MOBILIZING ASSETS FOR COMMUNITY DEVELOPMENT

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AUTHOR’S NOTE

I have to admit that I used to be highly skeptical about traditional medicine. While doing research for this case study, however, I had an experience that has made me less so. In the middle of the project, I had a bad flare-up of chronic eczema on my hands and wrists. I had forgotten to bring steroid cream and could not find any in Riobamba. One evening, the cook at the house I was visiting, saw my hands and asked if I had been exposed to dirty water. I replied that exposure to pond water has set off eczema episodes in the past. An hour later she beckoned me into the kitchen. She took my hands and, before I knew what she was doing, poured olive oil over the affected areas. She then grabbed a steaming pot on the stove (which I later learned contained a tea made from chamomile and another plant she found in the garden) and poured the hot liquid over my hands. Before I could object, she began to vigorously rub sections of fresh limes over my affected skin. I was horrified because exposure to fresh citrus juice is also one of the factors I associate with eczema episodes. My hands began to tingle but they didn’t feel irritated so I allowed her to repeat the process a few minutes later. I went home to bed and awoke to find that most of the skin on my hands was peeling off, almost like wax. Underneath was a fresh healthy layer of skin. Within two days my hands looked normal. I left Ecuador with several Jambi Kiwa products in my bag.

It is precisely this ancestral knowledge of Andean medicine, ignored by conventional Western medicine that becomes a development cornerstone for the Jambi Kiwa story. It was an asset, owned but yet to be developed by the community, which the women of Jambi Kiwa have capitalized on to create a cooperative business which responds to their vision for improving their livelihoods and reclaiming their Andean knowledge.

Gord Cunningham
Created by an association of largely indigenous women, Jambi Kiwa is a cooperative business that was set up to grow, process and market medicinal and aromatic plants. To succeed, these women have drawn on indigenous knowledge, traditional forms of cooperative activity, and the resilience borne out of the struggles of poverty and discrimination. They are determined to maintain and build on local assets, proceeding to secure trade partnerships in national and international markets.

In telling their story, we hope to enable members of Jambi Kiwa to reflect on and analyze what they have achieved as a way of safeguarding and promoting their assets in the next crucial phase of development. Members must now navigate important decisions in balancing a commitment to their social vision and the demands and opportunities of the global marketplace. We also expect this case study to be of value to the external agencies that have supported Jambi Kiwa to both affirm and illuminate what has been effective in their interaction with the Association. Finally, the case study will contribute to a larger body of work which is drawing lessons from comparable experience in Egypt, Ethiopia, India, Kenya and the Philippines.

As researchers, one of our biggest challenges was to balance academic rigour with the pragmatism of working within a limited timeframe, and respect for the communities’ ownership of the information. After interviewing many individuals and organizations that have a relationship to the Jambi Kiwa story, we were able to verify information through multiple sources. The research team offered different backgrounds and perspectives, providing a rich, holistic understanding of the Jambi Kiwa story. Researchers included: Martha Caranqui, a field worker with the Association since 1998 (and Quichua speaker); Thomas Walsh, a former businessman and lay missionary who has been living and working in Ecuador for the past twelve years, the last two as a cooperant with a Canadian NGO providing technical support to Jambi Kiwa; Aaron Steeghs, an anthropology graduate student from Dalhousie University in Canada who has experience living and working in the Andean region; and Gord Cunningham, a microfinance and community economic development specialist with the Coady International Institute at St. Francis Xavier University in Canada. Nevertheless, despite our best efforts, it would be presumptuous to claim that we have done justice to the full story, and invite the Jambi Kiwa community to use this as a starting point rather than an end point as they retell and reflect on their achievements.

1 A collection of case studies of asset-based and community-driven development initiatives sponsored by the Comart Foundation will be published by the Coady International Institute in 2007.
My name is Rosa Guamán and I have 5 children. I live in the town of Licto – I was born here. I lived here with my family until I turned 11 years old but, because of family problems, I had to leave home. With school finished, I went to the coast to find work. For the next eight years I did domestic labour to earn an income. It was during this time that I began the search for my identity and commitment – I wanted to change my life.

At 19, I returned to Licto and immediately noticed differences in the way domestic help was treated in Licto as compared to the treatment I received on the coast. In Licto the treatment of domestic help workers – and women in general – was awful.

Most native women in Licto were illiterate. At school there were no native girls and very few women among us had finished primary school. We had very low self-esteem, we felt very little self-worth. A woman’s words were almost never valued within the home and it was even worse in the general community; we would often hear comments like “What does she know? She is just an Indian.” On the public buses from Licto to Riobamba women could only sit in the back. And worse, if mestizos entered, women had to ride standing. As women we didn’t count.

In our traditional culture, women had great knowledge, but after the conquest of our people, this has changed. Instead of using their knowledge and natural resources to provide for their families, women now relied on donations of milk, semolina, oil and flour from NGOs. It was humiliating to live in a country with many resources and not be able to provide for ourselves.

I was so frustrated with this situation that I began to seek out other women who were determined to fight such injustices. Many women were interested, but we all needed to make sure that our children were fed and so we didn’t take drastic action. In 1974, however, Fr. Estuardo Gallegos came to Licto to be our parish priest, and he motivated us... to get jobs and start making changes in our lives. Through his liberation theology work, he
said that it was important to examine and encourage positive changes among the marginalized and exploited. His teachings seemed radical to us because the Church had not always been a place that we, as native people, felt welcome. In those days discrimination and racism were present everywhere. The Church was one of the worst discriminators, often using religion to put down the peasants and Indians. We were considered a lesser social class; we were not allowed to sit on the benches in Church and we always had to kneel on the floor. Fr. Gallegos began to win our trust by painting the church benches the same colour, arranging them in one row and allowing everyone to sit as equals.

So we began to organize. We offered literacy classes for women and then offered classes in cutting, sewing and knitting. We started doing traditional craftwork together. As we talked about our work, word spread, and more and more women organized themselves. We were not only learning trades, we were becoming the protagonists of our own development.

The women’s organization grew to become the Christian Network of Rural Women at the provincial level. Then, in 1999, we started the Association of Producers of Medicinal Plants – Jambi Kiwa. In starting this work, our struggle and commitment has also been to work for equality. While the idea of gender equality had taken root in many projects, social equality had been somewhat overlooked. It was too big for NGOs to want to take on so we had to do it ourselves. As a woman, it was difficult for me to confront such large social issues but I managed to do it. I was elected to the parish council, the main governing body of our small town. People supported me because they saw that we were trying to change things with our organization and valued our accomplishments.

We all have our personal journeys in life... my personal journey has [involved] a lot of hard times but the challenge is not to be bitter. I gradually began to realize that the mestizos had been born into a system where they exploited the indigenous: this had been going on for centuries. I also realized that the way forward is for us all to come together.
1.0 THE JAMBI KIWA STORY

1.1 A Seed is Planted

The story of Jambi Kiwa is about the creation of a new enterprise that holds the possibility of improving the livelihoods of hundreds of families in dozens of small rural villages throughout the mountainous region of Chimborazo. It is also a story about reclaiming and valuing traditional culture, knowledge and practices and redefining what it means to be an indigenous people in Ecuador today.

Jambi Kiwa’s history is intertwined with the nation-wide movement for indigenous rights in Ecuador (see Figure 2). Monsignor Leonidas Proaño, Bishop of Riobamba, was a liberation theologian who worked extensively with pastoral workers to support the development of indigenous leaders in rural villages throughout the province of Chimborazo. These efforts laid the groundwork for the emergence of community-driven initiatives like Jambi Kiwa.

One of those former pastoral workers, Rosa Guamán, plays an essential role in the story of Jambi Kiwa. Her work began with organizing indigenous women and their communities and continues today in her role as one of the founding members and inspirational leaders of Jambi Kiwa.

In 1997, Rosa, who had been recently hired by the Diocese of Riobamba as a community worker, was invited to attend a meeting of a group of women in Guayllabamba. This group had been working with Josée Lagarde, an agronomist with the Canadian Centre for International Studies and Cooperation (CECI), on a number of small income generating projects such as rearing cattle, growing fruit trees and vegetables and raising cuys (Andean guinea pig).
Rosa arrived with two colleagues – members of a group of indigenous women from Licto (The group was known locally as ‘the hand of the puma’ for the decisive way they attacked issues). At the meeting Rosa and her friends discovered that the Guayllabamba group had recently attempted to grow and sell traditional medicinal plants but were about to give up on this idea. Josée recalls that it was hard to interest them because it seemed time-consuming and they couldn’t see any profit in it (J. Lagarde, personal communication, October 31, 2004).

Rosa and her friends not only recognised a potential income generating activity, they also saw an opportunity to improve the health of their communities. However, given the difficulty persuading local women to put time and effort into preparing land and planting a new crop, Rosa suggested they start by gathering medicinal plants growing in the wild. They could immediately take these plants and display them in the local market as a way of reintroducing women to the medicinal qualities of local plants.

As they had promised, the very next week Rosa and her colleagues attended the local market in Licto to display several plants. As they were explaining their idea to a crowd of women who had gathered around, the leader of the diocese’s pastoral program happened to overhear the conversation.

Perhaps the most significant force in the indigenous peoples’ struggle for land was the Catholic Church. Being the largest land owner in Chimborazo, the Church was in a unique position to promote and enact land reform. Monsignor Leonidas Proaño, Bishop of...
Nelson Martinez, a lay follower of Bishop Proaño, later offered small stipends to Rosa’s two colleagues to continue promoting medicinal plants. He also provided the use of an attic in an old church building to dry and store the plants.

With minimal support, Rosa and her colleagues organized many groups of women over the next year to collect medicinal plants and bring them to the church. With a small UNDP grant, Josée was able to purchase plants from the groups. Purchases were made each Saturday, since cash on delivery was an incentive for the plant gatherers. Josée also found a reliable buyer in Aromas Tungurahua, a tea company in the city of Ambato. As a result, the plant gatherers who began by harvesting five to ten kilograms of plants each week now started bringing up to 100 kilograms of fresh plants to the church each weekend.

As the attic filled up with drying plants, Rosa and Josée saw the potential for these women to process the plants into a variety of medicinal products. As Josée recalls, it was significant that the women had begun to rediscover the traditional medicines of their ancestors:

> What I saw was women gaining confidence. They started coming to the courses we offered... We would pay older people to come in and show the women how to make traditional medicines or shampoo and soaps. I can remember some of them remarking: “Oh my grandmother used to do this.” Then they would take this re-discovered knowledge back to their communities. It was an exciting time (J. Lagarde, personal communication, October 31, 2004).

