



**Can Ethical Trade Certification Contribute to the Attainment of
the Millennium Development Goals?**

A Review of Organic and Fair-trade Certification

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Abstract

The growth of ethical consumerism in developed countries has led to increased imports of environmentally and socially certified products produced by the poor in developing countries, which could potentially contribute towards the achievement of the Millennium Development Goals (MDGs). Among these, organic products and fair-trade products are among the rapidly growing “ethical trade” products. This market development trend utilizes certification systems that ensure the impartiality of assessing products produced in developing countries. This paper assesses how the conditions under organic certification and fair-trade certification directly and indirectly contribute to the achievement of the MDG targets.

The study finds that organic certification substantially contributes to MDG1 (poverty and hunger) and MDG7 (environmental sustainability). Farmers who follow certification requirements stand to be rewarded with substantial improvements in farming systems, premium prices, and better market access. In addition, by eliminating the risk of exposure to toxic agrochemicals, it directly contributes to health-related MDGs. Moreover, as organic agriculture contributes to mitigating climate change, certified organic farmers with established farm-monitoring systems are in better positions to receive compensation for soil carbon sequestration, when the methodology is approved. However, organic certification doesn't clearly address social aspects, which fair-trade certification directly deals with. Fair-trade certification directly targets smallholders in marginal areas, resulting in broader impacts on other non-income MDGs. In addition, financial benefits for fair-trade certification are immediate, as organic certification often requires a transition period before full certification is granted. Thus, in achieving the MDG targets, a combination of organic and fair-trade certification is recommended. This paper concludes that for this market-based development scheme to broaden its poverty impacts, public sector support in harmonizing standards, building up the capacity of certifiers, developing infrastructure development, and innovating alternative certification systems will be required.

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Contents

I.	Introduction.....	1
II.	Organic Agriculture and Certification: An Overview	1
	A. Organic Agriculture.....	1
	B. Types of Organic Certification	2
	C. Organic Standards	3
III.	Organic Certification and the MDGs: Possible Linkages and Impacts	3
	A. Standards Covered in the Review	3
	B. Data Sources on Organic Certification	4
	C. Main Findings on Organic Certification and MDGs	4
IV.	Fair Trade Certification and Complementary Arrangements	10
	A. Fair-trade Certification	10
	B. Combination of Organic and Fair-trade Certification	11
V.	Challenges	14
	A. Organic Certification: “One Size Fits All”	14
	B. Who Pays for Third-Party Certification?	14
	C. Transition Period	15
	D. Land Tenure	15
VI.	Conclusions and Recommendations	15
	References.....	19

I. INTRODUCTION

The rise of ethical consumerism, where people are putting their money on healthier, greener, and more social-friendly production systems, has rapidly expanded “ethical trade” in developed countries. Among the “ethical trade” items, organic food has been one of the most rapidly growing items, having started from a small base in the 1980s and 1990s, global sales of organic food and drink grew to over US\$40 billion in 2006 (Willer, Yussefi-Mensler, and Sorenson 2008). In 2007, the market for fair-trade products also expanded by 47% (US\$14 million) (Organic Monitor 2008). The rapid growth of ethical consumerism translates to the direct involvement of the private sector in poverty reduction and thus can potentially lead to the attainment of the Millennium Development Goals (MDGs).

Majority of poor worldwide depend upon agriculture for their livelihood. In Asia alone, more than 600 million jobs are related to agriculture. Although poor farmers can potentially play a major role in providing environmental services while improving their livelihood, they do not do so due to the lack of incentives in the current agriculture trade system. Since the current trading system undervalues the potential social and economic services of products, there is a pressing need to put appropriate incentives into place. The public sector has traditionally provided support for the poor to protect the environment through development assistance projects and programs. However, there have been mixed results and most of the projects are not sustainable beyond the period of implementation. Private sector involvement using market-based instruments which internalize externalities of products has recently been viewed as a more sustainable solution.

The rapid increase in the demand for organic and fair-trade products has provided new income generating opportunities for poor farmers in developing countries, particularly in the export market. Specific certifications, and the fulfillment of their corresponding certification guidelines, are required in order to participate in such trade. In return for fulfilling the requirements under certifications, producers receive price premiums for their products. An estimate done by the Export Promotion of Organic Products from Africa (EPOPA) project suggests that 44% of the total benefits from organic agriculture come from farmers’ premium (ESCAP 2001). Another study estimated that half of the farmers’ accrued premiums directly benefitted the farmers themselves (Harris et al. 2001). Thus, ethical trade appears to be an effective market-based development strategy which incorporates incentives for the poor to improve their income while potentially contributing to the MDGs (Setboonsarng 2006).

This paper examines two popular certification systems, organic certification and fair-trade certification. It presents an initial attempt to explore whether the conditions set out under organic certification contribute to the attainment of the MDGs, and provides a platform for sounding out the problems that hinder its success.

