes that "*alliances derive their value largely from the shared mission and the combination of the complementary core capabilities of each partner.*" Warner and Sullivan (2004) provide several reasons why complementary resources and competencies are beneficial in a cross-sector collaboration. They highlight the value of each partner, they reduce the need for investment in new resources and they minimize duplication activities of nonprofit organizations. In the words of Iyer (2003: 43): "The pooled advantages can stem from each organization's strengths *compensating* for the other's weaknesses or from *amplifying* or *enhancing* their combined strengths."[81] And Waddell (1999: 2) refers to the link between strategy and distinctive resources, capabilities and competencies, and argues that gaining a better understanding of the differences between companies and nonprofits from such a strategic perspective – i.e. the resource-based view – reveals the potential of these alliances and help their further development: "The concepts of resources, capabilities and competencies present a way to better understand the distinction between the three organizational *sectors* of business, government and NGOs, the rationale for collaborations among them, and the way they can be more successfully formed."[82] Prahalad (2004: 312) discusses in his book how the ICICI bank in India collaborates with non-business partners to reach the Base-of-the-Pyramid: "Our aim is to combine the social mobilization strength of NGOs and MFIs with the financial strength of the bank. The partnership model helps overcome the constraints faced by NGOs and MFIs in scaling up their activities."

[81] Italics in original
[82] Italics in original

*Putting it all together: a RDT & RBV framework*

In sum, the evidence from this dissertation shows that cross-sector collaborations at the BoP are all about resource exchange between the businesses and nonprofits. Chapter 11 clearly showed that partners are primarily looking for complementary resources. It was explained that because of the centrality of resources in such partnerships two theoretical perspectives offer particular insight into the underlying reasons for collaboration and the dynamics in these governance forms. From the Resource Dependency Theory the following elements play a central role in building a theoretical framework on cross-sector collaborations: environmental constraints; the implementation of strategies to deal with those constraints; and resource needs. From the Resource-Based View these elements are: obtaining, gaining access to or benefiting from a partner's resources; the types of resources that both partners have and want, as well as the relationship between them; and rent generation.

**Figure 12.1 - Cross-sector collaborations from the RDT and RBV**



*Cross-sector collaborations at the BoP: extending the RBV*

Simply starting a cross-sector partnership can give companies a competitive advantage when they venture out to the BoP. In the words of Barney (1991: 102) "*A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors.*" This certainly makes sense, because the BoP is still a virtually unexplored and exploited market, especially for multinationals. This means that teaming up with grass-roots nonprofits or organizations that have much knowledge about these markets, can give a firm a competitive advantage while it can bring benefits to those organizations at the same time. This research pointed out that firms lack the knowledge about and links to the Base-of-the-Pyramid while nonprofits face limitations in financial resources, capacity and competences. One nonprofit manager put it in the following words: "*While you can understand stuff on the ground, your ability to translate it efficiently into a product or a set of products is limited. That's why it will take a longer time. So, collaboration, partnership makes complete sense* [for us]." Conversely, it also makes sense for the companies because nonprofits are essential for actually delivering the products at the BoP. "*The last mile of delivery is something which large corporations do not understand*," says the same manager. These claims suggest the existence of an interdependent relationship between nonprofits and companies at the BoP. To say, however, that companies do not understand the last mile of delivery may not do justice to the inventive ways they have been doing so throughout history. The specific conditions in these new markets – e.g. no existing distribution channels, no ready-to-use information about potential customers etc. – does make it very difficult for companies to enter them as easily as they are used to in their traditional markets. As argued by Prahalad (2004), this is one of the reasons why the BoP has largely been neglected as a profitable market. However, by collaborating with nonprofits, companies can obtain the knowledge and the access to networks and channels that are necessary to reach these new customers.

The extent to which such relationships are unique, substitutable and imitable ultimately determines the level of sustained competitive advantage the firm enjoys from the cross-sector collaboration. Barney states (1991: 103): "*A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy.*" Certainly the concept of co-creation (Brugmann & Prahalad 2007; Hart & London 2007) and the framework for setting BoP ventures apart from other development strategies (London 2007) points us in the right direction of the type of partnerships that keep their value for the company in the long-run.

