

Voluntary Sustainability Standards and Economic Rents

The economic impacts of voluntary sustainability standards along the coffee, fisheries and forestry value chain

Background Paper

Kathleen Sexsmith
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1.0 Introduction

1.1 Overview

Since the development of organic and fair trade labels in the 1970s and 1980s, the use of private voluntary standards to distinguish those products brought to market using sustainable methods of production has grown exponentially. Fuelled by a growing awareness of the social and environmental implications of the planet's rapidly industrializing economy, and the limitations of public regulation in dealing with them, stakeholders have increasingly sought alternative, rules-based systems to ensure that their everyday market decisions do not have unsustainable outcomes.

While the implementation of sustainability-motivated standards is not a new phenomenon, the entry of such standards within mainstream supply chains is more recent. Indeed, the rapid growth of certain voluntary sustainability systems in commodity sectors has rendered compliance a virtual “prerequisite” for producers to gain access to many mainstream markets. As systems for developing and implementing rules governing the interactions between supply chain actors, sustainability standards have the potential to exert considerable influence on supply chain decision-making and overall sustainability.

Information on the relationship between sustainability standards and economic development is particularly important for understanding their contributions to sustainable development, since a healthy economy provides the pathway to social and environmental sustainability. Yet, data on the influence of sustainability standards on economic variables and conditions along supply chains are persistently elusive. At present, there are no national or international authorities mandated to gather regular information on markets for certified products. In the absence of credible market information, it is difficult for stakeholders to make significant investments in the sector, and even more difficult for them to assess whether initiatives are having positive impacts on sustainability more broadly.

Determining whether sustainability standards deliver systemic economic benefits would require market data significantly more robust than the information currently available. Nevertheless, the growing body of anecdotal evidence allows for a fairly detailed market analysis. This paper attempts to identify current conditions and some historical trends for key economic parameters across a select number of standards initiatives in the coffee, forestry and fisheries sectors, using the literature, relevant databases and primary research with key informants.

1.2 Methodology

The research questions for this paper are:

- 1) What are the observed and expected impacts of sustainability standards on the distribution of economic benefits along international commodity supply chains?
- 2) How are these benefits distributed between different groups operating within particular nodes of these supply chains and why do some groups benefit more than others?

In answering these questions, we apply Global Value Chain analysis. The theory of global value chains was popularized in the early 1990s by Gereffi and Korzeniewicz (1994) as a way of conceptualizing the commercial linkages that transform raw materials into consumer goods.¹ It provides a set of methodological tools for tracing economic activities at each stage, or “node,” of the chain of activities. Gereffi (1994 and 1995) has identified four dimensions of value chain organization, which provide a useful framework for analyzing where economic value is generated and how it is controlled:

- 1) input-output structure, which describes how products and services are linked through value-added activities;
- 2) territoriality, meaning the spatial dispersion of activities;
- 3) governance structure, which explains the power relations that coordinate chain activities; and
- 4) institutional frameworks at the local, national and international levels, in which production and exchange activities are embedded.

Sustainability standards can fundamentally alter value chain structures, and these changes have implications for the distribution of economic benefits. First, standards alter the territoriality of value chains by diverting products to markets that demonstrate greater demand—and may be willing to pay a premium price—for items that have been produced under sustainable conditions. Section 3 addresses how standards affect the territoriality of value chains by comparing trade flows for conventional and certified commodities. Second, standards have an impact on the institutional framework of global value chains by changing relationships of participants with other chain actors, policy-makers and other organizations that help define the context of value chain activities. This topic receives attention in Section 4, where the impact of standards on the generation of different indirect economic rents is considered. Finally, standards can change the rules of value chain participation, and the distribution of authority to make these rules. The extent to which standards empower producers to participate in decision-making is analyzed in detail in the companion paper to this study.² The extent to which standards have redistributed value chain income towards

¹ Originally termed “global commodity chains,” the terminology was changed to “global value chains” to draw attention to the uneven distribution of value along the chain, and to avoid confusion arising from the common misuse of the term “commodity” as a standardized good (Humphrey and Schmitz, 2000).

² Sexsmith, Kathleen and Potts, Jason, 2009, “Voluntary Sustainability Standards and Value Chain Governance: How sustainability standards affect the distribution of decision-making power in global value chains,” IISD Background Paper.

commodity producers will be considered in Section 5. The paper concludes in Section 6 with a series of more general observations and recommendations corresponding to the analysis provided.

1.3 Data Sources

Given the absence of coherent and statistically comparable data, our research draws from a combination of trade statistics, web-based literature review and interviews. The paper focuses on the global market trends and the economic impacts of sustainability standards on stakeholders in the fisheries, forestry, and coffee sectors. These commodities were chosen for consistency, since sustainability standards are well defined and increasingly influential in these sectors, and for comparability, because differences in their value chain structures and market characteristics facilitate inferences about the impacts of standards more broadly.

The research involved 24 interviews, which were conducted in late 2008 with 26 representatives from standards organizations, NGOs and the private sector. Interview participants were identified using a snowball sampling method. The multiplicity of commodities and standards under study meant that a representative sample of interviewees from each sector could not be achieved in the allotted time. Rather, the intention was to obtain broad participation from the standards organizations under study, as well as from producers or NGOs and consultants with significant experience in the sustainability standards industry. Table 1 gives the breakdown of participants by sector and organizational affiliation. A list of the organizational affiliations of each participant can be found at the end of this document.

Table 1: Participant Breakdown by Sector and Organizational Affiliation

	Standard Organization (currently employed)	Standard Organization (employed in the past)	NGO/Consultant	Producer	Trader/Retailer	Total
Coffee	3	0	4	0	3	10
Fisheries	2	1	5	3	0	11
Forestry	2	2	1	0	0	5
Total	7	3	10	3	3	26

2.0 Voluntary Sustainability Standards for Commodities

2.1 Sustainability Challenges in Commodity Markets

This section explains how existing market conditions and policy arrangements constrain social and environmental sustainability in the coffee, fisheries and forestry sectors. It is intended to provide a general overview and to indicate sources for more in-depth analysis of sustainability challenges, which is outside the scope of this paper.

1. *Rising demand from developed countries for commodities produced in developing countries can raise incomes and help achieve sustainable development, but only if policy arrangements that support sustainability are in place.*

Most of the world's coffee, seafood and forest area is located in developing regions, while developed countries account for most traded purchases. Some basic figures illustrate these asymmetries:

- Coffee: Nearly all the world's coffee is produced in tropical, developing regions. On average, producing-country members of the International Coffee Organization export 80 per cent of their production, and these coffee beans are destined primarily for the world's wealthiest economies. The median income of the top 10 coffee exporting countries was less than 15 per cent that of the top 10 importing countries in 2005; and the median human development index ranking of these exporters was 106 (of 177 countries), compared to 14.5 for the major importers (Sexsmith, 2008).
- Seafood: Nearly two-thirds of the world's production from capture fisheries comes from developing countries. The best available data from the FAO indicates that 77 per cent of exports of fisheries commodities (measured by value) from developing countries are directed to developed countries, while only 15 per cent of developed country exports are received by developing areas.
- Forestry: A majority of the world's forest cover is located in Latin America, Africa, Asia and Central Europe. Meanwhile, over half of global roundwood imports and nearly three-quarters of sawnwood imports are purchased by North America and Europe.³

Developing country producers in these commodity sectors are dependent on developed country markets, with the result that their prospects for sustainable development are linked. That is, positive economic conditions in major purchasing regions can promote economic growth in producing countries, as their markets expand. Producers and producing country governments need this income expansion to implement more socially and environmentally sustainable practices and policies. However, economic growth does not lead to sustainable development if sound social and

³ Calculated by author from FAO, 2007, "State of the World's Forests 2007."

environmental policy protections are not in place. Indeed, recent growth in consumer demand for wood or agricultural commodities has not been sensitive to the social and environmental impacts of production methods, and has exacerbated the unsustainable outcomes of bad policies (Sun *et al.*, 2008). Income expansion in commodity sectors can reinforce unsustainable arrangements if local and international policymakers do not channel resources toward sustainable transformations.

2. *Public policy and market governance arrangements have not provided adequate protection for producers and the environment.*

National governments and intergovernmental agreements have failed to create the conditions necessary for sustainable development. Broadly speaking:

- Coffee: The collapse of the International Coffee Agreements in 1989 precipitated a 50 per cent drop in the international coffee price within two years (Bray *et al.*, 2002, pp. 433-434). The volatility of prices paid to coffee growers has increased substantially since the onset of this crisis,⁴ often falling below the cost of production and worsening the economic instability induced by declining real prices.
- Seafood: Through subsidies and inefficient practices, public policy in the fisheries sector has encouraged unsustainable harvesting levels and disregard for their environmental and social consequences (FAO, 2007a).
- Forestry: Policies affecting economic performance in the forestry sector have prioritized economic growth and short-term commercial interests instead of social and environmental concerns, inducing bad forestry management practices and instability over the long term for producers (Sun *et al.*, 2008).

