

FLOK Society – Social Infrastructure and Institutional Innovation

Proposed Pilot Projects – John Restakis, July 2014

1. National Organic Production/National Organic Producers Association

Background/Context

Ecuador is in a process of transformation with respect to its production matrix and this is especially true of the country's small-scale agriculture economy. One of the most interesting shifts is happening in the field of organics.

Traditionally, Ecuador's agricultural economy has been dominated by large haciendas with links to global agribusiness concerns. Its primary agricultural exports – bananas, coffee, cocoa – are all produced through a mono-cultural plantation model that has been criticized as a prime cause of ongoing wealth inequality and exploitation in the country's rural economy, with poor farmers and indigenous populations being consigned to work and living conditions that rank far below accepted levels of livelihood and quality of life. Agricultural workers are also subject to a wide range of debilitating diseases resulting from the pervasive use of chemical pesticides and fertilizers that not only degrade the soil but also convey harmful chemical substances through the food to consumers.

In contrast to this model of production, a number of organizations in Ecuador are now working to promote the concept of Buen Vivir and linking the idea to sustainable growing practices, organic production, and food sovereignty in rural communities. And while there are a growing number of producers interested in these ideas, there is still a very low level of awareness of these issues among consumers.

Meanwhile, the international organics market is booming. It has an annual growth of 15 % (U.S., Europe, Japan and China) and is valued at U.S. \$ 190 billion. The global organics market entails great opportunities for Ecuador if the country can develop the policies and sectoral institutions to access it.

To be effective, small producers and their allies must join forces to create the institutional supports needed for promoting organic agriculture, for supporting small scale production, for commercializing organic products, for accessing and diffusing knowledge, for developing appropriate technology, and for providing the requisite education, training, and development support for small producers.

Currently, rural organizations including indigenous, Montubia, and Afro-Ecuadorian producer groups are finding difficulty in advancing proposals to address these issues within government. Likewise, while government policies purport to support these aims through documents like the National Plan for Good Living, there is little in the way of a strategic national plan to advance the aims of a small-scale, organic production sector in the agricultural economy of the country.

Proposal

For these reasons, organic producers have set as their overall goal the creation of a new marketing structure with a focus on the expansion of organic production in the country. The association would be oriented to the principles of food sovereignty, sustainability, and organic production, and would assist producers to meet the growing international demand for organic products.

Such a structure would greatly advance the generation of jobs locally, would assist in the entry of organic producers into the global fair trade system, would ensure a fairer price for producers, and would provide the institutional framework whereby traditional farmers can transition to organic

models of production. A national organic producer's association, linked to producer-owned and controlled production and distribution networks locally, is an indispensable element for the growth of an organic agricultural sector in the country.

Pilot Description

The purpose of the pilot project is twofold:

1. To complete a feasibility study for the development of a national organic producers association and to identify the organizations and producers in Ecuador who are prepared to participate in its creation.
2. To implement a development process for the association based on direct producer education, participation, and control. The culmination of this process would be
 - The design of an organizational structure for the association
 - The identification of strategic priorities for its work
 - The convening of a first assembly of organic producers
 - The selection of a Steering Group to guide the further development and incorporation of the association.

51,500

2. Hacienda La Clementina

Background/Context

In 2013, the Internal Revenue Service (IRS) of the government of Ecuador seized the assets of Hacienda La Clementina, for non-payment of back taxes amounting to 100 million dollars. The property is located in the Province of Los Rios and was previously owned by Álvaro Noboa, a former Presidential candidate and one of the wealthiest men in Ecuador. La Clementina comprises over 11,500 hectares and is more than twice the size of the City of Cuenca. According to Global GAP, a consulting firm, it is considered the largest working farm in the world. The estate is devoted primarily to banana cultivation but also includes plantations producing teak, lemons, coffee, and cattle ranching. Over 2,200 hectares of the farm remain untouched and retain a unique bio-diversity in the region.

