PROJECT NAME: Promoting community innovations through scalable market-based distribution networks. (GU-M1051)

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I. PROJECT SUMMARY

This project will develop a unique mechanism for community development that builds local capacities, addresses pressing social, environmental and health issues, and increases access to essential products and services in isolated rural areas. It aims to stimulate technological innovation within communities in order to more effectively meet their own needs, as opposed to imposing external remedies (designed *by* the communities, not *for* the communities). As basic technologies are adapted or created to meet these needs by a local innovator, additional opportunities for income generation will arise.

This initiative is a collaborative effort between Soluciones Comunitarias (SolCom) and D-Lab at the Massachusetts Institute of Technology that will combine two field-tested methodologies in social innovation — Solcom's Micro Consignment (MCM) and D-Lab's Creative Capacity Building (CCB). This proposal is the result of a coordination process between Solcom and D-Lab, and it is designed to leverage the strengths of both methodologies to improve the impact of the intervention.

Creative Capacity Building (CCB) is a methodology that encourages and trains people to make technologies that generate income, improve health and safety, or save labor and time using the resources available in their communities. By distilling key elements of the design process into a hands-on curriculum that is accessible at any educational level, CCB presents a framework through which anyone can become an active creator of technology, not just a recipient or user of technology.

Through MCM local women and organizations are given the opportunity to become entrepreneurs by selling goods and services in their communities using a consignment mechanism. The entrepreneur is first provided products at no cost, then she sells them, pays the supporting organization, and pockets her profits—but only after having completed a sale. At that point she gets her inventory restocked and the cycle begins again.

Ultimately, the project aims to demonstrate the potential for local innovations to achieve scale, be profitable and generate a model that can be replicated in comparable settings. The project will be implemented over the course of 18 months in Nebaj, Guatemala. It is expected that 3 innovations designed by members of the communities will be distributed through MCM network benefiting an estimate of 4,000 people.

PROJECT CONTRIBUTION TO THE ACCESS FRAMEWORK

The project contributes to achieving MIF's mission and objectives through poverty reduction in the value chain topic. The project will be part of the Value Chain topic, contributing directly to the microfranchising and social innovation initiatives as it develops creative solutions to social issues starting at the grassroots level which are effectively linked with a distribution chain.

III. INFORMATION

COUNTRY:	Guatemala	MIF FUNDING: TEHCNICAL COOPERATION: INVESTMENT: LOAN:	\$150,000	67%
LOCATION:	Nebaj, Guatemala	COUNTERPART:	\$75,000	33%
EXECUTING AGENCY:	Soluciones Communitarias,	COFINANCING (IF AVAILABLE):	N/A	0%
AGENCI.	and MIT D-Lab	AVAILABLEJ.		
ACCESS AREA:	Access to Markets & Skills	TOTAL PROJECT:	\$225,000	100%
AGENDA:	Value Chain Topic	NUMBER OF DIRECT BENEFICIARIES:	4,830	
COMPLEMENTARY BANK	N/A	NUMBER OF INDIRECT BENEFICIARIES:	16,000	
OPERATIONS (IF ANY):		QED SCORE:	6.4	

IV. PROBLEM DIAGNOSIS

The main problem that the project will try to solve is that both commercial (some of them extremely relevant to the production activities, such as farming tools) and noncommercial products (such as water filters) do not reach the people living in the lxil region in Guatemala¹ in a consistent and affordable manner. There are several causes this; first we can mention the high production and distribution costs of essential products due to limited products and business models adapted to the community needs and the specific local context. The residents of Ixil are extremely limited by their geographic isolation. The mountainous terrain makes travel to and from the region particularly difficult, resulting in an access to many basic commodities at high prices. It is uncommon for commercial products to reach this part of the country due to high costs of distribution to the region's relatively small, scattered population. This isolation also contributes to a dearth of valid information about products that are useful in addressing poverty in these communities.

Poverty affects 87% of the population in the Ixil region of Guatemala (aprox. 95,000 dwellers with 33% live in extreme poverty) and 84% of the population living in this part of the country is indigenous.

