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**Upgrading opportunities for small-scale farmers in selected coffee value chains in Nicaragua**

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**Introduction**

In the last decades, coffee markets have changed towards buyer-driven value chains. Product differentiation and high-value products play an increasing role due to changing consumer preferences towards healthy, organic, ethical or gourmet quality products. Nicaragua has a good potential to participate in high-value coffee markets because of its favourable geographic and climatic conditions. Since its successful participation in the Cup of Excellence auction event, buyers increasingly appreciate Nicaraguan coffees as high-quality coffees. Substantial symbolic rents can be obtained by marketing differentiated coffees, but farmers' gains of selling certified and high-quality coffees are small (DAVIRON and PONTE, 2005).

More research is still needed to identify the income distribution along the value chain and to analyse the requirements for an efficient participation in these markets at production level. This research aims at identifying the income shares of small-scale farmers in the value chains of Nicaraguan coffee and investigates the inherent governance structure, especially regarding transparency. Upgrading potentials are further derived from the investigated chain structures with respect to enhanced participation of small-scale farmers and their cooperatives in specialty markets.

Upgrading is highly determined by its enabling environment and lead actors' interests for cooperation. Classical forms of upgrading are strategies related to product and process improvements<sup>1</sup>, functional<sup>2</sup> upgrading and chain<sup>3</sup> upgrading. Due to complex business environments and governance structures in the value chains, institutional issues should be further included in the definition of upgrading. These are related to managerial capacity of the cooperatives, organizational processes and services provided by chain actors (KAPLINSKY AND MORRIS, 2000; LAVEN, 2006).

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<sup>1</sup> Improving the product quality or creating a new product identity is a type of product upgrading, whereas process upgrading is related to the improvement of processing efficiencies.

<sup>2</sup> Functional upgrading is the investment in new processing forms, e.g. roasting of coffee.

<sup>3</sup> Chain upgrading refers to adding a new value chain, e.g. in the case of coffee farmers, this could be investing in product diversification with cocoa.

## **Methodology**

The methodological framework for the research is based on the principles of value chain analysis with focus on the institutional setting. The influencing factors for potential upgrading strategies are assumed as governance structure, communication and transparency. The point of entry for the framework is the production level, thus farmers and cooperatives.

Field research took place in northern Nicaragua in 2008. Semi-structured interviews with 34 small-scale farmers and three value chain workshops have been conducted with members of conventional cooperatives and of organic-fairtrade certified cooperatives. Also interviews with seven presidents of affiliated grassroots cooperatives are included in the data. Furthermore, two coffee importers and one roaster in Germany and the US have been interviewed using a semi-structured questionnaire, and key-person interviews have been realized to provide further input to the data. Both, qualitative and quantitative information has been acquired in the interviews regarding the income distribution and position of all actors, information flows and type of relationships between actors.

## **Results**

### Governance structure and transparency

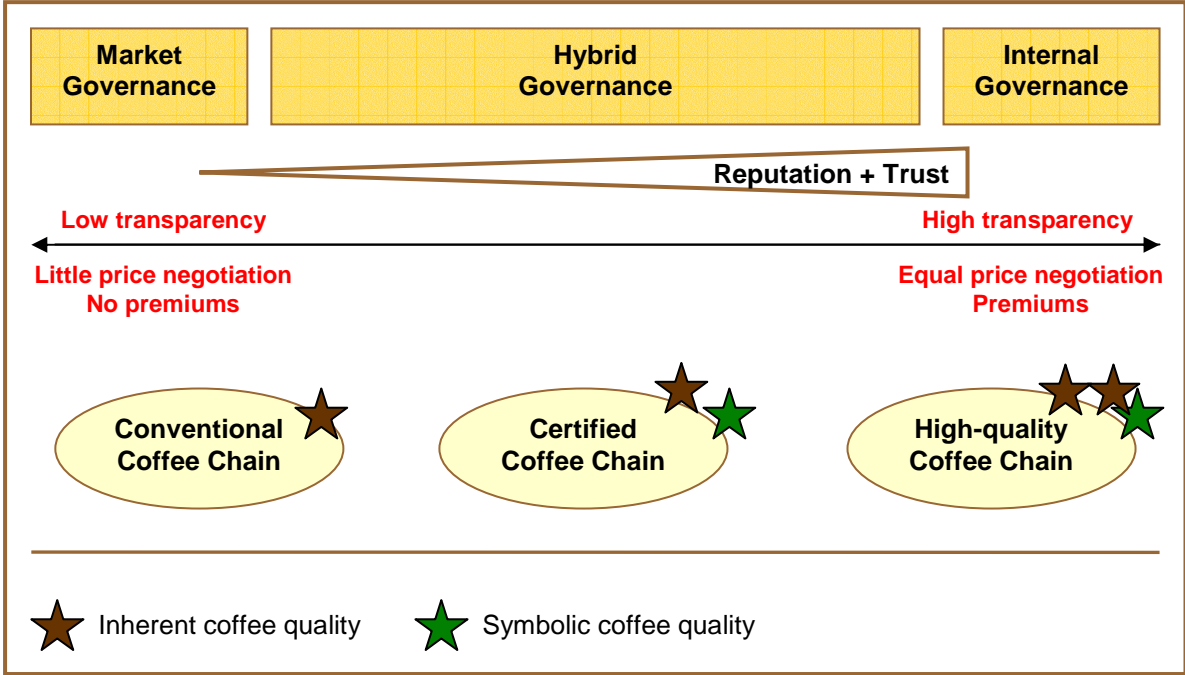
Product standards, quality requirements and contract design are imposed by lead firms, which are, in the case of this study, the buyers (importers/roasters) in consuming countries. The lead firms manage information, resulting in very low transparency on prices and restricted knowledge about quality at farmer's level. Transparency, especially regarding standards, improves in certified chains but still, cost structures and prices are hardly communicated. Quality requirements are more intense in certified<sup>4</sup> and gourmet chains. While price premiums are paid for higher quality, farmers and cooperatives are often not aware, where their coffee is finally sold and at which price.