There are over 1,700 workers employed on the estate. In addition to non-payment of taxes, the Noboa Banana Exporting Company (NEBC) has also been charged with violations concerning the use of child labour, substandard working conditions, the gross exploitation of workers, and the violation of human rights.

On December 4, the estate was auctioned by the SRI to Cooproclem (Co-operative Clementina), for 80 million dollars. Cooproclem was the sole bidder. Financing for the purchase was provided by CFN (National Finance Corporation) as a loan to the co-op. The terms of the loan include provisions that prohibit the sale or subdivision of the estate, and that a specially appointed board and administrator will manage the farm. The co-operative is not at present directly involved in the management of the estate.

As a consequence, a number of issues confront the long-term development and management of La Clementina.

The first concerns the weak organizational foundation of Cooproclem, which is the legal owner of the property and the holder of the CFN debt. There has been no formal education, training, or co-op organizational development involving the co-operative's members. The 1,700 workers who

are the co-op's members, are thus ill prepared for the ongoing task of developing and managing the co-operative and the businesses for which it is nominally responsible. As holders of the CFN debt, this is of crucial significance for the solvency of the co-op and the future of La Clementina as a high profile development project, and symbol of change, for the government.

Second, Cooproclem is not in control of the management and administration of the business activities of La Clementina. It is anticipated that the transfer of responsibility for managing the affairs of La Clementina will pass to Cooproclem over the course of the coming five years. Until such time, an administrative board composed of representatives from CFN, MAGAS, SENPLADES, and SENESYCT are in control of the estate.

However, it is untenable that the co-operative not be in control of its own enterprises and for which its members work. Unless the co-operative has the resources, skills, and leadership to take operational control, as well as legal ownership, of the estate, it is only a matter of time before the co-op effectively collapses, or remains a co-operative on paper only.

Third, considering proposed plans for the diversification and development of other agricultural activities on the estate, as well as the introduction of new practices, technologies, and development projects, it is unclear how Cooproclem will manage these activities without substantial development support including co-op education and training for the membership, leadership development, and long-term strategic planning in which the co-operatives plays a central role.

Proposal

We propose an intensive co-op education and co-op organizational development plan be implemented to strengthen the organizational foundations of Cooproclem. The purpose of this training and organizational development is that the co-operative be able to play the role assigned to it as the owner and developer of La Clementina as a true worker-owned and controlled co-operative farm.

Project Description

This pilot project will develop and implement a comprehensive co-op education and co-op development plan for the members and key stakeholders of Cooproclem and La Clementina. This process will include also the representatives of the Administrative Board of the hacienda.

Secondly, the project will initiate the process for connecting La Clementina to the global Fair Trade system for the sale of bananas and other products.

The co-op education and development process will include the following objectives:

1. Introduce co-op members to the principles and practices of co-operatives, including the background and history of producer co-ops in Ecuador, Latin America, and internationally;
2. Introduce to co-op members selected case studies and examples of other producer co-operatives to learn from their successes and failures and the lessons to be drawn and applied to La Clementina;
3. Provide members with co-op training in democratic decision-making and governance, including the roles and responsibilities of members, directors, managers, and stakeholders;
4. Identify key areas for co-op member and leadership training including: business and organizational administration; financial oversight; accounting and bookkeeping, conflict resolution, member services and support;

5. Identify with members priority areas for co-op development and long-term strategic planning;
6. Identify a process and timeframe for the transition of management and control rights from the Administrative Board to the co-op.

Fair Trade

Included in this development process, will be the sharing of information concerning the possible inclusion of La Clementina in the global fair trade system. This process will include research on the pre-conditions for Fair Trade certification, and a feasibility study on the development of La Clementina produce into fair trade products.

Also included in this study will be an evaluation of how, and whether, the farm practices of La Clementina can be changed to organic methods of production.