Due to high costs of transportation, local economic production is generally confined to immediate local markets with limited purchasing power, compounding the region's economic stagnation. Security concerns in rural regions further add to the costs of transporting goods to isolated regions². These costs are consequently transferred to consumers, and in addition the combination of these increased costs with a lack of sufficient demand to transport large quantities of goods has led many distributors to abandon efforts to reach these populations altogether. These realities demonstrate the need for alternative means of bringing useful products and services to underserved rural communities in the region.

Finally, Ixil dwellers have rarely, if ever, been presented with the opportunity to use their own abilities to creatively solve the problems they encounter in daily life. The quality of formal education is extremely poor in areas like Nebaj, particularly in the dispersed villages surrounding it. However, people, regardless of origin, are inherently capable problem solvers and many rural dwellers are forced to innovate regularly given the lack of available resources. Thus, targeted stimulation of the creative facility can complement their knowledge of local circumstances and common challenges in order to devise viable solutions.

Classify the problem:			
Market failure		Skill deficit	
Institutional weakness		Collective action problem	
Policy weakness/failure		Lack of appropriate technology	
OTHER (Explain as needed)			

The project's primary beneficiaries will be 800 inhabitants of indigenous communities in the Ixil region in the department of El Quiché, north of the Cuchumatanes Mountains, in Nebaj, Guatemala. Other beneficiaries of the project will be 30 entrepreneurs of Solcom (poor indigenous women), and 4,000 people from Ixil region receiving essential products at affordable prices and their families. Most of the beneficiaries belong to indigenous communities and are poor or very poor.

V. PROJECT DESCRIPTION

The project will test a model to develop market-based local community innovations, connected with a distribution network to achieve scale, in rural areas of Guatemala with a strong indigenous presence. The local innovations will bring better adapted solutions to different community problems (such as better production machines) while generating sources of income for both the innovators and the microentrepreneurs who are part of the distribution network. The confluence of two methodologies, CCB and MCM, will enable local participants to generate higher revenues, be more productive contributors to the local economy, and improve access to essential goods and services that can alleviate many causes of endemic poverty like, for instance, agricultural processing machines or eyeglasses.

² Companies report using 12% of operating budgets to provide security for transportation teams in Guatemala http://www.centralamericadata.com/en/article/home/Lack of Security on Guatemalan Roads

CCB trainings provide a structured mechanism for beneficiary communities to define and articulate their needs, and to explore the creation and/or adaptation of high-impact, low-cost, household-level technologies that can help families lift themselves out of pervasive poverty. Participants, both male and female, are challenged to produce, repair and adapt technologies, and they work collaboratively to develop technologies that meet their household needs and/or to generate income. Based on experiences in other settings³, participants may also begin to view technology as a vehicle for recalibrating gender-based workload imbalances. CCB suggests that the underlying principles of co-creation and crowd-sourcing – typically applied to computer software development, corporate management, or high-end product design – can be relevant to technological innovations aimed at ending poverty. Trainings build upon the skills, creativity, and local knowledge of beneficiaries to ensure that products can be made or repaired locally, and that the local context drives the choice of products introduced to each community. Moreover, participants are encouraged to focus on innovative products that address pressing local needs identified by the community.

MicroConsignment (MCM) is a type of microfranchising model in which the products are provided by Solcom - as microfranchisor- to community microentrepreneurs - as microfranchisees - on a consignment basis. MCM delivers essential products and services at affordable prices to the rural poor in the developing world by removing high barriers to entry and empowering microentrepreneurs. Currently Solcom manages in Guatemala a network of 75 Community Advisors (microfranchisees) with over 300,000 US\$ in annual sales. Micro entrepreneurs participating in the microconsignment model will also serve as essential links to rural communities by providing credible information on the usefulness, affordability and other benefits of these products; because the sellers are from the communities themselves, consumers are more likely to trust this information from the start.

