

Agricultural Development in Rural Colombia

Measurements and Best Practices

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Project Purpose

The purpose of this project is to help UNIMINUTO to serve the economic and social needs of rural agricultural communities by providing recommendations on best practices and indicators to effectively design, implement and measure the impact of their programs.

UNIMINUTO provides high quality education through an innovative, flexible and comprehensive model, centered around social justice and innovation.

Historical Context

Colombia's government signed a historic peace accord with the Revolutionary Forces of Colombia (FARC) in August 2016, ending the country's decades-long conflict. The peace accord opened formerly inaccessible rural communities to government and non-governmental agencies. However, factors that fueled the conflict remain barriers to economic development in rural communities. These factors include weak rural institutions, inequitable access to land, and underinvestment in the rural sector. Colombia boasts diverse ecosystems and cultures in addition to distinct geographic regions. The combination of barriers with ecological and sociocultural contexts of rural communities present distinct challenges to economic development.

Centers for Rural Sustainable Development

UNIMINUTO focuses on training competent, ethically responsible leaders through processes that emphasize social justice and reconciliation. Aligned with this mission, the university recently established the Centers for Rural Sustainable Development (CRSD) through collaboration with the Social Innovation Science Park (SIPS).

The peace resolution of 2016 created a window for UNIMINUTO's CRSD program to serve those individuals in post-conflict areas through their rural agriculture programs. The UNIMINUTO-SIPS team designed CRSD with the goal of developing the rural sector through an educative model and family farming approach.

This analysis seeks to identify best practices for agricultural development in post-conflict rural Colombia and indicators to measure the CRSD's impact. The following report outlines the methods, findings, and recommendations.



Organizational
Enhancement



Rural Education and
Training



Science and
Technology



Microfinancing



Commercialization of
Family Agriculture
Products

Our Approach

Due to the post-conflict context of Colombia, there is insufficient, reliable, and current quantitative data and a historical lack of an government presence in rural communities. As a result, we centered our research on qualitative methods, beginning with a robust literature review to root our research in international best practices. To provide first-hand context

requested by our client, we conducted in-person interviews and site visits in Colombia to better understand how the social and economic realities of post-conflict agricultural development aligned with our initial findings. All research was weighted and filtered by the mission and goals of the clients as well as a criteria of equity, efficacy and administrative feasibility.

Literature Review

104 academic journal articles, government reports, NGO reports

Case Studies

8 Thailand, Myanmar, Afghanistan, South Sudan, Sub-Saharan Africa (and the Journal of African Economics), Brazil, Cuba, and Colombia

Interviews

29 25 agricultural engineering students, 4 employees and professors from UNIMINUTO

Site Visits

4 Ekonuco Granja Agropecuaria
La Cosmopolitana
AulaViva Tropical
El Portal del Güejar



CRITERIA

- Efficacy
- Equity
- Administrative Feasibility



Findings

RQ1: What services and best-practices should be included within the scope of an agricultural program framework in post-conflict communities in Colombia?

Finding 1: Agroecology

Agroecology embraces ecologically biodiverse, resilient farming practices, which diverge from components of conventional farming systems, such as cultivation of single crops and a heavy reliance on chemical inputs. An agroecological approach presents a sustainable alternative to the most common existing agricultural development initiatives, which focus on economic liberalization, international agricultural investment, and export-oriented commodity production (e.g., soy, sugarcane, palm products).

Sources: Brazil Case Study, Cuba Case Study, field interviews, Site Visits (all farms)

Finding 2: Market Connections & Good Diversification

Value added products command higher prices at market, generate increased, non-farm income for producers, and create ripples of positive economic impacts up and down the production chain by changing the inputs and outputs needed for production to higher value products. Farm-based ecotourism takes many forms and creates additional revenue by bringing outside individuals to the farm rather than finding markets for VA products elsewhere.

Sources: Field interviews, AulaViva, El Portal de Guëjar, Literature Review, La Cosmopolitana

Finding 3: Community Building

Rural development depends on interactions between economic, physical, socio-cultural, institutional and technological factors. Thus, to build a comprehensive model to implement through the CRSD, community engagement must be addressed at all stages of the program.

Sources: UNFAO, Colombia, Northern Uganda, field interviews

RQ2: What are the best methods and indicators used to quantify the success of an agricultural program in a post-conflict community?

Finding 1: Meeting the Bottom Line

The success of a family agricultural program is primarily measured by its ability to meet a community or individual's bottom-line. The fundamental fact undermining an agricultural program's fiscal viability, is that crop choices are generally made before prices are set and revenue is realized.

Sources: RAND and La Cosmopolitana site visit

Finding 2: Social Capital

Successful sustainable development programs are distinguished by their ability to address economic and social factors. Lack of social capital manifests through a distrust of neighbors, service providers and the government, making post-conflict areas particularly difficult for organizations like UNIMINUTO to be accepted in the areas they are designed to serve. Research shows that while social unrest may be rampant, social capital can be built in the post-conflict context through the implementation of programs that incorporate traditionally marginalized groups such as women and indigenous peoples.

Sources: South Sudan, South Africa, Colombia, Northern Uganda, field interviews

Finding 3: Key Progress Indicators

Best methods and indicators to quantify success of economic development programs include a broad array of indicators (e.g., economic advancement, power agency and stakeholder participation). Successful interventions are able to connect inputs with expected effects, disaggregated by outputs, outcomes (short- to medium-term), and impacts (long-term).

Sources: International Center for Research on Women (ICRW), Grow Africa, European Commission, OECD

Recommendations

Recommendation #1



When selecting indicators to measure the success of a program an in-depth community diagnostic is recommended. This process is necessary to understand each respective community's context, which in turn identifies suitable programmatic goals. Measurements align with five phases (inputs, activities, output, outcomes, impacts), and each indicator should be born from a clear logic model effectively connecting inputs to intermediate outputs and short- and long-term impacts. Depending on the administrative capacity of a community, measurement of indicators at some stages may be prioritized over others. Upholding the criteria of equity, the process should involve all relevant community stakeholders in designing the programmatic goals and identifying the appropriate indicators. Three categories of indicators support the CRSD's goals of economic empowerment and administrative feasibility: power and agency (i.e., social capital), economic advancement, and reach and process. In particular, metrics that demonstrate whether individuals are meeting their bottom line are essential, though proxies for income may be substituted. Several key recommended potential individual and community level indicators for each area are shown in the table below.

Recommendation #2



Leveraging their educational scope, UNIMINUTO should develop a curriculum that emphasizes region-specific agricultural practices and sustainable strategies to ensure that best-practices are incorporated into a replicable model. The curriculum should also provide resources on community-based ecotourism and value-added products in rural areas, to be utilized by students in communities where such efforts are applicable. Education addressing relevant agricultural technologies that promote revenue creation, may be tailored to highlight opportunities within localized economies. This equitable approach includes those who are typically excluded from traditional channels of knowledge dissemination. To effectively, uphold the pillars of UNIMINUTO and the CRSD program, new aspects of the curriculum should be taught through a prism of equity and justice.

Key Indicators (Rec. #1)	Individual Level	Community Level
Reach and Process	Participant satisfaction # of participants Barriers to participation	N/A
Power and Agency	Ownership of assets Access to information and technology	Farmers involvement in community decision-making
Economic Advancement	How basic needs were met/ capacity to meet shocks Growth in farm/ non-farm businesses Progress-out-of-Poverty Index	Formal/ informal social safety nets Earnings/ growth at community level