

**PROJECT TITLE:** Diversifying productive opportunities for small Mayan farmers in Guatemala

**PROJECT NUMBER:** GU-M1055

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## PROJECT SUMMARY

Guatemala is one of the most important exporters of cardamom in the world. The product is sold to markets in India, Europe, and the Middle East, to be used primarily for the food and spice sector. Guatemalan cardamom is of the small type, known as the “Queen of spices” characterized by its green coloration and slightly sweeter fragrance than large cardamom<sup>2</sup>. It also represents 3% of the country’s exports and it is grown almost exclusively by small farmers who together have less than one hectare per family; yet, in the last three years, there has been an oversupply of Guatemalan cardamom that has brought the price to its lowest levels in decades. At \$3.4 per kilogram, the crop barely generates any profit for the farmers who will keep producing it because it is the main (if not only) income-generating agricultural activity they are familiar with. The communities and producers in the cardamom value chain are of very low income; for the regions of Alta Verapaz, Baja Verapaz and El Quiché, this problem points to a growing need for diversification so that rural families can have alternative sources of income.

It is in this context that CECI, a nonprofit organization, and ADECAR, the National Association of Cardamom Exporters, have joined forces to seek a real solution to a problem that affects thousands of small farmers of the region. Their efforts have attracted interest not only from cardamom exporters but also from other companies seeking new areas for high-value horticulture production that see potential in these departments for such expansion.

To address the poverty and exclusion problems affecting families of about 150 communities along the Rio Chixoy watershed, the project will work through an alliance of public and private actors that will focus on improving the quality and production capacity for cardamom, strengthening the community organization base and starting with farm diversification efforts into new high-value products, much needed for increasing the incomes of these communities and other economic activities.

## I. PROJECT CONTRIBUTION TO THE ACCESS FRAMEWORK

The project responds to the MIF mandate of poverty reduction and private sector development as it aims to improve the economic and social well-being of poor and low-income rural farmers by addressing the major constraints that limit their economic development and access to market opportunities. The project will contribute to the “Linking Small Producers to High Value Agriculture Markets” Agenda, by providing small farmers with access to knowledge and best business practices

<sup>2</sup> Cardomom is one of the world’s oldest spices and it is the third most expensive spice after saffron and vanilla. USAID Acceso Project, “The World Market for Cardamom – Market Survey 02”, November 2011

that will enable them to improve their productivity in order to cease market opportunities and position their product in high value markets.

## II. INFORMATION

|   |  |  |                |     |
|---|--|--|----------------|-----|
| <b>COUNTRY:</b>                               | Guatemala  | <b>TECHNICAL COOPERATION:</b>            | \$2,300,000    |     |
|   |  | <b>INVESTMENT:</b>                       | \$ 000,000     | 72% |
|   |  | <b>LOAN:</b>                             | \$ 000,000     |     |
|   |  | <b>TOTAL MIF FUNDING:</b>                | \$ 2,300,000   |     |
| <b>LOCATION:</b>                              | Departaments of, Alta Verapaz, Baja Verapaz, Quiche and communities along the Chixoy River basin | <b>COUNTERPART:</b>                      | \$ 905,800     | 28% |
| <b>EXECUTING AGENCY:</b>                      | Centro de Estudios y de Cooperación Internacional, (CECI)  | <b>COFINANCING (IF AVAILABLE):</b>       |                | %   |
| <b>ACCESS AREA:</b>                           | AMC  | <b>TOTAL PROJECT:</b>                    | \$ 3,205,800   | %   |
| <b>AGENDA:</b>                                | HVM  | <b>NUMBER OF DIRECT BENEFICIARIES:</b>   | 15,000 farmers |     |
| <b>COMPLEMENTARY BANK OPERATIONS (IF ANY)</b> | None   | <b>NUMBER OF INDIRECT BENEFICIARIES:</b> | 60,000 persons |     |
|   |  | <b>QED SCORE:</b>                        | 7.13           |     |