The process will start with Solcom identifying communities with highly-potential to develop innovations. Once the targeted communities are identified, a series of workshops on CCB will be implemented by D-Lab to develop the capacities of community members to generate technologies with potential to solve local needs. Solcom, through its network of Community Advisors, will follow up the communities and will identify the innovators in each community that have developed innovations with stronger market potential (such as a solar crop drier). The innovators will be invited to Solcom center in Nejab for advanced training and pilot their solutions and, if it is needed, offer them seed capital to start production of the products. The Community Innovation Center in Nebaj (also the distribution hub of Solcom for the MCM network) is where the project will be based. It serves as an integrated workshop, demonstration site, training center, and retail shop for appropriate technologies in a centralized site, augmented by the activities of microentrepreneurs in surrounding communities. The solutions will be tested by the Community Advisors in their contact with the communities. The most successful solutions will be incorporated in Solcom's portfolio as new products for the MCM portfolio.

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In prior CCB trainings in Uganda, men from the community recognized both their inability and social misconception for men to handle some everyday tasks traditionally carried out by women. Instead, they felt empowered to create a technological solution to the problem that they could use to relieve women from these tasks, effectively recalibrating gender-based workload imbalances.

One of the main tenets of this project is to build the local capacity for innovation, technology creation and distribution. Such capabilities, if properly developed and deeply rooted in the beneficiary communities, will directly translate into the sustainability of the project beyond the life of the grant. SolCom is a financially sustainable enterprise that will continue to promote the MicroConsignment model and manage the community innovation center; innovators trained in the CCB methodology will become the next generation of trainers to spread this methodology to other communities.

Project Components

Component 1: Intercultural Local Training, Creative Capacity Building and Product Design (D-Lab & SolCom)

- Initial training workshop for local trainers, facilitated by D-Lab staff.
- Program promotion and recruitment of participants interested in product design and entrepreneurship.
- Technology demonstrations based on existing innovations.
- Identification of local needs, social issues, and constraints to addressing local problems.
- Creative Capacity Building workshops that encourage product innovation and enhancing entrepreneurial and problem solving capacities.

Component 2: Implementation of Microconsignment Distribution Model (SolCom)

- Development of a viable business model(s) allowing new/adapted technologies to be distributed to other communities in the region, providing consumers with access to tools that solve local problems and improve quality of life while also benefitting the entrepreneurs creating the products/services.
- Identification of communities that can most benefit from distribution of products and services developed through CCB and MCM.
- Distribution of products and services to regional communities.

Component 3: Knowledge Creation and Dissemination of Results (D-Lab & SolCom)

The project seeks to explore how creative techniques to identify innovative local solutions (CCB) can be combined with micro distribution models to improve the overall quality of life in rural communities. While both methodologies have been field-tested successfully, they have not been combined. In addition, the project will look specifically at the feasibility of applying the concept within indigenous communities.

The main audience of the knowledge component is the wider social innovation and development community. It will be reached through the development and dissemination of a how to guide making the case of local innovation for the creation and adoption of new technologies linked with a distribution network. The dissemination of the guide will use the websites of the partners such as the MIT network.

VI. MIF ADDITIONALITY

MIF non-financial additionally is significant in this project. MIF's reputation and partner network (both in microfranchising and in social innovation) will enable the model to expand in other emerging Latin America markets contributing to poverty reduction and rural

economic development. MIF participation will also serve as a valuable source of input for adapting the model throughout the Latin American context.

VII. PROJECT RESULTS

Indicators

- 800 individuals acquire new technical skills through CCB trainings sex-disaggregated
- 3 new technological solutions created locally and distributed through MCM network
- 25% reduction in the logistic costs of Solcom from acquiring local products vs products from outside the communities.

VIII. PROJECT IMPACT

Indicators

- Microentrepreneurs increase their monthly income through MicroConsignment model sex-disaggregated
- Revenue generated for community innovators sex-disaggregated
- New jobs created in targeted communities (suppliers, trainers, etc.) sex-disaggregated
- Individuals in poor communities who benefit from new technologies, products and/or services developed through the Community Innovation Center.

The **systemic indicators** for the project will be:

- New markets that have emerged
- Replication of MIF introduced models

IX. BASELINE DATA, MONITORING MECHANISMS AND EVALUATIONS

The program will use a results-based monitoring and evaluation approach to assess performance. Specifically, it will measure the following outcomes and impacts, among others, on a continuous basis and at the end of the intervention through formative and summative evaluations: the skills, knowledge and attitudes gathered through the trainings; the number and type of idea exchanges at the Local Community Innovation Center; the use, adaptation and creation of technologies; the formation of enterprises and new employment opportunities; and changes in behaviors and relationships for the CCB training participants, community innovators (the agents of the MicroConsignment Model), and beneficiaries.