By mid-1999, Josée’s placement ended and CECI agreed to hire another cooperant, Manon Henrie, Riobamba, was a leader in this movement. Throughout the 1960s-1980s, he was instrumental in turning over large portions of Church land to peasant communities and ensuring that the poor had access to low-interest credit to buy hacienda land. He offered free legal advice and became a vocal advocate for the rights of indigenous peoples at the national level.

By the 1980s, national efforts were shifting towards capitalist land reform, through which peasants could purchase plots of land. Forceful land appropriations by indigenous groups also became more frequent, as did violent confrontations. As indigenous movements throughout Ecuador strengthened, many of them became part of a national movement known as the Confederation of Indigenous Nationalities of Ecuador (CONAIE). The CONAIE first got involved in national politics in 1988, but its most significant act came two years later when...
to continue her work. CECI also commissioned a market study to explore the potential for commercialization within Ecuador. Before she left, Josée also convinced her supervisor that CECI should hire Rosa. This was the first time CECI-Ecuador had hired an Ecuadorian as a project staff member.

1.2 The Shift to Commercialization

By the spring of 1999, Rosa and her colleagues in the women’s medicinal plant producer groups were starting to attract the attention of other external agencies. Rosa was instrumental in connecting the Centre de Solidarité Internationale (CSI) in Quebec together with CECI in order to secure funding from the Canadian International Development Agency (CIDA). The collaboration of these three organizations and the informal association of producer groups resulted in a CAD 95,000 project to purchase a used mill and dryers. The diocese provided an old warehouse to house the new equipment. As well, four staff members were hired to work directly for Jambi Kiwa: Martha Caranqui, Medardo Bastidas, Melchor Vacacela and Rosa Guamán.

While its application to be an official association under Ecuadorian law was under consideration, Jambi Kiwa began small scale production of shampoos, expectorants, diuretics, slimming formulas, etc. By the spring of 2001, a makeshift factory was ready to be inaugurated, coinciding with the time when the association was granted legal status.

The transition from an informal group to a legal association marked a turning point in the evolution of Jambi Kiwa. For the group to be registered as an association, a formal, federated structure had to be created. Prior to this, each village-level producer group elected a representative, but as it organized a national uprising to demonstrate its frustration with the government’s stance on indigenous issues (such as access to social service, support for rural infrastructure, recognition of Andean cultural knowledge and land reform compatibility with indigenous culture). With the participation of roughly 70% of the rural population, the CONAIE brought the country to a virtual standstill.

Following this uprising, dialogue between the national government and the CONAIE increased significantly but the CONAIE continue to have difficulty getting their issues on the government’s agenda.

Indigenous people also struggled to break up the dominance of the mestizo controlled national and regional markets. While the CONAIE continued to represent indigenous people as a national organization it encouraged its members to support a new indigenous national political movement: the Pachakutik.
The number of producer groups grew, a new system was introduced. The result was the creation of three zones, each with an organization representing several producer groups (see Figure 4).

In April, 2001, Jambi Kiwa landed its first large scale contract to supply dried and milled herbal plants to Compañía Ecuatoriana del Te Ca (CETCA), a national tea company in Quito. Executives of CETCA, recognizing the growing national and international markets for herbal tea, had begun to look for local herb suppliers. Jambi Kiwa secured the contract after responding to CETCA’s advertisement in the local newspaper. The general manager, Jaime Macias Flores, agreed with the position put forward by these

Figure 4
small producers: intensive harvesting on small land plots had the potential to produce high yields of good quality plants.

Taking a personal interest in Jambi Kiwa, Flores showed them how to handle the herbs, provided the plans for the design of a new dryer and helped them with the designs of the new factory, even allowing them access to the CETCA plant. He was clear, however, that if Jambi Kiwa was going to supply plants to CETCA, they would have to follow certain procedures, such as artificial drying, to guarantee quality. He observed that when Jambi Kiwa started supplying herbs of a high quality, the company stopped buying herbs from Germany (personal communication, October 25, 2004). Over the next few years, the relationship between CETCA and Jambi Kiwa evolved into a partnership through which medicinal herbal teas were sold in Panama, Costa Rica and Columbia under the joint label Jambi Kiwa/Sangay.

In May 2001, CECI sent two more cooperants, Thomas Walsh and Jean Guy Bourbonnais, to Jambi Kiwa. Walsh recalls that Jambi Kiwa was still in its “honeymoon phase” at that time. There was little pressure, because CECI continued to administer the project, provide funds to the producers and locate markets for their products:

There were no demands on the producers... There were no annual dues, no expectation that the producers should contribute their labour to the emerging organization and there was no certification process. Producers would show up at meetings and only be concerned with when the truck was coming to pick up the plants (T. Walsh, personal communication, October 14, 2004).

Jambi Kiwa members were jarred out of this relative complacency by a national economic crisis.

In the 1980s, two economic trends had enormous impact on indigenous communities: economic liberalization and falling oil prices. In response to Ecuador’s growing national debt, international financial institutions pressured the state to implement neoliberal reforms. Trade liberalization led to the flooding of local markets with cheap imports while government austerity measures led to cuts in public sector jobs, tightening the labour market and lowering wages throughout the country. In 1997, the price of Ecuadorian oil (the country’s leading source of foreign exchange at that
that gripped Ecuador starting in early 2000 (see Figure 3). In response to growing debt and rapid inflation, the government took the drastic measure of adopting the US dollar as the national currency. Dollarization increased Jambi Kiwa’s costs, particularly for fresh plants and labour. In late 2001, association members were asked to pay dues and contribute labour at the factory in order to keep the business viable. As a result, some members left the organization but the committed ones remained. Rosa describes the struggle to maintain a clear vision among members:

I can recall a situation when a group of producers came and wanted to become members of Jambi Kiwa. They wanted to know what the profitability was going to be each month. I said, “Our benefits are not just economic and financial – they are about learning, training, improving the biodiversity of the community and having a better diet.” That is the challenge – finding people [who] are willing to be part of this vision (personal communication, October 14).

Despite financial constraints, committed members continued to emerge and Jambi Kiwa was able to grow. With growth, however, came a need to restructure the production process. A factory manager and two factory staff were hired. At the same time, a young industrial engineer, Inti Macias, was hired to offer support to the new factory manager. She improved the efficiency of the production process by developing job descriptions and adjusting the layout of the factory. As well, a bookkeeper assumed much of the day-to-day accounting required by CIDA for the CSI/CECI project. Wiliber Ibarra, a Jambi Kiwa producer, began training under the CECI cooperants to become the director of marketing for Jambi Kiwa. To increase potential markets for Jambi Kiwa products, producers also needed...
training that would earn them “green seal” status, or certification from Bio Control Systems. To increase the volume of production needed to successfully commercialize the business, a permanent facility with new equipment became a priority.

1.3 Outside Organizations Respond

Over the next two years, Jambi Kiwa was able to progress in terms of both commercialization and its larger social vision of reclaiming and valuing traditional knowledge and culture by forming relationships with a series of external organizations. Some of these organizations sought out Jambi Kiwa, attracted by its early success. Others were approached by Jambi Kiwa members to support a specific aspect of its work.

Several relationships resulted from the reputation that Jambi Kiwa had developed within the donor community. Small grants allowed Jambi Kiwa members to make use of a second building for a temporary factory, purchase a new mill, replace an electric dryer with a gas model, and create a root drying facility. A staff member was sent to take training courses on marketing natural products at the Interamerican Cooperative Institute (ICI) in Panama. Rosa and her colleagues were also able to broker a partnership between the Association, Scarboro Missions, CIDA and the Comart Foundation (which had already agreed to supply Jambi Kiwa with a vehicle). This meant that a much-needed permanent factory could be built, solar energy technology could be acquired, a truck could be purchased, and management training for several women leaders could be arranged.

2 The most significant of these was a CAD 40,000 donation by the Sisters of Notre Dame in Montreal. Like many other Jambi Kiwa relationships this one came about through the referral of another Jambi Kiwa partner, in this case CECI.
Jambi Kiwa was beginning to attract support for its social vision as well. The new partnership included funds to expand the School of Andean Medicine. Now it could provide further training to traditional healers and midwives and implement medicinal garden projects in a number of indigenous schools.

[In addition to medicinal plant production], our goal is to increase people’s self worth to such a level that our healers can talk as equals with doctors…In Jambi Kiwa we prioritize the participation of indigenous campesinos and women. We try to generate employment for these groups (R. Guamán, personal communication, October 14, 2004).

In keeping with this goal of increasing the self worth of members, gender equality programs were implemented, with particular emphasis on women’s literacy and addressing family violence. The impetus for this came from the personal experiences of many of the women of Jambi Kiwa (see Figure 1).

The association further strengthened its literacy efforts by convincing the Ministry of Education in Chimborazo to give stipends to eight Jambi Kiwa members to carry out literacy training with women’s groups. This program was advantageous for Jambi Kiwa as it financially supported the women trainers who were, in turn, providing training to women’s groups in the cultivation and use of medicinal plants.

Jambi Kiwa also became an attractive placement for a wide range of volunteers. Volunteer placements at Jambi Kiwa took one of five forms. More experienced cooperants from CECI were given one or two year placements. Young professionals were offered internships from three to eight months in duration by Andre Larenndeau CGEP, Silva Forest Foundation, CSI and Trent University. Unaffiliated individuals approached Jambi Kiwa for an opportunity to volunteer in various capacities, depending on their skills. Formal or informal groups of volunteers, from Utah-based VIDA, offered labour for one or more weeks at a time. Finally, groups of Ecuadorian university students arrived from the University of Chimborazo (Business Administration) and Chimborazo Polytechnical University (Industrial Food Production and Agriculture) to study Jambi Kiwa.

Buoyed by the interest that external organizations were showing, Jambi Kiwa began to look for new partnership opportunities. In May 2002, Jambi Kiwa members participated in a workshop in Guayaquil with the Corporación de Promoción de Exportaciones e Inversiones (CORPEI), attended by a number of Ecuadorian medicinal and aromatic plant producer organizations. (CORPEI is a national paras-tatal organization formed to promote the development of export markets for non-traditional exports). After the workshop, Jambi Kiwa emerged as a lead member of the Red de Productores de Plantas Medicinales Mashi Numi (RPPMMN), a nas-
cent national association of these organizations. At its first meeting, Rosa Guamán was elected head of this new federation.

