Chapter 8
Innovation Ecosystems in Brazil: Promoting Social Entrepreneurship and Sustainability

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Abstract We highlight cases of organizations that promote social entrepreneurship and sustainability in Brazil through initiatives that support the ecosystem of innovation. An innovation ecosystem comprises not only the core innovator, but also stakeholders including suppliers, customers, and organizations that develop the infrastructure or provide complementary services in different industries or communities. From the perspective of an innovation ecosystem, it is important to consider not only how an individual or organization solves innovation challenges, but also how this individual or organization interacts with stakeholders and organizational partners to stimulate innovation. The chapter focuses on two cases that showcase two sets of concerns: innovation and sustainability in the value chain; and social entrepreneurship and microfinance. These cases suggest that organizations supporting social innovation ecosystems can foster the startup and growth of social enterprises. These cases may serve as a guide for how other organizations can develop their own approaches to enrich their local innovation ecosystems. This chapter offers a novel approach to the understanding of social entrepreneurship in the context of an emerging economy by addressing the connection between innovation ecosystems and social entrepreneurship.

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8.1 Introduction

In this chapter, we offer a novel approach to the understanding of social entrepreneurship in the context of an emerging economy by addressing the connection between innovation ecosystems and social entrepreneurship. To date, the literature on innovation ecosystems has generally focused on for-profit organizations (Autio and Thomas 2013). This study begins to bridge this gap in the literature by addressing innovation ecosystems in the context of social entrepreneurship.

The burgeoning field of social entrepreneurship has witnessed the development of new organizational forms involved in the practice of social entrepreneurship. This chapter presents two cases of organizations that promote social entrepreneurship and sustainability in Brazil through initiatives that support the ecosystem of innovation. From the perspective of an innovative ecosystem, it is important to consider not only how an individual or organization solves innovation challenges, but also how this individual or organization interacts with stakeholders and organizational partners to stimulate innovation.

Our methodological approach is the case study method (Yin 2005). This chapter presents two cases. Our first case addresses innovation and sustainability in the value chain. The data for this case came from the organization in the case (*Fundacao Getulio Vargas*), collected by three of the co-authors who were directly involved in the design and implementation of the project in the case. Our second case addresses social entrepreneurship and microfinance. The data for this case came from a detailed review of published sources. These cases may serve as a guide for how other organizations can develop their own approaches to enrich their local innovation ecosystems.

This chapter has the following structure: First, we review the literature on innovation ecosystems and social entrepreneurship. Second, we present our two cases: "Innovation and Sustainability in the Value Chain;" and "Social Entrepreneurship and Microfinance." Third, we describe our conclusions, highlighting the ways in which the organizations in these two cases have promoted social entrepreneurship.

8.2 Innovation Ecosystems

The term "ecosystem" has been used in practice by social entrepreneurs, business practitioners, and organizations (e.g., Lampinen 2011) such as Endeavor, a nonprofit that focuses on catalyzing high-impact entrepreneurship. Scholars in the fields of innovation and strategy have dedicated increasing attention to the concept of ecosystem (Adner 2006). Complementary streams of studies based on different theoretical approaches have contributed to the understanding of innovation ecosystems (Autio and Thomas 2013).

An *innovation ecosystem* can be understood as a network of interconnected organizations organized around a focal organization, which incorporates producers and users who create value through innovation (Autio and Thomas 2013, p. 3). Some companies have developed collaborative engagements involving economic transactions and institutional arrangements between suppliers and users (Normann and Ramirez 1993; Stabell and Fjeldstad 1998). In an increasingly interconnected world, some firms are able to create value that no single organization could do alone by coordinating innovation ecosystems. The innovation ecosystem perspective highlights that it is important to examine not only the core innovator individually, but also its interaction with suppliers, customers, and organizations providing complementary services to stimulate innovation (Adner and Kapoor 2010; Iansiti and Levien 2004).

Interdependence and collaboration among organizations are typical features of ecosystems. Adner (2006, p. 98) states that ecosystems entail "collaborative arrangements" through which firms combine their individual offerings. Wincent et al. (2010, p. 599) state that "strategic networks" focus on the achievement of "shared goals through collective efforts." Gawer and Cusumano (2008, p. 28) emphasize that a focal firm or "platform leader" may work with companies supplying complementary products and services, and thereby form an ecosystem of innovation that is mutually beneficial to the organizations involved.