This paper is organized into six sections. An overview of organic agriculture (OA) and the process of organic certification follow the introduction. The next sections present the standards covered in this review, their links to the MDGs, and the problems faced. The last section summarizes the findings and discusses policy recommendations.

II. ORGANIC AGRICULTURE AND CERTIFICATION: AN OVERVIEW

A. Organic Agriculture

Organic agriculture is a farming system which excludes the use of synthetic chemicals such as fertilizers, pesticides, or antibiotics in both crop and livestock farming. Unlike conventional agriculture, which relies heavily on external input, organic agriculture relies on ecosystem

management. More formally, IFOAM¹ (2005) defines organic agriculture as a “holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems.”

Increasing food safety and climate change concerns have led to a growing demand for socially and environmentally produced food such as organic food. Based on estimates by the International Trade Center, in the medium-term, the world market for organic products is expected to grow at an average rate of 15–20% per annum.

The supply-demand gaps in developed countries generate opportunities for developing countries to produce and export organic products. The substantial price premium that this market segment offers is its most important initial pull upon developing countries. More recently, developing countries have begun promoting organic agriculture in view of its other non-income benefits such as improved household health, food security, and environmental conservation.

There has been an increase in research supporting the environmental and climate change benefits of organic farming. Heppery et al. (2008) found that carbon sequestration rates in organic farming greatly exceed rates for conventional farming and also utilize 33% less energy than conventional farming. A study done by Granstedt and Kjellenberg (2008) concluded that compensating humus degradation through the incorporation of harvest residues and farm manure can potentially serve as an important carbon sink, reducing surplus carbon dioxide (CO₂) in the atmosphere.

Bandel and van den Bos (2008) projected that the production of 50,000 tons of compost would lead to the reduction of CO₂ by 25,000 tons. Although composting lead to soil carbon sequestration, farmers have difficulty monitoring the amount of sequestered carbon in order to potentially receive the carbon credit payment. In this regard, it is easier for certified organic farmers, with their established farm inspection systems, to monitor and claim carbon credits compared to conventional farmers who have no such practices. This can be an added incentive for farmers to adopt sustainable practices which generate global public goods.

B. Types of Organic Certification

Since consumers cannot visually distinguish between OA products and chemically-grown products, a certification system is required. The organic certification systems can be classified as follows:

1. First-party certification: In the 1980s, organic agriculture was promoted by grassroots organizations or NGOs composed of consumers and farmers who sought alternative methods of food production, as well as product distribution system. At that time, organic food was sold directly to consumers through community-supported events such as box schemes or farmers’ markets. This type of arrangement emphasized face-to-face relationships and trust rather than formal certification, and was critical in building confidence in the integrity of organic products. This arrangement is classified as first-party certification or self-claimed organic certification, done at the community level or by individual groups of farmers. Self-claimed certification can suffice if the market size is small and concentrated in a local area. The group-claimed certification or community-based certification is sometimes known as a “participatory guarantee system.” These participatory systems are perceived as more credible than individual ones, and are able to deliver a higher volume of produce to a wider market.

¹ International Federation of Organic Agriculture Movement (IFOAM) is an umbrella organization for the organic movement with 750 member-organizations in 108 countries.

2. Second-party Certification: As markets expanded beyond local areas, face-to-face relationships become less feasible. As a result, many NGOs and traders who continued to maintain close contacts with farmers acted as trading agents, and provided consumers with information about farmers and their production processes to consumers. This type of arrangement wherein a trading agent ensures product quality is classified as second-party certification. The degree of effectiveness of second-party certification depends largely on the trading agent's reputation. This concept may be compared to the branding of products or the so-called franchising of agriculture. Many supermarkets are using this system for their organic products.

3. Third-party Certification: As the international trade of organic products continued to expand, a more standardized system of certification was developed. This system developed a more efficient process of providing information across borders, and in so doing, reduced time and costs. Through this arrangement, national and international organic standards were introduced to OA farmers. To ensure that all certification standards were adhered to, an impartial third-party certifier reviewed the production process. This is known as third-party certification.

Today, these three certification systems coexist in the market. However, in the context of international trade and developing global partnerships for large-scale poverty reduction, third-party certification remains the most efficient. The remaining part of this paper focuses on issues and standards essentially used in the structuring of third-party certification.

C. Organic Standards

The earliest organic standards were developed independently by private associations. Some groups started their own certification systems to assure buyers that organic products were produced according to the supposed standards (FAO 2001; Rundgren 2002). Standardized international guidelines were nonexistent until IFOAM published its Organic Standards in 1980. The IFOAM Basic Standards (IBS), together with the Codex Alimentarius Guidelines for organic agriculture were adopted in 1999, and have since been the international guidelines used by national and private standard-setters (Rundgren 2002).

As the demand for organic products increased and more conventional distribution networks such as supermarkets entered the market, the development of organic standards and certification has gained momentum. Many countries have defined their own standards, while certain private associations continue to develop their own organic labeling systems.

