SUSTAINABLE AGRICULTURE AND VALUE NETWORKS: AN OPPORTUNITY FOR SMALL GROWERS TO EXPORT SUCCESSFULLY?

A paper contributed by
Gabriela Alvarez
Consultant, Latitude
Switzerland

Introduction

It is estimated that there are 25 to 30 million coffee farmers and nearly 70% of global coffee is grown in farms of less than 5ha (Venkatachalam,). In West Africa, approximately 10 million people live in cocoa farms averaging between 4 to 6 ha. Tea, fresh fruits and vegetables as well as other agricultural products also affect large number of small growers in developing countries, whose livelihood is heavily impacted by the production and trade conditions in these markets. A key challenge for development is to reduce rural poverty in developing countries by increasing production and export of these agricultural products.

Tariffs and quantitative restrictions have been lowered in recent years as a result of negotiations at the World Trade Organization. However, subsidies to local agricultural producers remain very high. More importantly, sanitary, phytosanitary requirements and traceability requirements[1] have become more extensive and more stringent as a result of food scares in the past decade. Some agriculture products have also become more differentiated (ex. gourmet coffees and chocolates, fresh tropical fruits, counter-season vegetables, etc.) and large retailers or food processor companies impose requirements for quality, reliability and product differentiation that demand a higher level of competence as well as a closer coordination of the entire chain.

For small growers, these requirements have become 'de facto' new barriers to trade. They are particularly difficult to overcome by small growers, lacking the scale, financing and technical know-how of their larger counterparts. In the dairy industry for example, the requirement that milk be refrigerated at the farm level was identified as the main reason for marginalization of thousands of small producers in Brazil (Reardon & Farina,). Similarly, in the fresh vegetables market, the requirements specified by large retailers in Europe for cost, quality, delivery, product variety, innovation and quality systems led to a concentration of exporters in Kenya and Zimbabwe, effectively excluding the small producers from participating in the export market (Dolan & Humphrey, 2000).

> *"The livelihoods of small growers focus mainly on survival. It is characterized by fragile entitlements, self exploitation and unwaged family labor income, weak or depleted human and natural resources with livelihoods crisis-crossed by periods of off farm work and temporary migration".*
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> *M. Lakshmi Venkatachalam, former Chairperson, Coffee Board of India*

What are the options for small farmers under these new conditions? Will they be excluded from agricultural value chains dominated by large buyers and few, large suppliers? Are there ways to help them export more successfully and to capture more of the value being created by differentiated products to the consumer?

Consumers in developed economies and non-governmental organizations (NGOs) have recently emerged as a new force in promoting the welfare of the small producers in developing countries. An increasing number of consumers are demanding more from the products they buy at the supermarket, and include considerations of social and environmental concerns in their purchase decisions.

Some of these requirements are basically around complying with minimum standards (ex. child labor, transparency in transactions, etc.)[2]. These can be pursued under the same organization structures.

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[1] A term used to define an aspect of the quality of a processed raw material or manufactured product, specifically that certain variables can be verified by a chain of retrievable documentation generated at the time and place during which the material was handled or produced. Some examples of traceable variables include dates, locations, growing conditions, process conditions, lot numbers, measurements, etc. ...

[2] Among the largest is The Global Compact, a UN initiative that engages firms in implementing ten principles drawn from human rights and principles on environment and development. It involves over 2000 companies worldwide, several UN agencies, several transnational NGOs and international labor federations. Other programs consist of established social or environmental standards verified by

More interestingly, when corporations integrate their requirements imposed by high quality standards and supply chain efficiencies requirements with sustainability concerns, new forms of organization emerge. These “value networks” involve farmers’ cooperatives, NGOs and governments cooperating in sourcing programs that offer superior value to the consumer while securing a more “fair” deal for the farmer, and that specifically contemplate the social, economic and environmental sustainability of the production process.

From courageous isolated experiences, alternative forms of organization and public-private cooperation programs have expanded to become a noticeable presence in corporate sourcing programs and in development agendas. Global sales of fair-trade certified products exceeded US$ 1 billion in 2005, growing 37% only in the last year. Global organic food products are an established segment of the food industry at US$ 35 billion and growing also at double digit rates in European and North American markets. Large corporations, such as Marks and Spencer, one of the largest food and clothing retailer in UK, switched its entire range of tea and coffee to Fairtrade certified in 2005.

