

## **Perceived Constraints and Opportunities for Brazilian Smallholders Going Organic: a case of coffee in the state of Minas Gerais**

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Key words: Brazil, Organic Agriculture, barriers, opportunities, certification.

### **Abstract**

*This paper presents the findings of an analysis of the perceived rationales of smallholders for declining or entering organically certified coffee production, in the case Poço Fundo region, Minas Gerais. Based on group interviews and questionnaires, the rationale for farmers who declined organic production were found to be avoidance of perceived risk of harvest failure associated with the process of conversion from conventional to organic coffee production. Rationales for farmers who entered organic production included non-market benefits such as environmental quality and life quality enhancement.*

### **Introduction**

Brazil has the strongest economy in Latin America, and yet rank a global second in income inequality, with a Gini-coefficient of 0.57 (World Bank, 2006). Any major reduction of this inequality requires policies targeting poor households, including smallholder agriculture (OECD 2005).

The organic sector in Brazil grew immensely over the past decade with annual growth of 30 - 50%. The country now has 19.000 organic producers, of which 90% are on smallholdings (Lernoud & Piovano, 2007), producing 70% of the total organic production (Darolt, 2005)

Organic agriculture has perceived potential to contribute to sustainable development and smallholders' livelihood. While certified products may help smallholders gain market access and induce price premiums, use of organic methods may bring additional, non-market, on-farm and intra household benefits. Compliance assessed organics, therefore, are increasingly considered a potential instrument for rural development in Brazil.

Coffee production is one of the economic cornerstones of national development, according to the Brazilian Ministry of Agriculture (MAPA). The vast majority of coffee farms belongs to smallholders, and is important for maintaining rural livelihoods.

On this background, the overall objective of this study is to explore the rationales of smallholder coffee producers for entering organic production under certification schemes.

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## Materials and methods

The study was conducted in Poço Fundo, Minas Gerais, Brazil, during an overall period in Brazil from January 2007 through to May 2007. The study focused on a cooperative, COOPFAM, consisting of 215 smallholder coffee producers, whereof 115 farmers are organic and Fairtrade certified and 100 are only Fairtrade certified.

Data was collected using semi-structured interviews, Participatory Rural Appraisal (PRA) and questionnaires. The PRA exercises were based on a story line, a “post-it” exercise and a group interview with subsequent discussion. The “post-it” exercise enabled the participants to make a visual and dynamic ranking of constraints and benefits of organic production. The outcome the PRA exercises was used for questionnaire construction. Overall, 100 questionnaires were distributed and 40 completed questionnaires were gathered. As the total sample size is small, the findings can be seen as indications, not statistically significant. Within the questionnaire, two ranking matrixes were constructed (on the basis of the post-it exercise) to enable the farmers to rank benefits and constraints (five factors in each ranking matrix was provided).

Semi-structured interviews were conducted to gather qualitative information about the cooperative and to get more in-depth information concerning the questionnaire answers. Furthermore, semi-structured interviews were used to gather data from key informants from the Ministry of Agriculture, an export promotion agency and a certification body about certified organic goods and producers in Brazil<sup>3</sup>.

## Results

The organic farmers in COOPFAM are BSC-ÖKO Garantie certified as well as Fairtrade certified by Fairtrade Labelling Organization International (FLO). Through BSC-ÖKO Garantie the cooperative is smallholder group certified using an Internal Control System (ICS).

Group certification gives opportunities for smallholder farmers to enter the international market, as the cost of inspection from certification bodies, which is often seen as a constraint, is reduced. The cost reduction depends on the structure of the ICS as well as infrastructure in the area (Gwendal Bellocq, IBD). In the case of COOPFAM, the overall organic certification cost is reduced by 30% due to group certification and ICS.

**Tab. 2: Benefits of certified organic coffee production.**

Enhanced life quality	28%
Environment preservation	27%
Market guarantee/Market stability	18%
Higher price of coffee	14%
Better coffee quality	13%

Source: Questionnaire results – from ranking matrix; COOPFAM, Minas Gerais, Brazil, 2007.

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<sup>3</sup> Key informants included Gwendal Bellocq Instituto Biodinâmico (IBD); Ming Liu (Organics-Brasil); Luiz Carlos Rebelatto dos Santos, Ministry of Agricultural Development (MDA).

Organic coffee farmers in COOPFAM perceive enhanced quality of life and environmental benefits as the most significant factors when converting to organic coffee production, whereas the quality and price of the coffee were seen as the least important benefits (fig. 1).