3. *The livelihoods of commodity producers are rendered increasingly vulnerable as commodity values decline.*

Recent short-term spikes notwithstanding, international commodity prices have tended to become depressed over time:

- Coffee: The terms of trade for green coffee beans fell by about 50 per cent between 1965 and 2000 (Fitter and Kaplinsky, 2001).
- Seafood: The volume of seafood traded has increased by four times since 1976 while the value of trade has increased by a factor of only three, producing a decline in its per-unit value (FAO, 2008).
- Forestry: World prices for wood have been depressed by 7–16 per cent due to the flood of illegally traded products (in Sun *et al.*, 2008).

⁴ Sexsmith, (2008) calculated the coefficient of variance of the price to Mexican growers for the 1977-1989 and 1990-2006 periods and found that price volatility doubled in the latter period.

Falling prices in international markets can erode livelihoods in communities dependent on commodity production and exchange.

4. *Reduced livelihood-earning potential puts increased pressure on social and environmental systems in commodity-dependent communities.*

The loss of livelihoods has often forced producers to take drastic measures to compensate for reductions to their income, which have led to social instability and environmentally destructive practices. For example:

- Coffee: Over the course of the most recent “coffee crisis” (2001-2005) many coffee growers were forced to either migrate or destroy natural forest cover to expand their cultivated area.
- Seafood: Global supply from capture fisheries has declined by two per cent since 1997, with some major producers (Japan, Chile and Russia) seeing reductions on the order of 30 per cent. Half of the world’s fish stocks have met, or are near to meeting, their maximum sustainable yields, and a further quarter is under greater pressure than it can sustain (FAO, 2007a).
- Forestry: The rate of decline of forest cover in developing regions represents the most important threat to the world’s stock. Losses in Africa account for a majority—nearly 55 per cent—of the global reduction, while North American forestland is barely declining and European and Asian forests are in recovery (FAO, 2007b). Producers in developing regions respond most strongly to price signals and Illegal logging, “asset-stripping” of forests, and the sale of timber to finance armed conflict arise as significant sustainability challenges (Sun *et al.*, 2008).

In summary, conditions in international commodity markets have induced unsustainable economic, social and environmental conditions that are not adequately addressed by local and international policy. Voluntary standards can help fill the gap created by private and public sector failures by providing economic incentives for supply chain actors to engage in sustainable production and trading practices.

2.2 Standards and Supply Chain Governance

In response to the growing demand for sustainable commodities, and the recognized need for common definitions and a level playing field, there has been a rapid proliferation of voluntary, rules-based systems of production and trade. These standards serve a number of purposes, such as risk management, supply management, promotion of accountability and continual improvement. Although their overarching objectives might differ, all standards systems must have policies to set, implement and resolve disputes over their supply chain rules. It is possible to identify the following

core governance functions—and associated costs—within most standards systems:⁵

- **Rule-making:** Standards, by definition, set common rules for players across markets and supply chains. These rules vary significantly in detail and breadth of coverage. The distribution of authority throughout the rule-making process has significant impacts on the ways that stakeholders apply, and benefit from, a given standard system. The broad process of negotiating political differences over the content of a standard often represents a significant organizational cost.
- **Monitoring and Enforcement:** A given standard must be able to track compliance to ensure that its intended impacts are actually achieved. Monitoring and enforcement mechanisms also enable market growth, by building consumer recognition and trust. Although monitoring and enforcement costs can vary significantly, they tend to represent the largest expense in the certification process.
- **Dispute resolution:** To form complete governance systems, standards must not only develop and enforce rules, but also institute systems to resolve disputes over these rules. Although these specific functions typically account for a modest portion of standards' operational costs, they are crucial for maintaining legitimacy and operational consistency.

2.3 Sustainability Standards for Coffee, Fisheries and Forestry

Differences in the governance systems of standards can be traced to their historical roots and intentions to reach particular markets. Below we provide a brief description of the specific systems analyzed in the present paper.⁶

2.3.1 Coffee

Fairtrade: Implemented by Fairtrade Labelling Organizations (FLO) International, based in Bonn, Germany, Fairtrade was conceived with a social mission, but has increasingly incorporated environmental criteria. It seeks to achieve direct, transparent trading relationships between producers and buyers by holding them accountable to fair terms of exchange. Fairtrade differs from the other standards studied in this paper by requiring that producers are paid a “fair” price, which is set at a fixed amount above the conventional market. Smallholder producers, who must be organized in democratic cooperatives, are paid the Fairtrade minimum price of US\$1.25/pound, or the New York “C” futures contract price—the international benchmark for green Arabica coffee beans—if this is higher. In addition, they receive US\$0.10/lb as a “social premium” to be invested in

⁵ Kaplinsky and Morris (2003) have suggested analyzing value chain governance in separate terms of executive, legislative and judicial functions. In the present paper and the companion piece, we have conceptualized the governance impacts of sustainability standards on each of these roles.

⁶ Other prominent standards in the coffee sector not explicitly addressed in this paper include the Common Code for the Coffee Community, Bird Friendly and Starbucks internal CAFÉ Practices program. They have not been included in the quantitative analysis because of either their limited scope, or their application within a single company's supply chain.

the community and US\$0.20/lb if the contract is for certified organic coffee.⁷ Certification is carried out by FLO-Cert, an independent certification body.

Rainforest Alliance: Rainforest Alliance certification is awarded to farms that meet a set of standards developed by the Sustainable Agriculture Network (SAN), a coalition of Latin American conservation NGOs based in Costa Rica. The standard is based on SAN's 10 social and environmental principles, which aim to promote efficiency in farm management by improving conservation practices and guaranteeing workers a safe workplace and fair working conditions. Certification is carried out by Sustainable Farm Certification International, an independent certification body.

UTZ Certified: This organization, based in the Netherlands, intends to be a tool to help mainstream and specialty coffee companies integrate corporate social responsibility practices into their operations. It intends to promote transparency and accountability in the value chain by requiring that all buyers report their pricing practices through an online member portal. The standard covers social and environmental criteria and is open to farms of all sizes. Certification can be carried out by any of the independent certification bodies approved by UTZ Certified.

Organic: The organic sector is comprised of a number of standard-setting organizations and certification bodies, which are typically members of the umbrella organization IFOAM (International Federation of Organic Agriculture Movements). The principles of organic agriculture, as defined by IFOAM, are to protect human, environmental and animal health by rooting productive systems in ecological cycles, and by treating human and natural environments fairly and with caution.⁸

2.3.2 Seafood⁹

Marine Stewardship Council (MSC): The dominant certification program in the fisheries sector, its standards are exclusive to marine capture fisheries (to the exclusion of aquaculture or “fish farms”). Fisheries can apply for certification to an environmental standard that is based on three principles: sustainable fish stocks, minimizing environmental impact and effective fishery management.¹⁰ Separately, companies along the supply chain can apply for certification under the MSC's “chain-of-custody standard for seafood traceability” for the right to place the MSC label on their products. MSC certifiers are independent and receive accreditation from an independent body.

⁷ It is important to note that Fairtrade buyers are not required to purchase certified organic coffee under FLO organic contracts. That is, certified-organic Fairtrade producers do not always receive the US\$0.20/lb organic premium for their organic coffee. Payment of the social premium is mandatory.

⁸ Visit: http://www.ifoam.org/about_ifoam/principles/index.html. Accessed February 12, 2009.

⁹ The MSC is the only certification program in the seafood sector with an important market presence. The Global Aquaculture Alliance has also been established as the leading standard for aquaculture seafood.

¹⁰ Visit: <http://www.msc.org/about-us/standards/msc-environmental-standard>. Accessed February 12, 2009.

2.3.3 Forestry¹¹

Forest Stewardship Council (FSC): FSC standards are developed in a decentralized fashion by multi-stakeholder groups on a regional or national basis. They are based on the organization's 10 principles and 56 criteria, which pertain to conservation and efficient forest management, and also strongly emphasize the rights of indigenous people and forest communities. There are special standards for small and low-intensity forest managers, as well as the option to apply for certification as a group. Chain-of-custody certification is also available. Certification bodies are independent, as is the accreditation process.

Programme for the Endorsement of Forest Certification (PEFC): This organization, which has 34 member countries, endorses national forest certification schemes. To qualify, schemes must cover the entirety of forest management, be developed through a participatory process, and be held accountable by independent certification and accreditation.

¹¹ The share of global certified forest land outside the scope of the two systems referred to in this paper is negligible.

3.0 Market Impacts of Sustainability Standards

This section analyzes supply and demand patterns for certified coffee, seafood and forest products and compares them to global market trends (to the extent possible) to determine how standards affect the “territoriality” of global value chains. The spatial distribution of production and exchange activities determines where employment will be created and where value will be added. The analysis of trade flows, therefore, indicates which geographical regions will benefit economically from standards, and where their sustainability impacts are felt.