The current organic certification system requires third-party certification before a product can be labeled organic. Organic certification verifies that the product has been produced, stored, processed, handled, and marketed according to the appropriate organic standards (IFOAM 2005; FAO 2001).

III. ORGANIC CERTIFICATION AND THE MDGS: POSSIBLE LINKAGES AND IMPACTS

A. Standards Covered in the Review

The standards included in this review cover a cross-section of national, regional, and private organic standards imposed by major trading partners. The decision to focus on these standards, instead of focusing on the domestic standards developed and used by developing countries, was based on two considerations, namely:

1. Producers from developing countries must comply with these international standards if they wish to acquire a respectable share of the global market for organic products; and

2. These standards are more likely to be advanced and extensive with regards to the subject areas covered, including those related to social justice. As such, they have a potentially broader impact on poverty reduction and on the MDGs.

With the IFOAM Basic Standards used as the benchmark, the following standards were evaluated vis-à-vis their possible impacts on the MDGs.

National/Regional Standards:

1. Council Regulation (EEC) No 2092/91 for organic production
2. The US National Organic Program (USNOP) Regulations
3. The Japan Agricultural Standard (JAS) of Organic Agricultural Products

Private Standards:

4. Bio Austria
5. Bio Suisse
6. Demeter International (Germany)
7. Naturland (Germany)
8. Soil Association (UK)

B. Data Sources on Organic Certification

Apart from the standards themselves, this review made extensive use of information archived in www.organicrules.org. This comprehensive database contains information on the differences between national and private organic standards in Europe, as well as some entries on the USNOP.

C. Main Findings on Organic Certification and MDGs

Despite variations in specific standards, there was a high degree of concurrence on the basic principles governing crop production, including crop rotation, soil fertilization, and the use of synthetic inputs.

On the other hand, there was less concurrence on environmental management issues such as ecosystem management, habitat protection, and energy and water conservation. The reviewed national standards tend to indirectly address these issues through crop production standards related to crop rotation or soil fertilization. In contrast, certain private standards address these issues more directly.

The area of least concurrence regarded principles and standards for social justice, which is crucial in strengthening the impacts of organic certification on MDGs in the areas of education and health. Although social justice is covered in the IFOAM basic standards, among the eight national and private standards reviewed, only the Naturland standards discussed it.

As expected, private standards tend to be more extensive and stricter compared to national standards. National standards tend to put more stress upon the basic treatment of regulations imposed and subject areas covered. Table 1 below presents the main findings of the review.

Table 1: Organic Certification and the Millennium Development Goals (MDGs)

Area Covered by Standards	Expected Areas of Impact	IFOAM Basic Standards	Comparison of National and Private Organic Standards
Crop Rotation	MDG 1: Eradicate extreme poverty and hunger • <u>Target 1</u>: Halve, between 1990 and 2015, the proportion of people whose income is less than US\$1 a day. • <u>Target 2</u>: Halve, between 1990 and 2015, the proportion of people who suffer from hunger. Crop rotation lessens the incidence of crop failure, which is a major determinant of income and food insecurity. MDG 7: Ensure environmental sustainability • <u>Target 9</u>: Integrate principles of sustainable development into country policies and programs and reverse the loss of environmental resources Crop rotation contributes to soil fertility by mitigating soil nutrient losses and by encouraging nutrient cycling	The standards state that the diversity of plant production activities shall be assured by minimum crop rotation requirements and/or an array of plantings. For annual crops, minimum rotation practices shall be established, unless the operator demonstrates diversity in plant production by other means. For perennial crops, the certifying body shall set minimum standards for orchard/plantation floor cover and/or diversity of refuge plantings in the orchard.	The EEC Regulation, USNOP and JAS standards specify the crop to be used in rotation but do not specify the minimal share for each crop in the rotation. Demeter International is more precise regarding methods for the design of adequate crop rotation. Naturland sets the minimum share of legumes in crop rotation at 20% (with exemptions). Soil Association standards provide detailed and specific rules regarding the types of crop and their sequence in the rotation.

Area Covered by Standards	Expected Areas of Impact	IFOAM Basic Standards	Comparison of National and Private Organic Standards
Ecosystem Management/ Habitat Conservation	MDG 7: Ensure environmental sustainability • <u>Target 9</u>: Integrate principles of sustainable development into country policies and programs and reverse the loss of environmental resources – Target 25: Increase the proportion of land area covered by forest – Target 26: Increase the ratio of protected surface areas to maintain biological diversity.	The IFOAM Basic Standards recognize that the quality of ecosystems benefits from organic agriculture, and thus, further specified measures for ecosystem management that go beyond simple production methods. This is reflected in the following standards: • Operators shall take measures to maintain and improve landscape and to enhance biodiversity quality. • Clearing of primary ecosystems is prohibited.	No specific recommendations or requirements relating to environmental management or habitat conservation are included in the EEC Regulation, USNOP, or JAS. However, the USNOP indirectly addresses this issue in their standards on wild crop harvesting, i.e., “A wild crop must be harvested in a manner that ensures that such harvesting or gathering will not be destructive to the environment and will sustain the growth and production of the wild crop.” As with the USNOP, a number of private standards likewise refer to this issue through regulations on the harvesting of wild crops. Demeter International requires extensive diversification within the farm. They further require that at least 7% of farm land be dedicated to ecologically diversified areas. Naturland's standards on landscape and ecosystems state that structuring elements of the landscape, such as hedges, borders, humid areas, and oligotrophic grasslands, must be preserved or recreated if required. Soil Association standards contain detailed recommendations and