## CHAPTER 13 – Conclusions

Since the publication of Prahalad and Hart's article *The Fortune at the Bottom-of-the-Pyramid* (2002) and particularly since Prahalad's book (2004) with the same name, the attention for the role of business improving the lives of the poorest has gained ground among academics, the (international) public sector and the development community. Additionally, increasingly more business managers are getting interested in the profitable opportunities this virtually untapped market has to offer. However, rigorous academic research on the topic is still sparse – although increasing – and is often not embedded in traditional firm- and organizational behavior strategies. This dissertation presented four case studies that aim to introduce products and services in BoP markets in India, Kenya and Uganda. Two of them involve a large multinational, one a small company, and another one a foundation of a large multinational. The common element in each of these cases is that the companies decided to closely cooperate with organizations from different sectors, such as nonprofits, international organizations and cooperatives. Several publications have presented reasons for these cross-sector collaborations, but a pure theoretical explanation has been lacking. Traditional strategic alliances have primarily been explained from a Transaction Costs perspective, although recently also the Resource-Based View has been applied. With regard to these new forms of partnerships between organizations from different sectors, especially the latter perspective provides valuable insights into their grounds for existence. Chapter 12 presented a theoretical framework, as depicted in figure 12.1, that is based on the RBV and the Resource Dependency Theory. It shows how companies and nonprofits (or any other non-business organization) have (a) a resource need, (b) are constrained by their environment, (c) have different options of acquiring the needed resources, (d) can choose to collaborate with partners through semiformal and informal linkages to obtain them, (e) can together ensure the commercial introduction of products and services at the BoP, (f) appropriate relational or social relational rents, and (g) may enjoy unforeseen spillover or social spillover effects.

This concluding chapter deals with a number of remaining issues. First, it analyzes the type of resources that have been exchanged within each of the four case studies and what this means for the character of the cross-sector collaboration. Second, it deeper discusses the resources that are exchanged between partners and what this dynamics means for their relationship. Additionally it explores the potential new roles of nonprofit organizations at the Base-of-the-Pyramid. Third, it says something about how the performance of a cross-sector collaboration at the BoP should be measured and presents some hypothesized general measures for each partner in the four case studies. Fourth, it discusses the theoretical and managerial implications of this study and suggests some directions for further research. The chapter ends with some final thoughts on this research project, cross-sector collaborations and the Base-of-the-Pyramid phenomenon.

*The intensity of resource exchange in cross-sector collaborations*

Austin's (2000b) Collaboration Continuum shows how cross-sector collaborations can vary in levels of intensity across three different stages: philanthropic, transactional, and integrative. In addition to this framework, he introduces seven aspects that are useful for analyzing the dynamics of collaborations. One of these aspects concerns the magnitude of resource exchange, which can be classified in three classes. In generic resource transfer (2000b: 98) "each organization provides to the other benefits that derive from resources common to many similar organizations." Put in RBV terms, these resources are not rare, mostly tangible and probably fairly easy to imitate and substitute. In core competences exchanges (2000b: 99) "each institutions' distinctive capabilities are used to generate the benefits to the partner and the collaboration." He argues that especially this has great potential value creation. From a resource-based view, the exchanged resources are rarer, more often intangible, and more difficult to imitate or substitute. And in joint value creation (2000b: 99) "benefits are … joint products or services derived from the combination of the organization's competencies and resources." The synergistic combination of resources is unique to the alliance and therefore the results are not replicable. The outcomes of the resource combinations are therefore very valuable, very rare, and very difficult to imitate or substitute. Put differently, they have VRIN characteristics and can create much rent once well organized in the collaborative governance structure. The three levels of resource exchanges provide a good tool for analyzing the intensity with which resources in the four case studies were transferred between partners and to identify what types of exchanges have been most relevant for the success of these cases.

**Table 13.1 – Motivations, resources, exchange magnitude and collaboration intensity**

| *Reason for collaboration* | *Main resource(s) needed from nonprofit* | *Magnitude of resource exchanges* | *Intensity level cross-sector collaboration* |
|---|---|---|---|
| Gaining knowledge about local market conditions and consumers:<br>a. identify pilot markets<br>b. product development, testing, standard setting<br>c marketing development | a. networks, market knowledge<br>b. technological & consumer knowledge, field experience<br>c. market & consumer knowledge, field experience | a. core competences<br>b. joint value creation<br>c. joint value creation | a. transactional<br>b. integrative<br>c. integrative |
| Making the connection<br>a. organize awareness raising and education campaigns<br>b. set up user training and salespeople training<br>c. reaching a broad group of BoP consumers | a. consumer & market knowledge, staff time, reputation organizational capacities<br>b. consumer, technological & market knowledge, staff time<br>c. networks | a. core competences<br>b. core competences, generic resources<br>c. core competences | a. transactional & integrative<br>b. integrative & transactional<br>c. integrative |
| Creating alternative distribution channels | networks, organizational capacities, commercial attitude | core competences | integrative |
| Enabling a partial profitable or risky business model | staff time, financial resources, commercial attitude | generic resources, core competences | philanthropic, transactional & integrative |
| Disclosing hitherto unseen opportunities | consumer, technological & market knowledge | core competences | transactional |
| Legitimizing forprofit business ventures | reputation, networks, staff time | core competences, generic resources | transactional |
| Enjoying financial benefits | financial resources | generic resources | philanthropic, transactional |