Methodology

The training will be based on popular education techniques that place the concrete experiences and aspirations of co-op members at the centre of the learning process. This process will also include the participation of co-op practitioners and leaders from other co-ops to share knowledge and experiences in a direct, peer-to-peer methodology between producer and producer.

The overall training and development proposal will be designed with the participation and approval of the Cooproclem members at the very outset, to establish and acknowledge their primacy and control over a process that will affect their co-operative.

The purpose of the training therefore is twofold:

- a) To impart essential co-operative skills and knowledge;
- b) To impart a clear sense of ownership, control, and commitment to the future of the co-op.

3. Community Water Service Systems

Background/Context

Despite the major strides made in Ecuador for the improvement of essential infrastructure in the country, water treatment remains a key issue for many communities. Indeed, water treatment is realized in only two of the major cities in Ecuador (Quito and Guayaquil). In the country as a whole, only 8% of all collected wastewater is treated. In addition, the level of non-revenue water (water that is lost on the way to the consumer) is estimated at 65%, among the highest in Latin America.

A multitude of stakeholders – the Ministry of Housing, the Emergency Social Investment Fund, the Solidarity Fund, the State Bank, NGOs, municipalities and others – are involved in the sector, adding confusion and complexity to resolving the issue and despite the existence of an Inter Institutional Committee for Water and Sanitation, there remains much room for improvement in co-ordination of services.

Coverage for both water and sanitation services tends to be lower in coastal areas and in the East than in the sierra. In addition, water supply coverage varies greatly by income, reaching about 90% for the top three income deciles in urban areas compared with levels of only about 60% for the bottom three income deciles.

In general, [water service quality](#) is low in Ecuador. Water supply services are interrupted in 50% of the urban areas. Water pressure is well below standard, particularly in poor outlying areas. In 30% of the urban areas, there is no treatment of drinking water and 92% of wastewater is discharged without any kind of treatment.

According to a study in 2004 about sustainability, 38% of systems in rural zones have collapsed, and 20% are seriously damaged. 29% are somewhat damaged and only 13% are considered sustainable (OAS, 2005).

Responsibility for establishing water policy is legally vested in the *[Subsecretaría de Agua Potable y Saneamiento](#)* or *[Subministry of Potable Water and Sanitation](#)* under the Ministry of Urban Development and Housing. However, there is no clear definition of roles and responsibilities between various national and sub-national actors, nor is there an independent regulator of water supply and sanitation services.

While in urban areas municipalities are responsible for the provision of water services, in rural areas more than 5,000 community-controlled Potable Water Boards provide the services. Most of them are under resourced and operate with personnel that are under trained. With little support from government agencies, the boards are left to their fate in abandoned conditions due to very low tariff levels, negligence of care of the water sources, and lack of an institution to help the local water boards since the dissolution of IEOS in 1992 (UN Economic Commission, for Latin America and the Caribbean).

The absence of effective water treatment systems has enormous environmental consequences on natural resources, on the ongoing contamination of rivers and the ocean, and on multiple adverse effects for the health of people who use river and channel water for drinking, cooking, irrigation and household activities, and who feed themselves with fish from rivers and oceans.

Access to clean water is central to the eradication of poverty and the absence of proper water treatment facilities entails direct health costs for the treasury.

Proposal

We propose the recognition and treatment of water in Ecuador as a commons and the introduction of small-scale, user-controlled, co-operative models for the management of local water service systems in rural communities.

Pilot Description

This proposal focuses on the provision of local, community-controlled and co-operatively organized, small-scale water treatment and supply services to rural communities.

The project would focus on:

- Identification of four pilot sites (communities) for introduction/development of community-controlled water systems;
- Development and introduction of co-operative models for the management and supply of local water services;
- Development of local water and wastewater analysis, including the identification of contamination spots and the state of the local water system;
- Development of protection strategies for uncontaminated spring and well water;
- Development of effective monitoring systems;

- Introduction of examples and best practices of successful co-operative water treatment models from other jurisdictions;
- Adoption of open-source designs for rural and small scale water treatment systems focusing on low construction and maintenance costs;
- Development of technical and biological solutions for water treatment for use on a small scale;
- Development of long-term, strategic linkages between local water co-operatives, universities, and online open source networks supporting community water systems.