Area Covered by Standards	Expected Areas of Impact	IFOAM Basic Standards	Comparison of National and Private Organic Standards
			requirements concerning environment management and the conservation of landscape features, semi-natural habitats, and wild species on the farm.
Energy Use/ Production of Greenhouse Gases (Climate Change)	MDG 7: Ensure environmental sustainability • <u>Target 9</u>: Integrate principles of sustainable development into country policies and programs and reverse the loss of environmental resources – Target 27: Regulate energy use (kilograms of oil equivalent) per US\$1 GDP (PPP) – Target 28: Reduce CO₂ emissions (per capita) and consumption of ozone depleting CFCs (ODP tons)	The IFOAM Basic Standards did not specifically address energy use and production of greenhouse gases, although their standards governing soil fertilization could have an impact. More specifically, the IFOAM Basic Standards that promote the recycling of plant and animal wastes could also help by minimizing the use of nonrenewable resources (for details see Soil Fertility and Fertilization).	Bio Austria and Bio Suisse regulate the heating of greenhouses to address the environmental aspects of saving energy.
Soil Fertility and Fertilization	MDG 7: Ensure environmental sustainability • <u>Target 9</u>: Integrate principles of sustainable development into country policies and programs and reverse the loss of environmental resources – Target 27: Regulate energy use	The standards state that: • Material of microbial, plant, or animal origin shall form the basis of the organic fertilizers • Nutrients and fertilizers shall be applied in a way that protects soil,	The EEC Regulation restricts the use of farmyard manure to not more than 170 kg N/ha/year. There are no other restrictions. The USNOP identifies approved fertilizers but does not specify any limits to their application.

Area Covered by Standards	Expected Areas of Impact	IFOAM Basic Standards	Comparison of National and Private Organic Standards
	(kilograms of oil equivalent) per US\$1 GDP (PPP) Target 28: Reduce CO₂ emissions (per capita) and consumption of ozone depleting CFCs (ODP tons) MDG 4: Reduce child mortality (indirect) MDG 5: Improve maternal health (indirect) OA eliminates the health risks associated with pesticide use or exposure.	water, and biodiversity. Restrictions may be based on amounts, location, timing, treatments, methods, or choice of inputs applied.	Bio Austria's standard is stricter than the EEC regulation; it requires a limit of 170 kg N/ha for organic manure in general, and not only for farmyard manure. It also prohibits the use of some products permitted under the EEC Regulation. Bio Suisse standards limit the amount of nitrogen and phosphorous input per hectare to a maximum of 2.5 LSU/ha. Individual limits are also set by Demeter International for each crop.
Water Management/ Conservation	MDG 7: Ensure environmental sustainability <u>Target 10</u>: Halve, by 2015, the proportion of people without access to safe drinking water and basic sanitation. - Target 30: Increase proportion of population with sustainable access to an improved water source, urban and rural. MDG6: Combat HIV/AIDS, malaria, and other diseases (indirect) Better water management reduces the risk of water-borne diseases such as malaria.	The standards provide that: - Grazing management shall not degrade land or pollute water resources. - Relevant measures shall be taken to prevent or remedy soil and water salinity. - Operators shall seek to preserve water quality and shall not deplete nor excessively exploit water resources. They shall, where possible recycle rainwater and monitor water extraction.	The USNOP states that organic practices must maintain or improve the natural resources of the operation, including soil and water quality. Naturland has standards on the use of water resources.

Area Covered by Standards	Expected Areas of Impact	IFOAM Basic Standards	Comparison of National and Private Organic Standards
Social Justice	MDG 3: Promote gender equality and empower women MDG 4: Reduce child mortality (indirect) MDG 5: Improve maternal health (indirect) MDG 8: Develop global partnerships for development Other aspects of poverty reduction, such as the right to organize and bargain collectively.	The standards provide that: • Operators shall have a policy on social justice. Operators who hire fewer than ten (10) laborers and those who operate under a state system that enforces social laws may not be required to have such a policy. • A product cannot be declared as organic in cases where production involves violation of basic human rights and clear cases of social injustice. • Operators/producers should not use force or involuntary labor. • Employees and contractors of organic operations have the freedom to associate, the right to organize, and the right to bargain collectively. • Operators shall not be discriminatory, and shall provide their employees and contractors equal opportunities and treatment. • Employed children shall be provided with educational opportunities.	Only Naturland specifies standards for social responsibility. The standards are fairly extensive, covering employment, human rights, forced labor, freedom of association, access to trade unions, equal treatment and opportunities, child labor, and health safety. These standards came into force in 2005.