## III. PROBLEM DIAGNOSIS

**The key problem the project aims to address is the lack of economic and productive opportunities for small farmers in the region and their almost complete reliance on cardamom as a unique cash crop.** While cardamom represented close to US\$250 Million in total exports for Guatemala in 2012, the production regions continue to be areas with high poverty levels and little opportunities for income diversification<sup>3</sup>. Farmers have learned to rely on cardamom for their main source of income from many years past. The crop was introduced in Guatemala by the Germans after the Second World War, and while it had its periods of boom, in the last few years it has started to lose value with issues of over production, poor quality, and lack of farmer organization. In the last two years, disease (Thrips) has also affected production, and many farmers who also grow coffee, have seen the same scenario play out in their coffee plantations due to Roya, low prices and disease. The problem is exacerbated by the lack of a strong infrastructure that would allow farmers to test and commercialize other crops and products. To further add to the problem, the challenging road access to some communities is so difficult that private companies stay away from trying to establish production projects in the region.

<sup>3</sup> <http://www.eleconomista.net/noticias/146418-cardamomo-guatemalteco-con-el-reto-de-generar-desarrollo.html>

### **Causes of the problem**

- ***Low or nonexistent farmer capacity for organization:*** there is an estimated 350,000 farmers involved in cardamom production, and yet very few or none farmer organizations exist<sup>4</sup>. This limits the farmer's capacity to negotiate prices, to work on coordinated production plans, to buy inputs in bulk and to access credit. Any work done on improving the quality of the production is done in isolation and no incentives exist in the marketing schemes to work on quality. The cardamom value chain in Guatemala is highly inefficient and fragmented, with over 8 identified levels of intermediation between exporters and farmers. Efforts are underway to reduce waste and redundancies in the chain, but much remains to be done and the exporting companies have started to look at ways in which they can combine forces to address the issues of overproduction and poor quality.
- ***Low levels of production and quality problems with smallholder cardamom farmers:*** a recent study of the cardamom value chain reveals many similarities with the coffee value chain, where the coffee exporters and processors capture most of the economic gain<sup>5</sup>. Several factors affect this situation; on the one hand there is a lack of agricultural good practices, which has an impact on yields and production. In addition, farmers usually sell their unprocessed cardamom which have no added value and, thus, receive very low prices. The relationship in price between raw cardamom and dried processed cardamom can be as high as 10 to 1. In 2012, a sack of raw cardamom fetched Qtz 250 to Qtz 380 (paid at the farm) while processed (dried only) cardamom was sold at Qtz 2500<sup>6</sup>. This does not include some of the other services that farmers must forego for lack of capacity such as transport, selection, warehousing, and packaging. Some of these services also hurt the farmer's profitability: in the case of transportation for example, the cost of transporting raw (wet/humid cardamom) is much higher than that of dried cardamom, which weighs less. Finally, farmers lack the basic tools and knowledge that would allow them to make improvements in quality and yields and obtain a better price for their product. They also lack the adequate channels for feedback on how to make these improvements which makes their plots more vulnerable to plagues and diseases. In 2013, farmers were hit with a disease known as "thrips", which caused much havoc affecting close to 35% of the national production<sup>7</sup>.
- ***Limited market access and capacity for diversification:*** while farmers tend to grow other crops for self-consumption, such as potatoes, corn and beans, they have not diversified into other cash crops besides cardamom, as they don't have knowledge as to what else they could plant. In part, it is believed that their distance from dynamic markets has also inhibited this diversification. Some of the communities are completely isolated and far from roads and infrastructure, and surrounded by water. In one region, an important bridge that connects the Northern watershed of Chixoy has not been completed and is a crucial byway for the commercialization of agricultural products. Other crops such as onions, amaranth, radishes, and coriander grow well in the region, but have not been adequately promoted or market access has not been sustained.

**Classify the problem in one or more of the following categories that most apply:**

<sup>4</sup> Based on ADECAR's Cardamom Presentation provided to the MIF.

