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Conflict Resistant Agribusiness in Democratic Republic of Congo

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Abstract

ESCO Kivu SPRL, located in Beni and Butembo North Kivu, is one of the few successful medium sized agribusiness enterprises in the region. ESCO pursues a line of conflict-resistant enterprises: chinchona (quinine), cacao and vanilla. Chinchona is the most conflict resistant product, while cacao is the most profitable. The company operates 26 trucks and 31 small stores, utilizing over 50 agronomists and 16,000 small stakeholder farmers. Farmers receive production support and a 15% premium for quality and exclusivity. ESCO exports cacao to the USA to specialty organic chocolate processors such as Theo's, in Seattle, USA. Vanilla exports also go to USA buyers assisted by VANEX (Association Vanilla Exporters of Uganda). This study focuses on ESCO's conflict resistant business strategies in the Democratic Republic of Congo.

Keywords: Conflict resistant agribusiness, North Kivu, Chinchona, ESCO Kivu SPRL, supply chain

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Company Background

North Kivu, located in the Democratic Republic of Congo is a violent conflict-prone region of Africa. Even after the peace accord of 2008, conflict escalated in the region resulting in loss of lives, farmer displacement, looting, smuggling, ethnic tension and destruction of infrastructure in agriculture (Vlassenroot and Raeymaekers 2004; Vlassenroot and Huggins 2005). The involved parties include state actors of from the Democratic Republic of Congo, Rwanda and Uganda as well as rebel groups such as M23 and Mai Mai (Baaz and Verweijen 2013).

ESCO Kivu SPRL (ESCO) is a privately owned agribusiness company operated from Beni, North Kivu. Established in 1970, ESCO initially focused on coffee production. However, due to a severe outbreak of coffee diseases in the region and local conflict, the company ceased its functions during the 1980s. ESCO was restructured in 1995, with a focus on conflict resistant business strategies. The newly structured company initially invested in quinquina. The bark of the chinchona (or quinquina) tree contains quinine, which is used to treat Malaria. ESCO started diversifying with cacao in 1998 and again in 2000 with the production of vanilla.

The rebirth and success of ESCO can largely be attributed to quinquina. Although, quinquina has been growing in Eastern Congo since the 1800's, ESCO is the main company to develop the industry in North Kivu in the modern era. From 1996 onwards North Kivu has been affected by violent conflict causing land displacement of farmers, pillaging of farms, and destruction of market infrastructure. However, quinquina is largely conflict resistant. It cannot be readily converted to cash and it is not useable in its raw form. The trees can be neglected for weeks or years, and only gain in value. The bark can be harvested when safe and convenient. The trees can withstand violence and vandalism due to their tall, sturdy structure and they offer no apparent benefit for the actors of violent conflict. Needing no day-to-day attention, they are not affected by cyclical farmer displacement due to conflict. Normally the crop becomes profitable in two -three years; trees are cut and the bark is stripped every 5-12 years. The next crop grows from the stumps left behind. The bark is bought and collected locally by the ESCO personnel. The business owns six quinquina stores and six trucks are used to collect the bark. ESCO dries and packs the bark and exports it to Europe, Asia or the USA for the quinine extraction. ESCO has set up a small research plant for extraction and further development in partnership with local plant pathology and pharmaceutical companies: Pharmaquina, Plavuma and Dankis. The company has also initiated collaboration with CIDIP, an organization that conducts research on quinquina and markets improved seeds.

After ensuring sustainability of their business through quinquina, ESCO focused on cacao. Since 2000, cacao has become the most profitable product for ESCO. The profitability of cacao can be attributed to ESCO's astute supply chain management during conflict, relying on local production, research and development, judicious investment strategies on small stakeholder farmers and a fair price mechanism. The company works with local farmers to produce purely organic cacao. Currently, ESCO is working with about 16,000 stakeholder partner farmers. A usual ESCO stakeholder farm is about one acre and typically comprises 1,000 trees. Each of these trees produces approximately one kilogram of dry seed every year. ESCO partners with INERA-North Kivu in Yangambi and other resources in Kisangani to distribute improved seed varieties to the local farmers. They have established a community nursery that disburses production inputs and provides basic training to farmers.