This form of organization combines the integration of the activities across the value chain but it also differs from other forms of buyer-seller integration in two major ways: it seeks to integrate a large number of less affluent, smaller producers into global supply chains and it explicitly includes social, economic and environmental goals that benefit the broad local community, offering an opportunity to upgrade the living conditions and potentially escape the cycle of poverty.

“The key challenge thus confronting policy design and implementation is not whether to take part in the global processes but how to do so in ways which provide for sustainable income growth”

(Kaplinksy, 2000).

Corporations, NGOs and Governments: New partners in development?

The design and implementation of development goals and programs has been traditionally a role for governments and international organizations. Governments will always play a critical role in legislating and regulating public policies that are enablers of efficient markets and stimulate economic development. But there has been a recent openness to complement their efforts with those of private initiatives. The vast resources and the management efficiency of the private sector has have attracted the attention of governments and international organizations, especially in developing countries where governments find themselves facing looming social and economic goals with limited budgets or resources.

The size and power of the private sector has indeed vastly increased in the last three decades. Today, over half of the world’s largest economies are transnational corporations (TNCs) and not nation states (Anderson & Cavanagh, 2000). According to a recent UN report, the overall number of TNCs in 2004 had risen to 70,000 firms with at least 690,000 subsidiaries and millions of suppliers and distributors connected through global value chains (UNCTAD, 2005). These corporations have concentrated an increasing percentage of the global assets, affecting the lives of people and organizations around the world as consumers, employees, suppliers, governments and communities in general.

As a result, there has been increasing pressure on TNCs to act in a more responsible or ‘sustainable’[3] way. Be it because of positive incentives (the opportunity of increased value of the brands or of

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certification processes that communicate the compliance to the consumers concerned with such goals. Fairtrade, Utz-Kapeh and Bird-Friendly certification programs are all part of these third party verification schemes

[3] Sustainable Development is development that ‘meets the needs of current generations without compromising the ability of future generations to meet their needs and aspirations’ (Report of the World Commission on Environment and Development, 1987). It is frequently used to address social, economic and environmental concerns.

attracting responsible investment[4]) or because of normative beliefs (all stakeholders are valuable in their own right) or a fear of being the target of negative publicity campaigns, the attention given by corporations to stakeholders[5] interests has increased, and the expanding number of sustainable sourcing programs has indeed been a consequence of this shift.

"… having created the new global economic space that is transforming how people live and work the world over, [companies] ought to be held accountable not only to their shareholders but also to a broader community of stakeholder who are affected by their decisions and behavior…"
John G. Ruggie, "Reconstituting the Global Public Domain"

Non-Governmental Organizations (NGOs) are to be found behind much of the pressure exerted on TNCs. The global non-profit sector has itself grown to a $ 1 trillion-plus turnover. According to a recent study, it could now rank as the world's eighth-largest economy in the world (John Hopkins, 2003). A large and powerful NGO sector can also, by being focused, quick, and generally perceived to be more "trustworthy" than corporations, have a profound effect on how corporations behave. "By using media and the more egalitarian and pervasive distribution channel for information created by the Internet, NGOs have more powerful tools than ever to threaten corporate reputations" (Argenti, 2004).

One area of particular focus by NGOs has been TNC relationship with suppliers, especially from developing countries. High profile clothing brands like Nike and Gap have seen their reputations tarnished by allegations of exploiting child labor. The coffee company Starbucks, having been targeted by the NGO Equal Exchange, engaged in alternative sourcing mechanisms to shift part of its sourcing to "fair trade" coffee.

But as demands on NGOs also grow, many of them are shifting from challenging the system from outside and spotlighting problems to participating more actively in developing and implementing the solutions. From being 'outsiders' and 'pressure groups', NGOs are increasingly being portrayed as being 'insiders' and 'program partners' in sustainability projects.

If you [as an NGO] are not talking to business, you are just preaching to the choir. The real change to protect the environment is going to come from the business sector"
SustainAbility report, 2003

It is in this context that value networks have emerged. They actively involve the players in the direct supply chain (such as raw materials, agriculture producer, exporter, branded buyer and/or retailer, etc) as well as other stakeholders playing a role in promoting the quality of efficiency aspects of the chain (ex. Research institutes, universities) or the sustainability of the production process (ex. NGOs, local governments, multi-lateral cooperation agencies, etc.).