Through CORPEI, Jambi Kiwa sought partnerships with three other organizations: EcoCiencia (an NGO that specializes in conservation research and training), the Organization of American States (OAS) and the Latin American Network of Rural Producers (FOMRENA). Jambi Kiwa began working with EcoCiencia to train its producer members in environmentally sustainable methods for the collection of wild plants and the cultivation of plants that, until then, had only grown wild.

Jambi Kiwa also successfully approached OAS for funding for additional training and equipment over a three-year period. FOMRENA (created by the German aid organization GTZ) provided partial financing for a dryer through a local credit cooperative and then asked Jambi Kiwa to make installment payments as if it were repaying a loan. The repayments that would normally go to FOMRENA were actually returned to an account that Jambi Kiwa was able to use for other activities. Jambi Kiwa adapted this strategy for a revolving fund to assist members in creating seed banks and purchasing tools and equipment to improve their farms.

Jambi Kiwa was beginning to gain national and international recognition. In 2002, the organization Services for an Alternative Development in the South (SENDAS) gave Jambi Kiwa an award for Best Rural Women’s Business in Latin America. In 2004, Rosa was invited to present the Jambi Kiwa experience to the World Social Forum in Brazil and then to the Seminario de Emprendedores Rurales de America Latina, an event sponsored by GTZ in Nicaragua.

While this kind of recognition was positive reinforcement for Jambi Kiwa, perhaps the most important international recognition came when the first export sales were finalized. In June of 2004, Jambi Kiwa was invited by Salinas Cooperative in Bolivar
province (a member of RPPMMN) to help them supply a contract they had recently obtained with a buyer in Italy. Only four months later, Jambi Kiwa made its first independent international sale to Le Clef des Champs, a producer and distributor of organic plants and extracts based in Canada.

2.0 UNDERSTANDING THE JAMBI KIWA STORY:

An Asset-based and Community-driven Development Perspective

The Jambi Kiwa story appears at first glance to be a good example of community development that is both asset-based and community-driven (McKnight & Kretzmann, 1993; Mathie & Cunningham, 2003, 2005). Its success was created through the mobilization of a wide range of community assets that were, in turn, used to lever considerable outside resources. Throughout, this initiative has been driven by a highly motivated group of indigenous women leaders.

One way to unpack the Jambi Kiwa story is to examine it through an asset-based prism represented in the diagram below (figure 5). Two sides of the prism examine the degree to which Jambi Kiwa is asset-based. The first analyzes how assets have
been identified and mobilized to create Jambi Kiwa. The second looks at the assets built or enhanced that will allow this initiative to be sustained. The third side of the prism analyzes the roles played by both internal and external agency. Assuming that some of the assets mobilized and built are those that ensure a community-driven process, the third side examines how internal and external agency can contribute to sustained community-driven development.

2.1 The Range of Assets Mobilized to Create and Sustain Jambi Kiwa

One of the most striking aspects of Jambi Kiwa is its range of assets, both internal and external, that have been drawn upon to create and sustain the initiative. One helpful way of categorizing these assets is through the Sustainable Livelihoods Framework (SLF) promoted by the United Kingdom’s Department for International Development and a number of international NGOs\(^3\). This framework identifies several types of assets (described as ‘capitals’) that exist in varying degrees at both the household and community levels. The mobilization of these capitals has been instrumental in the creation and growth of Jambi Kiwa.

2.1.1 Natural Capital

Natural capital is defined as the natural resources to which people have access. This is perhaps the most visible asset drawn upon by Jambi Kiwa. Specifically, these assets include the favourable climate, the land (both individually and communally owned), and the indigenous plants that grow in the sierra. Jambi Kiwa’s individual producers do not own much land, compared to the former haciendas or modern agribusiness plantations, but these small plots are farmed intensively. As well, many producers practice mixed cropping so that they are able to diversify the sources of income from their land. Some Jambi Kiwa members are engaged in more than a dozen income producing activities (such as a variety of cash crops, livestock, honey production, medicinal plants etc.) on a single plot of land.

2.1.2 Human Capital

Human capital refers to all the skills, knowledge, experience, health and time possessed by people. During the course of Jambi Kiwa’s development, the value of indigenous knowledge has come to be recognized within and outside the organization. National and multi-national pharmaceutical companies are not merely interested in securing plants from groups like Jambi Kiwa; they are also interested in the

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\(^3\) For more information on the Sustainable Livelihoods Framework see [www.livelihoodsconnect.org](http://www.livelihoodsconnect.org)
medicinal recipes and formulas that have been passed down from generation to generation by the indigenous peoples of the Andean region. Recognition of the value of such knowledge has motivated Jambi Kiwa members to secure ownership of this precious resource.

Specifically, Jambi Kiwa draws upon and enhances the indigenous knowledge of identification, cultivation, harvesting, processing and use of medicinal and aromatic plants. In the early days of Jambi Kiwa, the use of traditional medicines for local health care was limited. Much work had to be done to help people rediscover knowledge about medicinal and aromatic plants. In the first few years, this meant that Rosa and her colleagues spent time discussing the value of certain plants in the markets or in small community groups. Over time, Jambi Kiwa institutionalized this process through the creation of the Andean School of Medicine. This school consists of a group of elders who agree to provide training about the use of medicinal and aromatic plants. In turn, the people who receive this training are expected to train others in their communities, a process that has created human capital. Since it raises interest among prospective producers and members in the use and cultivation of medicinal plants, it becomes an asset for Jambi Kiwa.

Jambi Kiwa has also recognized and built upon the traditional agricultural practices employed in the sierra. Andean agricultural technology included the use of organic vegetation and animal fertilizers; intercropping and crop rotation, terraces and levelled curves for soil conservation and optimal use of water; and the use of earthen walls and ditches as boundaries, canals and windbreaks against erosion (Jambi Kiwa & El Centro de Communicacion Indigena, 2003).

With the help of EcoCiencia, Jambi Kiwa has helped farmers rediscover sustainable agricultural practices. Simultaneously, new technologies have been introduced that are compatible with the sierra ecosystem. Jambi Kiwa members also possess many other skills, including construction-related trades. Tapping these skills, each member is asked to offer valuable in-kind contributions to the cooperative in the form of ten days of labour every year.

2.1.3 Financial and Physical Capital

Financial and physical capitals describe money or other assets that can readily be converted to money, and infrastructure such as buildings, equipment, technology, roads, electricity, etc. These assets are sometimes called also referred to as “produced capital” (Bebbington, in press).

Jambi Kiwa members regularly contribute money to the business through annual
membership dues. Even producer groups in local communities have followed this example. In Trigaloma, the producer group has created an income-generating scheme that also provides financial capital for a revolving loan fund for its members. The producer group has met every Saturday for a year so members can gather, transport, and sell their farm produce at the nearby market in Pallatanga. Ten percent of the profits from these sales go into a revolving fund which members can use to buy seeds, fencing, irrigation tubing or other farming supplies. The financial capital accumulated this way has benefited producers by helping them increase productivity. It also benefits Jambi Kiwa by increasing its volume of production.

Jambi Kiwa’s strategy of mobilizing financial assets before seeking outside resources is one that has become integrated into its organizational culture. Jambi Kiwa has been able to lever hundreds of thousands of dollars of funding and access physical assets such as the church attic and warehouse because of the initiative members have shown in contributing labour and returning assets to the cooperative. When interviewed about Jambi Kiwa, representatives of donor organizations were impressed by the capabilities, contributions and commitment of its members. Martha Rice, of the Comart Foundation, observes that the community is driving the process, while members are “empowering themselves, figuring out what their assets are and mobilizing them – that energy is what is attracting funders” (personal communication, October 4, 2004). The combination of mobilizing internal assets and using these to lever outside assets have allowed Jambi Kiwa to accumulate a variety of equipment, a vehicle, buildings and land. These physical assets have in turn become equity that can be used to lever additional financial capital in the future.

2.1.4 Social Capital

Social capital has been one of Jambi Kiwa’s most important assets because of its ability to help access other assets. There are two types of social capital illustrated in the Jambi Kiwa story. The first is social capital that lies in relationships of trust, reciprocity and shared interests that bring people together in kinship groups or associations at the local level. This is otherwise known as bonding social capital. The second is bridging social capital which refers to the relationships that local individuals and groups have with those outside their own kinship group or organization (and often outside the local area). Bonding social capital allows local people to assemble collective will and resources toward some common end while bridging social capital provides these groups avenues for mobilizing external assets or affecting the local or larger policy environments (Woolcott & Narayan, 2000).

The colonial period destroyed many of the kinship and associational relationships
that were part of indigenous culture in Chimborazo province. From the Spanish conquest until the 1960s there were few independent indigenous communities. “The most important relationship for many household survival strategies was the ‘vertical’ link to the hacienda, rather than ‘horizontal’ ties among families” (World Bank, 2000).

One of the most influential factors that changed this dynamic was the active involvement of the Catholic Church. Bishop Proaño played a strong role in breaking up the haciendas controlled by the Church and in promoting community initiatives through the diocese’s pastoral program. Jambi Kiwa built on these efforts to create producer organizations at the village, zonal and provincial levels. Over the past two generations, communities like Cuatro Esquinas have built bonding social capital through community-driven projects requiring the expansion of local social networks (see figure 6).

As Cuatro Esquinas resident Luis Guamán explains, the community works well together, since individuals have respect and confidence in one another: “This person beside me is my neighbour, but I treat him like a brother. If we have some differences, or if something goes wrong between us, I don’t go and complain. I go and talk with him” (personal communication, October 14, 2004). The consequence of this dialogue, he says, is a common vision for developing the community together.

Jambi Kiwa has created a grassroots organization by building on the bonding social capital at the family and community levels and developing bridging relationships with members across various districts of Chimborazo. Rosa explains that Jambi Kiwa is rooted in families and groups of families, strengthened by each branch or zonal group, and crowned with the Association itself. She illustrates how relationships are supported at the zonal level: “We have monthly meetings [to] plan the community work, the harvests, what is to be planted and the maintenance needed in the gardens” (personal communication, October 14, 2004).

Jambi Kiwa’s network of external relationships is evidence that it has “bridged”
local assets with outside resources. CECI and CORPEI have provided gateways for Jambi Kiwa to many other organizations. Now Jambi Kiwa is using bridging social capital in an effort to create a national federation of medicinal and aromatic plant producers’ associations. Maria Jose Borja of CORPEI says, “Jambi Kiwa has been the leader and its people have the most experience. Rosa has been central to this, with her experience [in] organizing people from a very basic level to what they have now” (personal communication, October 12, 2004).