To achieve the project deliverables, executing agencies will track progress towards a variety of benchmarks, such as: training a target number of participants through the CCB workshops; creating, building and repairing a target number of technologies; and making a target number of new technologies accessible to communities in the project area. Data collection techniques will include surveys, interviews with training participants and beneficiaries, focus groups, and direct observation, among others. All of these data will be used by project staff to make informed decision about programmatic improvements, and will be available for use by the MIF in the advance of international development practice.

X. EXECUTING AGENCIES

This project is a collaborative effort between several organizations with significant experience in social enterprise development and microconsignment. Soluciones Comunitarias - SolCom4 (local institution affiliated with Community Enterprise Solutions US) will be the primary executing agency for the project, and its Guatemala-based management team will be responsible for reporting to IBD/MIF and coordinating with local actors as needed (Oversight of Components 1, 2 and 3). SolCom is based in Nebaj and will be principally responsible for organizing all trainings and community campaigns, for operating and maintaining the innovation center, for providing ongoing supervision of all aspects of the project, and will contribute to the project's execution (Component 2). SolCom is the primary implementer of MCM in Guatemala and currently manages the distribution of 17 products around the country. SolCom entrepreneurs executed approximately 650 distribution campaigns in 2012, generating approximately \$215,000 in net profits.

D-Lab is a program at the Massachusetts Institute of Technology (MIT) that aims to improve the quality of life of low-income households through the creation and implementation of low cost technologies. Like the Social Entrepreneurs Corps, D-Lab also sends students to developing countries to participate in trainings and to facilitate creative utilization of local resources, fostering innovative solutions to local problems. D-Lab's technology development experience encompasses a wide range of technologies, including community water testing and treatment, clean-burning cooking fuels, post-harvest processing, pedal and human power production, mobility aids and physical rehabilitation. D-Lab will be responsible for delivering the CCB curriculum through the Training of Trainers with the SolCom staff, and with developing the appropriate indicators and assessment tools for the knowledge creation component of the project (Components 1 & 3).

XI. PROJECT RISKS

The primary risks of the project identified are following: (i) Lack of sufficient local demand for innovations generated through the Community Innovation Center due to satisfaction with current service providers or as new providers enter the market; and (iii) Difficulty in achieving cost-effectiveness of new technologies in order to make products affordable for low-income rural households. The risks will primarily be mitigated by drawing on the extensive experience of Solcom in implementing microconsignment as well as D-Lab operating in different cultural contexts around the world. The involvement of local actors

Solcom will be the executing agency in the project document and a provision for a direct hiring of D-Lab as consultant will be included due to the "exceptional value from the services provided that cannot be supplied by any other entity". Because Solcom is a relatively new entity with limited experience in project execution, appropriate capacity strengthening and mitigation measures will be incorporated in the project design to assure correct project implementation.

throughout this project will help to ensure that products and services meet local demands and are feasible within the local socioeconomic context. CCB and MCM trainings will further prepare entrepreneurs to deliver high quality services to distant communities in the region, and cultural idiosyncrasies will ultimately have little effect on the project's success since entrepreneurs share local traditions and customs. Finally, the innovative approaches of CCB and the MIT D-lab program are specifically tailored to pursuing low-cost solutions to identified problems in developing countries, using local materials when possible, and sourcing other inputs in large quantities through SolCom, which reduce costs more than local entrepreneurs could achieve independently.

XII. ENVIRONMENTAL AND SOCIAL ASPECTS

There are no anticipated negative environmental or social effects of the project. The distribution of certain products (such as solar lamps or improved stoves) will have a positive impact on the environment. Regarding the social aspects, the project will work closely with the indigenous specialist at the MIF to assure that key community aspects and learning are taken into consideration.

XIII. COUNTRY OFFICE COMMENTS

The Guatemala country office supports this project as part of an effort to work in poor indigenous communities empowering their capacity to develop their own solutions.