Cocao Beans

Farmers can become impatient and shortcut the cacao bean fermentation process, leading to a lower quality bean. They will attempt blend their lower quality beans with others higher quality beans. To promote accountability and entrepreneurship, ESCO requires each farmer to conduct their own fermentation. Following the cacao harvest, farmers are able to sell and transport their produce through ESCO trucks and locally owned ESCO stores. The business currently owns 20 trucks and 25 small stores for cacao marketing that operate in Beni, Lubero, Nambasa and Enuhumu. ESCO promotes fair prices and production incentives for local farmers who continue farming under economic stress and conflict. ESCO usually pays a 15% premium over the usual wholesale market price of cacao to small stakeholder farmers. This premium provides incentives to farmers to produce and ferment cacao during conflict, provides support for any loss due to violence, and ensures better produce quality and loyalty to ESCO.

ESCO only recently diversified into vanilla production and markets it in Uganda. Currently, they produce only about 200 Kilograms of vanilla per year, which contributes to less than .001% of their total revenue. The challenges with vanilla production and marketing include but are not limited to labor intensive production, low domestic demand and no government research or other industry support. However, the potential for export keeps ESCO interested in vanilla production.

Current Management Structure

ESCO is owned and financed by a group of entrepreneurs from Switzerland, who are long-term investors in the region, understand this regional market, and are motivated by its profit potential. They are led by Mr. Philip Betts who resides in Kampala, Uganda, which is a relatively short distance from Beni and Butembo. He relies on Executive Manager, Ms. Eva Mbanona to make decisions on daily administration. Ms. Mbanona's parents are from Madagascar but she was born and raised in DRC. Mbanona has a depth of knowledge of Congolese agriculture and on the specific industries that ESCO operates. Ms. Mbanona received advanced technical training from the Catholic University of Graben in Butembo. She expresses satisfaction with the achievements of ESCO and projects a long-term association with the company. Her staff includes several managers, plant pathologists, agronomists and extension workers.

ESCO considers local leadership and small stakeholder farms to be the driving force of the company. ESCO collaborates with several national and international plant research and development companies to provide its stakeholder with better expertise and improved inputs. In-house plant pathologists visit stakeholder farms to assist with plant production and to identify diseases. In 2011, ESCO collaborated with GTZ and Dome Foundation to facilitate farmer-training programs.

Key Success Factors

ESCO's underlying success factors include leadership from by empowered local managers, foreign financing, business strategies that can withstand violent conflict, and an efficient production-supply chain. Strategic partnerships with national and international processing firms, combined with an emphasis on human capital development, strong community support and incentive programs are also key components. External financing from the West provides ESCO with stability and shock resiliency to operate in a financially insecure fragile society. Its visionary local leadership and strong stakeholder participation makes ESCO thrive under challenging conditions.

Initially, ESCO was unsuccessful in its coffee business due to plant diseases, lack of market infrastructure and violent conflict. Since its reorganization, the company has developed conflict resilient strategies, local stakeholders and an incentive structure. Quinquina was identified as a conflict resistant crop because of its shock resilient characteristics. The efficient supply chain system of quinquina bark has also contributed to its success. After securing sustainability with Quinquina, ESCO invested in the most profitable business in the region, cacao. Their 15% premium to the farmers serves as an assurance for stakeholder farmers and provides them rent for possible displacement, theft, hardship due to violence etc. Conflict and poverty in the region are chief drivers' of low agricultural training, weak technology, poor roads and transportation systems in North Kivu. ESCO provides farmers with improved seeds, scientific assistance and a transportation facility to counter these issues.

The company has also initiated a savings program for farmers to enable its stakeholders to invest and use their resources wisely. Often, small local farmers are unable to invest their earnings safely, conveniently and with a good return. The savings program tries to support its stakeholders by offering them to manage and invest their funds. ESCO strategic partnerships with local seed and agricultural companies provide them significant leverage in assisting their stakeholders. Partnerships and business relations with international companies such as Theo Chocolate ensure the local product gets exported. ESCO leadership understands the importance of trade and growth; hence the company is always looking to expand both vertically and horizontally.

ESCO's agronomists and buyers serve essentially extension agents who recruit and train farmers. Mr. Bets and Ms. Mbanona themselves were trained and are continually updated by the local Catholic University of Graben, and they in-turn participate in farmer recruitment and training.

ESCO has generated trust among cacao farmers through frequent contact by their agronomists and who assist farmers in solving problems of disease, insect pests and product quality. ESCO's provision of dependable product transport and a 15% price premium, and supporting farmers' financial stability though the savings program are also factors for eliciting farmers' trust. Farmers' reciprocation by remaining loyal to ESCO as their buyer, and by becoming identifiable with the quality of their product (e.g. not mixing their product with that of other farmers) helps to strengthen the bond of mutual trust.