Sources: Austin 2000a & 2000b

With reference to the reasons for collaboration as identified in the four cases and described in chapter 11, table 13.1 sums up the main resources that companies are searching for when collaborating with nonprofits at the BoP, the magnitude of the resource exchanges and the concomitant level of collaboration intensity. Due to the ambiguity of the links between these concepts, the framework serves only as a means for approximating the dynamics of cross-sector collaborations at the BoP. The table shows that companies primarily want to gain access to nonprofits' networks, reputation, and their knowledge about consumers, markets and (appropriate) technologies. The magnitude of the exchanged resources is therefore based around the nonprofits' core competences. While many of these exchanges can be more or less described as transactional, almost an equal number of collaborative exchanges are integrative in character, which means that the results are joint products or services. However, it is important to note that this does not mean the actual collaboration can be labeled as such. It merely means that one of the seven aspects to analyze the dynamics of collaborations, as proposed by Austin (2000b), pushes the overall partnership in the integrative direction. The final products and services that are actually sold at the BoP are therefore not necessarily jointly created, but a result of a collaboration of which certain parts of the process can be typified as joint value creation, e.g. the design of the product. With this in mind, Austin's framework (2000b) provides a good tool for gaining a better understanding of what is needed for higher levels of co-creation between partners at the BoP, which boils down to (a) higher levels of engagement between partners, (b) a higher strategic importance of the partnership to the partners' missions, (c) a broader scope of partnership activities, (d) a more intense interaction level, (e) a higher level of managerial complexity and (f) the partnership should have major strategic value to both.

*Consequences of dynamic collaborations and the role of nonprofits*

Cross-sector collaborations are characterized by a partnership between a forprofit entity and a nonprofit entity. The literature review and the four case studies clearly showed that each of the partners have different missions and therefore also different motivations to enter such a governance structure. However, sometimes nonprofits alter their missions and develop into forprofit entities, thus basically becoming a business. With reference to the studied cases, in particular micro-finance institutions are prone to such change. Following the boom of micro-finance in the nineties, clients began to expect more and more services from their MFIs on top of a micro-loan. Being excluded from having an ordinary bank account, they especially developed a need for depositing their money for savings. To serve these needs, MFIs put pressure on the regulators in order to change intro micro-finance and deposits taking institutions. In Uganda, this process has already been going on for a while and it is expected that several of these MFIs will turn into regular commercial banks in 2010 even though they stay focused on BoP clients. Meanwhile, many MFIs already changed from a nonprofit organization to a forprofit one and had to adapt to the rules of the market. These developments have implications for the relationship between cross-sector partners, and the model presented in this dissertation may be helpful in predicting chances. When a nonprofit's mission changes, its resource needs will also change, as well as its environmental constraints. When the new business searches for partners to collaborate with, it will pursue the acquisition of different rents as described by Lavie (2006), namely appropriated relational rents and outbound spillover effects (from the focal firm viewpoint) instead of appropriated relational social rents and outbound social spillover effect. Missions between partners therefore become more similar and the alliance will increasingly more resemble an ordinary strategic alliance. Sometimes nonprofits retain their nonprofit mission but do serve their constituencies with products and services that compete against those of forprofit entities.