Certified commodities are not tracked in national trade databases, thus the information presented in this section is based on data provided by standards organizations, anecdotal evidence provided by interviewees, and a literature review. Below we consider each market separately in terms of its supply and demand characteristics.

3.1 Certified Coffee Market

3.1.1 Demand

Overview

Although sales of certified coffees have been expanding rapidly throughout North America and Europe, the percentage of total sales coming from certified sources remains well below 10 per cent of total market share. Recent statistics (2006) usually put the certified percentage of total green coffee exports at about four per cent of global exports or roughly 220,000 tonnes (for example, Giovannucci, Liu and Byers, 2008). The largest certified coffee market is Fairtrade, estimated at over one million bags; organic follows closely at 900 million bags.

Although volumes are small, certified markets are growing much faster than conventional markets. Compared to 2006 levels, sales of roasted Fairtrade coffee in 2007 rose by 19 per cent, UTZ Certified sales rose by 57 per cent (and green coffee purchases rose by 47 per cent), and Rainforest Alliance purchases were expected to double again in 2007. By contrast, calculations from ICO data show that world coffee imports grew by only three per cent. Even in the gourmet segment, demand grew more slowly at 10 to 15 per cent (Giovannucci, Liu and Byers, 2008, Table 2).

Table 2: Global Market Characteristics for Certified Coffee

Certification Program	Green Coffee Purchases in 2006 (000's bags)	2005-06 Per Cent Demand Increase	2006-07 Per Cent Demand Increase	Per Cent U.S. Coffee Market in 2006
FLO	1,088 ¹²	53	19	3.3
Rainforest Alliance	450	106	~100 ¹³	~1
UTZ Certified	600	25	57	~0
Organic	900 ¹⁴	15		2.5

Sources: The Coffee Guide, FLO, UTZ Certified, Rainforest Alliance, Fair Trade Almanac, 2007, Giovannucci, Liu and Byers (2008), and Giovannucci and Villalobos (2007).

Fairtrade and Organic

North America is driving market growth for organic and Fairtrade certified coffee. Giovannucci, Liu, and Byers (2008) report that organic consumption in North America rose from 37 per cent to nearly 50 per cent of the world total between 2005 and 2006. Imports of organic coffee into the U.S. grew by 56 per cent in 2006, and at an annual average growth rate of 33 per cent over the prior seven years (Giovannucci and Villalobos, 2007). Analysis of FLO sales figures reveals that North America consumed 37 per cent of the world's Fairtrade coffee in 2005, and 50 per cent in 2006 and 2007. Fairtrade coffee sales more than doubled (110 per cent growth rate) in the U.S. between 2005 and 2006, and by 14 per cent¹⁵ in the subsequent year. In 2007, demand for conventional coffee had grown at only 9.1 per cent in Canada and 2.2 per cent in the U.S. over 2006.¹⁶

North America's share in certified markets is disproportionate to its share in the global coffee trade. Canada and the U.S. together accounted for only 22.8 per cent of world coffee imports in 2007—roughly half their share in certified organic and Fairtrade markets. All certified coffees together represented about eight per cent of the U.S. market in 2006—about twice the share that certified coffees hold in the global market.¹⁷

Europe's share in Fairtrade sales corresponds more closely to its share in the global coffee market than North America's share. In 2006 and 2007, Europe purchased half of the world's Fairtrade

¹² Authors' estimation: Transfair USA calculation of U.S. imports (29,380 metric tonnes) converted to number of bags (489,666) and assuming 45 per cent share in world imports of Fairtrade coffee.

¹³ Predicted growth rate of certified purchases, from Rainforest Alliance 2007 Annual Report.

¹⁴ The Coffee Guide notes that organic export figures may be incomplete due to inconsistent recording by exporting countries.

¹⁵ Calculated from FLO sales figures as reported in the Coffee Guide. Giovannucci, Liu and Byers (2008) reported that the slowdown may have been due to over-purchasing the previous year.

¹⁶ Calculated from ICO statistics.

¹⁷ Giovannucci and Villalobos (2007). There may be some discrepancy in this comparison since the global figure is based on exports and the U.S. figure is based on imports.

coffee and 54 per cent of its total coffee supply. Europe's share in world Fairtrade sales has declined, having represented 62 per cent of the total in 2005, due to slower market growth than in North America—roughly 21 per cent in 2005 and 2006.¹⁸ In fact, two important European markets, the U.K. and Germany, were importing less Fairtrade coffee as a share of their total coffee imports in 2006 than in 1999 (Sexsmith, 2008). However, Europe's demand for Fairtrade coffee is still growing significantly faster than overall coffee imports, which increased by only 3.4 per cent between 2006 and 2007.¹⁹

The only national Fairtrade labelling initiatives outside of North America are in Japan, which sold less than 0.5 per cent of the global total in 2007, and Australia and New Zealand, whose combined sales were less than one per cent. Japan's share in the world coffee market is much more significant, however, at 5.7 per cent of world imports. Russia, the seventh largest coffee importer in 2007 with 3.5 per cent of global imports, has no registered sales of Fairtrade coffee. An interesting divergence from the North-South trade pattern is exhibited by Starbucks' plan to offer Fairtrade coffee in Timor and Peru, two of the company's origin markets where there is also a significant retail presence.²⁰

Rainforest Alliance

The territorial distribution of sales of Rainforest Alliance coffee has been closely related to its historical origins, but its market appears to be rapidly globalizing. That is, in 2006, North America accounted for 43 per cent of total sales of Rainforest Alliance coffee, but this share is dropping as other markets are developed. Demand is growing the fastest in Japan, which represented 15 per cent of the Rainforest Alliance market in 2006, and also in Europe.²¹

UTZ Certified

The current market distribution for UTZ Certified coffees are traceable to the fact that UTZ was originally initiated as a project of Ahold, a major Dutch retailer. UTZ Certified coffee exhibits a markedly different pattern of trade flows from the other three certifications, since North America accounted for less than five per cent of certified sales in 2006 (Giovannucci, Liu, and Byers, 2008). Most coffee certified to this standard is sold in Europe, and a significant share of sales—28 per cent—are based in the Netherlands (UTZ Certified represents 86 per cent of the sustainable coffee market in the latter country).²²

Market Concentration

¹⁸ Calculated from FLO sales figures as reported in the Coffee Guide.

¹⁹ Calculated from ICO statistics.

²⁰ Interview with Starbucks' Manager of Green Coffee Sustainability.

²¹ Rainforest Alliance market data obtained from: <http://www.thecoffeeguide.org/>.

²² UTZ Certified 2007 Annual Report

The rapid growth in sales across certified coffees over the past decade is largely attributed to sustainable sourcing commitments made by major companies in recent years, rather than the growth of small organizations or consumer awareness.²³ Of the total purchases of green beans made by Starbucks in 2007, six per cent was Fairtrade and four per cent was certified organic. These figures are significant when one considers that the company buys two per cent of the world's green coffee beans. Starbucks purchases of Fairtrade certified coffee have grown to 32 per cent of all Fairtrade certified imports into the U.S. and 16 per cent of global Fairtrade imports (in 2007) since the company entered the Fairtrade market in 2000.²⁴ Kraft Foods, one of the world's largest companies in the food and beverage industry, is the largest purchaser of Rainforest Alliance certified coffee (approximately 20,000 tonnes in 2007).²⁵ Using sales estimates for that year, this amounts to approximately 37 per cent of all purchases of Rainforest Alliance coffee. McDonald's Europe, Sara Lee, and ASDA are just a few of the other major companies in North American and European markets that have recently made significant commitments to purchase from Rainforest Alliance or UTZ Certified coffee farms, in some cases up to 100 per cent of all purchases. These two initiatives have achieved remarkable growth rates due to their pursuit of sales partnerships with large, mainstream coffee companies, and inclusion of plantations in their certification systems (which remain excluded from Fairtrade and are less likely to have organic certification) (Raynolds *et al.*, 2007, pp. 158-159).

These market figures indicate a high and rapidly growing level of concentration at the trade and retail levels in the certified coffee value chain. The consequences of such concentration could be the replication of power asymmetries experienced in non-certified coffee chains. This diminishes the potential of standards to close the distance between consumers and producers. For example, large retailers in certified markets can outsource their production and labelling activities, and thereby avoid building close, long-term trading relationships with coffee producers (Hutchens, 2007). The challenge faced by standards is to grow their markets—and, therefore, their positive impacts on producer—without sacrificing their potential to reduce power asymmetries in conventional trading relationships.

3.1.2 Supply

Coffee certification programs have their strongest presence in Latin America. This regional bias is likely related to the fact that producers in this region have often been involved in founding standards organizations (as for the Fairtrade, UTZ Certified and Rainforest Alliance standards). In the organic segment, Mexico is the world's largest producer with over 150,000 hectares of coffee under organic cultivation (IFOAM, 2008). Of 446 individual farms registered on the database of Sustainable Farm

²³ A similar observation was made by the Manager of Green Coffee Sustainability at Starbucks.