CFC = chlorofluorocarbons, Kg. N/ha = kilograms of Nitrogen per hectare, LSU/ha = livestock units per hectare, MDG = Millennium Development Goals,

ODP = ozone-depleting potential, PPP = purchasing power parity

Source: Millennium Development Goals (MDGs), International Foundation for Organic Architecture (IFOAM), Council Regulation (EEC) No 2092/91 for organic production, The US National Organic Program (USNOP) Regulations, The Japan Agricultural Standard (JAS) of Organic Agricultural Products, Bio Austria, Bio Suisse, Demeter International (Germany), Naturland (Germany), Soil Association (UK), www.organicrules.org

In general, the conditions set forth in organic certification concern the elimination of agro-toxic use in production systems, have an impact on four MDGs: mainly MDG1 (poverty and hunger) and MDG7 (environmental sustainability), and to a lesser extent, MDG4 and 5 (child and maternal health). The contribution of organic certifications on other MDGs is not specific since national organic standards hardly include provisions for social aspects. Most social impacts of organic certification, such as education improvement due to higher income and increased social capital through organizational activities of farmers' groups, are achieved indirectly.

This study highlights the importance of having a comprehensive database, such as www.organicrules.org, that facilitates not only a comparison of standards, but also places the groundwork for standardization. At present, no such database exists for the standards adopted by developing countries.

In our review of the developmental experience of organic agriculture among smallholders, particularly for export market, we have observed that organic farmers often also enter into fair-trade arrangements as well. Since the fair-trade arrangements have the primary objective of promoting social justice and accountability, it satisfactorily supplements organic certification, which deals mainly with the technical aspects of production. As fair-trade certification is less understood by most people, it is discussed in the following section.

IV. FAIR TRADE CERTIFICATION AND COMPLEMENTARY ARRANGEMENTS

A. Fair-trade Certification

Fair-trade certification was developed and reviewed under the informal umbrella of Fairtrade Labelling Organizations (FLO) International, a multi-stakeholder association including producer networks, labeling initiatives, traders, and experts.

FLO's strategic intent is:

- to deliberately work with marginalized producers and workers in order to relocate them from a position of vulnerability, and help them attain security and economic self-sufficiency;
- to empower both producers and laborers as stakeholders in their own organizations; to play a wider and more active role in the global arena in order to achieve equitable terms of trade.

For a product to be labeled fair-trade, it must meet the international standards set by the FLO. The certification is done by an independent international certification company under the FLO umbrella.

The FLO has two sets of generic producer standards:

- The first set applies to small farmers or smallholders organized in cooperatives or other organizations with a democratic, participative structure;
- The second set applies to organized workers on plantations and in factories²

The generic standards specify "minimum requirements," which producers must comply with in order to be certified as fair-trade, and "progress requirements," which contain conditions that producers are encouraged to improve over time. Progress requirements cover working conditions, product quality, environmental sustainability, and investments in the development of the organizations and their producers/workers (FLO 2006a).

² For details, see:

<http://www.fairtrade.net/pdf/sp/english/Generic%20Fairtrade%20Standard%20SF%20Dec%202005%20EN.pdf>, and
<http://www.fairtrade.net/pdf/hl/english/Generic%20Fairtrade%20Standard%20Hired%20Labour%20Dec%202005%20EN.pdf>

FLO trading standards stipulate that producers have to:

- pay laborers a salary that is enough to cover the costs of sustainable production and living;
- pay laborers a premium so that they can invest in development;
- allow partial advance payments when laborers ask for it; and
- use contracts that allow long-term planning and sustainable production practices (FLO 2006, Fairtrade Foundation 2006).

In 2006, sales of FLO-labeled fair-trade products reached about €1.6 billion worldwide, 42% higher than that of the previous year. Fair trade-labeled products are mostly food-related, such as coffee, cocoa, bananas, and tea. As of 2006, there were 569 certified producer organizations in 57 countries. The FLO certification system benefits an estimated 5 million producers (FLO 2007). However, further empirical investigation is needed, particularly concerning the additional costs that may be involved with fair-trade labeling.

There is evidence that suggests that organic certification together with fair-trade certification can be a feasible and optimal combination for meeting the multiple objectives of the MDGs. Impacts of fair-trade certification include narratives on how it doubled farmers' income, how they were taught better resource management procedures, how their children were sent to school, and how they were consulted on current and future projects, among others.³

B. Combination of Organic and Fair-trade Certification

Organic certification mainly involves the technical aspects of production, with the main objective of producing safe food while improving the environment. Since organic certification standards originated and evolved based on the existing conditions of farmers in developed countries, they are likely to favor farmers from temperate regions and developed countries, and may be biased against farmers from the south or from tropical zones.