Brugmann and Prahalad (2007) argue that this could lead to tensions between organizations from different sectors. For example, they describe how nonprofits micro-finance institutions in India take away potential customers from commercial banks, whereas large chains like Starbucks and Tesco offer fair-trade products for which the standards were originally set by nonprofits. With regard to CSR-related partnerships between companies and nonprofits it is sometimes the case that the collaboration itself leads to a changed dynamic between the partners. For instance, the insurance company AON helped commercializing the Ugandan nonprofit MicroCare to offer insurance products to lower-level employees. Although it is too early to determine the success of this commercialization, despite the partnership has ended already and the nonprofit has changed into a forprofit company called Micro Health, it may very well be that Micro Health becomes a serious competitor to AON's core insurance business in Uganda. In fact, MFIs in Andra Pradesh are now selling insurance products to rural customers because the Life Insurance Corporation from India experienced difficulties in reaching these customers. And vice versa, the ICICI Bank is now serving many local networks in Tamil Nadu to indignation of the nonprofits that initially developed them (Brugmann & Prahalad 2007). While there were no partnerships involved in the two latter examples, they clearly show the potentially competitive dynamics between organizations from different sectors. Although Vodafone and Safaricom can still enlarge the Kenyan market for M-Pesa, in terms of customers and M-Pesa transactions through increased collaboration with micro-finance institutions, the companies are currently not involved in any partnership. Hypothetically the same could happen with the Breathing Space program or Akashganga when final users find their own way to the producing companies without the intermediary role of large national nonprofits or the cooperative sector. The importance of collaborating with nonprofits at the BoP is evident. Yet, the dynamics between a business and nonprofits may change over the course of the partnership from cooperative to competitive. As argued by Zeng and Chen (2003) the necessary exchange of resources in traditional business alliances is essential for creating joint value, but can be obstructed by the pursuit of self-interests by partners, and this is probably not different in cross-sector collaborations at the BoP. Thus, such partnerships may have a finite character for a number of reasons. Indeed, partnering with them may only be necessary for a limited period of time to obtain the resources and have access to knowledge that is needed for specific phases in the entire process. Nonprofits can adopt an enabling role for companies that pursue a commercial business strategy at the BoP. This dissertation pointed out that nonprofits complement companies by embracing a complementary role, e.g. serving as a connection between the firms and local consumers or providing market or technological knowledge. By doing so, they also benefit as the goals of the collaborative efforts align with their own mission. These observations raise the question what the role of nonprofits should be. Several scholars advocated for a co-creating relationship (London 2007; Hart & London 2007). In a reaction to the increasing pace with which liberalized markets develop, Brugmann and Prahalad (2007: 135) expect that nonprofits mature into "a new generation of scalable, market-based, social-sector organizations that are tailored to the interface with and operate within the value chains of traditional companies …" On the other hand, Maleri (2007: 135) argues that "as long as corporate objectives don't overwhelm the NGOs, and until a wall is erected between the two, partnerships can really act as a catalyst in unleashing sustainable and humane growth for the benefit of a broad range of stakeholders." On that note, a serious argument can be made that, at least in some of the cases, nonprofits should explicitly adopt a facilitating role. This means they should accept and fully support the profit-seeking motives of the firm as an acknowledgement of the idea that achieving a firm's commercial objectives also contributes to the nonprofit's own mission. Year reports of many large companies already include sections in which the social impact of the company is discussed. For instance, through cause-related marketing companies enable nonprofits to undertake certain projects, and often these companies include such achievements in their reports. Reversely, also nonprofits contribute to the objectives of firms. And maybe herein lies an opportunity for them to discover a new role besides their traditional work, namely purposefully looking for those BoP ventures with a high positive social impact. While some may perceive this as a 'sell-out' it is most important to keep in mind that the nonprofit's mission may be very well served by helping companies in their pursuit of reaching the Base-of-the-Pyramid. Such collaboration may be only limited in time, although they can also stay involved for longer periods, possibly to help designing new products. The Akashganga case showed how the successful introduction of the Automated Milk Collection System provided many benefits for the cooperative system in India. By staying involved over a longer period, the partnership can be extended for designing and introducing additional products such as the milk chiller. And although Vodafone and Safaricom do not actively cooperate with nonprofits currently, additional applications of M-Pesa may require the assistance of similar partners in the future. Investing in the relationship is therefore also important for long-term strategic objectives.

*Measuring the performance of a cross-sector collaboration*

The literature on strategic alliances provides a number of ways to measure performance. This can be done by adopting a macro-perspective and by taking the alliance as such as the unit of analysis. For instance, Beamish (1987) looks at alliance longevity, Reuer and Miller (1997) at profitability, while Dollinger and Golder (1992) and Thomas and Trevino (1993) make a strong argument by studying to what extent individual firms have met their individual objectives of participating in the alliance. However, the success of a cross-sector alliance is not easily measurable by adopting macro-level performance indicators, such as longevity. The intrinsic different missions of firms and nonprofits, and the fact that nonprofits by definition don't pursue the maximization of profits, makes it virtually impossible to hold alliance profitability as an indicator or performance. Also longevity is not a good proxy for performance, simply because the duration of alliances is often a function of the partners' profitability, i.e. if the partners notice an increase in their profits they may decide to continue the alliance. But since profits are not the objective of nonprofits, longevity doesn't say much about the alliance performance. Sometimes cross-sector alliances are short-term collaborations with specific social objectives, e.g. making a one-time charitable donation with a strategic objective. In some other cases firms and nonprofits collaborate for a longer but still limited period only, while occasionally nonprofits want to establish long-run and highly integrative partnerships with businesses, e.g. to secure income. The literature on cross-sector collaborations shows that the motivations and benefits for companies and nonprofits to form alliances are different. Moreover, alliances have different purposes and vary in the level of integration, as shown in Austin's (2000a) Collaboration Continuum. For these reasons, when measuring performance the unit of analysis should be changed from the alliance to the individual firm and nonprofit, thus creating two or more units of analysis. If not seen from a third-viewpoint with a specific interest, e.g. new product development (Deeds & Hill 1996) or alliance profitability (Cullen et al. 1995), then it doesn't make sense to take the collaboration as the unit of analysis. Instead, the extent to which the pursued benefits for the company and nonprofit have been achieved should be evaluated individually. Table 13.2 presents some very general performance measures that the partners in each case may strive for in order to call the partnership a success (not all partners are included in the table). Testing these performance measures was outside the scope of this research, and neither has the topic been a specific part of the interviews with the key managers of the companies and organizations. Still, the proposed measures are coherent with the empirical information gathered during these interviews, although this does not mean that the measures are correct. For instance, despite the logical objective of collaborating with Safaricom in