2.2 Assets Built

The second lens through which the Jambi Kiwa experience will be examined is that of the various assets built or enhanced at the household, community and societal levels. This is not meant to be a thorough assessment of the impacts of Jambi Kiwa. Rather, it is an attempt to learn more about dynamic aspects of assets during a community development process and, in particular, how assets are built, enhanced, depleted or destroyed.

2.2.1 Household Level

Individual producers have benefited economically by eliminating intermediaries. Jambi Kiwa has raised the price paid to producers for fresh plants (from 8 cents/kg in 2001 to 20 cents/kg in 2003). Several producers reported sending between 200kg and 300kg of fresh plants to the factory each month. This represents roughly USD 40 - 50 monthly in income they didn’t have before they joined Jambi Kiwa. These benefits are not limited to individual producers. As a Trigaloma member pointed out, “Every extra cent is a cent more I can spend on my children” (personal communication, October 15, 2004).

Soldador Toltora, a producer from Totoras who complements his farming income with earnings from welding, points out the advantages of his association with Jambi Kiwa. Prior to being involved with the organization, he grew only potatoes and broad beans, but he couldn’t make a profit. For instance, his current crop of broad beans cost him USD 10/sack to produce, but he is paid $8 less for a sack when it is sold. The problem is the same for his potato crop. His solution has been diversification:

Now I grow medicinal plants… [and] each month we harvest about 200 kg of artichoke leaves. As well, each month we harvest between 180-200 kg of chamomile. This represents an additional USD 30-35 each month and helps us to cover our family costs…I would like to increase production… as [this will] improve our living conditions” (personal communication, October 15, 2004).
Cuatro Esquinas is a small rural community of 60 households on the side of Mount Chimborazo. The people of this area are known as the Puruhuas. Survivors of conquests by the Incas and the Spanish, these former warriors are described as “always having fire in their eyes.” The people of Cuatro Esquinas also have recent history of fierce independence. Until the 1960s, they were famous for running a contraband trade in distilled sugarcane (a mountain firewater called bluebird) from the coast. They continue to be known as the icemen of Chimborazo; to this day they carve ice from the glaciers to be sold in the markets of Riobamba.

The people of Cuatro Esquinas have always directed their own development. In 2003, they took their children out of the Spanish school in the area and created a bilingual school to promote their language. They are seen by outsiders as entrepreneurial and independent. Ironically, perhaps, they have been very successful at leveraging outside resources for their community-driven projects. Recently they received new bells from the Scarboro Missions for the church they are building themselves. Luis Guamán, a villager from Cuatro Esquinas, explains that even though they don’t have funds, they have started such projects as a small tourist lodge and an interpretive centre. Now they take tourists with them when they cut ice; they have a mountain railway. “We have lots of things we think we can do together...We have a new school with more than one building and a garden. We have all invested in training ourselves, as carpenters, welders and weavers and we want to revive the randeem [traditional barter system] which is part of our culture” (personal communication, October 14, 2004).
The first woman to start collecting medicinal plants in Cuatro Esquinas was Maria Francesca Ochoa. She had heard about Rosa Guamán and the effort to buy medicinal plants at a meeting in a nearby town. Together with a friend she began collecting plants and taking them to Riobamba. She recalls, “We walked all over these hills collecting plants. It was profitable, [an] important source of cash for us. Then Jambi Kiwa started to interest us in cultivating...[and] we didn’t have to leave home. That’s when our group started to grow.”

Now the 14 women in the group are all certified organic producers. Two members of the group have assumed leadership positions with Jambi Kiwa. Ochoa is a member of the Association’s supervisory committee while another group member is the president of the zone committee. Although Jambi Kiwa requires producers to have a minimum of 400 metres$^2$ for cultivation, most members in Cuatro Esquinas have nearly doubled that.

Ochoa’s garden is a model of diversity. It is surrounded by malva trees which provide a windbreak and leaves with medicinal properties. In addition to medicinal plants, the garden contains plots for seed potatoes and carrots that are sold as cash crops. Even though experts have concluded that bees will not survive at this altitude (over 3,000 metres above sea level) Ochoa has several beehives that provide honey and increase pollination of plants. She also raises sheep, llamas and donkeys and she has developed a large compost area which utilizes vermiculture. When asked why people like Maria Francesco Ochoa and the community of Cuatro Esquinas have been able to drive their own development agenda, Luis Guamán responded, “There is an incentive to value what is ours. Because we are poor, we can’t risk losing our land” (personal communication, October 14, 2004).
The additional household income gained for producers and their families is not merely a seasonal endeavour. Medicinal plants are grown and harvested year round. Thus, the income received for plants is spread throughout the year, reducing household vulnerability to periodic or seasonal shocks. As a producer from Trigaloma explains, “This area can be hit particularly hard by frost and when we lose other crops to frost, we have this to fall back on” (personal communication, October 15, 2004).

Other producers report the importance of Jambi Kiwa in helping them develop skills for identifying, collecting, growing and harvesting medicinal and aromatic plants. One Jambi Kiwa member points out, “The plants which we have here were unknown to us. Thanks to Jambi Kiwa we can now identify them. And we know what they are used for and that is why we are cultivating them” (personal communication, October 15, 2004).

In other instances, Jambi Kiwa has worked with groups such as the local affiliate of Germany’s Bio Control Systems to certify its members as organic growers. To date, more than 420 producers in 38 communities have been certified and steps are being taken to train an additional 175 members in techniques for soil and water retention and in the preparation of organic fertilizers and biocides.

During the last two years the Andean School of Medicine has held monthly workshops facilitated by traditional healers skilled in ancient remedies and therapies. Today more than 35 Jambi Kiwa healers and midwives have been trained in the practice of natural medicine. All of this has benefited both family health and household income. Maria Francesca Ochoa comments, “We are going to the doctor less; we have our own medicine here and we’ve been trained. We know which plants can be used for what and we are eating a lot of these crops” (personal communication, October 14, 2004). Another producer, Aurora Borja of Santa Rosa, describes the rediscovery of an asset previously taken for granted: “Before we only used commercial [sic] medicine, but these plants can prevent and cure a sickness. That is why we talk about the magic of the plants” (personal communication, October 14, 2004). This sentiment was reinforced by the members of the Trigaloma zone committee, who pointed out that they now have a hospital and pharmacy in their own front yards (personal communication, October 15, 2004).

2.2.2 Community Level

As a result of having a new source of income, many members have continued living in, or have returned to, their communities. As one member of a producers’ group in Caliata exclaimed, “I am proud of being able to live here with this clean
Melchor Vacacela, a producer and staff member, said that he hoped to improve agricultural practices by growing medicinal plants, and, in so doing, “be able to provide for our children so that they don’t have the idea to migrate to another country” (personal communication, October 15, 2004). The leadership of Jambi Kiwa agree. By highlighting successful young farmers, Rosa hopes Jambi Kiwa can play a role in stemming the tide of migration that is draining Ecuadorian communities of its best and brightest.

The ability of Jambi Kiwa to continue providing new economic opportunities for its members will depend on whether the Riobamba factory can become a centre of innovation. If it can develop value-added products (currently the larger profits from processing the plants into finished products are mainly being earned elsewhere) and thereby retain income earning opportunities, it will realize one of Jambi Kiwa’s most important goals. To this end, members have worked hard to secure a new factory and invest in drying, milling, storage and tea bagging equipment. For example, profit can be increased from USD 3-4/kg to $50/kg if Jambi Kiwa can move from loose leaves to pre-packaged tea bags (see appendix A). There are other ways in which Jambi Kiwa is looking to add value, such as adding certain starches during the milling process.

Producers are also encouraged to add value to their plants before they are sold to Jambi Kiwa by cleaning and preparing them, reducing the processing required at the factory. Many of Jambi Kiwa’s producers recognize that they will have to maintain consistent quality and quantity if they want to compete in a discriminating marketplace. The only reasonable way to achieve these goals is for producers to work collaboratively.

The willingness of producers to work together for mutual benefit continues to strengthen local social linkages and build social capital. In one community each producer has an individual garden, but 22 women are also working together on a model garden: “[We grow] cilantro, lemon verbena and oregano. We sell the [plants] for 16-20 cents/kg. Right now we are happy because yesterday we sold the plants from the garden. And each one of us received $6” (Jambi Kiwa & El Centro de Communicacion Indigena, 2003).

This willingness to collaborate also extends to working with other Ecuadorian groups involved in medicinal plant production. In October 2004, Jambi Kiwa hosted a meeting of the RPPMMN to look at possible areas of collaboration. The participants were aware of a mood of cooperation created by coming together with others at the national level. Producers discovered a larger vision, particularly in terms of export (RPPMMN group, personal communication, October 20, 2004).
New community health services in the villages of Jambi Kiwa’s members are evidence of a stronger base of human capital. Jambi Kiwa is working with Free the Children Canada to establish a health centre in Guarguallá Chico which covers three indigenous rural communities. A Jambi Kiwa health worker and a number of health servers (trained in the cultivation, identification and use of medicinal plants) are assisted by the Diocesan Andean Alternative Hospital through monthly workshops and supervision in their home communities. In addition, a number of medicinal gardens have been established in local schools so children can learn about the healing qualities of plants.

2.2.3 Societal Level

Less tangible are the assets Jambi Kiwa is striving to build at the societal level. Some producers express the hope that membership in Jambi Kiwa will improve power dynamics in the local markets. Middlemen have an advantage over small, independent farmers because they are better organized. And since they have vehicles and capital, they have access to larger markets in Quito, Guayaquil and Cuenca. For this reason, livestock cannot be sold at a fair price, given the costs of production for the farmer. “In the animal markets, as in the slaughterhouses, the peasant arrives with a cow, a lamb or a pig and the intermediaries force them to sell at [a low] price. One can say: ‘it’s worth $200’; they say ‘I’m giving you $50’” (R.
Guamàn in Jambi Kiwa & El Centro de Communicacion Indigena, 2003). Jambi Kiwa’s solutions to this have been twofold. First, collaboration among producer groups in villages and zones has given them more clout in the marketplace. Second, a new supply chain has been created for medicinal and aromatic plants. Producers now sell directly to the factory, bypassing intermediaries. The farmers, who are predominantly indigenous, have gained more power over the brokers, who are predominantly mestizo.