The literature on innovation ecosystems has evolved from a body of research on related concepts including business ecosystem, value network, and strategic network (Autio and Thomas 2013). Moreover, scholars have used the perspective of ecosystem in the field of entrepreneurship. For instance, Zacharakis et al. (2003) have described an ecosystem as the infrastructure of knowledge, technical skills, and financial support that facilitates entrepreneurship in a region.

An ecosystem may have a particular emphasis on value creation and innovation. Moore (1993, p. 76) states that a "business ecosystem" entails the notion that "companies coevolve capabilities around a new innovation…and eventually incorporate the next round of innovations." Christensen and Rosenbloom (1995, p. 234) suggest the term "value network" to describe the context within which firms identify and develop solutions to create value. Autio and Thomas (2013, p. 3) suggest that the underlying purpose of an ecosystem is to create value through innovation (Autio and Thomas 2013).

However, the literature on ecosystems has typically focused on for-profit organizations. For instance, Jarillo's (1988, p. 32) concept of "strategic networks" describes "purposeful arrangements among distinct but related for-profit organizations." There is a scarcity of studies in the literature on ecosystems that address the context of nonprofit organizations and social enterprises. In this study, we begin to bridge this gap in the literature by addressing the connection between innovation ecosystems and social entrepreneurship.

8.3 Social Entrepreneurship and Sustainability

The burgeoning field of social entrepreneurship has witnessed the development of new organizational forms involved in the practice of social entrepreneurship. Correspondingly, the literature on social entrepreneurship has incorporated diverse definitions of social entrepreneurship and related concepts.

In his classic work on the meaning of social entrepreneurship, Dees (2001/1998, p. 4) defines social entrepreneurs as those who "play the role of change agents … by adopting a mission to create and sustain social value (not just private value) …" Building on the notion of social value, Mair and Marti (2006, p. 37) maintain that social entrepreneurship is "intended primarily to explore and exploit opportunities to create social value" and "involves the offering of services and products but can also refer to the creation of new organizations." Accordingly, there are different organizational forms involved in practicing social entrepreneurship.

Various forms of hybrid organizations from the private and nonprofit sectors have sought to blend a market-based approach with a social mission. According to Bielefeld (2009, p. 72), social enterprises would include "nonprofits with some earned income; nonprofits or for-profits with equal concerns for social and financial ends …; and for-profits with some emphasis on social responsibility." Similarly, hybrid organizations "can exist on either side of the for-profit/nonprofit divide; blurring this boundary by adopting social and environmental missions like nonprofits, but generating income to accomplish their mission like for-profits" (Haigh and Hoffman 2012, p. 126). Therefore, social entrepreneurship includes nonprofit organizations that develop a branch with financially self-sustained operations independent from donations, as well as for-profit organizations that are equally concerned with financial and social ends.

Formally, these types of organizations include new legal forms of operation. A recent legal form in the United States is the low profit limited liability company (L3C). Created in 2008, L3C is a form of taxable business entity that allows investors, including for-profit businesses, foundations, governments, public charities, and individuals interested in social outcomes, to make donations to this type of social enterprise (Bayona and Milani 2011, p. 66). L3Cs must have a clear balance between profit and social goals by significantly pursuing one or more charitable or educational purposes. Another new legal form in the United States is the benefit corporation. This type of organization is a blend of a traditional for-profit corporation with a mission to benefit the public, and requires directors to consider not only the stockholders' interests but also the societal ramifications of their decisions (Minna and Corbin 2010).

These different organizational forms indicate that there are multiple ways to perform social entrepreneurship. In the next section, we describe cases of organizations that promote social entrepreneurship and sustainability in Brazil through initiatives that support the ecosystem of innovation.

8.4 Social Entrepreneurship and Innovation Ecosystem Cases

8.4.1 Case 1: Innovation and Sustainability in the Value Chain

This case discusses an initiative of the Center for Sustainability Studies, an organization that is part of *Fundacao Getulio Vargas*, accredited by the Association to

Advance Collegiate Schools of Business, and located in Sao Paulo, Brazil. The Center stimulates social entrepreneurship via the Innovation and Sustainability in the Value Chain Project, which highlights the influence that sustainability-oriented small and medium enterprises can have on large companies' value chain. The Project organizes workshops to bring together individuals from companies of different sizes and industries to discuss best practices of innovation and sustainability in the value chain. These workshops present successful cases of collaboration between large companies and sustainability-oriented small and medium enterprises. By generating and disseminating knowledge as well as bringing small suppliers closer to large companies, this Project has been strengthening the ecosystem of innovation in Brazil.