**Table 13.2 – Hypothesized performance measures of the four cross-sector partnerships**

| The partnership is a success when… | | |
|---|---|---|
| **Case study** | **Company** | **Nonprofit / public sector partner** |
| *Improved cooking stoves* | *The Shell Foundation:*<br>… it can find partners that take in a complimentary role in the value chain for designing, manufacturing and selling improved cooking stoves, and that have the ability to work towards financial independence from the Foundation. | *ARTI or Development Alternatives:*<br>… it can enjoy the knowledge, capabilities and networks of the Shell Foundation in order to introduce many improved cooking stoves while at the same time it become financially independent |
| *Akashganga Automated Milk Collection System* | *SKEPL*:<br>… it can further develop its systems with the Indian Cooperative system and find in it a reliable partner for regular sales of the Akashganga products | *Cooperatives*:<br>… it can co-develop and buy products that will be of benefit to Indian farmers by increasing productivity and the trust in the cooperative system. |
| *Micro-insurances* | *AIG Uganda*:<br>… it can develop and sell its micro-insurance products to a large group of underserved new clients. | *Micro-finance institution(s):*<br>… it can rely on the insurance company to offer a valuable additional service to its micro-loans collaborate in an efficient way through the sales and claims process |
| *M-Pesa, mobile payment service* | *Vodafone-Safaricom:*<br>… it can conceptualize a mobile payment product and identify valuable partners in the focus markets (with regard to Coffey International)<br><br>… if it can further design and develop the pilot-product and gain knowledge about the actual usage of the system with relevant potential users | *Coffey International*:<br>… if the financial stimulus to the company (Vodafone) leads to the development of a product or service that will improve the financial access of the poor and is scalable.<br><br>*Faulu Kenya*:<br>… if the partnership leads to improved efficiency by implementing the payment system for repayment and internal usage. |

implementing Vodafone's M-Pesa service, Faulu Kenya apparently has no further interest in doing so. Possible reasons have been discussed elsewhere in this thesis. Putting the performance measures of the companies and nonprofits next to each other clearly shows the different objectives partners may have with the collaboration and that different resources may be necessary to achieve them.

*On the value of the Resource-Based View*

This dissertation presented a framework based on central elements from the Resource Dependency Theory and the Resource-Based View. The framework makes it easier to explain why companies work together with nonprofits (and other organizations) while introducing their products and services at the Base-of-the-Pyramid. In particular the RBV work on strategic alliances (e.g. Dyer & Singh 1998; Lavie 2006) has been useful in the gaining a better understanding of the reasons why organizations from different sectors collaborate. By harnessing the partners' complementary resources the specific objectives of the partnership can be achieved, which can yield relational rents for the company, social relational rents for the nonprofit, as well as unforeseen spillover effects for both. Still, the value of resource is not indefinite. Porter (1991: 108) says that they can only be meaningful "in the context of performing certain activities to achieve certain competitive advantages. The competitive value of resources can be enhanced or eliminated by changes in technology, competitor behavior, or buyer needs which an inward focus on resources will overlook." Porter's criticism to the RBV should be taken seriously and this certainly applies to cross-sector collaborations at the Base-of-the-Pyramid. Although most BoP models are highly innovative and involve novel products and services, changes in the external environment can make some partnerships obsolete. For instance, a competitor can introduce a similar product or service that is cheaper or has better functionality, and technological developments may make existing BoP products outmoded. Thus, the collaborations that were established with organizations from other sectors for designing, producing and marketing such products may therefore have to change as well. Hence, Porter's industry perspective certainly has value as it enables a structural analysis of the external environment.