On the other hand, fair-trade certification has strong pro-poor features, having been developed based on the needs of small farmers in developing countries. Fair-trade certification strives for long-term benefits for poor communities. For example, fair-trade requires that producers organize themselves into democratic groups/associations, which allow them a higher level of collective action and bargaining power. Fair-trade also provides a guaranteed free-trade price premium that must be reinvested at the community level and not at the individual household level. In addition, it addresses the challenge of high certification costs for small-scale farmers by providing financial support during the start-up period. These unique features under fair-trade certification directly contribute towards target 12 and target 13 of the MDG8.

Target 12: Develop open, rule-based, predictable, non-discriminatory trading and financial systems

Target 13: Address the needs of the least developed countries

One of the key benefits of this market-based instrument is that certification brings about the formation of smallholders' groups. Beyond facilitating information dissemination and collective bargaining, groups can help smallholders overcome marginalization and social exclusion, and can lead to the accumulation of social capital.

Organic and fair-trade certifications seem to complement each other, and the combination of certain aspects of both could more effectively contribute to the achievement of the MDGs. Moreover, the potential for achieving the highest premiums is maximized when farms have both organic and fair-trade certification (ESCAP 2002). Table 2 outlines the key differences between organic certification and fair-trade certification, and how fair-trade could complement parts regarding social objectives where organic certification is lacking.

³More case studies reported by Fairtrade Labelling Organizations International are available at : <http://www.fairtrade.net/sites/impact/stories.html>.

Table 2: Organic and Fair-trade Certification

	Organic Certification	Fair-trade Certification
Objectives of Certification	- Concentrates on agricultural production methods, particularly the production of high quality food while minimizing the environmental impacts. - Although social justice is included in the IFOAM Basic Standards, very few national/private standards have followed suit.	- Issues are centered on social justice, dealing with multiple issues that can lead to improvements in the producers' quality of life. - The FLO has two sets of generic standards, one applicable for small farmers and another for plantations and factories. - The generic standards distinguish between "minimum requirements", which producers must meet in order to be certified, and "progress requirements" that encourage producer organizations to continuously improve working conditions and product quality, to increase the environmental sustainability of their activities, and to invest in the development of the organizations and their producers/workers (FLO 2006).
Price Premium	Generally exists, but there is no guarantee that producers will get a significant share of the price premiums	- Guaranteed trade price premium; additional premium is given in the case of organic products - Laborers are entitled to partial advance payments, when they ask for it.
Long-Term Supply Contracts	No guarantee	Guaranteed; trade relations are meant to have a long-term perspective
Support Given to the Community	No guarantee, given the absence of standards governing social justice	Part of the premium is reinvested in the community, and in some cases, helps in the transition of the community from conventional production to organic production
Formation of Farmers' Groups/Associations	Not required, although typically, producers voluntarily establish one in order to reduce compliance costs	Required; producers must be organized into democratic groups/associations

	Organic Certification	Fair-trade Certification
Scope for “Special and Differential Treatment”	- Standards are uniform for producers from both developed and developing countries. - Since standards were developed based on existing conditions of farmers in developed countries, it is partial towards OA in temperate zones	Standards favor the situation in developing countries
Cost of certification	- No support mechanisms for producers - Generally shouldered by firm or producer	Shouldered by the producer, although the producer can apply for financial assistance from the FLO Certification Fund or from a national FLO member (Fairtrade Foundation 2006).
Main Benefits	- Empirical evidence is strongest in the case of MDGs 1&7: - Improved profitability/income - Gains in productivity - Gains in marginal areas where low-input traditional farming is the norm - Improved environmental impact - Empirical evidence is weaker and/or has mixed results for other MDGs (Setboonsarng forthcoming)	- Case studies reported by FLO suggest that fair-trade certification can have substantial impacts on multiple objectives of the MDG (see http://www.fairtrade.net/sites/impact/stories.html) - Meanwhile, Dankers (2003) reports that the fair-trade price premium represents only a small part of the benefits, and that the success in farmers' self-organization is far more important, and ultimately results in better bargaining positions, better credit worthiness, and economies of scale. - A study prepared by Rotherham (2005) for the UNEP further suggests that long-term supply contracts, which are a main feature of fair-trade, may be a more important determinant of project sustainability than the price premium.

FLO= Fairtrade Labelling Organizations International, MDG= Millennium Development Goals, UNEP= United Nations Environment Programme

Source: Millennium Development Goals (MDGs), International Foundation for Organic Architecture (IFOAM), Council Regulation (EEC) No 2092/91 for organic production, The US National Organic Program (USNOP) Regulations, The Japan Agricultural Standard (JAS) of Organic Agricultural Products, Bio Austria, Bio Suisse, Demeter International (Germany), Naturland (Germany), Soil Association (UK)

V. CHALLENGES

For poor farmers in marginal areas, improvements in natural resource management can lead to increased sustainable productivity and reduced poverty. While certification can potentially facilitate improvements in natural resource management, and contribute toward the achievement of the MDGs, there remain several problems which need to be solved. Small-scale farmers live in remote areas with minimal infrastructure, rampant market and institutional failures, and unsecured land tenures. They often lack the technical knowledge needed to comply with complex certification requirements and need external facilitation. The following section highlights some of the key problems that poor farmers face.