<sup>5</sup> Centro de Estudios de la Realidad (CER), "Impacto de las exportaciones de cardamomo en la economía de Guatemala, en las comunidades y en las familias productoras"

<sup>6</sup> <http://www.s21.com.gt/pulso/2013/07/29/zona-cardamomo-sigue-pobreza>

<sup>7</sup> Currently, the sector is going through a price crisis caused by about 18,000 metric tons of overproduction. One factor that further exacerbates the situation is the low quality and decreasing yield per hectare of Guatemalan cardamom: while in 2011 the production area of 31,067 hectares had an average yield of 15 quintals per hectare (dried Cardamom), the 2012 yield decreased to 12 quintals per hectare with a production area of 59.769 hectares.

|  |  |
|--|--|
| Market Failure <input type="checkbox"/>                    | Skill Deficit <input checked="" type="checkbox"/>                          |
| Institutional Weakness <input checked="" type="checkbox"/> | Collective action problem <sup>8</sup> <input checked="" type="checkbox"/> |
| Policy weakness / Failure <input type="checkbox"/>         | Lack of appropriate technology <input type="checkbox"/>                    |
| Other _____  |  |

#### **Project Beneficiaries**

The audience and project beneficiaries are identified as rural communities in the Central region of Guatemala. The project will benefit at least 15,000 small farmers, 2000 of which are in the basin of the Rio Chixoy. These families have annual incomes that do not exceed US\$ 2,000; in most cases, these families rely on subsistence farming obtaining minimal income from the sale of their produce. Many families also work as day laborers and have little access to education or technical schools that would allow them to incorporate techniques and acquire capabilities focused on production.

Based on 2006 data, the departments of Alta Verapaz and El Quiche have a very young population (with a median age ranging between 15 and 17 years old) who is mostly rural and indigenous (in Alta Verapaz and El Quiche about 90% of the population is indigenous, in Baja Verapaz the number drops to 65%). Moreover, in the last household survey two out of five citizens identified themselves as part of the linguistic community of the Mayan, Garifuna or Xinca peoples<sup>9</sup>.

In the three departments, the Human Development Index ranges from 0.61 to 0.65 falling below the nation's average of 0.70. When disaggregated by municipality, the situation is even more worrisome, with the lowest index below 0.40. The PNUD report points out that indigenous populations generally live in more precarious conditions than the rest of the population; on average, about 83% of the indigenous population of Alta Verapaz, Baja Verapaz and El Quiche live in poverty with limited access to basic services, restricted consumption levels and overcrowding.

#### **IV. PROJECT DESCRIPTION**

The Project seeks to have a direct impact on at least 15,000 small farmers and rural dwellers of three Guatemalan departments: Alta Verapaz, Baja Verapaz, El Quiche and the communities along the Chixoy river basin. The project will seek to strengthen the capacity of these farmers to reach higher value cardamom markets and also implement a strategic diversification program with alternative crops that will provide much needed income for these families.

#### **Specific details of the model**

The project seeks to replicate the experience that MIF has in strengthening rural communities through value chain development in two complementary ways: while in the case of cardamom the project will strengthen the capacity of small farmers to reach higher value markets, in the case of the communities around the Chixoy River basin, the project will identify productive and commercially viable crops or other activities that will provide them with key additional income.

CECI, a nongovernmental organization with experience in rural economic development will execute the project that will focus, initially, on associativity and communal organization of the producers. Secondly, the project will improve production practices of existing crops – cardamom will be one of

<sup>8</sup> The term "collective action problem" describes the situation in which multiple individuals would all benefit from a certain action, which, however, has an associated cost making it implausible that any one individually can or will undertake and solve it alone. The rational choice is then to undertake this as a collective action the cost of which is shared.

<sup>9</sup> United Nations Development Programme, "Human Development Numbers for Alta Verapaz, Baja Verapaz and Quiche", 2011.

the main crops supported given its relevance as an export crop. The training, demonstration plots and nurseries that will be set up will be led by agricultural community promoters. A third group of activities will center on introduction of complementary species, other cash crops and other activities (such as animal husbandry) whose feasibility will be determined by a consultant hired with project funds; this third group of activities will be particularly important for the communities along the Chixoy river basin. A fourth group of activities will focus on value-adding post-harvest processes (such as drying, packaging) as well as the provision of key infrastructure that will facilitate linkage with local markets. It should be noted that for this fourth component, and the construction of the bridge, FOMIN will work closely with TSP (Transport) Division of the Bank, which will have the technical responsibility for the final design and implementation of the construction.