These programs span from establishing minimum criteria for the respect of social and environmental rights to sophisticated private-public joint projects, integrated to the core business of the enterprises and actively contributing to the sustainable development of the community.

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[4] The market for socially responsible investment has reportedly grown to over US$ 2 trillion in investment capital. Approximately 200 mutual funds now screen for environmental, social and economic factors, the so-called "triple bottom line" of corporate performance

[5] The term 'stakeholder' was introduced in the 1960s proposing that instead of focusing exclusively on stockholders (shareholders), a firm also needs to be responsible to a variety of stakeholders without whose support the organization would cease to exist. A commonly accepted definition of stakeholder as 'any group or individual who can affect or is affected by the achievement of the organization's objectives' was introduced by Freeman (Freeman, 1984) in his influential book *Strategic Management: A Stakeholder Approach*

"Although it is the Government's responsibility to provide public goods, this does not always happen simply because of the sheer magnitude [of the challenge]. Sometimes companies do raise questions about appropriate boundaries, but today the debate is less about public vs. private – it is accepted that companies should supplement the Government's effort to bring about all-round development"

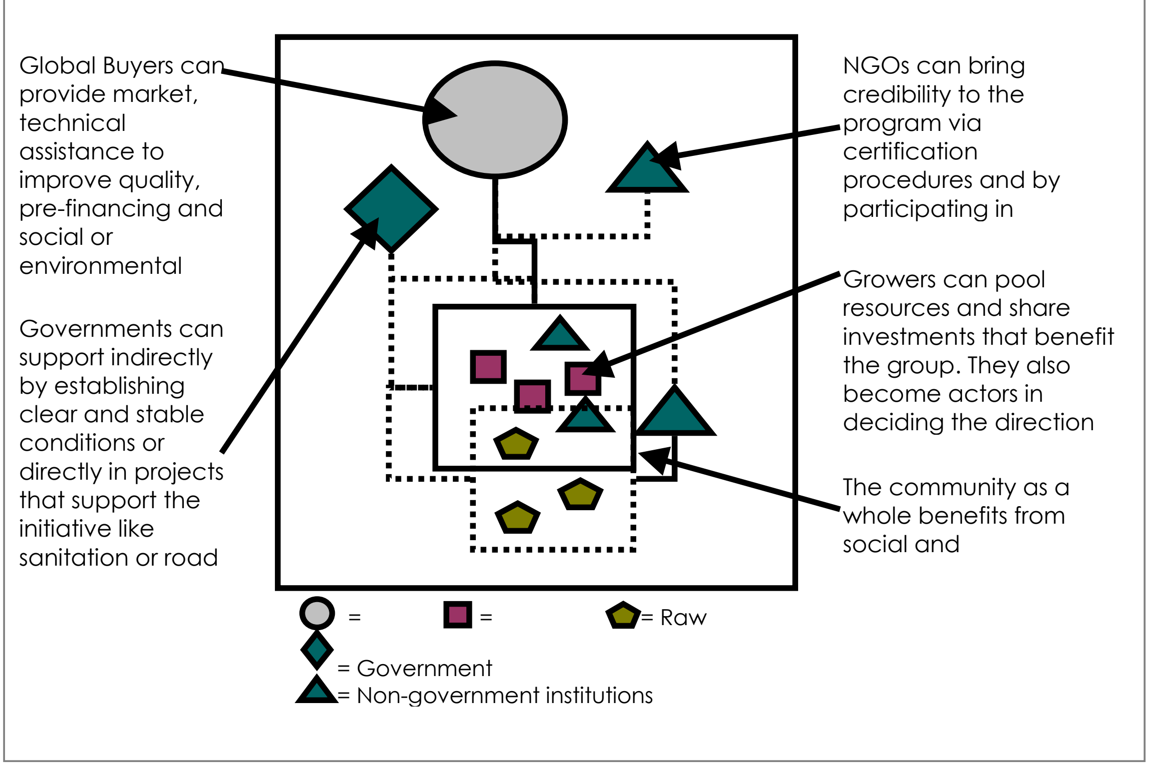
Sushanta Sen, Confederation of Indian Industry

Value networks: An opportunity for small growers to participate in global trade?