A. Organic Certification: “One Size Fits All”

As discussed in the previous section, organic certification evolved from the conditions of farmers in developed countries, where farmers are relatively well-educated and generally involved in large-scale agricultural production. In contrast, farming systems of the poor are small-scale, diverse, and complex. The many conditions that certification systems require are not easy for poor farmers to comply with. The requirements for organic certification are also very information-intensive, and require extensive paperwork about farm history, production plans, and most tediously, day-to-day record-keeping of farm inputs and activities. Moreover, in the context of small farms, the required area of buffer zones separating chemical farms from organic farms makes it difficult to receive organic certification without supports from public sector. In addition, since ecosystems in developed and developing countries differ, scientific research is required to make the certification requirements more appropriate for each particular ecosystem.

Nevertheless, there have been successful cases where non-government organizations (NGO) or local governments have effectively facilitated the certification processes of organic farms. The lessons learned from their successful experiences should be documented and disseminated for other farmers to emulate.

B. Who Pays for Third-Party Certification?

The process of organic certification requires third-party inspectors to visit the field to verify compliance. However, certified inspectors often do not exist at the local level, so certification entails the use of inspectors from importing countries or from other regions, thus adding to costs and making the total certification cost unrealistically high for farmers. The inspection fee alone could cost from US\$1000–US\$4000/year, depending on location, size of operation, and export destination requirements. Frequently, in cases where products are to be exported to multiple countries, more than one certification is required. Thus, experiences in developing countries show that the training costs, as well as the certification costs, could easily exceed the potential profit gained from premium prices. Since this is generally beyond farmers' financial capacity, at least initially, the certification costs are often paid by:

- **Private sector firms:** Where an international trading firm or multinational retailer is involved, the firm usually pays for the certification.
- **Government:** Recognizing that organic certification offers positive externalities, governments like those in Bhutan, Thailand, and some state governments in India have either partly or fully covered the cost of certification for farmers.
- **NGOs with external support:** Many development projects have recognized the potential benefits of organic certification, and so have provided funding through NGOs to support certification costs and including training costs.

- **Producer groups:** After the initial externally-supported period, many farmers' groups had successfully developed to be able to collectively pay for certification costs. The certification cost is deducted from collective funds of the farmers' group, so individual farmers may not have even been aware that they are paying for the costs of certification.

In the case of fair-trade certification, since it evolved based on existing smallholders' conditions, there are provisions supporting the setting up of certification systems for small-scale farmers. Before 2004, the cost of fair-trade certification was paid by importers, but in early 2004, the FLO decided to introduce a certification fee for producers. Fortunately, producers can apply for financial assistance from the FLO's Certification Fund or from a national FLO member (Fairtrade Foundation 2006). However, certification costs are normally passed on to consumers in the form of higher prices for organic and fair-trade products.

C. Transition Period

In order to be certified organic farmers, farmers who have previously been using agrochemicals on their farm require a transition period of 2–3 years to gain certification. During the transition period, yields may drop and premium prices may not yet be available. External financial support may be required to financially support farmers to go through the transition years.

Fortunately, for marginal farmers in chemical-free areas, the transition period can be shortened, or in some cases avoided. Since most of their farms are "organic by default," there is a comparative advantage for poor farmers to enter market-oriented organic production.

D. Land Tenure

Farmers without secure land tenure are less likely to obtain organic certification, mainly because the return on investment only becomes apparent in the medium to long-term. Poor farmers often live in areas where land tenure is problematic, and due to unsecured land tenure, farmers are less likely to invest in land improvement measures. In the Philippines, farmers on leased land reported that they were forbidden by their landlords to convert to OA, as it could lead to difficulties in terminating lease contracts if the tenant had already extensively invested in land improvements (Personal field visit 2003). Thus, land tenure is an important factor in using organic certification to achieve the MDGs.

VI. CONCLUSIONS AND RECOMMENDATIONS

The growth of ethical consumerism in developed countries has led to increased imports of environmentally and socially certified products from developing countries. Organic food and beverage have been some of the most rapidly growing sectors in international "ethical trade," providing links between the global market and poor farmers in developing countries. In the past two decades, organic certification has expanded to include a sizable portion of poor farmers in remote areas, due to the support of NGOs, donors, and governments of developing countries that have increasingly recognized the benefits of supporting organic agriculture.