The model includes the participation of a group of cardamom export companies<sup>10</sup> and a large horticulture export company interested in purchasing new crops that will be sustainably introduced in the region.

### **Sustainability**

The sustainability of the Project will be achieved by the long term establishment of high value cardamom markets for these communities, and the contractual relationship that will be established between the export companies, the farmers and their associations. In order for the Project to have a long lasting impact, the farmer associations will be essential in: a) helping farmers achieve economies of scale in inputs purchases, b) improving the farmers' negotiating capacity to receive better prices and c) assisting farmers to implement better agronomical practices to attain higher quality product and secure a position in higher value markets.

The diversification component of the project will also be critical, and will allow farmers and their families to reach markets with new crops and establish new relationships with buyers who have expressed an interest in horticulture and high value vegetable production in that region.

### **Project Components.**

- **Component 1: Community Organizations and Business Skills.** The objective of this component is to support the creation of community organizations and the strengthening of business skills for the beneficiary communities. An assessment of existing capacities will guide the design of tools that will provide training / support services to small producer organizations. The activities included in this component are: i) Diagnosis of productive and organizational conditions, identification of community leaders and define the organizational structure that meets the needs of beneficiaries, ii) Methodology design including knowledge transfer training focused on associativity and communal organization, development of training materials and manuals tailored to the target beneficiaries, iii) Implementation of group training workshops on issues related to organization and community partnerships at the municipal or micro-regional level, iv) support for community organizations to become legally recognized at the municipal level and v) creation of a farmer electronic database for all the members of the community organizations.
- **Component 2. Good production practices.** This component seeks to improve the quality of agricultural production through the transfer of good practices and agro-productive diversification under an approach that emphasizes sustainable agroforestry systems and the introduction/

<sup>10</sup> The export companies affiliated to ADECAR include: Del Trópico, Agronómicas de Guatemala, CARDEX, EXCARD, Multi-Export (Grupo Tecun), Agrodiversas S.A./ UXSA, Exportadora Internacional Dinámica, Overseas Export, IMEXSA and Cardomino.

improvement of species and spices. The activities included are: i) design of a good production practices training plan that includes integrated crop management, soil and forest conservation, new varieties and better production methods, ii) implementation of a cardamom training program including demonstration plots to facilitate the transfer of best agricultural practices and pest management, iii) community nurseries for breeding trees that will provide shade for the cardamom plots and iv) technical monitoring visits.

- **Component 3: Productive diversification.** The objective pursued is to support the transfer of best practices in product diversification under a sustainable agroforestry systems approach that promotes the introduction/ improvement of species and spices. The activities included are: i) Hiring of a consultant that will focus on identifying potential areas for the introduction of new species, ii) implementation of agroforestry demonstration plots with annual crops such as cinnamon, cloves, vegetables, sesame and corn, to name a few; iii ) training on the integral management of the newly introduced crops / spices and iv ) technical monitoring visits.
- **Component 4. Marketing support.** The objective of this component is to strengthen post-harvest processes (which include handling and commercialization) that will enable beneficiaries to capture more value and have a solid position in the value chain. The activities included are: i) construction of a pedestrian bridge that will allow the communities of the northern Quiché region to access markets in Alta Verapaz , ii) training in milling processes for the newly introduced spices promoted by the diversification plan iii) training in management practices for post-harvest processes (drying and packaging) aimed at both cardamom producers and milling companies; iv) implementation of a quality certification program product in coordination with the export partners and v) commercialization support.
- **Component 5. Knowledge management and strategic communication.** This project will contribute to reducing the “Linking Small Producers to High Value Agriculture Markets” Agenda **knowledge gaps**, generating knowledge and lessons learned on how to assist small rural producers to diversify their crops. The objective of this component is to inform the target audiences about best practices and knowledge targeted towards improving the quality and productivity of the local cardamom production, and to distribute knowledge about a diversification model that allows communities along the Chixoy river basin to increase their income. The **strategic audiences** of the project are: a) Guatemalan agricultural producers<sup>11</sup> with interest or experience in producing cardamom and other alternative crops that will be supported by the diversification plan, b) Export chambers (such as ADECAR for cardamom) and export companies from the private sector (such as Unispice) that are interested in sourcing from the beneficiary communities and c) other NGOs and international development agencies interested in developing similar diversification projects. In order to meet these audiences’ knowledge needs, the following **knowledge products** will be developed within the framework of the Project: a how-to guide that explains the methodology used in this project to assist small producers to diversify crops and a case study compiling best practices and lessons learned in the project. On an annual basis, CECI will update the Project Fact Sheet (template provided by the MIF), which contains basic information on the project, its challenges, the intervention strategy and results.