4. Sigchos – Regional Economic Development

Background/Context

Sigchos is a community of 12,000 in the county of Cotopaxi in central Ecuador. Located in a remote region of the country the region is also the third poorest county in the country. Economic development in the region is focused primarily on dairy production, sugar cane, and small-scale farm production.

Key issues constraining the advancement of economic development include poor regional infrastructure including lack of proper roads; lack of value-added processing capacity for local products (sugar, dairy); monopolization of local distribution and processing by private, international firms; absence of local investment and loan capital for enterprise development; and absence of social/economic organization among local small firms and producers.

Small-scale farmers see themselves confronted with highly concentrated food processing-structures that dictate prices and control selling conditions. The consequences of this are the minimization of independence and the perpetuation of low incomes for small-scale farmers. Lacking local infrastructure and resources for even the most modest industrial development, the region is also totally dependent on imports for all manner of technical and industrial equipment relating to local production systems and processes, primarily in the agricultural economy.

After two visits to the region that included intensive site visits with local producers, consultations with key stakeholders including representatives from local indigenous groups, and a series of community meetings and workshops, it is apparent that there is a great deal of interest in using the expertise, recommendations, and ideas of the FLOK project to promote a number of pilot projects that could advance economic development in the area.

At the most recent series of discussions at the beginning of July, a number of areas were confirmed as opportunities for the application of co-operative models and open source technology to a number of strategic pilots for the region.

In addition, the municipality of Sigchos is preparing to purchase a 2,100 hectares hacienda in the area to serve as a locale for a number of pioneering projects for the region. This investment by the municipality and its interest in leveraging it for promoting economic development represents a major investment of money, land, and resources for the furtherance of a number of pilots.

Plans for this land include:

- a) The development of an Institute of the Andes to promote research into indigenous grains, plants, and cereals and the development of appropriate cultivation techniques for the area;

- b) The development of a comprehensive water system for the area, including water treatment and an irrigation system for area producers;
- c) The building of a machine production factory utilizing open source design and 3D printing technology for the production of farm machinery for local use.

Proposal

Two pilot projects have been proposed as a means of promoting the economic development of the region. The links to the FLOK research holds potentially substantial benefits for not only the regional economy but for replication and application throughout Ecuador.

The first project is the development of an open source farm machine factory. The second is the promotion of ecotourism in the area, with a particular focus on development of the Inca Trail as the focal point for a region-wide tourism strategy.

Pilot Descriptions

c) Open Source Farm Machine Plant

The pilot project would focus on the development of a plant for the production of open-source farm machinery geared to the specific requirements of local producers and the local agricultural economy. The factory would also utilize open-source designs and 3D printing technology for the development of the machinery. The primary market and use of the machinery would be by local producers, but the potential for expanding production to include sales to small producers across Ecuador would also be explored.

Although the proposed factory would serve as a demonstration facility for possible replication across Ecuador (and indeed the entire Andean region), it is also intended that this be a successful business enterprise on its own terms. The factory would serve as a model of open-source design and production; as a model for Ecuador's first 3D printing facility geared to the production of low cost and adapted farm machinery for small producers; and as a model for co-operative ownership among primary stakeholders, including workers, producers, and community stakeholders, including the municipality.

It is also proposed that the open source factory be developed with strong research, teaching, and support linkages to universities and the public school system. All open source designs and products would also be made available through commons licenses for replication in other regions, as would technical expertise in the planning, design, and construction of other open-source plants.