Jambi Kiwa is also building human capital by encouraging the development of indigenous women leaders. Some women leaders who have risen through the ranks of Jambi Kiwa may become future political leaders. Reflecting on the ways they have emerged, Nina Pacari, an Ecuadorian and the first indigenous female foreign minister in Latin America, observes that they have contributed to fundamental change in Ecuadorian society. Indigenous women have fortified the national identity by reinforcing traditions. And while they have worked to sustain their families, now they are also sustaining their communities, and their nation, by taking on leadership positions. Today, she says, they can be found working “as leaders, be it on a local, provincial or national level…women of a long trajectory who have really fought to position the role of women [at this level]” (Jambi Kiwa & El Centro de Communicacion Indigena, 2003).

Louis Michele Trembley of CSI agrees that Jambi Kiwa has helped build the capacity of indigenous women: “The women I met at the beginning were not the same as [they are now]. They are more open… and sure of themselves. This is a big success. Even if Jambi Kiwa ends today it will have changed these women” (personal communication, October 1, 2004).

Despite such positive developments, the leaders of Jambi Kiwa face a challenge in reversing the natural asset depletion that has occurred in the sierra. Edison Suarez, the Jambi Kiwa agronomist, observes that because of global warming, a serious water shortage is looming. Rainfall will not be enough to provide water for farmers. Erosion and chemical contamination have also compromised the soil. Those who are trying to restore it remain in the minority: “In short, we are facing a serious ecological problem” (personal communication, October 13, 2004).

Jambi Kiwa has introduced sustainable agricultural practices to its members, but change can be slow. However, the over-harvesting of wild plants has been significantly reduced and some leaders in the Ecuadorian development community believe that the move to organic production will gather momentum as farmers see the benefits. The Coordinator of Swiss Aid in Ecuador, Pancho Gangotano, is an organic farmer himself. He explains:
When your land was yellow and now it is black you don’t need to go to labs to know what is happening. And when you see a tiny little wasp controlling the aphids and if you see your cilantro or fennel attracting certain insects, and you see that the nitrogen, phosphorus and potassium can be obtained from certain plants…this is a very powerful thing. You can say that development has started (personal communication, October 21, 2004).

Perhaps the most significant societal level impact that Jambi Kiwa may achieve is the creation of a new economic model for indigenous and campesino communities in rural Ecuador. Integrated into the larger economy, these communities have experienced dramatic changes in lifestyles and aspirations over the past thirty years. Indigenous and campesino communities are simultaneously looking for ways to maintain autonomous cultural space, build their economic assets and make claims on the state by virtue of their citizenship (Bebbington, 1999). If Jambi Kiwa can compete in a globalized economy while also fulfilling its cultural, environmental and asset building ambitions, it may help to redefine what it means to be indigenous in Ecuador today.

2.3 The Roles of Internal and External Agency

2.3.1 Internal Agency

Agency has been defined as “the state of being in action or of exerting power” (Stein, 1984, p.25). A community-driven initiative is characterized by a high degree of internal agency, that is, the ability of the community to determine and maintain control over the development agenda. This requires local leadership that is able to generate a strong motivation to act among community members. External agency refers to the actions or power exerted by individuals and organizations outside the community, such as governments or NGOs. A community-driven initiative is also characterized by external agency that is responsive to the efforts of internal agency.

There is evidence to suggest that governments and NGOs are, in fact, attracted to strong internal agency (McKnight & Kretzmann, 1993). Many of these organizations have had experience with projects initiated and implemented from the outside that have collapsed as soon as external support is withdrawn. A growing number of external agents realize that community development initiatives are more likely to be sustainable when local communities or groups are driving the process.
The leaders of Jambi Kiwa have developed strong internal agency by motivating members and staff in three distinct ways. First, they have clearly articulated a vision to address the issues facing rural communities in Chimborazo. Second, they have identified concrete opportunities for members to contribute to the growth of a new enterprise. Third, they have drawn on a long history of community leadership, mobilization and action, as well as the collective indigenous knowledge of Jambi Kiwa’s members.

Shared Vision

Jambi Kiwa’s leadership has been able to articulate a direction for the organization that has captured the imagination of its members. They have tapped into a feeling shared by many indigenous people in Chimborazo that cultural assimilation, degradation of their lands, exploitation by middlemen, and the loss of their young people to the cities of Ecuador, North America and Europe will only be overcome if they organize themselves. Moreover, they have been able to make the case that Jambi Kiwa is an attempt to address these cultural, environmental and economic issues in a holistic manner.

Rosa describes the main objectives of Jambi Kiwa’s as: sharing and revaluing the ancestral knowledge of medicinal plants; the development of new income generating activities for indigenous families; the creation of a mechanism to eliminate the intermediaries who profit from its members’ toil; and providing a way for her people to follow the Andean cosmos-vision (the concept of being at one with Mother Earth). To its leaders, Jambi Kiwa represents an opportunity to create environmentally sustainable economic alternatives for indigenous people.

[What we have is] the belief in the power of community-based organizations; the understanding that our organization is a learning centre, a new way of educating…[and] the commitment to work for the benefit of future generations (R. Guamán, personal communication, October 14, 2004).

Ownership of the Process

Jambi Kiwa members see themselves as part of a social movement. As Rosa points out, it is an organization with roots, because its members feel a moral responsibility to make it work. She emphasizes that it is “not merely a good idea with financial backing” (personal communication, October 14, 2004). Producers and staff alike seem highly motivated by the possibility that Jambi Kiwa can provide a new model for ensuring the survival of rural indigenous communities. The staff at the factory in Riobamba also seemed motivated by the ways in which they were
encouraged to actively participate in some element of the business. In this, Jambi Kiwa differed from other organizations in Chimborazo. “It didn’t demobilize its workers, it mobilized them” (R. Guamán, personal communication, October 14, 2004).

The main difference between Jambi Kiwa and many indigenous NGOs in Chimborazo is that Jambi Kiwa is member-owned and member-run. Even the staff are members. Edison Suarez, describes Jambi Kiwa as an “inside-out” organization as compared to the “outside-in” NGOs he has worked for:

With other projects, the outside NGO works on the basis of goals, tasks, results and deliverables. But from outside you don’t zero in on what really needs to be done to make the initiative effective. When you are working from within an organization you look at where the bottlenecks are occurring. Here we have monthly meetings and determine what has to be adjusted. This feels more like I’m working for a company than a project (personal communication, October 14, 2004).

These differences are also reflected in the way in which the Jambi Kiwa staff relates to members at the community level. Suarez explains:

We do what we call ‘accompainment’ [sic: Whitmore & Wilson, 2000] where we don’t pretend we can replace the campesino’s knowledge. Rather, together we inves-
tigate the situation and try to come up with a solution together. The producers learn by setting up demonstration plots where they can test out solutions… We also work with the local schools to set up demonstration gardens so the children can learn [how to grow] traditional medicinal plants (personal communication, October 13, 2004).

As a member from Trigaloma puts it, “There have been times when the leadership has had to push us a bit but now we feel that this project is ours” (personal communication, October 13, 2004).

Nina Pacari describes the history of indigenous community-driven development by noting that such groups are developing small local economies that have moved beyond subsistence. They are also not reliant on government funding. This reveals a movement that is modern in its outlook, yet one that is traditional at the same time:

In the matter of agriculture, natural resources and in the relationship of ‘person-nature-society’, [these initiatives] come to constitute themselves… in the case of native peoples, as a matter of recovering aspects which have been part of the philosophy and life of these peoples (Jambi Kiwa & El Centro de Communicacion Indigena, 2003).

People in Caliata lent support to this claim. One villager stated, “We have a history of working together. We did that with a communal house [which is used as a school]. We pooled the money for a piece of property and then built the house on it” (personal communication, October 14, 2004). In Cuatro Esquinas, a local citizen declared that everything in the community, from the school to the roads, had been built through the mingas. These self-help associations pool labour to undertake community initiatives (they are known as yanapacu in Bolivia and ayni in Peru). In the paramo (high sierra) there is also a long history of communal land ownership. In other words, group ownership is part of the very spirit of indigenous communities in Chimborazo.

Leadership

Nelson Martinez of the Diocese of Riobamba points out that, while Rosa is clearly the most visible leader of Jambi Kiwa, the organization has managed to develop a cadre of women leaders to carry the organization forward into the future. He says, “There are a lot of really good leaders in Jambi Kiwa, besides Rosa. Each zone has

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4 This describes concept of accompanying and supporting someone else’s process, and allowing local people to lead the process of social change.
some key groups, and this is important because of the [physical] distance between the groups” (personal communication, October 16, 2004). It is also important because it creates a pool of potential successors to key leaders such as Rosa.

There is an unspoken sense of shared leadership at Jambi Kiwa. This is formally encouraged through the association’s policy of electing new leaders to the board every two years. The frequent turnover of leaders has prevented the emergence of an entrenched old guard. It has also created an organizational culture that feels non-hierarchical and where leadership is recognized as action, rather than position.

2.3.2 External Agency

Breaking from Tradition

A community-driven initiative that has developed external relationships on its own terms is the exception rather than the rule in Ecuador. Community development is often seen by government and non-government organizations as an exogenous rather than endogenous process. According to Pancho Gangotano, relationships between NGOs and community-based organizations in Ecuador are typically structured along the lines of patron and client. He observes that while community members analyze their problems, they often look to external organizations to provide technical assistance. Since the answers come from outside, he says, “people no longer trust their vivencia, [or] their life experience” (personal communication, October 21, 2004). The unfortunate consequence is that communities develop an inferiority complex. He has concluded that, in general, NGOs tend to reinforce this sense of inferiority, rather than alleviating it:

We promote it; we have big programs…to solve problems. We get technicians and money. Everything is external. If an outside technician is present, communities will defer [to that individual]. But if a technician is not there, the community will go and see how their neighbours did it. They will…carry out the initiative, and, when they finish, the community will have ownership and pride (personal communication, October 14, 2004).