Strategic Issues Provide Business Justification and Plans for the Future

ESCO plans to expand its business in the near future. Cacao is commonly regarded as the most lucrative agricultural product in North Kivu, but will require constant vigilance with respect to disease. New varieties that are resistant to disease and insect pests will be part of the answer. Soil fertility is also a concern. Organic cacao production has been taken to mean non-use of chemical fertilizers. Farmers, agro-processors and regional scientists say that North Kivu soil quality is declining. Research is needed to determine if and how soil fertility for cacao production can be maintained through organic practices. ESCO has excellent scientific talent and ties to Western product markets, financiers and input suppliers. An interactive approach among these parties is needed in order to identify the technologies and operational principles.

North Kivu chinchona is being challenged in the international markets by Asian chinchona. North Kivu has the advantage of ample land with excellent growing conditions. However, it will be important for ESCO to introduce new chinchona varieties that show higher yields of quinine. Continuing steps toward local extraction of quinine will also help the industry remain competitive.

Looking Ahead

The biggest challenges for ESCO and other similar firms in North Kivu region are: armed conflict and violence, insecurity among stakeholders, lack of institutional assistance, absence of farmer co-operatives and training facilities, border smuggling, difficulty in legal international trade, plant diseases and stakeholder credit issues. ESCO's enterprises are often hindered by conflict as they are compelled to close their stores during armed violence. Their stakeholder farmers feel insecure and at times abandon their own farms. The government and NGO's are not actively assisting agricultural production in conflict prone Beni, North Kivu. Although ESCO tries to train and assist their farmers as much as it can, the absence of farmer training schools, co-operatives and micro-credit facilities hurt the growth of agriculture in the region. The government and international organizations do not have any farmer rehabilitation programs to provide shelter and empowerment to displaced and conflict-affected farming households.

ESCO wishes to empower women stakeholder farmers and train the youth population to encourage an efficient work force. Lack of medical facilities is one of the biggest problems for the underprivileged population of Beni, especially for women. The available medical facilities are expensive and are not efficient. The situation is exacerbated due to oppression against women and child soldier recruitment in the area. They believe conflict and poverty can be alleviated through legitimate income earning employment generation. Border smuggling and tension are also hindering ESCO's growth and creates barriers for agribusinesses. The produce is often smuggled to Rwanda and Uganda by illegal means and are sold as a Rwandan/Ugandan product. ESCO wishes to have a larger domestic market and competition created through more businesses such as theirs. They recommend the government intervene on illegal border trade and help create new agribusinesses in North Kivu.

ESCO has not been affected by serious plant disease since its reorganization, however it still remains a threat for the enterprise. Black pod, ring spot, verticilium diseases are most common in the region. Stakeholder farmers also suffer from attacks of insects in their farms.

Optional Perspectives

Until recently, international development agencies and specialists have tended to regard economic regimes that are dominated by armed conflict to be beyond the tools of developmental science. They are relegated to the domain disaster relief. North Kivu firms like ESCO demonstrate that conflict regimes are tractable to modern business principles and provide the framework for communities to emerge from conflict. Young agribusiness scholars, researchers, analysts and advisors would do well to invest their attention to improving conflict regimes.

There is a body of practices and principles in economies afflicted by armed warfare waiting to be identified and utilized in the some of the world's poorest communities. These practices and principles are likely as useful in Afghanistan, Myanmar, Mali, and El Salvador as they are in North Kivu.

Non-traditional business models should be used to understand the ESCO's market dynamics. Conflict-development frameworks are needed for understanding and communicating the relationships between political and ethnic conflict with economic and social development. These frameworks should include non-market competition over resources, threats to human health and human life, and insecurity of land access. From these frameworks, business strategies can be designed to mitigate the risks and build economic and social resiliency into ESCO's supply chains. Such strategies might include farmer communications systems, diversification of its supply base, and increased research collaborations.

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References

Baaz, M. E. and Verweijen, J. 2013. The volatility of a half-cooked bouillabaisse: Rebel–military integration and conflict dynamics in the eastern DRC. *African Affairs* 112(449): 563-582.

Vlassenroot, K. and T. Raeymaekers (Eds.). 2004. Conflict and social transformation in Eastern DR Congo. Academia Press.

Vlassenroot, K., & C. Huggins.2005. Land, Migration and Conflict in Eastern DRC. From the ground up: land rights, conflict and peace in sub-Saharan Africa. 115-195.

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