The proposed pilot would first focus on the following aspects of the development process:

1. Completion of a feasibility study for the open source plant. This study would address basic questions including:
 - a. Identification of the most appropriate (and useful) farm machines for production;
 - b. Confirmation of producer interest and support for the project;
 - c. Identification of markets for the machinery;
 - d. Identification of the agricultural sectors for which machinery will be produced;
 - e. Confirmation of investment and capital costs related to type and scale of machinery to be produced;
 - f. Confirmation of technical assistance and expertise required;
 - g. Identification of primary stakeholders and options for ownership structure;
 - h. Confirmation of professional training requirements and costs for plant employees, producers, and other stakeholders.
2. Completion of a detailed business plan for the planning, design, construction, and operation of the open source machine plant.

3. Completion of a multi-stakeholder ownership and governance structure for the plant, based on co-operative principles.

d) Inca Trail Ecotourism Project

During the winter of 2013-2014, the Inca Trail was designated as a UNESCO World Heritage asset. This heritage designation has brought international attention to the Inca Trail as a precious cultural heritage, but to date, the Inca Trail has been associated almost exclusively with the trail systems in Peru and their association with Machu Pichu. The Inca Trail in Ecuador is almost unknown as a tourist destination. Very little has been done to develop the educational, recreational, and economic potential of the Inca Trail in Ecuador.

This pilot project focuses on four primary objectives:

- i. The development of the Inca Trail and associated Inca archeological sites in and around Sigchos as a premier eco-tourism destination;
- ii. The development of a sustainable eco-tourism model that both enhances and protects the natural and cultural artifacts of the region;
- iii. The development of a low-impact and distributed economic benefit model that maximizes the involvement and benefits on the part of local businesses and family households as central to the evolution of community-based tourism in the area;
- iv. The mobilization and involvement of the youth of the region in developing, maintaining, and protecting the infrastructure associated with the eco-tourism project and the evolution of the Inca Trail in this area as an invaluable natural and cultural resource.

The focus on youth is a key aspect of this project. With the absence of employment opportunities for young people in the area, and the urgent need for interesting and challenging employment opportunities beyond the traditional agricultural economy, eco-tourism could play a major role in retaining youth in the region and in providing new sets of skills and employment in a sector that has a broad appeal to many youth. Prospects for the involvement of young people internationally in the project as volunteers is also very high.

As with the open-source farm machinery project above, the Inca Trail Eco-tourism Project would commence with the following:

- a) The completion of a Feasibility Study for developing the social organization, business services, and supporting infrastructure to initiate a first stage eco-tourism plan for the Inca Trail in the area. The study would include:
 - a. Confirmation of available tourism resources and assets in the region;
 - b. Confirmation of possible links to other regional tourist assets such as Quilotoa and Cotopaxi;
 - c. Identification of educational, cultural, community, and business stakeholders committed to supporting the project;
 - d. Identification of leadership among the region's youth to establish a co-operative youth organization as the primary driver of this project;

- e. Identification of the legal and policy measures required to make the Inca Trail a natural and cultural Commons.
 - f. Identification of needed professional training and skills development required among key stakeholders, in particular area youth;
 - g. Estimation of the costs and time required to establish a minimum level of service for the launch of a Sigchos Inca Trail itinerary, with linkages to area archeological sites.
- b) The completion of a Business Plan for launching and operating the Sigchos Inca Trail Project, with a time horizon of five years.

5. Alianza Solidaria – Commons and Community Service Projects

Background/Context

Allianza Solidaria is a co-operative organization in southern Quito, which has been implementing a visionary project of housing and community development on land that is collectively owned by the co-operative. Allianza Solidaria is the largest housing co-operative in Ecuador and the leading housing co-op that is successfully developing an integrated proposal for habitat, community and housing in the country.

Over 25 years, Allianza Solidaria has built Ecuador's largest housing and community co-operative, creating quality affordable housing and a thriving community in one of Quito's poorest neighborhoods. The co-op has built 500 homes, self-financed by its members, and is on track to complete 800 more.