The center for sustainability studies *Fundacao Getulio Vargas* (FGV 2012) is an academic foundation created in 1944. The Sao Paulo Business Administration School of *Fundacao Getulio Vargas* (FGV-EAESP 2012) was founded at a later stage, in 1954, through a joint effort between the Brazilian government and companies, as well as the collaboration of Michigan State University. Since then, the School has been working towards meeting the demands of the academic and business communities by creating new disciplines, while seeking for suitable ways to plan ahead for future academic and managerial demands.

It was within this context that in 2003 the Center for Sustainability Studies (GVces 2012) was created. It represented the school's initiative to offer an open arena for study, learning, insights, innovation, and knowledge production. The Center has based its activities on the development of public and private management strategies, policies and tools that promote sustainability within the local, national and international scenarios. Its programs are based on four major pillars: capacity building; research and knowledge; organization and partnerships; and communication and mobilization.

These pillars permeate all of the programs and initiatives that compose the Center for Sustainability Studies. Currently, the Center has seven programs. Each program works on different issues and includes distinct projects. This case focuses specifically on one of these projects: the Innovation and Sustainability in the Value Chain Project. The goal of this project is to promote innovation in business models, strategies, relationships, process, products, services, and corporate practices, aligned with sustainable development.

The innovation and sustainability in the value chain project The Project launched its first initiatives in December 2011, in partnership with Citi Brazil and sponsored by Citi Foundation, and focuses on promoting innovation for sustainability through small and medium enterprises that are part of large companies' value chains.

The relevance of the focus on small and medium sized enterprises is due to the significant impact that such firms have on the Brazilian economy. Small and medium sized enterprises represent about 99 % of the entrepreneurial businesses in Brazil, their transactions account for about 20 % of Brazil's annual GDP, and they generate about 70 % of the formal jobs in the country (IBGE 2012). However, small businesses in Brazil usually have less access to technical knowledge related to innovation and sustainability than large firms. Even when they have access to such knowledge, in many cases they lack access to financial resources to make their products or business practices viable (Branco et al. 2012). Yet, given the nature of the small business sector, there is a high potential contribution of SMEs to the implementation of innovative and sustainable strategies within their respective value chains and as suppliers in the value chains of larger companies.

In the case of innovative small and medium enterprises (SMEs) that have social and technological innovations addressing sustainability, there are some barriers to success as suppliers in the value chain of large companies. Most of these barriers derive from large companies' procurement policies and relationships with suppliers, guided by three main principles: price, quality, and time. Many of the large companies that operate in Brazil do not manage their own supply chain in a responsible way. Even in companies that do have some social and environmental procurement criteria, these criteria are usually set by a top-down approach, and do not engage with suppliers to co-create guidelines that could establish win-win relationships with innovative small and medium enterprises. Therefore, not only do the innovative small and medium enterprises have to assume all the risks and costs of developing innovations, but they must also be competitive enough to supply to large companies oriented by these three values.

Given these challenges faced by sustainability-oriented small and medium enterprises, the main objectives of the Project are to:

- Foster the success of small and medium enterprises by supporting their integration as sustainability-oriented suppliers in large companies' value chains;
- Mobilize large firms to elaborate innovative sustainable strategies for their value chain;
- Recognize and promote innovative co-solutions and partnerships between large companies and SMEs in a manner that fosters the success of sustainability-oriented SMEs;
- Create a space for an exchange of experiences and formation of networks between SME suppliers and large companies.

In order to put these objectives in practice, the Project has organized many initiatives involving large corporations and SMEs, including:

1. Workshops: spaces where SMEs and large corporations can exchange information and dialogue about successful practices and discuss policies related to management of suppliers. Additionally, representatives who are present in these workshops receive valuable technical knowledge about how to initiate a strategic risk analysis linked to the management of their production chain. Also, the workshops favor communication and collaboration among SMEs and between SMEs and large corporations.
2. Publication: the results of the Project in 2012, as well as a detailed description of exemplary cases of innovation and sustainability of SMEs selected by the Project, were described in a publication launched at an annual Forum with a round table composed by invited experts and an exhibition fair presenting the SMEs' innovations. The publication demonstrates not only the possibilities of win-win situations that can emerge from partnerships and exchanges between large firms and their smaller suppliers, but also sheds light on the challenges faced by the SMEs as they implement their innovative ideas.