Value networks are forms of organization structured to implement sustainability programs. They involve multiple players and are regulated both by market transactions as well as inter-organizational relationships. They involve players in vertical supply chains (such as raw materials, agricultural producer, exporter, branded buyer and or retailer, etc), in horizontal relationships (such as consortia, growers' cooperatives) and related stakeholders playing a role in promoting the quality of efficiency aspects of the chain (ex. research institutes, universities) or supporting other aspects of the process. NGOs, local governments, multi-lateral cooperation agencies are involved both in economic development and in sustainability issues.

Figure 3.1 illustrates how such a network can be structured. Initiatives tend to be "driven" or initiated by a global buyer initiative. Food processing companies or global retailers can decide to shift a portion of their supply chain to integrate sustainability concerns. Social or economic development concerns generally involve a large number of small suppliers in the process. The role of cooperatives or other entities grouping the efforts of the producers become key actors in the network, generally responsible for the coordination of critical phases of the supply chain and the destination of the social surplus. Transmission of know-how and technical support can be provided either by the global buyer (in the case of technology or business know-how) or by other institutions (for example NGOs in the case of social or environmental sustainability). Governments can get involved indirectly in these initiatives by providing a legal and macro-economic framework, but also directly by investing in specific infrastructure or participating in financing schemes.

Figure 3.1: Value networks in sustainable programs



How does this compare to other alternative export options for the farmer?

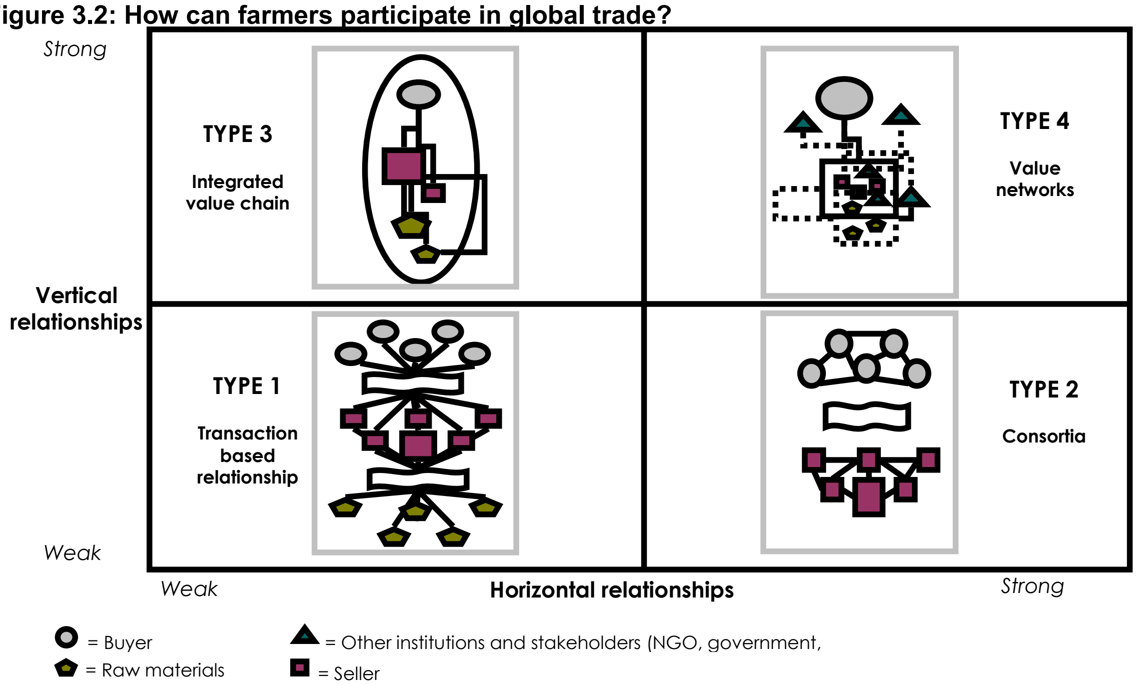
"Value networks" is one of the ways in which farmers can participate in global trade and it is a form that suits the objectives of sustainability programs very well. But farmers can also be integrated into global trade via market transactions or integrated supply chains. How does the value network form of integration with buyers differentiate from other options?