Through pure community effort, the co-op has transformed a garbage-filled ravine – long abandoned by the municipality – into Quito's first reclaimed commons, providing the city with its first bicycle path and a beautiful public park. This volunteer work took eight years to complete. The co-op has plans to transform the other ravines in Quito in the same way.

The co-op has also created Ecuador's first co-operative school, run jointly by its teachers, parents, students and community members, which is not only an international model for its innovation and its inspiring educational vision, but also ranks at the top of Ecuador's schools for the academic, sports, and cultural achievements attained by its students.

Allianza Solidaria is also planning the development of a community shopping center with a focus on fair trade products and community enterprises, a public plaza, and a community service center on site.

With the completion of housing on the co-op site and the interest of the co-operative in promoting other forms of common property and community co-operation projects, there is an opportunity to develop a series of community services structured co-operatively for the residents of this community. In addition, the co-operative school offers a unique opportunity to develop a pilot project that combines the co-operative and environmental values of the school with a demonstration project that could be replicated in other schools across Ecuador.

Proposal

The FLOK proposal with Allianza Solidaria focuses on three potential pilots:

- a) The development of community service co-operatives for the Alianza Solidaria co-operative housing community and surrounding area;
- b) The development of a wind turbine project for the co-operative school;
- c) The reclamation of Quito's ravines as municipal commons.

Pilot Descriptions

a) Community Service Co-operatives of South Quito

The proposed pilot is the identification and development of community and human services that could be provided by social co-operatives in the area. Social co-operatives, which have proven extremely successful for the provision of social and community services in other jurisdictions, are a new concept in Ecuador and provide a new frontier for the application of co-operative and commons principles to the question of community-based care. A process of community development and inclusive education will be launched to introduce the concept of social co-operatives, to identify local priorities for services, and to recruit support and participation from local actors.

Potential community services include:

- Senior Care
- Childcare
- Education Services, linked to the co-operative school
- Car sharing and transportation services
- Food Services, linked to local producers
- Health services
- Etc.

A Feasibility Study will be completed to assess the viability of the proposed services to be provided and based on an assessment of community needs and priorities. Business Plans would then be made for the services of the co-operative(s) to be piloted. Funding, technical support, and resources for co-operative development will be allocated on the basis of these business plans.

This process can also be co-sponsored and provided with technical support from two universities that maintain close relations with Alianza Solidaria.

b) Co-operative School Wind Turbine Project

The Alianza Solidaria Co-operative School is deeply committed to the promotion of environmental awareness and stewardship among its students and has won a number of national prizes for this work. Community service, co-operative values, and environmental responsibility are central aspects of the school's curriculum and educational philosophy.

This project builds on this strong educational foundation and extends its impact by offering an opportunity for students, teachers, parents, and community stakeholders to collaborate on the design and construction of a wind energy turbine to be located on the school grounds. The turbine would be designed to provide the energy needs for all the operating systems of the school.

This would be a small-scale turbine utilizing materials available locally. Technical assistance for the design and development of the project would be provided by energy consultants from Greece who have visited the school and are associated with the FLOK project.

The wind turbine designs would all be open-sourced and available for application in other locales, as would technical assistance.

c) Ravine Reclamation

One of the most remarkable projects undertaken by Allianza Solidaria is the commons reclamation of the ravines adjacent to the co-operative's housing projects. Over the course of eight years, Allianza Solidaria co-ordinated a community-led co-operative effort to reclaim the ravine opposite Quitumbe Bus Terminal, producing a treasured public park and bicycle path for the residents of Quito. The co-op is currently reclaiming and restoring a second ravine adjacent to its new housing project.

This pilot project utilizes the experience and technical assistance of Allianza Solidaria to reclaim additional ravines throughout Quito, with the intention of turning them into public parks and commons and as key tourism attractions for the city. The project would utilize existing ties with the municipality, with urban planning departments at universities, and would mobilize communities and local schools to undertake the reclamation work in selected ravines and neighborhoods.