3. Website and online platform: the main tool of communication with all the Project's stakeholders. The Project aims to disseminate all the SME cases selected through the years and to serve as a virtual forum where different actors can gain knowledge and express their opinions regarding the theme.

Throughout this year, the Project has engaged 25 large companies and has identified and selected nine SME suppliers with innovative practices. Within the nine selected cases, TerpenOil (2012) is an example of a success story. This young technology company has developed sustainable solutions for environmental challenges involved in the production, use, and reuse of natural cleaning products. TerpenOil's products are made of "terpene," a substance found in abundance in the essential oils derived from plants that are responsible for antiseptic properties within natural ecosystems. It fulfills three main functions: solvency, neutralization of odors, and elimination of bacteria. The products offered by TerpenOil combine these three functions, using orange peels as the main source of terpene. The choice of this input was due to the abundance of the fruit in Brazil, once the largest world exporter of the fruit (Branco et al. 2012, p. 67). The orange peels go through a physical process that generates specific blends with solvent and microbiological properties that are capable of neutralizing odors. TerpenOil's competitive advantage is the natural and scentless properties of terpene in a traditional industry filled with artificial and heavy chemicals (Branco et al. 2012).

From the perspective of an innovation ecosystem, one notable example of the formation of win-win relationships is the collaboration between TerpenOil and Whirlpool in Brazil. The use of TerpenOil's products in Whirlpool makes it possible to replace alkaline and toxic liquids in the cleaning and elimination of oil (grease) in Whirlpool's electronic goods. Besides being harmful to human health, the use of conventional compounds demanded a high consumption of water and energy. TerpenOil's products feature natural detergent, and do not require the use of hot water in the process. This has resulted in a 20 % reduction in the use of electric energy and a 76 % decrease of the use of water for the rinse process while increasing Whirlpool's productivity by 99.3 %. The firm also experienced a cutback of five hours in its production process due to the fact that it was no longer necessary to cool down manufacturing machines before repairing them. An extra advantage is seen in the disposal of the by-products after cleaning of tools; due to its natural and non-toxic properties the remains of the process can be discharged directly in sewage networks.

In this way, the relationship between TerpenOil and Whirlpool enriches its innovation ecosystem by collaborating for sustainability-oriented innovation. In turn, the Innovation and Sustainability in the Value Chain Project strengthens its local innovation ecosystem by disseminating information about successful partnerships and fostering networks between SME suppliers and large organizations for the purpose of stimulating sustainability-oriented innovation. By promoting the success of sustainability-oriented SMEs or social enterprises, the Innovation and Sustainability in the Value Chain Project has helped foster social entrepreneurship in the region.

Lessons from the innovation and sustainability in the value chain project To assess behavior change among participants in the 2012 cycle, participant surveys were applied at the end of each activity and also at the end of the cycle. These surveys and participants' statements suggest that the Project has positively influenced the use of sustainability-oriented tools and policies in large companies, while benefiting their relationship with sustainability-oriented SME suppliers.

The results obtained during the first cycle of activities were extremely satisfactory, but there were also challenges involved in the implementation of the project. One of them relates to raising the awareness of large corporations about the importance of sustainability in their respective value chains. One of the solutions found in order to guarantee the adherence of such firms to the initiative came from an already existing network of 36 firms that participate in another project managed by GVces named "Business for Climate Platform," which aims at disseminating and promoting a low carbon economy in Brazil. These firms were invited to participate in the first cycle of the Innovation and Sustainability in the Value Chain Project. In this way, the project has helped foster a network of organizations.

Another challenge was associated with the engagement of professionals from the purchasing department of the large participating corporations in the themes treated during the Innovation and Sustainability in the Value Chain Project workshops. As this specific cycle of the project relates to both the sustainability and the procurement of supplies, the Project team requested that the participating firms send two representatives to the workshops, one from the sustainability and another one from the purchasing department of the respective firm. The activities promoted in the cycle have slowly convinced these managers to engage in discussions and provoked their curiosity, resulting in much more interest from participants in dialoguing among themselves through the course of the cycle. Another positive result was the establishment of a closer dialogue between managers from the two areas, promoting interaction and exchange of strategies and different practices among firms themselves.