Rosa adds her impression of traditional relationships between NGOs and communities in Chimborazo:

There are two dynamics going on: one, a long history of the NGO as protagonist where almost all the work is palliative…and two, people have become complacent, almost like beggars. Whatever NGOs have [they] will take (personal communication, October 14, 2004).
Jambi Kiwa has never operated this way; in addition to motivating members at the community level, its leadership has been able to reach out to external networks and support. The sheer number of external relationships is impressive (see figure 7). According to Bebbington and Perreault (1999), this is a sign of strong local leadership: “Simply put, good leaders tend to mean wider networks, greater external support, and thus a more active organization; weak leaders lead to little external support and moribund organization” (p.16). Jambi Kiwa’s decision to reach out to external organizations did not come easily. Members had to be convinced to seek out partnerships, since it meant breaking with the indigenous tradition of remaining independent.

In spite of their lack of experience, Jambi Kiwa’s leaders have managed to forge external partnerships that support its development agenda. Rosa points out that she and her colleagues had to learn how to deal with government and non-government organizations: “Even though we did not have experience in negotiating we are now able to sit at the table, listen and observe what is happening and come back, discuss and make a decision” (personal communication, October 14, 2004). Jambi Kiwa’s leaders learned valuable lessons from their early external relationships that helped them in later negotiations. “Those in government, live in a completely different world from us. But I believe that when you sit chair to chair with them you learn something” (R. Guamàn, personal communication, October 14, 2004).

- Figure 7  

External Relationships

\[\text{Figure 7} \]

![External Relationships Diagram](image-url)
Responding Rather than Driving

The relationships between Jambi Kiwa and external organizations can be broadly characterized as partnerships, though each is unique. One of Jambi Kiwa’s longest running partnerships is with the Diocese of Riobamba. The seeds for Jambi Kiwa were planted in the days of Bishop Proaño, fertilized through the development of the Chimborazo Rural Women’s Christian Movement, and nurtured through the work of Rosa and her colleagues in the rural pastoral program. From its early support of women’s groups to its provision of the church attic and subsequent loan of the first warehouse, the diocese continues to help Jambi Kiwa flourish without controlling the initiative or creating dependency.

Since 1998, the most important NGO partnership for Jambi Kiwa has been CECI, through which Jambi Kiwa has made linkages with UNDP, the Sisters of Notre Dame, CSI, CIDA and Comart. CECI has also placed five full-time cooperants with Jambi Kiwa over eight years. In addition to providing technical assistance, cooperants helped Jambi Kiwa develop relationships with customers, donors and technical support organizations. Their approach allowed for the members to take charge, since cooperants “led by stepping back” (T. Walsh, personal communication, October 20, 2004). And members have taken command of developing new external relationships now that there are no longer any CECI cooperants. For example, Rosa recently successfully approached the Japanese Embassy in Quito for support in the building of several solar dryers.

Another important partnership for Jambi Kiwa has been CORPEI. Through its program with the Embassy of the Netherlands, CORPEI has connected Jambi Kiwa to training opportunities in quality control and good agricultural practices. It has also helped Jambi Kiwa staff attend international trade fairs, commissioned comparative research into the quality of plants in Ecuador, Columbia, Bolivia and Peru, and supported the formation of the RPPMMN. Through CORPEI, Jambi Kiwa has developed further partnerships with the OAS, FOMRENA and EcoCiencia.

Its relationship with CORPEI has given Jambi Kiwa credibility with government ministries. The association’s relationships with government are characterized by reciprocity and trust, not bureaucratic wrangling. For example, Jambi Kiwa works closely with the Ministry of Education in developing and delivering literacy training for its members. As well, the Ministry now recognizes agricultural extension training carried out by Jambi Kiwa’s agronomist and the trainers for EcoCiencia. Certificates are given to Jambi Kiwa’s producers in recognition of this training, a formal tribute to the value of indigenous knowledge.
Similarly, Jambi Kiwa has cultivated a positive relationship with the Ministry of the Environment. Jambi Kiwa anticipated the requirement of environmental licences for the export of all natural products. It has kept the Ministry in Chimborazo informed about plant domestication and cultivation, as well as steps to counter over-exploitation of wild plants. They share an interest in reducing harvesting in high elevations, which are environmentally sensitive. They also work together to improve agricultural practices, such as terracing and setting up windbreaks, as well as establishing crop rotation and intercropping throughout the sierra. According to the regional director of the ministry, Patricio Hermida: “Once people start to realize the economic value of their plants, they will be more encouraged to preserve and develop a system which is beneficial to the environment” (personal communication, October 15, 2004).

Jambi Kiwa’s many external partnerships have prevented the organization from becoming dependent on a single donor or technical assistance provider. Managing the large number of relationships does, however, pose a challenge to Jambi Kiwa’s staff and leaders. As the business evolves, it is possible that Jambi Kiwa’s portfolio of partnerships will change in composition. There will likely be fewer relationships with donor organizations and NGOs and more business partnerships with other producer organizations and domestic or foreign trade organizations or companies.

2.3.3 The Challenges Ahead

Production and Marketing

Jambi Kiwa is poised to take advantage of the overall growth in international markets for medicinal and organic produce (Canadian Executive Services Overseas, 2004). The new factory, which opened in January 2005, provides Jambi Kiwa with the capacity to quadruple its output. In preparation for this, Jambi Kiwa has simultaneously tried to increase its producer membership while improving productivity through training. Producers are also encouraged to make use of the revolving fund for such farm enhancements as seed banks, fencing to keep out animals, and tubing for irrigation.

For Jambi Kiwa members, the transition from small-scale domestic operations to large-scale production and export may prove demanding. For example, the relationship between producers and managers has sometimes become strained. In an attempt to boost production of medicinal plants, Jambi Kiwa raised the minimum cultivation area required of producers from 100 to 400 square metres. At times they also encouraged producers to grow a certain plant only to have the market dis-
appear by harvest time. For its part, Jambi Kiwa sometimes has to contend with brokers offering its producers higher prices for plants. When the immediate need for income has been great, some producers have overlooked the potential benefits of being long-term owners of a successful company.

Jambi Kiwa has struggled to achieve a viable economy of scale for its operations and get its costs in line with its competitors. Members have been asked to make certain sacrifices. For instance, a minimum number of plants is now required on pick-up day to make transport worthwhile. Yet sometimes members have to wait to be paid because funds from Jambi Kiwa’s buyers have been delayed. While these factors have cost Jambi Kiwa some members, most have stayed. As one member from Trigaloma put it “There has been strong motivation to persist”. Her group felt proud and hopeful by the knowledge that plants that they have grown are now being sold internationally (personal communication, October 15, 2004).

Jambi Kiwa is in the process of deciding on a strategic direction for production for the next few years. While it could continue to increase sales of dried or powdered ingredients to international manufacturers and continue joint labelling in Ecuador, this two-pronged strategy may not be profitable for many years. Most Jambi Kiwa export items have little value added. As a result, profit margins are quite small. Certain value-added products are sold domestically through a joint labelling agreement but, to date, these products have failed to generate profits for Jambi Kiwa. For instance, while the partnership with CETCA has allowed Jambi Kiwa to get its teas nicely packaged and placed on the shelves of major Andean supermarkets, CETCA’s calculation of costs has not left any profit to be shared. CETCA also developed designs

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Le Clef des Champs reports that shipping costs from Ecuador (CAD 400/m3) are four times higher than China and five times higher than Europe. In China a ship is leaving every day for “Canada; in Ecuador a ship might leave every three weeks. In addition, Jambi Kiwa has to pay all its producers and factory workers in USD putting it at a cost disadvantage with its Andean neighbours: Columbia, Bolivia and Peru”. 

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for the Sangay herbal tea line that greatly resembled Jambi Kiwa’s own labels. When Jambi Kiwa objected to this practice, CETCA made only modest design changes.

Despite challenges, Jambi Kiwa continues to work on a three-pronged marketing strategy. The first prong is to pursue large buyers of low value-added (dried and milled) plants in Europe and North America. Large international customers of medicinal plants are becoming interested in supply chain management and looking to find long-term reliable suppliers of natural ingredients. The second prong is to try to break into the international fair trade networks. Jambi Kiwa’s application to the Fair Trade Labelling Organization (FLO) in Belgium has been accepted and is in the final stage of being approved. As a result, Jambi Kiwa is currently negotiating sales to businesses in Belgium, Canada and France. The third prong is to continue to pursue the domestic and regional market. Jambi Kiwa plans to continue joint labelling of high value-added products such as herbal teas and medicinal formulas in the Andean region.

The products which hold the most promise commercially are herbal teas (see Appendix A). A consultant, Jean-Guy Godbout, with Canadian Executive Services Overseas (CESO), has recommended that Jambi Kiwa be incorporated as a separate business owned by the association. He stressed the importance of tracking costs and revenues for each product and for developing a multi-year business plan. His main recommendation was for Jambi Kiwa to seek out a joint agreement with a North American company and focus almost exclusively on the herbal tea market. From his perspective, such a business partner could provide capital and technical assistance to the factory and place Jambi Kiwa’s products, possibly under a different label, in North American supermarkets.

Jambi Kiwa’s leadership has major concerns about the direction the consultant has proposed. They are worried that an exclusive focus on herbal teas will be at the expense of the development of other medicinal formulas. They are also fearful of gradually losing ownership of Jambi Kiwa to a larger, more powerful company.

As Jambi Kiwa moves into the export market, one of its biggest challenges is whether or not to follow a conventional business model. There is a clear tension in the organization between the need to be responsive to the demands of the market and aspects of their shared vision such as the desire to follow the Andean traditions of communal ownership, consensus building, and rotating leadership.
Organizational Model

Rotating leadership is essential to a good democratic organization and is also an Andean tradition claims (Luciano Martínez, personal communication, October 12, 2004). Respecting this tradition, the Association holds an election for its board and President every two years, often resulting in a complete turnover of board members. Presidents are only allowed to serve one two-year term, according to the current system, though other representatives are eligible for re-election. This prevents incumbent leaders from becoming entrenched, allows member interests to be represented, and develops a cadre of people with valuable leadership knowledge and experience.

Yet it also means that each time new leaders take their positions, the steep learning curve delays important decision-making. According to Thomas Walsh, this can be costly to the business: “It can take Jambi Kiwa months to make a decision…The competition can be making four or five of those decisions a day” (personal communication, October 20, 2004). On the other hand, he stresses that while the process is slow, members remain responsible for their decisions and so have complete ownership of the operations.

Internal debate has delayed the final approval of Jambi Kiwa’s new strategic plan. On the surface, this debate is about whether Jambi Kiwa should focus on relationships with existing clients or concentrate production on more value-added products (like herbal teas) where they do not yet have solid commitments from buyers. At its core this debate is about which management model Jambi Kiwa will adopt: the current model with a manager handling day-to-day factory operations and the board making most management decisions; or a more conventional business model consisting of a management team with a board focusing on policy, making strategic decisions and overseeing operations. In all likelihood, Jambi Kiwa will face enormous pressure from customers and donors to move to a more conventional business model.