²⁴ Starbucks 2007 Corporate Social Responsibility report.

²⁵ Visit: <http://www.kraftfoods.co.uk/kraft/page?siteid=kraft-prd&locale=uken1&PageRef=2526&Mid=41>. Accessed January 27, 2009.

Certification International, the certification body for Rainforest Alliance, 433 were in Latin American countries.²⁶

In the Fairtrade market, the U.S. exhibits a particular preference for coffee from Latin America. Measured by volume, about 80 per cent of U.S. imports of Fairtrade coffee in 2007 came from Latin America, and 59 per cent of the total came from just four Latin American countries (Peru, Mexico, Brazil and Nicaragua). Meanwhile, only four per cent of the total volume was purchased from Africa. These figures roughly reflect the regional distribution of overall coffee imports into the U.S., although Latin American exporters benefit disproportionately from a nearly 10 per cent larger share in the U.S. Fairtrade market than in its general coffee market. Peru, in particular, represents over one-quarter of all Fairtrade coffee imports into the U.S. but only about four per cent of its overall coffee market. The rapid growth of U.S. Fairtrade coffee sales could therefore create disproportionate market benefits for Latin American producers if this regional preference continues. Considering that Latin American countries are ranked substantially higher than Asian and African countries in the Human Development Index (Table 3, first column), this bias cannot be explained by an intention to favour the most disadvantaged producers.

Table 3: Fairtrade vs. all Coffee Imports into the U.S., by Volume

	2005 HDI value ²⁷	% Fairtrade coffee, 2007	% all coffee, 2007	2007/2003 ratio, Fairtrade coffee	2007/2003 ratio, all coffee
Top 5 Fairtrade Exporting Countries					
Peru	0.773	28.1%	4.2%	5.4	1.1
Indonesia	0.728	13.2%	5.1%	3.9	1.2
Mexico	0.829	11.6%	5.8%	1.9	2.5
Brazil	0.800	9.8%	21.4%	46.3	0.9
Nicaragua	0.710	9.4%	2.2%	2.9	1.1
Regions					
Latin America	0.803 ²⁸	79.6%	70.9%	3.6	0.98
Asia ²⁹	0.611 ³⁰	16.0%	26.3%	2.9	1.5
Africa	0.493 ³¹	4.4%	2.8%	3.9	0.9
World total	0.743	100%	100%	3.5	1.1

Sources: Transfair USA Fair Trade Almanac 2007, USDA Foreign Agriculture Service

The proliferation of certified coffee production has created an excess supply. The supply of Fairtrade coffee was estimated to be seven times greater than existing demand in 2003 (Murray *et al.*,

²⁶ As of January 9, 2009.

²⁷ From 2007-2008 Human Development Report. Ranked from 177 countries.

²⁸ Latin America and the Caribbean.

²⁹ Calculated as world totals less Latin American and African totals.

³⁰ South Asia.

³¹ Sub-Saharan Africa.

2003), although this imbalance may have diminished with the dramatic expansion of the U.S. market in recent years. Most certified Mexican coffee cooperatives can sell only 20 per cent of their coffee on the Fairtrade market (Renard and Perez-Grovas, 2007). Rainforest Alliance informally estimates its surplus to be about half of the excess in the Fairtrade market (using random figures as an example, this would imply 40 per cent oversupply rather than 80 per cent oversupply).³² The Coffee Guide estimates that of the 1.5 million bags of certified organic coffee produced, 1.1 million are recognized as such when exported.³³

The persistence of excess supply across certified markets makes it easier, theoretically, for buyers to interchange suppliers and seek out the lowest cost, thereby driving prices down. This would undermine one of the primary motivations of sustainability standards, namely to promote long-term, reliable trading partnerships. In the case of Fairtrade, even though it is resistant to price pressure beyond its established price floor, it is possible that producers may have to make other sacrifices (for example, not request pre-financing) to maintain market access.

3.1.3. Summary of Market Impacts – Coffee

The following conclusions can be drawn from the information gathered in this section:

- North America has even more leverage over certified markets than it enjoys in general coffee markets. The region's purchases account for half of the market for certified organic and Fairtrade coffee, and nearly half the market for Rainforest Alliance coffee. This represents more than double the North American market share in conventional trade.
- Latin American coffee producers are generally favoured in certified markets. Since their economies have typically reached higher levels of human development, this implies that standards may not be maximizing their sustainable development impact.
- The certified coffee sector is reproducing the market power imbalances of conventional trading structures. Commitments to sustainable coffee sourcing by major traders and retailers in the U.S. and Europe are driving growth in demand for certified coffee and creating concentration in downstream value chain segments. The weakening of producer market power that arises in this context is exacerbated by significant excess supply of certified coffee.
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³² Interview with Chief of Sustainable Agriculture, Rainforest Alliance.

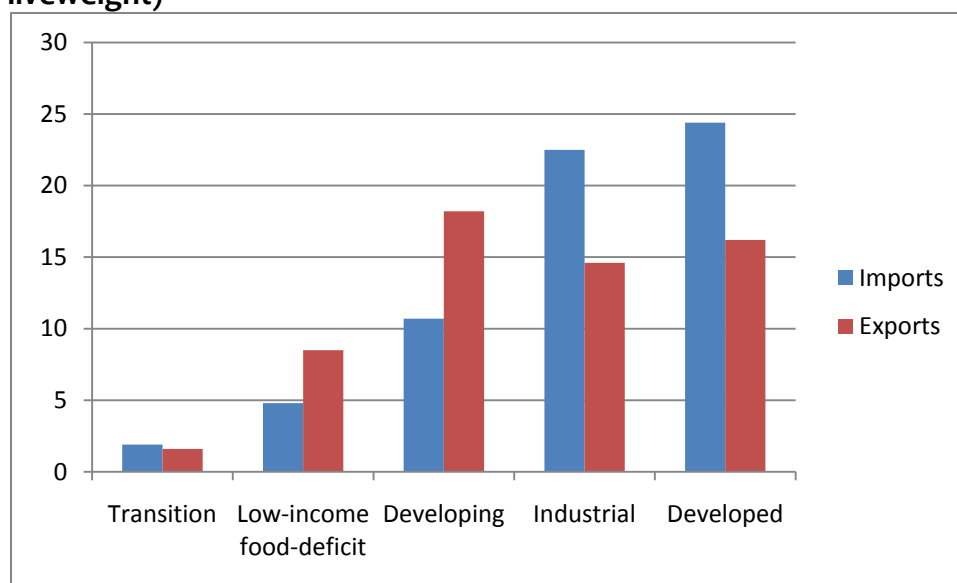
³³ Visit: <http://www.thecoffeeguide.org/>.

3.2 Certified Seafood Market³⁴

3.2.1 Supply

One-third of total fisheries production enters world trade, a majority of which (59 per cent) comes from developing countries. Roughly speaking, net exports of fisheries commodities are inversely related to a country's stage of economic development (Figure 1). Certified fisheries represent approximately six per cent of the world's edible wild capture fisheries. The rate of certified production is particularly high for wild salmon (42 per cent of the global catch), prime whitefish (32 per cent), New Zealand hoki (13 per cent) and South African hake (11 per cent).

Figure 1: Imports and Exports of Fisheries Commodities by Level of Development (tonnes liveweight)