Figure 3.2 identifies four types of buyer-seller relationships characterized by the degree and extent of the horizontal and vertical relationships across the different organizations.

The vertical axis measures the intensity of relationships that involve exchange relationships along stages of a supply chain and where one unit acts as a 'buyer' and the other one acts mainly as a 'seller' of services or goods. This would involve the entire production process, from seeds to a finished food product to the end consumer.

The horizontal axis measures the intensity of relationships across similar units, where there is not a direct buyer-seller relationship. A stronger relationship can occur between firms linked in associative or consortia links (ex. growers cooperatives).

Figure 3.2: How can farmers participate in global trade?



Type 1 is a traditional 'Transaction Based Relationship', a set of discrete, market-based transactions and virtually all necessary information is contained in the price of the product that is exchanged'(Webster, 1992). This is the traditional way trade in which trading of commodities is conducted and is still the format that rules the trade of many undifferentiated agricultural products. The small grower in this case is a 'price taker'. As it happened in the coffee market in the early 90s, a surplus of growers can drive the market price well below subsistence levels and farmers are subject to the market shifts. There is also little possibility of upgrading the capabilities or capturing some of the value that is created along the supply chain.

"Consortia" relationships (Type 2 in the diagram) are characterized by a high degree of horizontal interaction. Grower cooperatives are one example of horizontal type of relationship, integrating a number of small growers to increase their bargaining power or pool resources for joint benefit. Export consortia are one example of this type of relationship. An export consortium is “a voluntary alliance of firms with the objective of promoting the goods and services of its members abroad and facilitating the export of these products through joint actions” (UNIDO, 2003). By cooperating in promotion or in overcoming technical difficulties common to all members, small growers can increase their competencies and access new export markets.

Type 3 relationships, “Integrated Value Chains”, exhibit a very high degree of coordination between a buyer and a seller throughout the entire production system. As requirements for technical innovations, traceability and quality system requirements increase, this relationship has become a significant form of integration. But, as mentioned in the Introduction section, it tends to favor large farmers that can cope with the requirements imposed by buyers, excluding small farmers that don’t have the scale or the capabilities to compete.

Value networks are represented in the diagram by Type 4 relationships. They display a higher intensity of vertical integration as well as horizontal integration across growers, global buyers as well as other support organizations such as NGOs, international organizations and other institutions that perform functions required to create value to the consumer. As in the integrated value chain, communication and product flows across the chain are closely integrated, creating a stronger end product for the consumer. But coordination, technical and infrastructure requirements are spread among different players. This concept is related to the concept of cluster defined in as much as a ‘geographically proximate group of interconnected companies and associated institutions in a particular field linked by commonalities and complementarities’, but it is also less constrained than clusters by spatial restrictions, incorporating the international buyer as a key player in the network[6].

A fair cup of gourmet coffee?

Coffee is one of the first internationally traded products to engage in sustainability programs. Most of the largest roaster companies have initiated some sort of sustainability program, many among them have established or are in the process of establishing “100% sustainable” or “100% Fair Trade” brands.

The origin can be traced back to the coffee industry crisis in the early 90s. An initial supply constraint in Brazil, followed by high prices prompting a surge in production, and a change in the cost structure introduced by Vietnam and Brazil, led to a deep crisis in the industry and pushed a large number of small growers across the poverty line, with no financing capability, no possibilities of investing in upgrading their production and least of all to think about social or other types of investments.

At the same time, a portion of the consumers that were once freely sipping $4 cappuccinos in large cities began being more concerned about the conditions of the coffee growers and about how much of this amount actually made it to the person working the fields in some distant developing country.

Though the conditions were given, maybe not much would have happened without the NGOs selecting the issue as one worth pursuing. NGOs have an ability to focus on specific issues, use sophisticated communication mechanisms and enjoy a higher degree of trust from the general public. On a first phase, the demands were focused on gaining better conditions for the workers, threatening to damage corporate reputations, as was the case of Global Exchange targeting Starbuck’s annual shareholders meeting in early 2000.