The Innovation and Sustainability in the Value Chain Project also discovered a few positive surprises throughout the cycle. One such surprise was the interest of two external investors who approached the Project's team envisioning this initiative as an opportunity to bring large and small enterprises one step closer to each other. Additionally, the exchange of experiences between large and small enterprises (as well as between small firms) in such a short period of time was impressive. The workshops worked well as open spaces where important dialogues about their challenges and successes related to sustainability took place.

Finally, a few lessons can be suggested for institutions that intend to create workshops such as the ones promoted by the Center for Sustainability Studies. It is fundamental to involve the entire large institution when the intention is to influence their procurement and management of suppliers. When it comes to small and medium enterprises, the project identified a few important lessons that may be used as a basis for offering innovative and sustainable solutions that address the issues faced by large corporations and their supply chain (Branco et al. 2012). These include:

- Conformity to the current environmental legislation;
- Transparency, long-term thinking, and adequate structuring in the management teams of small and medium enterprises;
- Production capacity that can serve large corporations in a large scale, and that is capable of quickly responding to new demands;

- Mapping large firms that face challenges that the small and medium enterprises are capable of addressing via the provision of innovative sustainability-oriented products and services.

Based on this first year's results, there is evidence that the Innovation and Sustainability in the Value Chain Project can contribute to establishing and strengthening the ecosystem of innovation for sustainability in Brazil by generating and disseminating knowledge, and bringing small and medium suppliers closer to large companies.

8.4.2 Case 2: Social Entrepreneurship and Microfinance

This case study describes and analyzes the formation and development of a socially innovation ecosystem in the *Conjunto Palmeiras* neighborhood, a low-income community in the city of *Fortaleza*, Brazil, which resulted in the creation of Palmas Bank (*Banco Palmas*). Palmas Bank has strengthened its local innovation ecosystem by developing a financial infrastructure that facilitates entrepreneurship in its community. The bank's financial services have enabled marginalized populations to access microcredit to develop formal and informal businesses. Moreover, the bank has interacted with customers and governmental organizations to issue a social currency that circulates only inside the community with the goal of ensuring that the wealth generated by residents remains inside the community. Palmas Bank has also developed a methodology that helps the creation of new community banks in Brazil. In this way, Palmas Bank has boosted its local innovation ecosystem, and also guided social entrepreneurship initiatives in other innovation ecosystems in Brazil.

Palmas Bank, created and managed by its local Association of Residents, was formed initially as a microfinance organization operating an integrated system of microloans, which are "minor loans, unsecured, to individuals or groups in order to start or expand business" (Khavul 2010, p. 57). The goal was to organize and encourage its 30,000 inhabitants to produce and consume in their own neighborhood. Palmas Bank has emerged based on a grassroots organization and was the first community bank of Brazil. Over the years, Palmas Bank has become a reference and main coordinator of the Brazilian community bank model, adopted as a public policy initiative by the Brazilian government.

The *Conjunto Palmeiras* neighborhood was created by the city in 1973, with the goal of reducing the spread of shantytowns (*favelas*) in the city of Fortaleza through the compulsory removal of 1,500 families living in the coastal zone, an area of interest for expansion and revenue creation based on urban and tourist activities. Relocated to a large open area covered by mud and lacking any urban infrastructure and basic services and provided with only some building materials donated by the government, people organized themselves into groups helping one another build their own homes on the demarcated land. This represented a first learning experience about community organization which evolved into the formation, in 1981, of the Association of Residents of *Conjunto Palmeiras* (ASMOCONP 1998), which started to organize community projects, and became the central network node of social innovation (Costa 2010).