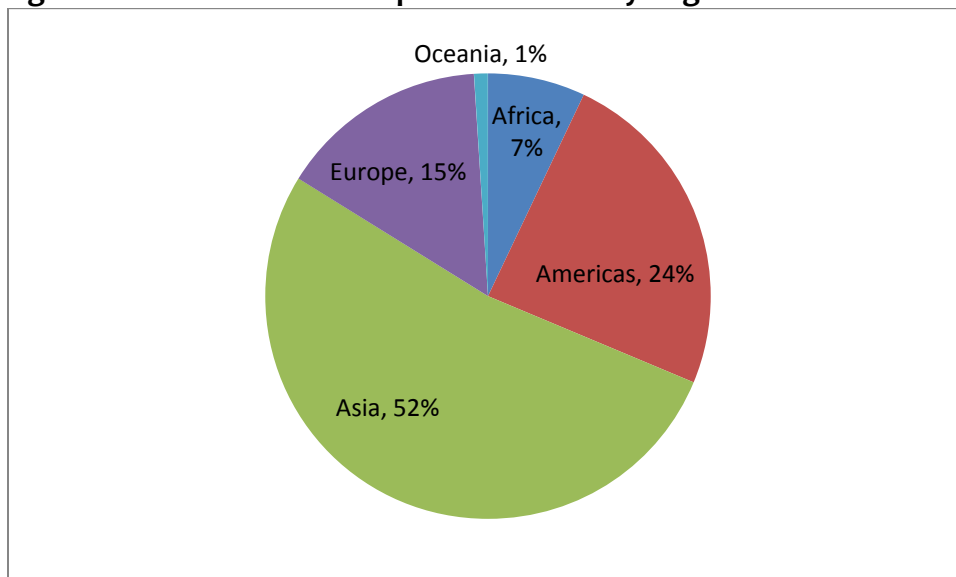


Source: FAO, 2006 Yearbook of Fisheries Statistics

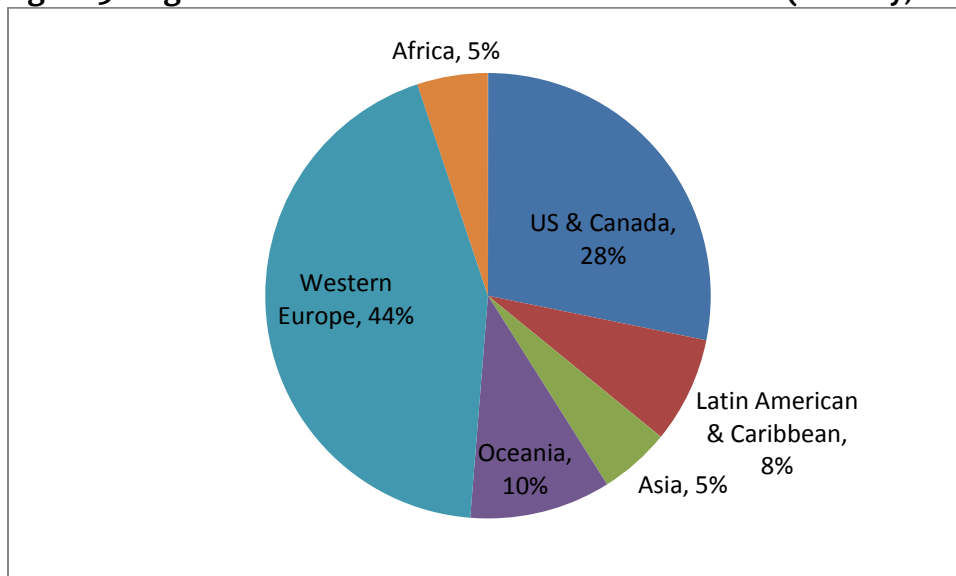
Given the dominance of developing countries in fisheries production (Figure 2), a disproportionate share of certified fisheries is located in Western Europe, Australia and New Zealand, and the U.S. and Canada. Figure 3 shows that 82 per cent of the 39 fisheries holding MSC certification at the time of writing (January, 2009) are located in these regions. Yet, less than 40 per cent of the world's production from capture fisheries takes place in the developed world. Given the regional distribution of fisheries in the process of obtaining certification, this imbalance is not likely to improve in the near future. Joint applications made by fisheries undergoing MSC assessment make it difficult to determine the precise distribution of fisheries listed (of which there are 88). However, it can be said that of 67 separately listed applications, a majority (55 per cent) are in Europe (including Russia), 28 per cent are in the U.S. and Canada, and only 14 per cent are in Latin America, Asia and

³⁴ Unless otherwise noted data in this section from FAO (2007a) and FAO 2006 Yearbook.

Africa. The exclusion of the poorest fishers and fishing communities from certification has led Ponte (2008) and others to conclude that they will be increasingly marginalized unless specific actions are taken to ensure market access for poorer producers over the long term.

Figure 2: Production from Capture Fisheries by Region

Source: MSC website.

Figure 3: Regional Distribution of MSC Certified Fisheries (January, 2009)

Source: FAO, 2006 Yearbook of Fisheries Statistics.

The current concentration of certified production in developed countries may well be a reflection of MSC's long-standing focus on environmental protection at the expense of attention to equity or market access for developing countries. As noted by an ex-staff member of the MSC, at the inception of the program, there was, "no acknowledgement that it needed to operate in developing

countries” among its founders.³⁵ In its initial establishment, priority for certification was given to the groundfish fisheries from which Unilever, the food company that helped found the MSC, sourced its seafood.

Nevertheless, the very fact that organizational priorities have defined access to certification means that the exclusion of developing countries can be resolved if their needs are brought to the forefront of the MSC’s agenda. Indeed, the MSC made the creation of developing country access to the standard a priority in 2002 with the launch of a project to facilitate certification of fisheries with low data-gathering capacity. The purpose was to overcome perceived barriers to certified markets, since some of these fisheries had been operating on a sustainable basis but lacked the, “big western signs to prove it.”³⁶ At present, there are seven developing country fisheries in trial assessment through the MSC’s Developing World program. The main challenge of extending the program to include data-deficient fisheries is to ensure that the bar for the standard is not lowered to achieve access for marginalized producers.³⁷

3.2.2 Demand

The availability of MSC certified seafood has increased rapidly since it was introduced to the market in 2001. In 2004, there were approximately 200 million tonnes of certified seafood available globally, and this number had surpassed 600 million tonnes by 2007. As of April, 2007, there were 608 different products carrying the MSC label available in 29 countries and 110 of these new products had been created over the preceding half year.³⁸

Interviewees in Canada and the U.S. perceived that European markets, and to a secondary extent U.S. markets, are driving demand for certified seafood. One European retail chain has already ceased purchasing from a B.C. salmon fishery undergoing a drawn-out certification process, and the remaining European retailers have given the fishery a deadline of 2009.³⁹ The apparent concentration of certified seafood markets in Europe does not seem to represent a diversion of trade, since Europe has a 46 per cent share of world fisheries commodities imports. North American demand is also being significantly stimulated by Wal-Mart’s decision to purchase 100 per cent of the wild-caught seafood sold in its U.S. stores from MSC-certified fisheries by 2011, and also by new demand from Loblaw’s in Canada.⁴⁰

³⁵ People within the organization were “taking a consumer-based approach,” and their decisions made it clear that the organization would be “Euro- and British-centered.” Interview with former MSC Chief Executive.

³⁶ Interview with MSC Associate Director.

³⁷ Interview with MSC Associate Director.

³⁸ Data on MSC-labelled products from: Progress update: Fisheries and Commercial. Presentation by Chris Ninnés, April, 2007. Available on MSC website.

³⁹ Interview with BC Seafood Alliance.

⁴⁰ Interview with BC Seafood Alliance and

<http://www.worldwildlife.org/what/globalmarkets/fishing/engagingbusiness.html>. Accessed January 20, 2009.

On a global scale, Asia accounts for nearly one-third of world imports of fisheries commodities (by value) and is experiencing the fastest growth rates, but the continent has not contributed significantly to demand for certified products. One halibut fisher on the west coast of the U.S. noted that the vast majority (he estimated 95 per cent) of the fish harvested by his association was sold in Asia, but that this number declined to about 80 per cent as markets for sustainable seafood have grown in North America.

3.2.3 Summary of Market Impacts - Fisheries

Analysis of supply and demand patterns for certified seafood has produced the following conclusions about the impact of the MSC program on global markets:

- Strong pressure from retail segments in Europe and North America to obtain certification threatens to reduce market access for fisheries that are late to enter the MSC program.
- As certification has thus far been biased toward developed country fisheries, those fishing communities that already experience economic marginalization might be further disaffected as certification becomes a *de facto* rule for exporting to higher value European and North American markets.
- The dominance of one certification program in the fisheries sector, the MSC, gives it significant influence over supply conditions in markets for sustainable seafood. The MSC can use this leverage to improve access to certified seafood markets for low-capability fisheries.

3.3 Certified Forest Products⁴¹

3.3.1 Supply

In May 2008, there were 320 million hectares of certified forest area globally, amounting to 8.3 per cent of the world's total forest area and 13.4 per cent of its managed forest area. This figure represents an increase of 8.8 per cent over the preceding year. PEFC has a nearly two-thirds share of the global certified forest area while FSC holds nearly one-third. An additional two per cent of world forest area is certified by national initiatives other than the major international endorsed schemes.

Western Europe is the only region with a majority of its forest area (54 per cent) under certification. North America has the next highest share with 39 per cent of its forest area currently certified. These two regions together make up nearly all of FSC-certified area (82 per cent) and of PEFC-certified forest area (93 per cent), but less than half of the world forest cover. Canada and the U.S. are the top two holders of both FSC-certified and PEFC-endorsed forest area, in that order.⁴²

⁴¹ Data from UNECE/FAO (2008) unless otherwise noted.

⁴² The Canadian figure for PEFC includes the area certified under the Sustainable Forestry Initiative, and the American figure includes the American Tree Farm System and Sustainable Forestry Initiative, which have been PEFC-endorsed.