#### **MIF or other organizations’ experience**

<sup>11</sup> This strategic audience refers to producers not benefited by the project.

CECI has worked with the MIF in a previous project in Haiti named “Developing the North Department as a Tourism Destination”<sup>12</sup> whose main purpose was to organize and facilitate private-public management of the tourism destination with the participation of local economic initiatives (community based businesses and individuals, rural and urban Micro, small and Medium Enterprises (MSMEs)). Despite its focus on services, some of CECI’s experiences that could be applicable to the current project are: expertise coordinating with a variety of public and private actors and technical assistance provision focused on MSMEs with a training-the-trainer approach.

In the case of the MIF, the project implemented in the stevia value chain in Paraguay<sup>13</sup> also worked in integrating about 2,500 new producers to the stevia commercial market, increasing the number of productive hectares from 800 to 1,300, collaborating in the creation and legal support of 9 producer groups and supporting the creation of schemes that would incentivize collective action (such as a bonus for each kilogram delivered each kg delivered if target amount was reached by producer organizations). The knowledge developed was also captured in a good agricultural practices manual created with project funds.

#### **Lessons Learned and Best Practices**

The MIF has experience in working in agricultural value chains and rural development, areas which this project will focus on. Specifically the lessons learned are centered on the following:

- (i) In order for productive projects to have a lasting impact in rural dispersed farming units, commercially viable crops and products should be clearly identified from the beginning of the project, and the key actors involved in that specific value chain, involved. Be these companies, cooperatives or service providers, all these actors must be a part of the design and initial roll out of the project.
- (ii) Following the above point, the demand for these products and crops should be clearly identified in the early stages of the project, if these have not been identified prior to project start up. MIF supported activities and projects have been proven to be more successful when these two elements have been present from the start.

## **V. MIF ADDITIONALITY**

#### **MIF Non-Financial Additionality**

The MIF brings to this project much experience in agricultural value chain development. Some of the best value chain projects have been seen in Central America, with crops such as coffee, cocoa, and honey. The MIF along with the executing agency will bring these experiences to bear at the time of execution through information exchanges about projects, replication of methodologies, and adaptation of various manuals and training aids. These apply to the specific materials around crops and certifications, as well as to methodologies and practical guidelines to working with adult rural populations. Specifically, the project will seek collaboration with existing projects in Guatemala with Root Capital, Asobagri, Copiasuro, and others.

#### **MIF Financial Additionality**

MIF financing is critical to the Project. No other donors are working in these regions with the communities that the project will attend. While each of the various partners of the project has

<sup>12</sup> Project HA-M1037

<sup>13</sup> “Competitiveness Improvement in the Stevia Value Chain” - Project PR-M1013

resources available, each organization faces limitations in terms of the amount of resources that can be allocated to the activities listed above. The MIF financing will be the central core of funding needed to leverage the remainder of the funds available and will help finance those items and activities which would otherwise not be fundable.

## VI. RESULTS INDICATORS

- XX metric tons of cardamom from the communities of the project are accessing higher value markets
- XX% average increase in yield for the beneficiary farmer participating in the project
- XX number of farmers in the Chixoy region have at least two new crops that are being sold in the market (local and or global)
- XX number of farmer organizations have been formed and are functioning at the end of the project in the Chixoy region
- XX % of farmers is accessing financial services to market their products through their organizations.
- XX new markets developed for the new products and high value cardamom
- 1 operating bridge is administered by the community and maintained under a pay for use system.