The history of *Conjunto Palmeiras* became intertwined with the life of seminarian Joaquim Melo Neto, who became a well-known social entrepreneur and spokesman of this neighborhood. At that time he participated actively in ecclesiastic movements of the Catholic Church, strongly influenced by the Theology of Liberation. In early 1980s, Joaquim was appointed to undertake community work within the project "Priests in the *Favela*," in a landfill near *Conjunto Palmeiras*, where many residents used to work (Melo 2011). Soon after, Joaquim moved to *Conjunto Palmeiras* and began to engage in community activities helping organize task forces to provide water and electricity to the neighborhood (IDES 2011). In this way, Joaquim, the founder of Palmas Bank established a relationship with the community by developing community work and encouraging the foundation of the local Association of Residents, even before the foundation of the community bank. Such a long-term relationship with the community, which was built from the bottom-up, has strengthened the capability of Palmas Bank to understand the needs of the community, develop a bond with community members, and thereby contribute to its local innovation ecosystem.

The existence of community organization, embodied in the Association of Residents of *Conjunto Palmeiras*, made possible in 1991 the seminar "Inhabiting an Uninhabitable Place," in which residents discussed alternative actions to complete the urbanization of the neighborhood. This organization allowed, institutionally, a dialogue between the community and the government, enabling social programs to be developed in an organized manner on site. In 1992, through the *Prorenda* Program, an Integrated Community Development Plan was prepared with the support of governmental specialists focusing on the promotion of an integrated human development in the community. In 1995, the *Prosanear* Program enabled the construction of sanitary infrastructure in the neighborhood (Palmas Institute 2011).

In 1997, the community implemented a second "Inhabiting an Uninhabitable Place" seminar, focusing on the search for alternatives for income generation and job creation in the neighborhood. The guiding question was: "Why are we poor?" To answer this question, the community, with the support of consultants from the Social Service of Industry (*Servico Social da Industria* or SESI) and the Brazilian Service of Support for Micro and Small Enterprises (*Servico Brasileiro de Apoio as Micro e Pequenas Empresas* or SEBRAE), conducted a survey of residents in order to identify how much, where, and in what residents used to spend their money. The result of the survey, which examined a considerable proportion of the 25,000 residents of the community at that time, showed that residents bought around R$ 1.2 million (US$ 590,812) per month in various products, but only 20 % was spent in the community. This "map of local production and consumption" showed that the income of the community was seldom circulating in the community, and therefore not sufficiently encouraging a cycle of local production and consumption. It was only possible to dialogue with the Social Service of Industry and the Brazilian Service of Support for Micro and Small Enterprises because the Association of Residents of *Conjunto Palmeiras* had been established and active in organizing the community.

Thus, the challenge was to find alternatives that would stimulate local consumption and for this purpose it was necessary to ensure local production. In 1998

Palmas Bank was created for this purpose with the support of the non-governmental organization Center for Studies, Organization, and Reference of Human Settlements (*CEARAH Periferia*), which provided seed capital. According to Joaquim Melo (IDES 2011):

> We obtained a loan of R$ 2,000 (US$ 984). At that time, people would not talk much about microcredit, or solidarity economy, so we opened the bank only with that money. On the first night we made five loans and there was no money left in the bank. I like to joke that the bank broke on the day it opened. But people paid back and national and international partners have emerged.

At the beginning of its operation, Palmas Bank functioned in a small room on the premises of the Association of Residents and its activities were operationalized by only two people. According to Joaquim Melo (*Revista Consciencia Ampla* 2011, p. 4):

> Our idea was to stimulate not only production, but also consumption by creating a currency to circulate only in the neighborhood, so that people would consume mostly there. The idea of Palmas Bank was completely endogenous.

Other nonprofit organizations, such as Oxfam, also provided resources to Palmas Bank, which over time has sought financial assistance from other programs of international cooperation, such as the United Nations Development Program, and to a lesser extent from local public sources. The few funds raised through interest were used to help pay the expenses of the bank.

Building a methodology for the creation of community banks The fact that there was community organization in the *Conjunto Palmeiras* neighborhood enabled the development of networks that have supported the creation of Palmas Bank. Once formed, the bank fulfilled the role of seeking alternatives for local production and consumption, and meeting the social demands of the community.

Palmas Bank has developed its own methodology, inspired by the practices of the Grameen Bank. In addition to educational and other initiatives, Palmas Bank's methodology has enabled the provision of a range of products and services, namely, the provision of microcredit for producers and consumers; creation of incentives for local consumption, in the form of credit card and social currency, called *palmas*, accepted by merchants in the neighborhood and backed by Brazilian *reais* (1 *palma* equals 1 Brazilian *real*); and the development of new forms of commercialization in solidarity fairs and shops (Melo Neto Segundo and Magalhaes 2009).

