Case Study

Risk management by farmers in Ethiopia

Need assessment[1]

Facilitators notes

Divide participants into small groups and ask them to read the text (10')

Invite them to answer the questions (a) and (b) of the first page of the text and write the answers (15')

Distribute the author's comments

Ask the groups if their analysis is consistent with the author's one or where are the differences. Make some conclusive comments comparing the group answers with the author's analysis. (20')

Sample questions: How can we deliver risk hedging products in rural areas:

- By/Through MFIs?
- Through Cooperatives?
- Directly to farmers?
- Which type of insurance?

Explain that some of these issues with be dealt with in the next sessions

[1] Excerpt from: *Financing coffee farmers in Jimma zone, Ehiopia: challenges and opportunities,* a paper prepared by Anne Bastin for Giordano Dell'Amore Foundation, March 2006. Adapted by Laura Viganò and Luciano Bonomo

AUTHOR'S COMMENTS

Table 1 and table 2

Table 1 brings a wealth of interesting information for framing the subsequent analysis. First, statistics on age mean is around 46: considering that the life expectancy at birth is 42 year for males (and 45 for females), we can conclude that we got the older share of the population; this can be also related to the patriarchal status of the Ethiopian society.

Second, the average family size is 7.2 persons with a standard deviation of 2.8: therefore, we can say that the distribution is rather concentrated around the mean. If we compare our mean with the average of 4.9 persons found in 1994 for the Oromia region[2], we can infer that the average family size has greatly increased during the last decade. This also proves the high demographic pressure in Oromia region (in particular), and on overall in Ethiopia.
Third, the indicator of working people says that a large majority of family members is working: 5.4 persons on an average size of 7.2. It should also be remembered that in these groups are included also children above 5 years old.

An interesting indicator is the average distance between the house and the market, which is equal to 5 km, and the maximum distance in the sample is 15 km. Considering that the standard deviation is around 4, we can say that our rural communities are not really so remote and this corresponds to our sample selection design.

Fourth, concerning the land size, we observed an average of 1.2 Ha each with a minimum of 0.6 Ha and a maximum of 5.5 Ha. Taking into account that the standard deviation is 0.8, we can conclude that the land distribution is rather concentrated around the mean. So, we are facing a very traditional and rather small agricultural structure, which is not conducive to the employment of intensive and productive techniques; this is also reinforced by further evidence on land fragmentation, which is 90.8% of the cases in the sample.

Turning to the focal issue of our work, that is coffee production, table 1 shows that the average size of the coffee land is 0.6 Ha. Coffee accounts for the major part of the farmers' income, almost 71%, which shows a high dependence on this cash crop. The high dependence on coffee is also confirmed by table 6 below, showing that it is the first source of income for almost 96% of the sample. This quasi mono-culture is very risky in bad years like in 1998-1999, when coffee prices dropped dramatically in the region. The second source of income is the maize (corn) crop, which accounts for only 21% of the revenue, also because most of it is used for household consumption.

Table 3

The biggest issue for coffee farmers is their vulnerability towards coffee prices, which is one of the systemic (id est, common) risks affecting coffee producers[3]. Obviously, the living condition of coffee farmers is directly linked with the pendulum of coffee prices. In particular, during the period, small coffee farmers suffer from hunger[4].

[2] See Oromia Finance Economic Buro in Addis Ababa, August 2005.
[3] In particular, many mentioned the difficulties inherent in forecasting prices; moreover, others mentioned that the government should stabilize the prices as it used to do during the Derg regime, where all prices were controlled and fixed
[4] Significantly, one of the farmers observed: "Our life goes up and down with the coffee prices and there is nothing that we can do about it."

The second risk is the CBS disease (Coffee Berry Disease), also called “cholera” by local farmers. There is a high demand for training to learn how to tackle this issue. CBS is causing big losses in coffee production since the grains get black before maturation and become spoiled. Even if remedies are potentially available, mainly through the Coffee Improvement Project (CIP) from the EU, a sizeable portion of farmers has not benefited from the service yet. Therefore, many of the farmers interviewed would need advice on this big issue. Moreover, a growing number of farmers now chooses to compete in international markets with (higher quality) organic coffee, so that they can not use fungicides. The third systemic risk – *at least perceived by farmers as a risk* - is the lack of loans. In fact, coffee is harvested once a year, and those very dependent on it need loans to invest on production and diversify their activities, with other income sources (oxen fattening, bee-keeping activities, etc.). Going to the idiosyncratic (id est, individual) risks faced by coffee farmers, we note that the main one is the illness in the family (19,5%), which prevents them or their family to work on the fields. The main disease in the area is the diffusion of Malaria. Often, farmers do not have the money necessary to pay for medicines, since malaria appears during the rainy season (which corresponds to the lean period).