## VII. IMPACT INDICATORS

- % increase in the global average income of the beneficiary farmer
- XX% annual increase in income of farmers from commercialization of new crops
- XX% annual increase in income of farmers from higher value cardamom markets
- XX number of beneficiaries have diversified their production with at least one new product

## VIII. SYSTEMIC IMPACT

The methodology that MIF will develop (which includes a diversification program and activities focused on strengthening the cardamom value chain) will contribute to systemic change by providing one highly-replicable model that is expected to introduce at least XX new crops and that can be implemented in: a) the remaining 90% cardamom producer population that will not be directly benefited by the project and b) neighboring departments with rural populations who are highly vulnerable to food insecurity and poverty.

Through the creation of XX communal producer organizations and the promotion of commercial relationships between these and partners such as ADECAR, UNISPICE and CECI, the project is also expected to support the creation of XX new partnerships that will accelerate systemic impact beyond MIF's participation.

## IX. BASELINE DATA, MONITORING MECHANISMS AND EVALUATIONS

### Baseline Data

The Project will establish a base line from the communities and will include an impact evaluation.



### **Monitoring Mechanisms**

CECI will be responsible for presenting the Project Progress Reports (PSRs) within 30 days after the end of each semester or on the dates previously defined by the MIF. The reports will describe the progress reached during the implementation phase detailing targets that are being met, results achieved and their contribution towards accomplishing the objectives defined in the Logical Framework and in other operational tools. A final PSR will provide more detailed information regarding the results achieved, the sustainability plan and the key take-aways of the project.

### **Evaluations**

The bank will provide the funding to carry out two independent evaluations. The first one will be an intermediate evaluation that will track the progress level based on the indicators defined in the Logical Framework. The evaluation will also identify any meaningful deviations from the activities and strategies originally conceived on the design stage.

For the final evaluation, the dimensions that will be examined are: i) degree of compliance with the specific objectives of the Project, ii) assessment of the number and type of beneficiaries reached by the project, iii) quality of the products and/or services offered through the project, iv) user satisfaction measured by surveys that will be administered to the beneficiaries, v) lessons learned and best practices, and (vi) sustainability of the strategies implemented once MIF contribution has ended.

## **X. EXECUTING AGENCY**

The Center for International Studies and Cooperation (CECI) is an international organization headquartered in Montreal, Canada that has been working in topics related to economic development, food security, gender equality and human security and emergency response since 1958.

The organization's work is based on three basic values: cooperation, respect and equity. In Latin America, these values translate into a wide variety of programs with smallholders and rural populations. CECI's experience includes several fair trade initiatives, emphasis in access to markets for the alpaca and llama wool industry in Bolivia, support for economic recovery and environment protection in Haiti and direct intervention with at-risk populations in El Salvador.

Through its work in Guatemala, CECI has provided support for the development of community tourism in 12 municipalities. The agency also provided training and technical assistance for handicrafts production and marketing that benefitted 650 artisans (mostly women) who successfully entered fair trade markets in the EU, US and Canada. Through its work with volunteers, CECI has also supported the construction of a networking and service center for small-scale social economy producers in Guatemala.

### **Institutions' Core Business**

CECI "strengthens the development capacity of disadvantaged communities, supports initiatives for peace, human rights and equity, mobilizing resources and promoting the exchange of experiences and knowledge."

Based on the pillars of local governance and socioeconomic development, CECI has promoted projects in Guatemala through its country offices that started operations in 1992. The organization's management structure, administrative capabilities and information technologies are suited to administer contracts of various sizes (budgets from CA \$ 50,000 for a few months of implementation to more than CA\$ 80 million for 5-year implementation projects) with high quality standards. Some of CECI's partners are: World University Service of Canada (WUSC), Society for International

Development Cooperation, Socodevi, Fondation Paul Guérin- Lajoie, Canadian Executive Service Organization, CESO, Research Triangle Institute, RTI, the Humanitarian Network and others.