The supply of such products and services is made through an innovative methodology based on community involvement in the formulation, dissemination, implementation, and monitoring of actions. This management process is ongoing and involves constant personal (face to face) contact of the people working at Palmas Bank with the community.

Taking the example of the provision of microcredit, Palmas Bank developed the following methodology. The credit application can be made by a (formal or informal) entrepreneur directly at the headquarters of Palmas Bank, or the demand for credit can be identified by a bank employee by visiting people and businesses in the community. These visits have several purposes: identify customers for credit, update the master information for residents, and promote the products and services offered by the bank. The granting of the loan is made based on trust. Nonetheless, an employee of the bank would talk to people in the community to make sure that the entrepreneur is actually involved in a productive activity, thereby reducing the risk of the loan. Imagine the case of an entrepreneur who produces popsicles. An employee of the bank seeks to identify evidence that the potential borrower effectively produces popsicles, such as the existence of a refrigerated cart used to sell the product or invoices evidencing the purchase of fruit extracts used in the production of popsicles. Once the loan is granted, the bank verifies the activities of the borrower in order to monitor the effective use of resources and also to identify the need for some kind of training that is useful for the development of the entrepreneur or the venture. The bank also monitors loan payments so that, as soon as a default situation arises, a bank employee goes to the house of the borrower and offers a proposal for the payment of debt.

Disseminating the methodology: The transformation of Palmas Bank into Palmas Institute In 2003, the Brazilian government created the National Office of Solidarity Economy (*SENAES*), which has the goal of developing community banks that offer social currency and microcredit, aiming at local development (Singer 2009). That same year, Palmas Bank sought to systematize its approach in order to disseminate its methodology in other communities. To exercise its new role as disseminator of a methodology for the creation of community banks, it was necessary to become an organization with its own legal status and adopt a designation known in Brazil as a "civil society organization of public interest." In this way, Palmas Bank became a part of Palmas Institute, which, besides keeping all banking activities in *Conjunto Palmeiras*, has started to disseminate its methodology in other communities across the country. The National Office of Solidarity Economy adopted the methodology developed by the Palmas Institute as a reference for community banks in Brazil. In 2006, Palmas Institute created the Brazilian Network of Community Banks.

Palmas Institute is one of the institutions accredited by the National Office of Solidarity Economy to disseminate the methodology for the creation of new community banks. The Palmas Institute developed the Community Bank Kit, describing step by step how to create a community bank, including yearly estimates for the cost of implementation and operation of a bank.

The acceptance of the *palmas* social currency (P$) is increasing. In May 2012, there were 260 businesses in *Conjunto Palmeiras* accredited to accept the *palmas* social currency. The loan portfolio totaled 2,010,019.95 Brazilian *reais* (US$ 988,501.99) lent to 3,521 people, with an average of R$ 921.72 (US$ 453.29) per person, and an average monthly payment of R$ 5.41 (US$ 2.66) and average monthly interest rate of 2.77 % (Palmas Institute 2012). In 2012, there were 67 community banks active in Brazil. By building and disseminating a methodology to create new community banks in low-income communities, Palmas Bank has not only developed its local innovation ecosystem, but also stimulated the development of social entrepreneurship and other innovation ecosystems in the country.

8.5 Conclusion

This chapter has focused on cases of organizations that promote social entrepreneurship and sustainability in Brazil by supporting the ecosystem of innovation. An innovation ecosystem comprises not only the core innovator, but also its suppliers, customers, and organizations that develop the infrastructure or provide complementary services in different industries or communities. The innovation ecosystem perspective suggests that it is not enough to consider how an individual or organization solves innovation challenges, but one must also consider how this individual or organization interacts with stakeholders such as suppliers, customers, and organizational partners to stimulate innovation.

Our first case addresses innovation and sustainability in the value chain. This case discusses the Innovation and Sustainability in the Value Chain Project, an initiative of the Center for Sustainability Studies at *Fundacao Getulio Vargas* business school in Sao Paulo, Brazil. This Project has uncovered the influence that sustainability-oriented small and medium enterprises can have on large companies' value chain. The Project has organized workshops that bring together individuals from companies of different sizes and industrial sectors, to discuss best practices of innovation and sustainability in the value chain. These workshops have disseminated examples of successful collaboration between large companies and small/medium enterprises.