*Theoretical lessons and paths for further research*

The framework for explaining cross-sector collaborations at the Base-of-the-Pyramid that was proposed in this dissertation makes several theoretical contributions. First and foremost, it expands research in the Resource-Based View and Resource Dependency traditions. Indeed, a pure theoretical rationalization of their existence from an organizational behavior and strategic management angle has not specifically been provided in the literature before. Despite many indications in the cross-sector collaboration literature that companies and nonprofits have a resource need and therefore work together to obtain, get access to or benefit from partner resources and knowledge, such partnerships have not been explained from these two perspectives. Figure 12.1 integrates these and other central elements from the two theories and shows how both the company and the nonprofit can gain from the partnership by appropriating (social) relational rents and even enjoy unexpected (social) spillover effects. Second, despite the central role of resources, the Resource-Dependency Theory and the Resource-Based View have not been linked often before. In fact, only one contribution made an effort to compare the two perspectives (Medcof 2001). The phenomenon of cross-sector collaboration at the BoP, as becomes evident from the four cases, involves some characteristics that are central to both such as resource needs, constraints from the external environment and (social) rent generation. Third, it expands the Base-of-the-Pyramid literature. Although many scholars have emphasized the essentiality of collaborating with non-traditional partners at the BoP, no research has specifically focused on this phenomenon while describing BoP business strategies. The four case studies in this dissertation show that cross-sector collaborations form an essential component to successful BoP models. Still, the approaches from these cases are not the only roads for success. Whereas companies, nonprofits and other non-business organizations collaborate to obtain, gain access to or benefit from specific partner resources, other models may be based on the idea of companies leveraging existing local BoP business models. In a recent article from Seelos and Mair (2007), for which the authors won the Strategic Management Society Conference (SMS) Best Conference Paper for Practice Implications Award, it is illustrated how two large companies – Telenor and Map Agro – collaborated with local organizations to build new BoP markets while obtaining financial and social benefits in a sustainable way. Fourth, it expands on the literature of cross-sector collaborations. As chapter 6 showed, studies on these partnerships originate primarily in the United States and Latin America. Although some of these collaborations focus on serving poor people, the approach does not fall within the BoP paradigm but is tangential to it. Many examples of cross-sector collaborative relationships are namely characterized by lower levels of intensity, and despite the benefits for partnering organizations, they do not form a compelling argument for a necessary role in commercial BoP ventures. Thus, this dissertation demonstrates how complementarity of the resource base of companies and nonprofits should be taken as a serious starting point for implementing innovative strategies in non-traditional markets.

Still, as with any research, also this dissertation could not address all questions. Put differently, there is still much to be learned about the phenomenon of cross-sector collaborations at the BoP. First, although this research identified and summed up the resources companies and nonprofits are looking for with their partners, it did not analyze how different resources, and in particular intangible and knowledge-based resources, influence the power relationship between partners. Second, in the future particular attention can be paid to the process of knowledge transfer between companies and nonprofits. How does this happen? How does it influence the partners? And how does it affect the power structure of the relationship? Third, observing the complementary roles nonprofits play in these cases from the business model viewpoint, another research project could focus on how those organizations perceive their roles and to what extent they are willing to contribute to the commercial success of a BoP venture. Fourth, considering the commercial attitude of companies in serving the BoP, the specific financial agreements between them and their nonprofit partners could be further scrutinized. What contract forms are used, e.g. memories of understanding of more legally-binding contracts? How are residual claims divided between partners? And what happens when problems arise? Fifth, as has been done already for ordinary cross-sector collaborations it is important to get a better view on the entire process of building a partnership at the BoP. What is the role of partnership brokers? What are potential pitfalls? Sixth, the plea for co-creation at the BoP may be further analyzed from an RBV perspective. Although the advantages for partners and society at large of a highly integrated governance structure have been clearly propagated by several scholars (Brugmann & Prahalad 2007; Hart & London 2007), it may also lead to increased ineffiency when an arm's length relationship would benefit them just as well while having a big social impact. Seventh, with reference to an earlier section in this concluding chapter, it may be interesting to find out whether there is a relationship between the intensity level of different cross-sector collaborations at the BoP within a larger number of BoP ventures and the success of those partnerships as perceived by (a) the company, (b) the nonprofit partner(s) and (c) a third viewpoint, e.g. the product development or new customers served. And eighth, if a firm enjoys a competitive advantage from collaborating at the BoP, what are the factors that influence the level to which this advantage can be sustained?

*Managerial implications*

The managerial lessons that can be learned from this dissertation are also multifold. First, each of the cases on its own adds to a broadening body of business examples at the BoP. Despite growing evidence for the existence of the lucrative opportunities in these untapped markets, many companies are still hesitant to explore them, let alone actually exploit them. AIG Uganda didn't anticipate the success of its micro-insurance product for the country's BoP, and neither did Vodafone plan to develop a service that would have the potential of becoming a big hit around the developing world and possibly even beyond that. Often it is argued that markets in industrialized nations are saturated and therefore companies should turn to the billions of underserved people at the Base-of-the-Pyramid (e.g. Hammond &