Jambi Kiwa will also face market pressure to establish a consistent financial culture within its membership. There has been some resistance within both the leadership and membership toward adopting such a culture. The fear is that such a move will jeopardize the social vision that led to the creation of Jambi Kiwa in the first place. Some leaders and members feel that if they continue to submit to the demands of the market, Jambi Kiwa will be abandoning its indigenous peasant roots. Others contend that if Jambi Kiwa does not become more competitive and fully adapt to the market, it will never make a profit. The best way to promote community development, the latter argue, is to maintain a profitable business which will
improve producers’ incomes and generate money for the Association’s community development projects.

2.4 Conclusion

Jambi Kiwa is both a community-driven development initiative and a business. This duality is what has energized its membership and attracted support from technical assistance partners, donors and some customers. Rosa and her colleagues did not begin their work by submitting a proposal to an NGO or donor organization. They began by re-discovering indigenous knowledge and motivating other women to collect and sell medicinal plants. In other words, they mobilized their own assets before seeking assistance.

Most of the organizations that support Jambi Kiwa have an investment rather than a philanthropic orientation. These organizations tend to see themselves as stakeholders in Jambi Kiwa. This makes them aware of, and sympathetic to, the challenges Jambi Kiwa faces in integrating its business and community development roles. Although Jambi Kiwa has yet to turn a profit on any single product, annual revenues have increased each year. Jambi Kiwa members and external organizations alike expect this trend to continue if the organization can resolve its internal debate on how best to develop a commercially viable business while maintaining its strong social vision.

A great deal of human capital has already been built by Jambi Kiwa members, staff and leaders. Indigenous knowledge has been reclaimed. Members have acquired new skills in collecting, growing and processing medicinal plants. Health and literacy programs have been introduced. Within Jambi Kiwa there is room to build more human capacity especially in the area of business and finance. As the strategic planning exercise has highlighted, decisions on such issues as investment, production and marketing are going to be difficult to navigate without these skills. Fortunately, Jambi Kiwa has developed strong linkages with a wide variety of individuals and organizations that may be willing to help build the capacity of its leaders.

One external asset Jambi Kiwa has not exploited is the potential market provided by members of the Andean diaspora. There is evidence that these populations are a potential market for specialized value-added products. In early 2005, Jambi Kiwa sold 10,000 bags of Horchata (a traditional package of herbs popular in the Andes) to an Ecuadorian man living in the US. Jambi Kiwa’s capacity to target such niche markets will improve when it can streamline production and develop stronger marketing strategies.
At the core of Jambi Kiwa’s success has been the ability of its leaders to motivate members, mobilize existing assets and lever outside resources. Even with financial contributions and hands-on assistance from numerous external agencies, Jambi Kiwa has managed to retain control over its strategic direction. External agencies have responded to an agenda set by Jambi Kiwa, providing creditors, financial contributors, technical and economic advisors, and volunteers.

When asked what she would like to see in ten years, Rosa said she wanted to see better incomes for member families and more opportunities for young people to stop the migration to the cities. She added:

I want to see that the Andean culture will be strengthened, that these efforts we are making to revalue and extend the ancestral knowledge of medicinal plants, this training, will have paid off and that mothers and fathers [can] pass [it] on to their children. I want to see the Andean vision become part of the overall [vision for]…Ecuador. And I want to see Jambi Kiwa as a model for others…one that contributes to the new society (personal communication, October 14, 2004).

Rosa put this all in perspective by concluding that twenty-five years ago she would have been happy to have children and see her family working on the land. Now she and her colleagues have a much wider vision.
## APPENDIX A

Association of Medicinal Plant Producers of Chimborazo "Jambi Kiwa"

Current Prices as of June 30th, 2005 (USD/kg)

<table>
<thead>
<tr>
<th>PLANT</th>
<th>Dried</th>
<th>Powder</th>
<th>Tea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitter Melon</td>
<td>$6.30</td>
<td>$9.27</td>
<td>$11.12</td>
</tr>
<tr>
<td>Wormwood</td>
<td>$2.80</td>
<td>$4.29</td>
<td>$5.15</td>
</tr>
<tr>
<td>Basil</td>
<td>$3.76</td>
<td>$5.62</td>
<td>$6.74</td>
</tr>
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<td>$7.61</td>
<td>$11.33</td>
<td>$13.59</td>
</tr>
<tr>
<td>Althaea</td>
<td>$3.63</td>
<td>$5.49</td>
<td>$6.59</td>
</tr>
<tr>
<td>Celery</td>
<td>$4.90</td>
<td>$7.50</td>
<td>$9.00</td>
</tr>
<tr>
<td>Lasioccephalus</td>
<td>$3.35</td>
<td>$5.21</td>
<td>$6.25</td>
</tr>
<tr>
<td>Ararayu</td>
<td>$3.35</td>
<td>$5.21</td>
<td>$6.25</td>
</tr>
<tr>
<td>Borago</td>
<td>$6.09</td>
<td>$9.06</td>
<td>$10.87</td>
</tr>
<tr>
<td>Horsetail</td>
<td>$3.48</td>
<td>$5.34</td>
<td>$6.41</td>
</tr>
<tr>
<td>Caliswallow</td>
<td>$7.03</td>
<td>$10.00</td>
<td>$12.00</td>
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<tr>
<td>Marigold</td>
<td>$4.91</td>
<td>$7.13</td>
<td>$8.56</td>
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<tr>
<td>Canchalagua</td>
<td>$4.75</td>
<td>$6.98</td>
<td>$8.37</td>
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<tr>
<td>Lemon verbena</td>
<td>$3.00</td>
<td>$4.48</td>
<td>$5.37</td>
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<tr>
<td>Knot grass</td>
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<td>$5.62</td>
<td>$6.74</td>
</tr>
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<td>Chuquiragua</td>
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<td>$4.55</td>
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<tr>
<td>Dill</td>
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</tr>
<tr>
<td>Aerva</td>
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<td>$6.43</td>
</tr>
<tr>
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<td>Ila Flower</td>
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<td>$5.34</td>
<td>$6.41</td>
</tr>
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<td>Nagcha Flower</td>
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<td>$4.36</td>
<td>$5.23</td>
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<td>Grass</td>
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<td>$6.25</td>
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<td>Piper Carpanya</td>
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<td>$6.59</td>
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<tr>
<td>Black Mint</td>
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<td>$6.43</td>
</tr>
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<td>Lemon Grass</td>
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<td>$6.95</td>
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<td>Blackberry Grass</td>
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<td>$6.59</td>
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<tr>
<td>Cherry Leaf</td>
<td>$3.24</td>
<td>$5.10</td>
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</tr>
<tr>
<td>Fig Leaf</td>
<td>$3.63</td>
<td>$5.49</td>
<td>$6.59</td>
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<table>
<thead>
<tr>
<th>PLANT</th>
<th>Dried</th>
<th>Powder</th>
<th>Tea</th>
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</thead>
<tbody>
<tr>
<td>Orange Leaf</td>
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<td>$6.74</td>
</tr>
<tr>
<td>Nagal Leaf</td>
<td>$3.24</td>
<td>$5.10</td>
<td>$6.12</td>
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<tr>
<td>Cario Leaf</td>
<td>$3.48</td>
<td>$5.34</td>
<td>$6.41</td>
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<tr>
<td>Cow's Tongue Leaf</td>
<td>$6.30</td>
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<td>Ribwort</td>
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<td>$5.36</td>
<td>$6.43</td>
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<td>Marco</td>
<td>$3.68</td>
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<td>$6.64</td>
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<td>$6.09</td>
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<td>Pepeo Mint</td>
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<td>Muken</td>
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<td>Anisine</td>
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<td>Corn Hair</td>
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<td>Sangroche</td>
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<td>Santa Maria</td>
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<td>$6.43</td>
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<td>Dande Lion</td>
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<td>Elber</td>
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<td>Pepermint</td>
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<tr>
<td>Valeriana</td>
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<td>$15.05</td>
</tr>
<tr>
<td>Vervain</td>
<td>$4.20</td>
<td>$6.43</td>
<td>$7.72</td>
</tr>
</tbody>
</table>
# APPENDIX B

List of Herbal & Medicinal Plants Transformed (Collected and/or Grown, Dried, Milled) and Sold by Jambi Kiwa