The shares of forest area under certification in developing regions are dramatically lower—less than two per cent of forest area in Latin America is certified and less than one per cent is certified in each of Africa and Asia. Eastern Europe is experiencing the fastest rate of expansion with land area under certification having nearly doubled between 2006 and 2008. FSC has a larger presence in tropical countries than PEFC. Specifically, 60 per cent of certified forest cover in the developing world is under the FSC. Independent national schemes in Malaysia, Indonesia and Gabon account for most of the remainder.⁴³

Table 4: Global Forest Area Under PEFC and FSC Certification, 2008

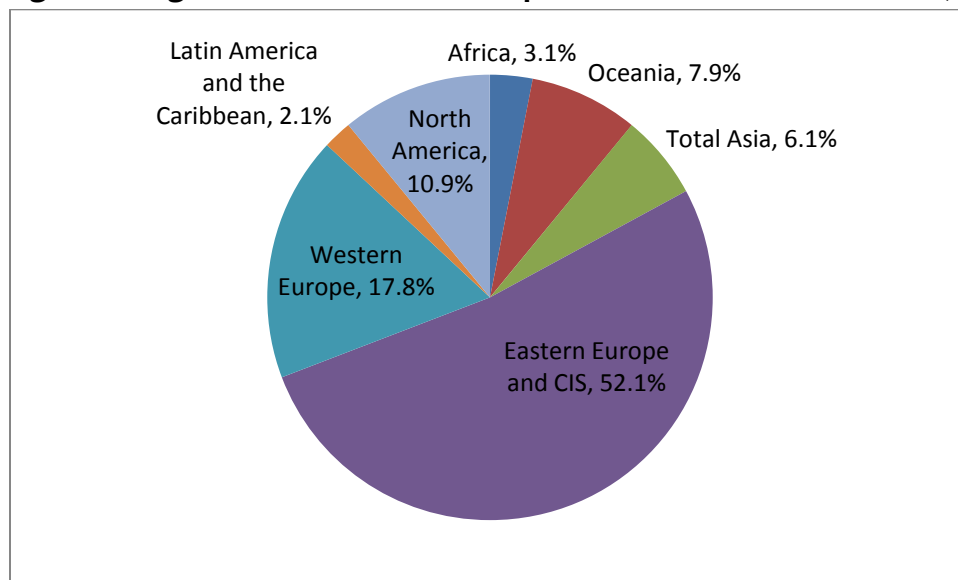
Region	Per cent of Forest Area Certified	Per Cent Constant Annual Growth Rate of Total Certified Area, 2006-2008	Per cent of Total FSC Certified Area	Per cent of Total PEFC Certified Area
Europe (Eastern Europe)	56.8 (2.7)	3.3 (37.6)	50.0	29 (2)
North America	38.6	7.3	32.5	66
Oceania	4.8	21.2	1.6	4
Central and South America & Caribbean	1.6	16.2	11.2	1
Africa	0.5	19.5	2.9	0
Asia	0.4	34.8	1.9	0
World	8.3	8.8	100	100

Sources: UNECE/FAO (2008), FSC, April 2008, "Global FSC certificates, type and distribution," PEFC Council Information Register (Accessed January 28, 2009), FAO, 2007b Annex Table 2.

The role of developing countries in markets for certified wood is disproportionately low when compared to their shares of global markets. Figures 4 and 5 demonstrate the shares of each geographical region in global roundwood exports and in global roundwood production from certified sources (data on regional certified roundwood exports were not available). This comparison reveals that while North America exports only 11 per cent of the world's total industrial roundwood, it accounts for over half (55 per cent) of its production of certified roundwood. Western Europe also has a significantly larger share of certified production than of global exports, at 44 per cent and 18 per cent, respectively. The sum of Latin America and the Caribbean, Africa and Asia's shares in global roundwood exports is 11 per cent, yet they represent less than one per cent of global certified roundwood production. This suggests that, even though their role in global roundwood markets is minor, they still experience significant marginalization from certified markets.

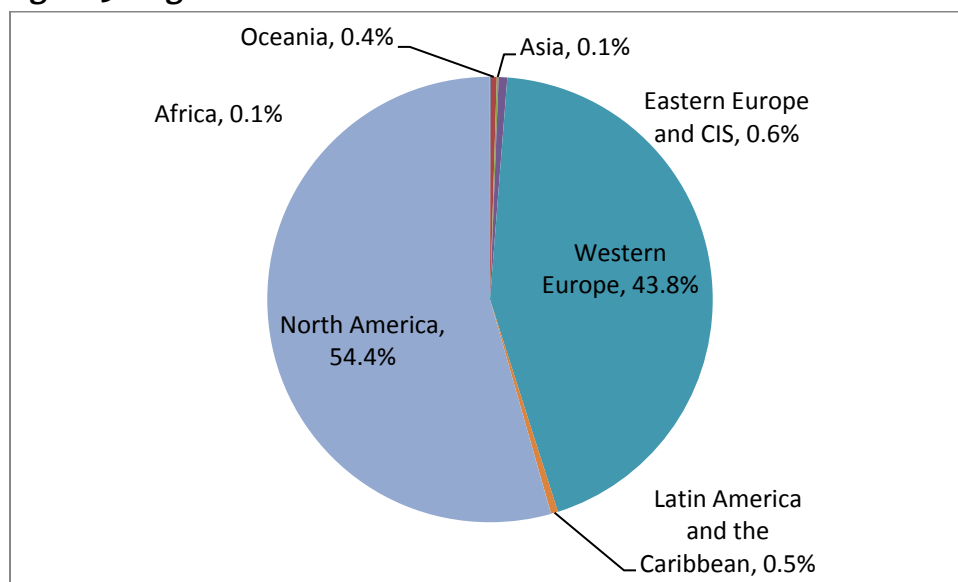
⁴³ There is relatively little cross-certification in the forestry sector, meaning that the largest certified producers tend to prefer either the FSC or PEFC: approximately 1.6 million ha of forest in Europe and another 1 million ha in North America holds two or more certifications.

Figure 4: Regional Shares of Global Exports of Industrial Roundwood, 2006



Source: FAO, 2009, Annex Table 4.

Figure 5: Regional Shares of Global Production of Certified Industrial Roundwood, 2006



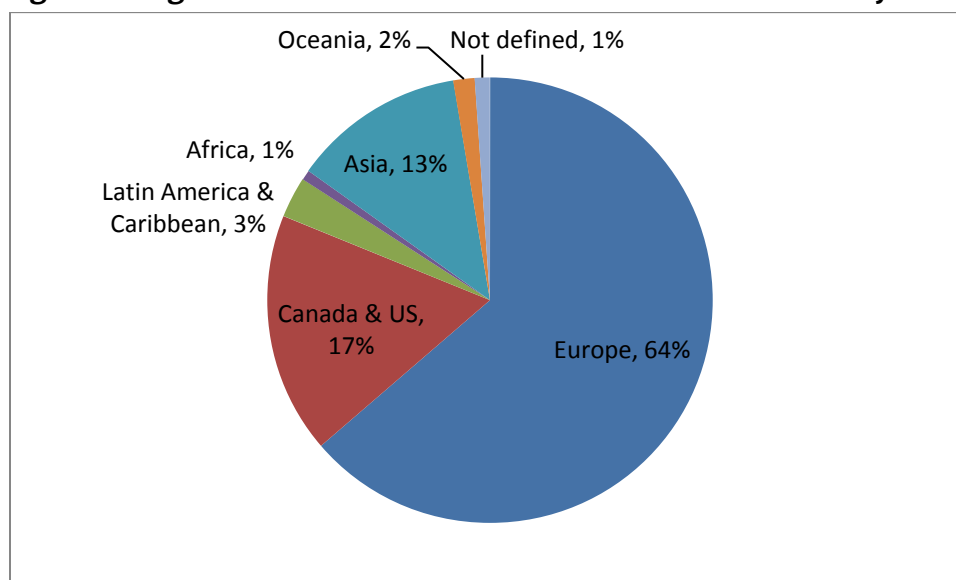
Source: UNECE/FAO, 2008, Table 10.2.1

3.3.2 Demand

Due to the lack of reliable data on demand for certified forest products, the number of chain-of-custody certificates issued can be used as a proxy for business-to-business market growth (UNECE/FAO 2008). The regional distribution of FSC and PEFC chain-of-custody certificates

issued globally is presented in Figure 6. At the time of writing, FSC and PEFC had together issued 13,096 chain-of-custody certificates worldwide. The FSC program has broader reach, accounting for two-thirds of this total. Most of the demand for certified forest products seems to come from Europe, which holds about two-thirds of all chain-of-custody certificates issued. In fact, the U.K. has recently overtaken the U.S. for the greatest number of certificates, at over 2,000. These figures suggest that Europe purchases a disproportionate share of the world's certified wood, since the continent consumes only about 30 per cent of the world's total roundwood and sawnwood.⁴⁴

Figure 6: Regional Distribution of FSC and PEFC Chain-of-Custody Certificates



Sources: FSC, April, 2008, “Global FSC certificates, type and distribution” and PEFC Council Information Register (accessed January 28, 2009).