Prahalad 2004). In terms of the Resource Dependency Theory, companies have a resource need, namely new customers. Thus, the four examples may stimulate companies again to consider the BoP as an interesting market. Second, the cases unambiguously show that nonprofits not just collaborate to obtain additional financial resources. Indeed, the findings showed that nonprofits are also keen on gaining access to or benefiting from resources such as reputation, commercial skills and corporate networks. Although the literature on cross-sector collaborations has already addressed this issue, it is worth emphasizing because paradigmatic views are persistent. Thus, cross-sector collaborations at the BoP reach beyond the philanthropic stage and should therefor get fair attention as a strategic challenge by managers. Third, although 'the fortune' at the Base-of-the-Pyramid may be clear to an ever-growing academic and international development community, the success will depend to a very large extent on the willingness of large western companies to take risk and really discover it. But as argued by Hart, the BoP isn't going anywhere, and doesn't deserve to go anywhere, if it will only be about companies making a profit of the poor (Hart & London 2007). Although this dissertation looked at cross-sector collaborations at the BoP primarily from the company's perspective, each of the cases also provided evidence that their cross-sector partners benefited from collaborating as well. And if there will indeed be a shift from a 'BoP 1.0' model to a 'BoP 2.0' model, with concomitant benefits to the society at large, these ventures and partnerships may actually become more than a one-time endeavor. Indeed, successful partnerships that took place in successful BoP ventures may become clear examples of actually 'doing good' while 'doing well'. Thus, if companies are seeking profitable opportunities at the BoP and need to collaborate for achieving their objectives, then it has the potential of becoming a showcase for their social impact by simply doing what companies are supposed to do, namely maximizing financial returns. And especially the combination of making profits and having an impact may be a great value to companies these days. Fourth, the case studies unambiguously showed how the companies had to collaborate with organizations from other sectors throughout the entire process and throughout the entire value chain. The conceptual development of M-Pesa happened in close cooperation with Coffey International, whereas Finca Uganda approached AIG Uganda to develop an insurance product for their clients. Since both the mobile payment and micro-insurance products are very successful, it pays off to listen very well to what these untraditional partners have to say about opportunities at the BoP. Further in the process such partners can also become very important for the actual development of the technology or the creation of the business model. For instance, the Aprovecho research center played an important role in the technological design of the Breathing Space stove models and AIG Uganda could not test the potential of its micro-insurance product without the continued assistance of Finca. Thus, even after conceptualization of new business ideas, it is essential to keep good relationships with such partners. In sum, each collaborative partnership has a specific purpose throughout the entire process of conceptualizing a product, its development, marketing and distribution. Companies should therefore not make the mistake of discontinuing partnerships too soon or stop reaching out for potential new partners. At the same time, a continuous process of co-creation may not be the preferred form of partnership for nonprofits either as they may have achieved their goals in an earlier stage. Fifth, the four cases also show that the entire process of venturing out to the BoP is indeed a long-term trajectory. It took Vodafone about 4.5 years to launch M-Pesa. AIG Uganda started its commercial expansion only around the turn of the century, whereas Finca already approached the insurance company in the mid-nineties. The Shell Foundation started the Breathing Space program back in 2002, whereas the scale-up phase will last until 2009. Akashganga may have been on the market for over ten years, but only now we can observe how the system is being introduced to other countries through collaboration with the international public and nonprofit sector. The lesson here is that these projects take time and need to be tested extensively to find out what works and what doesn't, which buttresses London's (2007) call for patient innovation. Sixth and in line with the previous argument, the Resource Dependency Theory states that companies face constraints in their quest for resources. In the presented framework these constraints are reflected as being internal and external to the firm. Through collaboration companies can circumvent them to a certain extent. Table 12.1 showed how in each of the cases the companies faced several constraints: the Breathing Space partners had to and still have to convince a public that sees no value in buying an expensive stove, SKEPL has to deal with local corruption that lowers the chances of selling another Akashganga system, AIG has to fight against the concept of insurance having a bad name in Uganda, and Vodafone-Safaricom need to apply diplomatic skills to ensure M-Pesa is accepted by regulators in a near legal vacuum. Seventh, Barney's VRIO framework demonstrates that obtaining, gaining access to or benefiting from resources and knowledge alone is not enough and that organizational capacity is needed to implement strategies. With retrospect to cross-sector collaborations it can therefore be suggested that this particular capability is a valuable resource of nonprofits. The findings of some cases presented in this dissertation buttress this suggestion. For instance, the Shell Foundation choose to collaborate with Development Alternatives and ARTI because of their capacity to organize parts of large-scale programs such as Breathing Space, and AIG found a reliable partner in Finca which could help integrating the micro-insurance product in the world of micro-finance. On the other hand, Vodafone and Safaricom were hoping that Faulu Kenya would be a partner with the organizational capacity to assimilate M-Pesa in the MFI's business operations, but found out that other considerations to maintain current practices refrained the organization from making changes and use its capacity to become more efficient. In the case organizational capacities are lacking, the companies can help their nonprofit partners to acquire them. The AIG and SKEPL cases provide evidence of such cross-sector knowledge transfer as specific training sessions were organized to increase the effectiveness of the partner organizations, i.e. the MFIs and local cooperatives. One indirect way to increase organizational capacity is by instilling a commercial attitude. Once nonprofits start working according to market principles, they are constraint by market forces and should henceforth therefore allocate resources in the most efficient way. Shell tried to stimulate this mind-set with ARTI and encouraged the nonprofit to establish a forprofit entity to market new stove models. And finally, the Akashganga case study unambiguously showed that the BoP is not only the terrain for multinationals but that it can also be served by small companies. As argued by Dawar and Frost (1999: 119 & 129) “in battles for emerging markets, big multinationals don’t hold all the advantages [because] the structure of some industries favors companies that operate on a large scale, so can the structure of other industries evolve to favor companies operating at a small scale.” The evidence showed that big companies collaborate with nonprofits to gain access to resources that smaller companies, such as SKEPL, often have and larger companies do not.