The Innovation and Sustainability in the Value Chain Project enriches the ecosystem of innovation in Brazil in the following ways. First, this Project generates knowledge about successful cases of sustainability-oriented small and medium enterprises that are often part of the value chain of large companies as suppliers and have collaborated with these large companies to produce an innovation. For this purpose, the Project selects cases and develops a publication that is available online. Second, the Project disseminates knowledge about sustainability-oriented collaboration with suppliers in the value chain by organizing workshops with large companies and small/medium enterprises. During these workshops, companies exchange experiences and identify new opportunities to pursue collaborative partnerships. Third, this Project serves as a networking center for different actors of large firms' supply chain while organizing stakeholders around the theme of innovation and sustainability.

Our second case focuses on social entrepreneurship and microfinance. This case describes the formation and development of a social innovation ecosystem in *Conjunto Palmeiras*, a low-income community in the state of *Ceara* in Brazil, which resulted in the creation of Palmas Bank (*Banco Palmas*). This bank was the first community bank in Brazil, created by its local Association of Residents as a microfinance solidarity organization providing small loans to individuals developing formal or informal businesses. Palmas Bank developed a methodology for the creation of the new community banks. To disseminate its methodology in other communities, Palmas Bank became a part of Palmas Institute, keeping all banking activities in *Conjunto Palmeiras*, while disseminating its methodology across the country. Brazil's National Office of Solidarity Economy adopted Palmas Bank's methodology as a reference for community banks in Brazil. In this way, Palmas Bank became the main coordinator of the Brazilian community bank model.

Palmas Bank's initiatives strengthen the local innovation ecosystem in the following ways. First, it has developed a financial infrastructure in low-income communities that facilitates entrepreneurship at the bottom of the pyramid by enabling marginalized populations to access microcredit to develop formal and informal businesses. Second, the bank has interacted with customers and governmental organizations to maintain a social currency named *palmas* authorized by Brazil's Central Bank, which circulates only inside the community. A main goal of the social currency is to increase the proportion of wealth generated by residents that stays in the community. Third, Palmas Bank has developed a methodology that helps support the creation of new community banks in Brazil. Building on Palmas Bank's successful relationships with different governmental agencies, the bank's methodology was adopted as a public policy microfinance initiative by the Brazilian government. In this way, Palmas Bank has not only developed its local innovation ecosystem, but also inspired and guided social entrepreneurship initiatives in other innovation ecosystems in the country.

Taken together, these cases illustrate the work of organizations performing or promoting social entrepreneurship in different ways while enriching their local innovation ecosystems. For instance, Palmas Bank has been at the same time a social enterprise (Dacin et al. 2010) and a promoter of social entrepreneurship by providing microfinance as a means to enable the creation of social value through productive entrepreneurship (Acs et al. 2013). Recent research on social entrepreneurship has highlighted how social entrepreneurship engages multiple stakeholders (Lumpkin et al. 2013) and creates social value (Di Domenico et al. 2010), and how social entrepreneurs can serve as agents of change (Maak and Stoetter 2012).

We contribute to the literature on social entrepreneurship by emphasizing that the perspective of an innovation ecosystem can be valuable to better understand the effects of initiatives that promote sustainability and social entrepreneurship in their local communities. For instance, many of the 2000 high-impact social entrepreneurs supported by the nonprofit organization Ashoka have influenced national legislation within 5 years of launching their social enterprises (Santos 2012). Indeed, the success and activism of the nonprofit organization Center for Digital Inclusion, created by Brazilian social entrepreneur Rodrigo Baggio with hundreds of computer schools in poor communities across Latin American countries, has influenced the Brazilian government to launch a national program of digital inclusion. These social entrepreneurs are strengthening their local innovation ecosystems not only by innovating individually, but also by interacting with stakeholders, including suppliers, customers, and organizational partners, to stimulate innovation. The cases in this chapter suggest that organizations supporting social innovation ecosystems can foster the startup and growth of social enterprises. Future research is needed to explore the connections between innovation ecosystems and social entrepreneurship in different countries and institutional settings. We hope that the cases in this chapter serve as a guide for how other organizations can develop their own approaches to enrich their local innovation ecosystems.

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