The market value of certified forest products is rapidly growing. Between May, 2007 and May, 2008, the number of chain-of-custody certificates issued grew by nearly 50 per cent. It has been estimated by the FSC that labelled sales of FSC products surpassed US\$20 billion in 2007, a fourfold increase since 2005. In the Netherlands, the certified market share was estimated at 17 per cent in 2007. In 2006, FSC-certified roundwood rose to 24 per cent of the global industrial roundwood supply, from just under 22 per cent in 2005. Pulp and paper is another important market segment for certified forests with FSC-certified products representing nine per cent of the global total.⁴⁵ However, these figures represent only those products sold with the FSC label. The “vast majority” of certified forest products are sold without a label (UNECE/FAO, 2008) and, therefore, the actual share of certified wood products in the global market cannot be accurately determined.

⁴⁴ Calculated from FAO 2007b, Table 4.

⁴⁵ All FSC data cited in this paragraph from FSC Market Info Pack.

The UNECE/FAO Certification Network surveyed its country correspondents in May, 2008 to develop an understanding of the forces driving demand in its member countries. It found that retail (particularly for “do-it-yourself” products, and pulp and paper) is the market segment driving growth of forest and chain-of-custody certification. Sustainable public procurement policies are also significant contributors to growth in European markets.⁴⁶ In fact, there are about 15 countries whose governments are implementing “green building” standards, which often call for certified wood, such as the Leader in Energy and Environmental Design (LEED) program. The popularity of institutional buying suggests demand for certified wood, and particularly for value-added wood products, will continue to rise.

3.3.3 Summary of Market Impacts - Forestry

The following features of markets for certified forest products stand out from the data presented above:

- Europe and North America account for the vast majority of global certified forest area, but less than a majority of the world’s forest cover. Europe is also over-represented on the demand side of the market for certified products.
- Large retailers are playing an important role in driving demand for certified forest products. Institutional motivations play an important role in demand for certified wood, suggesting that sustained market growth is possible.

3.4 General Observations

Some general observations can be made about the market penetration of certified commodities and expected future trends:

- The uptake of commodity standards exhibits a strong regional bias that precludes producers in marginalized economic regions from equitable participation in certified markets.
- Market penetration of certified products is low enough—10 per cent or less of global production and trade for each of the commodities studied—that market exclusion and trade diversion are not currently problematic on a large scale. Rapid growth in certified markets, however, means that regional preferences could present more significant market barriers in the future if the organizational biases and capability deficiencies that have created them are not resolved.
- Large companies, particularly retailers, are driving demand for certified products as part of their corporate social responsibility campaigns and to diversify their product offerings. They facilitate rapid market growth by dealing in large quantities. However, their size also implies

⁴⁶ See also: Nussbaum, Ruth, “Certification and Certified Forest Products Markets.” Available online at: <http://www.unece.org/timber/docs/tc-sessions/tc-66/md/presentations/04-nussbaum.pdf>.

that existing market structures and decision-making relationships are largely carried over from conventional to certified value chains.

4.0 Impact of Standards on the Generation of Economic Rents

The previous section summarized the evidence on the impacts of sustainability standards on the distribution of production and consumption at the national level and across developing and developed countries. The economic impacts of standards can, of course, also be felt at the micro-economic level through their impacts on the ability of stakeholders to command rents. Standards can change the institutional frameworks of value chains by creating new forms of interaction between supply chain players and with external organizations. The resulting changes to value chain dynamics can generate indirect economic benefits for stakeholders. This section will discuss how sustainability standards can help commodity stakeholders generate various forms of rent and maintain a competitive advantage over their non-compliant counterparts.

The methodological tools for analyzing how sustainability standards create economic rents have been developed by Kaplinsky (1998, 2004a and 2005). “The concept of rent is used to describe a world where the parties who control a particular set of resources are able to insulate themselves from competition by taking advantage of, or by creating barriers to the entry of competitors” (Kaplinsky, 2004a, p. 5). Following Schumpeter, he explains that “super profits” earned through rents—profit rates that exceed the sum of the direct and opportunity costs of the innovative activity—will encourage other producers to copy the novel strategy, diminishing its scarcity and advantageous returns (2004a, pp. 6-7). In other words, rents are “dynamic,” and stakeholders must maintain a continuous rate of innovation to remain in a better market position than their competition (2004a, pp. 7, 19). Below we attempt to identify basic ways that sustainability standards might affect stakeholders’ capacities to harness rents.

Kaplinsky identifies a list of nine rents which may create upgrading opportunities. Technology, human resource, organizational, relational and marketing and design rents are endogenous to the chain, since they are constructed by firms through the process of dynamic innovation discussed above (2004a, pp. 8-12). Exogenous rents include resource, policy, infrastructural and financial rents, which may be partially created by firms in the value chain, but are largely derived from the operating environment (2004a, pp. 12-17). Below we consider observed and reported impacts of standards in the coffee, fisheries and forestry sectors on stakeholders’ capacities to generate organizational, relational (vertical, and horizontal), institutional and design rents. We consider these impacts to be the most relevant, but recognize that further research is needed to explore how sustainability standards affect the generation of other types of rents—including those not within the parameters of the categories above.

4.1 Organizational Rents

Organizational rents are created when enterprises improve their overall skill level and/or develop tighter internal social relations, creating a competitive advantage in the flow, quality, and innovativeness of the way production is organized (Kaplinsky, 1998, pp. 22). Standards encourage organizational innovation by helping enterprises adapt to the needs of certified or niche market buyers, who typically demand higher quality. They do this implicitly, through conformity with sustainability criteria, and explicitly through technical assistance programs. In the forestry sector, for example, the higher expectations of export markets have caused community foresters to, “take a more businesslike approach to production and marketing” (Bass *et al.*, 2001, p. 30). In fact, “Certification has equal or greater impacts on systems and administration of management as it does on the technicalities of practices on the ground” (Bass *et al.*, 2001, p. 67). Better administrative practices and management of natural resources can, indirectly, increase price premiums over time (Giovannucci, Liu and Byers, 2008).

The ability of standards to induce organizational rents is, however, limited by the fact that producers must already have relatively good managerial skills to obtain certification. Sustainable forest management mechanisms are most influential in areas where practices are already fairly good (Sun *et al.*, 2008). Small-scale fisheries, furthermore, are unlikely to have the resources necessary just to initiate the certification process.⁴⁷ This implies that marginalized producer groups could face even greater market exclusion as certification becomes a criterion for market access. Furthermore, when resource-deficient groups obtain assistance to become certified, they often struggle simply to maintain certification. A representative from the Global Forest and Trade Network (GFTN) in Peru commented that indigenous groups in the Amazon, particularly smaller operators, require permanent technical and marketing assistance to maintain their certification. Generally, forester communities in the South have low capacity for quality control and marketing, meaning they have a relatively difficult time capitalizing on certification once it has been obtained.⁴⁸

Compliance with the environmental dimensions of sustainability standards may also constitute an organizational rent, if natural resources are conserved and productivity is raised over the long term. Yet, the effectiveness of standards at reversing resource depletion in the fisheries and forestry sectors has been questioned. It is generally agreed, in the literature and amongst interviewees, that MSC criteria are no more environmentally sustainable than the current practices of most small-scale fisheries, and thus certification would be of no ecological benefit to them.⁴⁹ Amongst large operators, there is a perceived tendency either to certify the “low-hanging fruit”—such as a Canadian halibut fishery undergoing assessment that considers itself “the most comprehensively managed

⁴⁷ Interview with Ecology Action Centre.

⁴⁸ Interview with Timothy Synnott, founding Executive Director of the FSC.

⁴⁹ Interviews with anonymous fishermen, Greenpeace USA, Ecology Action Centre and Dr. Yemi Oloruntuyi.

fishery on the planet”—or to pass out certificates without a sufficiently critical analysis. The enormous investment of resources required to achieve certification led one environmental advocate to comment: “Once it passes the pre-assessment, they go through. Nobody’s putting up CDN\$100,000 and not getting it.”⁵⁰ Furthermore, the fact that standards and indicators are often tailored to the contexts of individual certified enterprises or geographical regions creates significant variation in environmental impacts.

4.2 Vertical Relational Rents

Vertical relational rents are created when trusting relationships are built along the value chain to make the behaviour of suppliers more reliable (Kaplinsky, 1998). Certification is often effective at creating more direct and durable trading relationships. Many examples exist in the coffee sector, where certification aims to reduce the anonymity of conventional forms of trade by improving transparency in the supply chain.⁵¹ For example, retailers and importers have been known to improve their knowledge of origins and production methods by traveling to coffee farms, and to bring producers to their own countries so that they can develop a familiarity with consumer markets. In fact, close, long-term relationships with buyers are a main determinant of the price premiums received by certified Latin American coffee exporters (CIMS, 2004). Several additional examples exist where coffee importers have accompanied their purchases with pre-financing, marketing assistance, and preferred buyer status (Potts, 2007). In the fisheries sector as well, certification has tended to create “preferred seller” status with buyers.⁵² This impact is surely felt in markets for forest products too.