The practice of OA is uniquely pro-poor, as it builds on the comparative advantages that poor farmers have, such as the relatively chemical-free land, the abundance of labor, and the traditional knowledge of chemical-free production methods. These comparative advantages the poor farmer possesses have allowed cost effectiveness in producing organic and thus encouraged the private sector firm, which previously had little interest in reaching out to poor farmers, to set up contract farming operations in remote areas to produce certified OA products for export and for local urban markets (Setboonsarng, 2008). This private sector arrangement with the poor located in areas in developing countries where chemical farming is not feasible appears promising in contributing toward the achievement of the MDGs.

The global use of certification systems to guarantee the quality and production process of OA products, including environmental and social characteristics, is rapidly growing and is emerging as a norm in international trade. While these systems could have a discriminatory effect on small

farmers, if effectively facilitated, it could provide opportunities for them to participate in an open, rule-based, non-discriminatory trading system, which is one of the targets of the MDGs. Farmers who choose to comply with certification requirements are compelled to engage in a number of activities that can benefit the environment and improve their income sources.

In this review of the organic certification conditions and their impacts on the MDGs, we conclude that organic certification most directly contributes to MDG1 (poverty and hunger) and MDG7 (environmental sustainability, including climate change), and indirectly contributes to health-related MDGs through the elimination of the risk of exposure to toxic agrochemicals. Organic certification also enhances health and living conditions by improving sanitation and water quality. In terms of carbon credits, certified organic farmers are better equipped to claim payments than non-certified farmers, as they have undergone the process of detailed farm monitoring and record keeping. This can be an added incentive for farmers to adopt certified sustainable practices which contribute to global public goods. Organic certification however, does not directly address social aspects, so its contribution to the non-income aspects of MDGs is indirect.

The review of fair-trade certification conditions proves that it directly deals with social justice and community strengthening. In addition, by addressing the special needs of smallholders in marginal areas, fair-trade certification adequately complements organic certification in enhancing the social and non-income impacts of the MDGs. Fair-trade contributes directly to MDG8 (develop global partnerships in development), in particular targets 12 and 13, that address the needs of the poor in developing countries under rule-based, non-discriminatory trading systems. Since the primary objective of fair-trade arrangements is to promote social justice and accountability, it satisfactorily supplements organic certification, which mainly deals with the technicalities involved in the production process. Thus, a combination of organic and fair-trade certifications would contribute to the comprehensive achievement of the MDGs.

The review also shows that national standards are less strict than international standards, which can have interesting implications on poverty reduction and the MDGs. While it is possible that more extensive standards can generate even greater direct impacts on poverty and the MDGs, these benefits might not be justified by the corresponding compliance costs, particularly since standard organic certification requirements need further adjustment for farming systems of the poor in marginalized areas. Due to multiple standards in organic agriculture, additional effort in harmonizing standards is important. It would also be useful for developing countries to develop a comprehensive database, such as www.organicrules.org, as groundwork for standardization.

While there is a need for further research to fine-tune organic certification requirements, other options promoting organic certification should also be explored. Pioneer NGOs in this movement should further improve innovative “trust-based” certification arrangements, such as extending face-to-face communication through the use of information and communication technology (ICT). Community-based certification and franchising of agriculture are other options that could be further explored.

While both organic and fair-trade certification have significant poverty reduction potential, so far their large-scale impacts on poverty have yet to be realized. This is due to the high costs associated with certification, particularly for organic certification, which does not have built-in mechanisms to assist smallholders with certification costs.

With the current setting with limited public support, large food retailers emerge as the most effective actors in expanding the international trade potential of organic products. They are positioned to facilitate certification for large number of poor farmers. The private sector also holds the key to translating effective demand and technical solutions into practical advice for poor farmers to adopt certified OA. The scale of poverty reduction impacts of organic certification will be largely determined by the extent to which large food retailers will enter the organic sector in developing countries.

In order to increase the impact of “ethical trade” on poverty reduction, the public sector needs to play an active role in bringing down the costs of working with the poor, and join forces with media create a demand shift for “ethical trade” products. The role of the public sector could include but is not limited to the following:

- Harmonizing standards and/or the developing pro-poor regional standards;
- Developing alternative marketing and certification systems;
- Building up the private sector’s capacity as a certifying body;
- Strengthening the capacity of the local government to oversee certification bodies and standards;
- Developing rural infrastructure i.e., road, cold storage, etc.;
- Addressing land tenure issues;
- Supporting farmers’ organization;
- Strengthening institutional arrangements which are inclusive of the poor i.e., various form of direct and non-direct contract farming
- Supporting research and extension of OA for marginal ecosystems
- Supporting the carbon credit process for OA and support OA to be included under the Clean Development Mechanism (CDM);
- Providing incentives to firms, i.e., risk guarantee; and
- Creating a competitive environment for the private sector to work with the poor, e.g., promoting organic contract farming.

The task of achieving the MDGs through the use of ethical trade certification such as organic and fair-trade will require further cooperation among all stakeholders: farmers, committed private entities, national and local governments, donors, NGOs, and academic communities.

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