*Final thoughts*

Companies face many challenges nowadays. In the eyes of many the legitimacy of large multinationals is at stake and companies are expected to become socially responsible. Despite the ongoing debate on the value of CSR, it has become a new reality for companies to be good ‘citizens’. As the Economist recently wrote: ”This newspaper has argued that [CSR] is often misguided, or worse. But in practice few big companies can now afford to ignore it.”[83] The integration of the voices of fringe stakeholders in the periphery, such as at the BoP, is essential and may even lead to the discovery of new market opportunities and the development of new business models (Hart & Sharma 2004). Although this dissertation has

[83] Source: The Economist, “Just good business”, 17 January 2008

primarily looked at commercial BoP ventures, few would disagree that focusing on the poorest in our world cannot be labeled under the heading of Corporate Social Responsibility. The clear demand for quality products and services at the Base-of-the-Pyramid, as those in the presented case studies, is an unambiguous proof the poor prefer to spend their little money on them and raise their standard of living. Still, some argue that certain BoP products are unnecessary and are only meant to take away money without really adding any value. For instance, one of the interviewed managers in India criticized the marketing of shampoo sachets for hygiene reasons whereas traditional (much) cheaper products would do the job just as well. Another point of critique has been discussed in chapter two and concerns the idea that the poor should not only be seen as consumers but also as producers. While it is perfectly acceptable that multinationals try to sell their goods and services to the poor, which indeed may improve their standard of living, it is more important that the poor get the opportunity to build up a better life for themselves. In other words, the only way to raise real income is by starting to produce. As Peter Bauer and Basil Yamey have already remarked half a century ago (1957: 127): "It is often nearer the truth to say that capital is created in the process of economic development than that development is a function of capital accumulation." In other words, a business approach to development is crucial. Cross-sector collaborations may play an important role in the process of economic development because when companies are partnering at the BoP they are likely to transfer capital, knowledge, ideas and value system to companies and organizations at the local level (Meyer 2004).

The Base-of-the-Pyramid is certainly not a panacea because the poverty problem in the developing world is highly complex. In particular the poor face tremendous difficulty in obtaining access to capital. Rajan and Zingales (2005) write in their book *Saving Capitalism from the Capitalists* that a large number of people have no access to financial services and therefore cannot expand their economic opportunities. In addition, the work of Hernando de

Soto illustrates that a lacking property rights regime perpetuates the problem because the poor cannot use their possessions as collateral for obtaining loans. Over the past few years micro-credit has gained much attention, certainly since Muhammad Yunus, founder of the Grameen Bank, won the Nobel Peace Prize in 2006. However, the future success of micro-credit depends to a large extent on how well micro-finance institutions can lower their costs and reduce their risks. One of the cases in this dissertation showed how a large insurance company helped Ugandan MFIs to limit the threats resulting from clients' recovery problems. But also micro-insurance companies should become more efficient. McCord et al. (2006) say that "the premium payment mechanism needs to find a balance between being efficient and being sensitive to the needs and capacities of clients. Simply collecting a large number of small premium payments may make the products more accessible to the poor, but can also result in higher transaction costs that drive up premium rates." Another case study showed how a mobile payment system has the potential for MFIs to substantially reduce their administrative costs and thereby lower the interest rates they charge to their customers. And obviously this service can also be easily integrated into the administrative systems of insurance companies.

This dissertation presented a framework that showed that resources play a central role in the decision of companies and nonprofits to partner at the BoP. As Warner and Sullivan (2004: 17) say: "The partnership approach involves the 'pooling' of resources, competences, capacity and expertise, thereby achieving outcomes that add value to what each party could achieve by acting alone. [It] builds on the idea that each sector in society has core competencies and resources that, if appropriately arranged, are complementary to one another." This work formalized all these ideas and presented a graphical representation of the underlying dynamics of this relatively new phenomenon. Surely it is not all explanatory, but it unquestionably can help structuring our thoughts when thinking about this topic.

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