The current project is aligned with CECI's approach in economic development that includes<sup>14</sup>: a) training for development actors (stakeholders); b) implementation of a fund to support initiatives contained in local development plans; c) strengthening of gender equality; d) development of sustainable environmental management techniques and e) a social and solidarity economy approach.

#### **Other Partners**

- **National Association of Cardamom Exporters (ADECAR)**: It is an organization formed by 10 of the 13 cardamom export companies in Guatemala. The organization is supported by the cardamom union and its main goal is to support Guatemala's leadership in the international cardamom market. ADECAR centralizes most of the cardamom exports, guaranteeing the purchase of the cardamom produced through the project implementation stage. The organization will provide counterpart funding and will also sign a Cooperation Agreement with CECI.
- **Unispice**: Guatemalan private company interested in supporting the production and export of vegetables. The company will guarantee the purchase and commercialization of those newly introduced agricultural products that currently are a part of their portfolio (Brussels sprout, Chinese peas, sweet peas and green beans). The company currently works with an interesting model focused on promoting productive activities in vulnerable, low-income areas.
- **Inter-Church Organization for Development Cooperation (ICCO)**: this NGO will analyze the conditions for providing a guarantee fund that allows microfinance institutions to develop financial services targeted to small producers. Furthermore, it is expected that some partnerships with other financial intermediaries can be confirmed; the partnerships would focus on implementing technical assistance programs that extend beyond the lifespan of the project.
- **Coordinadora de las Comunidades Afectadas de la Hidroeléctrica Chixoy (COCAHICH)**: The organizations will give legitimacy to the project by promoting the active participation of the communities affected by the hydropower plant in the region.

## **XI. PROJECT RISKS**

1. **Sector Risks**: During the implementation stage, the project could face challenges related to the lack of knowledge of the beneficiaries, as well as a potential resistance to change and low adoption of more structured practices related to business skills and farm management. To minimize this challenge, the project will adopt a participatory methodology that will be adapted to the characteristics and context of each beneficiary community. A second risk is the reluctance of key actors to adopt leadership roles during the implementation of the project. To promote the creation of stronger relationships among stakeholders, the design of the work plan will encourage participation and collaboration of all project partners to make sure that the most important areas of concerns are being addressed.
2. **Environmental and climate change risks**: the geographical location of the project is vulnerable to natural disasters - especially hurricanes and tropical storms - that can cause flooding and landslides among others. Vulnerability to climate changes will be one of the dimensions that will be evaluated during the diagnosis of communities in order to propose risk mitigation and / or adaptation strategies that are specific to each target community.

<sup>14</sup> <http://www.ceci.ca/en/what-we-do/economic-development/>

## **XII. ENVIRONMENTAL AND SOCIAL ASPECTS**

The project will support initiatives and economic activities whose side effects are neutral or positive in the environment and society. The monoculture of cardamom with the low production levels and quality challenges detailed in previous sections are already affecting the ecosystem as deforestation and soil degradation in the beneficiary communities is evident. The project aims to generate knowledge, establish productive practices and create sustainable production alternatives that attempt to minimize / reverse the negative impacts mentioned above. As a measure to mitigate risks and negative impacts, the project includes monitoring activities for some of the key components along with creation and dissemination of knowledge.

The project will work with communities that are mostly indigenous and who have been excluded by a lack of infrastructure and opportunities. The impact is expected to be positive: the proposed diversification approach and the emphasis on promoting access to markets through a participative approach that promotes sustainable agriculture complemented by the construction of a bridge is expected to improve the living conditions and economic opportunities of the beneficiary communities. Also, by including COCAHICH in the design and implementation stages, the project will include other dimensions aimed at empowering indigenous populations such as the technical assistance and legal support for the formalization of community producer organizations.

## **XIII. COUNTRY OFFICE COMMENTS**

The project is aligned to the current country strategy, specifically in its strategic area of Productive Development. Through the creation of income-generating opportunities, the project looks to improve the living standards of the rural population living in the departments of Alta Verapaz, Baja Verapaz, Quiché and communities along the Chixoy River basin.