A second phase seems to be emerging. On one side, NGOs are expanding their areas of concern to the economic well-being of a larger community, and the promotion of social and ecological investments. On the other side, they are also shifting their focus from being outsiders clamoring for

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[6] A more comprehensive review of clusters and their role in export strategy can be found in “Innovations in Export Strategy: Competitiveness through export clustering” published by the Executive Forum in 2005

justice to being involved in the programs they promote, being a part of the solution and collaborating with their not-so-long-ago corporate enemies.

A broad range of certification schemes and joint programs have emerged to aid in providing guidelines for implementation and coding the communication with consumer. Each company can determine their own (for example Starbucks' C.A.F.E. and Nespresso's AAA – see insert). These are called first party certification schemes and they can be crafted according to a company's specific needs, incorporating other areas that may be particularly relevant for the corporation. Second party programs such as the Sustainable Agriculture Initiative is a voluntary set of guidelines established by a group of major food industry players. The goal of the SAI is "the definition and implementation of commodity-specific guidelines for sustainable agriculture which are harmonized along the food chain". Third party schemes are generally proposed by NGOs. They are the most prevalent in agriculture today and include Fair Trade, Utz Kapeh and Rainforest Alliance. Fourth party certification schemes have also been established to create a multi-stakeholder voluntary scheme. The Common Code for the Coffee Community (4C) initiative was launched in January 2003 was promoted by the German Development Cooperation Agency (gtz), and it involves producers, buyers, cooperation agencies, NGOs and Trade Unions. The code stresses "minimum" standards that are shared across many of the other certification programs such as minimum salaries, abandoning child labor, allowing trade union membership, which will probably soon become "minimum requirements" to trade.

Starbucks: Combining Fair Trade and its own approach

Starbucks combines its own approach to social and environmental sustainability with purchasing based on other parties' certification schemes. Their own program, C.A.F.E. (Coffee and Farmer Equity), consists of a set of guidelines that include 28 social, economic and environmental indicators against which suppliers (farmers, cooperatives, processors and exporters) are evaluated. Quality and economic transparency are prerequisites. For the others, a point system is assigned. Final scores are determined by independent, third party verifiers. In 2005, the total green coffee purchased within the program represented 24.6% of total purchases (Starbucks, 2005). An additional 7% of its total purchases are made of "Fair Trade" certified coffee and "Shade grown" certified coffee.

Starbucks presents it as a "commitment to purchasing high-quality coffee in a socially responsible manner" and bases its policies on six principles:

- Paying premium prices to help farmers make profits and support their families
- Encourage participation in C.A.F.E. practices, Starbuck's own social and environmental guidelines for producing, processing and buying coffee
- Purchasing conservation (shade grown) and Fair Trade Certified coffee
- Investing in social development projects in coffee producing countries
- Collaborating with coffee producers globally on coffee quality, production, processing and research through a team of experts

Cooperative Café Timor (CCT) in East Timor provides an example of the type of program Starbucks has developed in collaboration with NGOs, cooperation agencies and governments. Since 1995, Starbucks has purchased half or more of CCT's coffee and paid at least 30 percent above market rates. It was initially backed by US government funding through direct grants and Fair Trade Premiums, the program helped community development initiatives such as a rural water system and a network of primary health clinics. In another project in Cuzco, Peru, Starbucks initiated a joint venture with EcoLogic Finance, a nonprofit lender to sustainable businesses in environmentally sensitive areas to provide the financing needed to purchase coffee from cooperative members. EcoLogic Finance also received support from USAID, Calvert Social Investment Foundation and the Rudolf Steiner Foundation to finance "pre-shipment trade credit" which helps cover expenses during the six-month "cash gap" between the harvest and receipt of payment for the crop. With over 90% of the production being certified by one of the sustainability certification programs (i.e. Fair Trade, organic, Rainforest

Alliance) premiums have enabled the cooperative to provide training to farmers, offer a micro-credit program, and set aside forestland for habitat preservation

Nespresso: Quality and sustainability

Nespresso, a division of giant consumer products company Nestlé, has also developed its own approach to creating a green coffee-sourcing program. Nespresso's AAA Sustainable Quality Programme" involves suppliers, agronomists and The Rainforest Alliance, a non-governmental organization. The organizations have jointly developed a farm assessment process called TASQ (Tool for the Assessment of Sustainable Quality) which monitors the performance of farms and milling stations across quality, social, environmental and economic aspects.