Farmers thus lack bargaining power over prices and have limited access to information about quality issues and standards. Furthermore, they depend highly on other chain actors due to lacking knowledge and capacities. This is aggravated by a high degree of financial insecurity and dependency on annual credits for production. Enabling an enhanced participation of farmers in high-value coffee chains requires the creation of trust and reputation towards other chain actors, since governance structures in certified and gourmet markets tend towards deeper integration and are based on long term relationships (Figure 1). Additionally increased information management and product definition regarding distinct quality attributes is important to enhance the bargaining power at production level and to realize incentive schemes for quality production (KAPLINSKY AND MORRIS, 2000; DAVIRON and PONTE, 2005). Limitations for increasing the bargaining power at production level are currently the low educational level of farmers and cooperative staff in Nicaragua. Training is required and needs to be provided by either internal chain actors, (non-) governmental agencies or marketing institutions.

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<sup>4</sup> Requirements for specific quality profiles are imposed by lead firms, but this does not necessarily mean that among certified coffees there are better qualities than for conventional coffees. Symbolic quality plays an important role in the segment of certified (especially organic) coffees.

**Figure 1:** Governance structures in different coffee value chains.



Source: based on DAVIRON and PONTE (2005), chain actor and key-person interviews (2008).

Income shares

It resulted that farmers’ income shares of the final retail price are currently lower in certified chains than in conventional ones, which may be explained by the relative high coffee price for conventional coffee in the international market. Furthermore, economies of scale and marketing structures at distribution and retail level in the consuming countries are assumed to have an influence on that income share for conventional coffee. Hence, lower income shares in the consuming country for these coffees could be a result of lower costs for processing and distribution for conventional coffee by large-scale roasting companies and e.g. discounters in retail than companies might have for certified and gourmet coffees, especially in small retail stores.

In terms of absolute prices and premiums the situation is different. Farmers belonging to a fairtrade certified cooperative and producing organic coffee receive higher absolute prices than those selling conventional coffee. Surprising, was the price paid to conventional producers in a fairtrade cooperative, which not always receive a liquidation of the fairtrade premium by their cooperative, and thus only get paid the local market price. Nevertheless, social projects and infrastructural benefits that are provided by the fairtrade cooperative have to be considered, when comparing these producers’ income with conventional producers that are not member of a cooperative and sell to the local market.

Generally, premiums are paid on top of the market price depending on standards, certification and required quality. The double certification, organic-fairtrade, is the best option for small-scale farmers regarding the high premiums paid in addition to the market price. Nevertheless, due to high production costs, those premiums are usually not high enough to provide incentives to farmers for improving their quality. While individual premiums for higher quality are discussed within the cooperatives and are favoured by farmers, they are usually not

compliant with the cooperative's principles of solidarity. None of the farmers received a quality premium individually, whereas average qualities over all producers belonging to a grassroots cooperative are rewarded by the cooperative in the final payment in some cases. This highly depends on the prices received by buyers and also on the cooperative management and its price policy.

### Upgrading

The cooperatives engage in upgrading in order to strengthen their bargaining position and improve farmers' incomes. Product upgrading activities are investments to improve inherent coffee quality for successful participation in niche markets, such as certified markets. Investments are made as well in process upgrading, e.g. in improved production management through extension, investments in wet processing at farm level and in cupping laboratories at the dry mill. Furthermore institutional upgrading is applied in the cooperatives, since they provide technical and financial assistance to their members.

Especially for Nicaraguan small-scale producers and their cooperatives there are high entry barriers for certified and gourmet markets. They face substantial transaction costs to adapt the production system towards the required standards, to improve information flows and quality. Still not all producers have access to their coffee quality results, which would be needed if the farmers' bargaining position for better prices should be enhanced.

### **Conclusion**

Analysis shows that communication among different chain levels is limited by organizational factors that result in asymmetric information. Farmers and their cooperatives provide information on product attributes to upper chain actors, but rarely receive information on market issues, prices paid at other chain levels or final product characteristics. This lack of information limits the ability of small-scale farmers to successfully participate in upgrading activities and decreases their incentive to engage in certification and quality promotion programs.

Although cooperatives invest in upgrading related to inherent coffee quality, production, processing and extension, further institutional upgrading is required to improve transparency among chain actors. Enhanced knowledge transfer could increase farmers' understandings of high-quality coffee markets. The efforts of farmers to produce high quality products should then be rewarded by an adequate price which, until now, is often not the case.

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