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>Type</th>
<th>PRINCIPAL USES OF THE PLANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>Medicago sativa L.</td>
<td>Exotic</td>
<td>For kidney &amp; liver irritations, rheumatism, anaemia</td>
</tr>
<tr>
<td>Amaranth</td>
<td>Amaranthus caudatus</td>
<td>Native</td>
<td>For hemorrhages, decreasing menstrual and vaginal secretions, ulcers, anaemia, colds</td>
</tr>
<tr>
<td>Arquitecto</td>
<td>Lasioccephalus ovatus Schild.</td>
<td>Native</td>
<td>Used in diuretic and expectorant medicinal formulas, syphilis, heart ache, liver</td>
</tr>
<tr>
<td>Artichoke</td>
<td>Cynara Scolymus L.</td>
<td>Exotic</td>
<td>For cholesterol, diuretic, tonic, reproduces bile, antibiotic, laxative</td>
</tr>
<tr>
<td>Basil</td>
<td>Ocimum Basilicum L.</td>
<td>Native</td>
<td>For flatulence, stomach pains, lack of appetite, insomnia, nervousness, throat inflammations, insect bites, condiment</td>
</tr>
<tr>
<td>Borage</td>
<td>Borago Officinalis L.</td>
<td>Exotic</td>
<td>For Aromatic tea, lower fever, sedante, stimulate milk in mothers, sore throat, skin irritations, broken bones, eye irritation</td>
</tr>
<tr>
<td>Calaguala</td>
<td>Campyloneurum amphostenom Fee</td>
<td>Native</td>
<td>For condiment, for cleaning the blood, for cleaning cuts and calming inflammations</td>
</tr>
<tr>
<td>Celery</td>
<td>Apium graveolena</td>
<td>Exotic</td>
<td>For condiment, anti-inflammatory, anti-rheumatic, antispasmodic, carminative, diuretic, urinary antiseptic</td>
</tr>
<tr>
<td>Chamomile</td>
<td>Matricaria Chamomilla L.</td>
<td>Exotic</td>
<td>For stomach pains, gastritis, diarrhea, colds, bronchitis, eye irritation, rectal &amp; vaginal itch, coagulant for unhealed wounds, sedative, aromatic tea</td>
</tr>
<tr>
<td>Chilca</td>
<td>Flourecia campestris, Griseb</td>
<td>Native</td>
<td>Diarrhea, rheumatism, cuts and skin infections, tonic (known as poor man's tobacco)</td>
</tr>
<tr>
<td>Chuquiragua</td>
<td>Chuquiragua jussieui J.F. Gmel</td>
<td>Native</td>
<td>For paludism, malaria, relieves kidney irritation, relieves strong coughs, increases bile &amp; intestinal secretions</td>
</tr>
<tr>
<td>Common mint</td>
<td>Menthe aquatica</td>
<td>Exotic</td>
<td>For aromatic tea, flatulence, anti-diarrheic, anti-spasmodic, kidney</td>
</tr>
<tr>
<td>Dandelion</td>
<td>Taraxacum officinlis L.</td>
<td>Native</td>
<td>For stomach pains, liver Irritations, kidney pains, acne, detoxication, urine retention, dislocated ankle, reduces blood cholesterol level, laxative &amp; bile stimulant, condiment</td>
</tr>
<tr>
<td>Dill</td>
<td>Anethum Graveolins L.</td>
<td>Native</td>
<td>For throat inflammations, vomiting, body sores, flatulence and lack of appetite, bad breath, condiment</td>
</tr>
<tr>
<td>Dragon's Blood</td>
<td>Croton lechleri</td>
<td>Native</td>
<td>Powerful Coagulant Anti-inflammatory, stimulates cell growth, antibacterial, antioxidant, antiviral</td>
</tr>
<tr>
<td>Elder</td>
<td>Sambucus nigra L</td>
<td>Exotic</td>
<td>For rheumatism, kidney problems, colds &amp; coughs, constipation and intestinal inflammation, mumps &amp; measles, stimulates hair growth</td>
</tr>
<tr>
<td>Escancel</td>
<td>Aerva Lanata</td>
<td>Native</td>
<td>For aromatic tea, lung problems, inflammations and swellings, helps kidney and liver</td>
</tr>
<tr>
<td>Eucalyptus (aromatic)</td>
<td>Eucaluptus Globulus Labill.</td>
<td>Exotic</td>
<td>For aromatic tea, antimicrobial, antispasmodic, expectorant, expels worms, reduces blood sugar level</td>
</tr>
<tr>
<td>Grass</td>
<td>Agropyrum repens</td>
<td>Native</td>
<td>For urine retention, gout, kidney inflammation, bladder, kidney stones, rheumatism</td>
</tr>
<tr>
<td>Heartsease</td>
<td>Viola Tricolor L. ssp.arvensis</td>
<td>Exotic</td>
<td>For anti-inflammation, diuretic, expectorant, laxative, weeping sores and rashes</td>
</tr>
<tr>
<td>Horsetail</td>
<td>Equisetum arvense L.</td>
<td>Native</td>
<td>For kidney &amp; gall bladder pain, fever, chronic cough, rheumatic pains, arthritis, inflammation of the legs, wounds and bruises</td>
</tr>
<tr>
<td>Knot Grass</td>
<td>Phyllanthus niruri L.</td>
<td>Native</td>
<td>For diarrhea, cough, rheumatism, renal &amp; blood vessel problems, eliminating kidney &amp; gall bladder stones, hemorrhoid’s, and regulation of menstruation periods. Coagulate &amp; improves badly healing cuts</td>
</tr>
<tr>
<td>Lemon Balm</td>
<td>Mellisa officinalis L.</td>
<td>Exotic</td>
<td>For heart pains, illnesses related to nerves &amp; headaches, stomach pains, herpes, open wounds, insect bites, condiment, aromatic tea, digestive stimulant</td>
</tr>
<tr>
<td>Lemon Verbena</td>
<td>Aerva sanguinocleta L. Blum</td>
<td>Exotic</td>
<td>For coughs, flatulence and stomach pains, aromatic tea</td>
</tr>
<tr>
<td>Lemongrass</td>
<td>Cymbopogon citratos D.C. Staff</td>
<td>Exotic</td>
<td>For aromatic tea</td>
</tr>
<tr>
<td>COMMON NAME</td>
<td>SCIENTIFIC NAME</td>
<td>Type</td>
<td>PRINCIPAL USES OF THE PLANT</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mallow</td>
<td>Althaea officinalis L.</td>
<td>Native</td>
<td>For asthma, constipation, coughs and nerves, mouth sores, gums, ulcers, insect bites, hemorrhoid’s</td>
</tr>
<tr>
<td>Marigold</td>
<td>Calendula Officinalis</td>
<td>Exotic</td>
<td>For antirheumatic agent, anti-inflammatory, antimicrobial, healing wounds</td>
</tr>
<tr>
<td>Matico Pepper</td>
<td>Lepechinia betonicifolia (lam) Epling</td>
<td>Native</td>
<td>For infected burns, sore bones, rheumatism, stomach ulcers</td>
</tr>
<tr>
<td>Nettle Black</td>
<td>Urtica ballotaefolia L.</td>
<td>Native</td>
<td>For arthritis, anaemia, lack of appetite, lung illnesses, skin sores, stress, diarrhea, menstrual pains, bad airs, hypertension, nose hemorrhages, rheum, varicose veins &amp; bad circulation, measles, gout, pleurisy, paralysis</td>
</tr>
<tr>
<td>Nettle White</td>
<td>Urtica ureas L.</td>
<td>Native</td>
<td>For arthritis, anaemia, lack of appetite, lung illnesses, skin sores, stress, diarrhea, menstrual pains, bad airs, hypertension, nose hemorrhages, rheum, varicose veins &amp; bad circulation, measles, gout, pleurisy, paralysis, prostrate problems, conjunctivitis</td>
</tr>
<tr>
<td>Oregano</td>
<td>Origanum x majoricum Camb.</td>
<td>Exotic</td>
<td>For diarrhea, gastritis, asthma, coughs, bronchitis, pharyngitis, menstrual pains, condiment</td>
</tr>
<tr>
<td>Parsley</td>
<td>Petroselinum sativum</td>
<td>Exotic</td>
<td>For urine retention, bladder problems, sores, ulcers, heat cuts, anguish, nasal hemorrhages, menstrual pains and regularizing menstruation, high blood pressure, tooth aches, condiment</td>
</tr>
<tr>
<td>Peppermint</td>
<td>Minthostachys mollis Kunth</td>
<td>Native</td>
<td>For aromatic tea, regulate menstrual flow, against bronchitis, headaches, effective against high altitude sickness, asthma, stubborn coughs, bad air, prevents vomiting</td>
</tr>
<tr>
<td>Peppermint</td>
<td>Menta Piperita L.</td>
<td>Native</td>
<td>For stomach pains, colic &amp; gall bladder problems, worms, condiment, mild sedative, prevents vomiting</td>
</tr>
<tr>
<td>Ribwort</td>
<td>Plantago lanceolada L.</td>
<td>Native</td>
<td>For stomach irritations, body swelling, insect bites, coughs &amp; colds, clean the blood, hemorrhoid’s, ear infections</td>
</tr>
<tr>
<td>Ribwort</td>
<td>Plantago mayor</td>
<td>Native</td>
<td>For stomach irritations, body swelling, insect bites, coughs &amp; colds, clean the blood, hemorrhoid’s, ear infections</td>
</tr>
<tr>
<td>Rosemary</td>
<td>Rosmarinus officinalis L.</td>
<td>Exotic</td>
<td>For asthma, coughs, anaemia, low blood pressure, skin sores &amp; scabs, antidepressant, carminative, condiment</td>
</tr>
<tr>
<td>Rue</td>
<td>Ruta graveolens L.</td>
<td>Native</td>
<td>For heart nervousness, calm colic, improve appetite and digestion, headaches, get rid of worms, gout, lice, gout, chronic bronchitis, calm children in its bath water</td>
</tr>
<tr>
<td>Sage</td>
<td>Salvia officinalis</td>
<td>Exotic</td>
<td>For tonic, menopausal night sweats, improving digestion and circulation, mouth ulcers, gum disorders, insect bites, aromatic tea</td>
</tr>
<tr>
<td>Sauce</td>
<td></td>
<td>Native</td>
<td>For fever, colds, headaches, pain, heals cuts, against gum &amp; tonsil inflammation, hemorrhoid’s, rheumatism</td>
</tr>
<tr>
<td>Scorzonera</td>
<td>Scorzonera Hispànica L.</td>
<td>Exotic</td>
<td>Colds, coughs, condiment, expectorant, diuretic</td>
</tr>
<tr>
<td>Thyme</td>
<td>Thymus Vulgaris L.</td>
<td>Exotic</td>
<td>For lack of appetite, cough, bronchitis, asthma, sore throat, digestion, nerves, rheumatism, condiment</td>
</tr>
<tr>
<td>Valerian</td>
<td>Valeriana Officinalis L</td>
<td>Native</td>
<td>For allaying pain, antispasmodic, carminative, tranquilizer, reduces blood pressure, migraines,</td>
</tr>
<tr>
<td>Vervain</td>
<td>Verbena litoralis Kunth</td>
<td>Native</td>
<td>For rheumatism, expectorant, relaxing &amp; sedative, promotes sweating &amp; milk flow, relief from wounds and falls</td>
</tr>
<tr>
<td>Wormseed</td>
<td>Chenopodium Ambrosioides L.</td>
<td>Native</td>
<td>For memory, stomach pains, worms, parasites, anaemia, coughs &amp; asthma, hemorrhoid’s, condiment</td>
</tr>
<tr>
<td>Wormwood</td>
<td>Artemisia sodiroi Hieron</td>
<td>Exotic</td>
<td>For gout, intestinal parasites, diarrhea, colic, vomit, control diabetes, kidneys, bladders, lungs, control menstruation,</td>
</tr>
<tr>
<td>Yellow Dock</td>
<td>Rumex crispusa</td>
<td>Native</td>
<td>For sores, irritations, eruptions, itchiness of the skin, antiseptic for open wounds.</td>
</tr>
</tbody>
</table>
REFERENCES


MAP OF ECUADOR

COLOMBIA

PACIFIC OCEAN

CHIMBORAZO

RIOBAMBA

PERU