Projects involve support for the acquisition of processing machinery in Colombia with local cooperatives, a tree-planting project in Costa Rica in partnership with the local government and The Rainforest Alliance, and technical cooperation with coffee trader ECOM in Nicaragua.

What is interesting about these two examples is the increased integration of sustainability concerns in relationships with suppliers and a realization that in order to work in programs that promote reduction of poverty and social or ecological investments, participation of other organizations is required. These organizations are essential because of their technical knowledge, credibility, political and financial muscle.

The coffee crisis and the subsequent attention that consumers gave to the social and environmental issues in the industry definitely played a part, but even in the current upward swing in coffee prices, the programs seem to be well established and expanding their reach.

Implications for development

Though coffee is the most important sector in which different forms of "sustainable " programs have been applied so far, it is important to bear in mind that the scope and reach are very limited. Aggregate sales represent less than 1% of total coffee sales. Even accounting for corporate customized plans like the ones run by Starbucks and Nespresso, the total sales represent a very small portion of total green coffee sourcing.

It is however encouraging to observe the early results of these programs. In corporations where the programs have been introduced in core areas such as the supply chains and where the scope of programs is related to what the corporation is about and not a charity exercise, results are being achieved, programs are being longer lived and local communities are being positively impacted by these initiatives.

Governments and international development organizations are observing these experiments with increasing interest. The credibility they bring to the programs and the expertise in social and economic development can be a valuable contribution to the execution of this type of projects. These programs have an opportunity to be considered and integrated with broader development initiatives.

By getting involved as actors instead of off-stage commentators, NGOs risk their reputations. It is clear, however that for the ones participating, it is a much needed step forward and that the impact that they can achieve by being "insiders" complements and makes more credible their media campaigns.

Finally, and more importantly, are the farmers and local communities better off? Price premiums, stability of prices and crop financing directly impact their ability to plan their production and be financially independent. Investing in quality and equipment has also enabled farmers to upgrade their capabilities and the quality of their products. Finally, the social and environmental investments can be very important for a small community. The organization required by the community to determine the use of the funds and their execution also benefits the community with upgraded coordination and governance capabilities that can be applied to other projects.

Results are encouraging, but a number of challenges still remain before value networks in sustainability programs can be recognized as tools to pursue broader corporate and development goals. The appropriate boundaries of responsibility among the different actors is not very clear, the governance mechanisms to manage these new type of organizations have not been established and yet to achieve results, a longer term horizon needs to be considered by all parties involved.

Indeed, these are significant challenges. It is a new form of organization, still in its infancy, but which offers a very interesting opportunity for all actors to contribute to achieving development goals. It offers an opportunity to "tame the dragon, turning a social problem into economic opportunity and economic benefit".

Reference List

Anderson, S., & Cavanagh, J. (Institute of Policy Studies) 2000. ***Top 200: The rise of global corporate power.*** Institute of Policy Studies,

Argenti, P. A. 2004. Collaborating with Activists: How Starbucks works with NGOs. ***California Management Review,*** 47(1): 91.

Dolan, C., & Humphrey, J. 2000. Governance and trade in fresh vegetables: Impact of UK supermarkets on the African horticulture industry. ***The Journal of Development Studies,*** 37(2): 147.

Freeman, R. E. 1984. ***Strategic Management: A stakeholder approach*** . Englewood Cliffs, NJ: Prentice-Hall.

Kaplinksy, R. 2000. ***Spreading the gains from globalization: What can be learned from Value Chain Analysis.***

Reardon, T., & Farina, E. ***The Rise of Privae Good Quality and Saftery Standrds: Illustrations from Brazil.*** Paper presented at the International Food and Agribuiness Association Symposium, Sydney.

Starbucks 2005. ***Corporate Social Responsibility 2005 Annual Report.***

UNCTAD 2005. ***World Investment Report 2005.*** New York, Geneva.

UNIDO 2003. ***Development of clusters and networks of SMEs: The UNIDO programme.*** UNIDO, Vienna.

Venkatachalam, L. ***Perspectives on Sustainability and Globalization and the Challenges for the Coffee Sector.*** Paper presented at the International Coffee Organization, Salvador, Bahia, Brazil.

Webster, F. E. Jr. 1992. The Changing Role of Marketing in the Corporation. ***Journal of Marketing,*** 56(4): 1-17.