Table 4

Risk management strategies include income diversification and income skewing activities, while risks coping mechanisms include self protection instruments (such as saving and credit) or informal network arrangements (for example with friends, or institutions like EQUB and IDDIR). Table 4 illustrates that in our sample there is a clear prevalence of risk management strategies over risk coping mechanisms. The majority of farmers confirmed the use of risk management strategies: farm’s activities diversification (in other crops, etc.) (44.8%), coffee quality differentiation (42.5%), reduction of operative costs (20.7%) and secondary activities (18.4%). However, risk coping strategies are also used and consist in commercial credit (13.8%), long term contracts with buyers (12.6%) and saving (2.3%).

With more details, our sample displays that income diversification is mainly possible for entrepreneurs thanks to the loans given by MFIs: in fact, as it will be showed later, the amount necessary to buy an ox (around 800 ETB), or to start a new activity (such as bee keeping, which is a good source of income in the region), is usually obtained only from these formal micro-finance institutions, and result to be too high to be obtained from informal sources (friends, money lenders, etc.). The second risk management mechanism is the production of organic coffee that, being sold at higher prices, is able to guarantee farmers with a more interesting income. Our survey and focus group discussions showed that the Oromia Coffee Farmers Cooperative Union (OCFCU) and some of the primary cooperatives are intensively involved on this issue, together with local farmers.

From the interviews with households and focus group discussions we realized that innovative risk management instruments such as futures and options are not diffused in the sample, mainly because they do not have information (and understanding) on them. Moreover, the problem is also on the supply side, since these products did not diffuse in Ethiopia due to the absence of a developed financial market (including a proper stock market). It is also interesting to analyze the main risks in relation with the size of land owned by farmers.

Table 5

From table, it appears that the smaller farmers having less than 1 Ha are more subject to the systemic and idiosyncratic risks than the medium farmers.

The smaller is the land size, the more vulnerable are the producers towards the following risks: facing the weather conditions, volatility of prices, coffee disease , disease in the family and scarcity of land. While the medium farmers are suffering the most from the lack of access to financial services. This observation appears to be logical since the poor farmers do not have the capacity to repay the loans as they have to first think of the subsistence means. In opposite, the better off farmers do have bigger needs and capacity to repay, therefore they are more suitable to borrow money to pursue further investment on their farm.

Table 6

Table 6 shows the strong interdependency of the small farmers who have to sell their labor to bigger farmers: 68.8% of them are concerned by selling their labor or working in town in order to cope with the different risks. 72.7% of these producers also sell in advance their production to bigger merchants at a fixed price in order to get some money during critical period (lean season). Only a small proportion of farmers (2.3%) manage their difficulties by saving while none of the small ones save; this observation is logical since small farmers do have first to fight against subsistence needs, before being able to save. Derivative products are not used (and not known).

Cooperatives and farmers

From the quantitative data and the findings, we can conclude that being member of a primary cooperative has helped most of the coffee farmers to have access to Financial Services. We also observed that there is a significant association between being a member of the cooperative and the increase in income. However, the results from the focus group discussions hold in the 4 kebeles, showed many difficulties which, taken together may offer another explanation for the above association. Indeed, some people within the cooperatives committees were bitterly complaining about the non-transparence in the governance of the cooperatives, where political influence and interference may distort the mechanisms of choice for the funding[5]. One of the coffee farmers interviewed described the relationship between the farmers and the cooperatives in this way: "People get changed in the cooperative but the functioning is the same over all these years… However, all the farmers are interdependent with the cooperatives: as it needs us, we need it. What we need is to get well organized, to have training for better knowledge, and information on the markets. For all this, there is some promotion work to be done in a fair way from the government." From the different tables analyzed we can conclude that participating in coffee primary cooperative help with better access to financial services and higher income, compared to individual farmers who do not belong to any kind of organization.

Insurance products

This is a big issue for coffee farmers who told us, they were very vulnerable to systemic and idiosyncratic risks but do not have protection. There is no specific risk- insurance instrument to protect the coffee producers from price instability and other risks. They rely on their savings, when they do have savings, or on the family and community to help them when the problems and emergencies occur. However, the MFI Ocssco has launched an insurance product that is similar to a micro life insurance, protecting both the farmers and the MFI in case of death from the borrower. It is a step forwards to protect at least the family from indebtedness once the household has died.

[5] The fact that only one cooperative out of four got access to some amount of loans from the Union, shows that there are still many problems inside the primary cooperatives. Good governance and democratic mechanisms of some cooperatives are still to be founded in order to be effectively restructured.

Nevertheless, it is responding to the producer's demand of insurance product towards coffee prices instability since their life is strictly linked to coffee. Also during the focus group discussions, it appeared clearly that most of the farmers did not understand the aim of the new insurance product and felt like being forced to pay for a service, which did not benefit them directly and would help more the MFI rather than helping them. Thus, there is a need for better training and communication between the financial providers and the clients.