Farmers expressed that local environmental preservation, through absence of agrochemical input, was important for family and personal health, as they had experienced health problems amongst friends and family members due to chemical use in the fields. Pesticide use is often done without proper restrictions in Brazil, leading to (severe) health problems (Ming Liu, Organics-Brasil).

Organic Fairtrade coffee gave 48% higher price premiums per coffee bag (60kg) than that of a nearby cooperative producing conventional coffee. Overall, from one hectare coffee fields, the organic producer could harvest, on average, 25 bags, whereas the conventional producer in the same area could harvest 30 bags. Thereby, per hectare, the organic producers had an increased premium, compared to conventional producers, of 23% (harvest of 2006). Through semi-structured interviews, and interviews with office personal from the two cooperatives, it was noted that the production costs were higher for the organic producers compared to conventional coffee producers in Poço Fundo, leading to lower net revenue for organic/Fairtrade farmers (25% reduction).

**Tab. 2: Difficulties of certified organic coffee production.**

Insufficient funding	24%
Conversion period	22%
More work with organic production	20%
Difficulties getting knowledge of org. management	18%
Bureaucracy/difficulties with documentation	16%

Source: Questionnaire results – ranking matrix; COOPFAM, Minas Gerais, Brazil, 2007.

Overall, farmers found limited financial credit as well as the conversion period to be central constraints when converting from conventional to organic coffee production (fig. 2). Through an interview, a farmer explained that he had planted everything over again in his field when converting as the conventional coffee plants could not survive organic management. Outcomes like his have made farmers in the cooperative risk averse towards converting to organic management.

Concerning perceived “bureaucratic” aspects of certification, the farmers could get help from the cooperative and this was therefore not perceived as particularly difficult. Some farmers stressed that without this help, this could have been a major constraint.

In Brazil, there is emerging a desire from smallholder farmers to move away from bureaucratic certification schemes, with highly complicated and administration intense third party documentation, to a more socio-oriented control, Participatory Guarantee System (PGS). The Brazilian organic law, 10.831, recognizes alternative guarantee systems for direct marketing, and this is especially emerging in the South of Brazil (Luiz dos Santos, MDA).

## Discussion and Conclusions

The results indicate that major rationales for farmers in COOPFAM, Poço Fundo, converting to organic farming include (local) public good benefits such as (community level) environmental benefits and private (household) benefits – such as avoidance of health problems associated with pesticide use – and thus enhanced life quality. It was stressed that risk of crop failure and financial deficits were seen as main constraints when converting to organic production. Despite lower net revenues for the organic/Fairtrade producers, they chose organic production as it seemed to give a more stable income as well as reducing the negative effects of agrochemicals.

The farmers of COOPFAM experienced yield decrease when converting to organic. The farming system had, before conversion, been high-external-input intensive. A study in Mexico showed that when coffee producers converted to organic production from low-external-input systems, the production maintained its yield or even increased in yield as much as 67%. At the same time, the coffee producers in Mexico obtained price premiums, had low production costs, and overall gained higher net revenue (Dimiani, 2002).

Through producing in a cooperative the farmers of COOPFAM gained reductions in the cost of certification. As the reduction depends on the ICS organization, infrastructure and distances (travel expenses to third party inspector) these benefits can be harder to obtain in Northern parts of Brazil where farmers are scattered over a wider area and the farms are further away from the main certification agencies which are mainly situated in Sao Paulo.

Overall, farmers may have different rationales for entering the organic market, depending on their former production system, organisation of cooperative, conversion related risk assessment and their perceptions of benefits.

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## References

- Damiani, O., 2002. Small Farmers and Organic Agriculture: Lessons Learned from Latin America and the Caribbean. IFAD.
- Darolt, M. (2005): O Mercado Orgânico no Cenário Brasileiro. Instituto Agronomico do Parana, IAPAR.
- Lernoud, A., Piovano, M. (2007): Latin America: Country Reports. In Willer, H., Youssefi M. (eds.): The World of Organic Agriculture: Statistics and Emerging Trends. IFOAM, p. 164-175.
- OECD (2005): OECD Review of Agricultural Policies – Brazil. <http://213.253.134.43/oecd/pdfs/browseit/5105091E.PDF>
- World Bank (2006): Brazil Country Brief, <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/BRAZILEXTN/0,,contentMDK:20189430~pagePK:141137~piPK:141127~theSitePK:322341,00.html>