A caveat to this benefit is that producers must make organizational improvements to maintain tight vertical relationships. In the coffee market, buyers’ decisions to maintain trading relationships are based on consistent quality and business practices (CIMS, 2004). Where there is an excess supply of certified product, managerial capacity is even more important to effectively manage heightened competition and lower prices.⁵³

Processors and retailers have created vertical rents by helping to fund certification for their existing suppliers and strengthening trading relationships. In the fisheries sector, Wal-Mart has made financial contributions to the Sustainable Fisheries Fund to help its current suppliers obtain certification and thus reduce the adverse impacts its commitment to certified procurement has had on market access for uncertified fisheries.⁵⁴ As one example from the forestry sector, the Tropical

⁵⁰ Interview with Ecology Action Centre.

⁵¹ Interview with Certification Manager, UTZ Certified.

⁵² Interview with Director, MSC Developing World Fisheries Programme.

⁵³ For example, in the organic market in Peru, excess supply has led to the lowest organic premium of all organic exporters (CIMS 2004).

⁵⁴ Interview with MSC Associate Director.

Forest Trust gathers funds from importers or buyers, which are used towards certification.⁵⁵ Bass *et al.*, (2001, pp. 48-49) cite two examples where U.K. firms supplying the U.K. do-it-yourself sector have paid for Polish suppliers to obtain certification. In another case in South Africa, certification would not have gone forward if the processing division of a company had not agreed to cover the costs (Bass *et al.*, 2001, pp. 70).

Examples of downstream value chain actors financing certification for their existing producers are found less frequently in the coffee sector. Some members of Cooperative Coffees, a North American cooperative of importers of certified organic and Fairtrade coffee, provide interest-free loans to producers for the initial cost of certification, which are paid back through their first certified sale (Potts, 2007). The Rainforest Alliance representative commented that, on occasion big companies in the downstream value chain segment have “pushed certification” by contributing to costs, but that such assistance is by no means “systematic.”⁵⁶

Certification can also result in new collaboration when downstream value chain actors are under pressure from their own markets to find certified sources. For example, when a U.K. producer of railway sleepers sought new origins of certified wood products it funded training in the new process for manufacturers (Bass *et al.*, 2001, p. 57). Retailers in the forest products sector, on the other hand, have only rarely contributed to certification costs, and when they have it has been relatively short term (Bass *et al.*, 2001, p. 71). Producers’ awareness that they bear the costs of certification while retailers reap the reputational benefits can, in fact, create “resentment” toward them (Bass *et al.*, 2001, p. 71).

4.3 Horizontal Relational Rents

Collaborative efforts between firms at the same node in the value chain constitute a form of rent when they help produce economies of scale (Kaplinsky, 1998, pp. 23-24). Although groups not participating in certification are excluded from such benefits, the small-scale producer groups that get involved are generally brought together in ways that enhance their competitive position. Moreover, certification has acted as a catalyst for communities to gather and work toward their social goals. To the Rainforest Alliance representative, social capital is, “one of the unsung benefits of smallholder certification.”⁵⁷ Examples of Fair Trade companies in the U.S. and the U.K. investing in processing facilities shared by smallholder producer organizations, and enhancing their marketing capacities as a result, are common. Thus, the vertical relational rents created by standards may stimulate horizontal collaboration that creates further economic benefits (Sexsmith, 2008).

⁵⁵ Interview with Treasurer of the Board, FSC.

⁵⁶ Interview with Chief of Sustainable Agriculture, Rainforest Alliance.

⁵⁷ Interview with Chief of Sustainable Agriculture, Rainforest Alliance.

Similarly, standards development and implementation can lead to more coordinated action among players downstream on the supply chain, such as traders, manufacturers and retailers. UTZ Certified, for example, inspired by the retailer-led sustainability initiative EurepGAP, provides a natural meeting ground for retail chains to coordinate their sustainability strategies. Other initiatives, such as the Common Code for the Coffee Community (the 4Cs), provide a platform for collaboration across manufacturers.⁵⁸ Where sustainability initiatives encourage or facilitate collaboration among dominant players in global supply chains, they may actually increase the market authority and rent capture of specific nodes to the detriment of those most in need. Since the active participation of major players in sustainability standards is still a relatively new phenomenon, it is difficult to assess the actual impact of such collaboration at present. However, it is worth noting that newer mainstream initiatives have typically taken special care to avoid any direct collaboration or price-setting to ensure consistency with competition policy requirements in North America and Europe.⁵⁹

4.4 Institutional Relational Rents

Institutional rents are created when cooperation with governmental bodies creates a policy environment that enhances competitiveness and innovation (Kaplinsky, 1998, pp. 23-24). Standards may help create institutional rents by aiding commodity producers in building the reputation and capacities necessary to communicate effectively with policymakers. A recent ISEAL Alliance and Trade Standards Practitioners' Network project, "Governmental Use of Voluntary Standards," has documented numerous examples of how governments across the spectrum of development have directly used, supported participation in or facilitated the development of voluntary standards.⁶⁰ These collaborations have resulted in improved environmental management and market growth for sustainable products.

As one example gathered through the research for this paper, a fisher on the U.S. West Coast said that a DVD compiled by his association about their MSC certification had beneficial reputational effects after it was distributed to members of the U.S. Congress. The approval of a third-party certifier was thought to carry significant value with politicians. Similarly, the proliferation of organic agriculture standards in developing countries provides producer groups with new opportunities to interact with government departments dealing with the agriculture sector.⁶¹ Perhaps the most

⁵⁸ The 4C's was originally established as a partnership between the German Technical Cooperation (GTZ) and the German Coffee Association. As such, a considerable part of the logic of the initiative was built on the concept of enhanced collaboration between major coffee manufacturers. The 4C's membership accounts for more than 70% of global manufacturing capacity in the coffee sector.

⁵⁹ For more information on the relationship between horizontal and vertical collaboration within sustainability initiatives and American anti-trust law, see: Jason Potts, *Multi-stakeholder Collaboration for a Sustainable Coffee Sector: Meeting the Challenge of US Antitrust Law* (2004: IISD).

⁶⁰ For more information visit: <http://www.isealalliance.org/governments>.

⁶¹ Interview with Organic Commodity Products Inc. researcher/trader.

poignant example collected is how participation in the FSC certification program has helped forest owners, particularly indigenous groups, to secure their land tenure rights.⁶²

There have also been examples of certification helping producer communities to obtain direct funding from governments. Various interviewees from Canadian fisheries and NGOs stated that provincial and federal governments have helped to fund the assessment process and marketing for certified fisheries.⁶³ Quite significantly, the MSC-certified lobster fishery in Baja California, Mexico received about \$20 million dollars from the Mexican government for infrastructure and social services.⁶⁴ The community was able to use the, “recognition as a platform for requests” that were previously unheeded, thus achieving a, “better negotiating position” with the government as a result of certification.⁶⁵ These examples are just a few of the many that arose during the literature review and interview process.

4.5 Marketing and Design Rents

Marketing and design rents correspond to the “indirect” value chain activities, such as branding and advertising, that generate value-added by enhancing the reputation of a final product rather than its physical characteristics (Kaplinsky, 2004, pp. 10-11). Retailers can create these reputational benefits and transfer them to producers by using a seal or “eco-label” to promote the product’s origin and sustainable production methods. Several buyers in certified coffee value chains have demonstrated interest in developing a brand that denotes the geographical origin and social conditions of production (CIMS, 2004).

However, marketing and design rents at the retail level are dependent upon consumer recognition. Therefore, they depend on widespread labelling, as well as on an understanding of the meanings of different labels. In the European coffee market, for example, there is little awareness of Rainforest Alliance, and roasters typically do not use the logo or charge a premium (CIMS, 2004). Communication of sustainability benefits of certified products is particularly difficult in the forest products sector because of the complexity of the issues (Fischer *et al.*, 2005) and the sector’s heavy reliance on semi-processed products (for example, lumber and other building materials). The former trademark manager for the FSC observed that some retailers do not place the sustainability label on their products to avoid confusing customers with the variety on display, and, furthermore, perceive it as competition with their own logo. The recent approval in the FSC General Assembly of a motion to differentiate community-based timber with a new logo⁶⁶ could exacerbate consumer confusion.

⁶² Interviews with Treasurer of the Board, FSC and founding Executive Director, FSC.

⁶³ Interviews with BC Seafood Alliance, Greenpeace Canada, and anonymous fishers.

⁶⁴ Interview with MSC Associate Director.

⁶⁵ Interview with Director of MSC Developing World Fisheries Programme.

⁶⁶ Interview with Treasurer of the Board, FSC.

The effectiveness of standards at building producers' reputations is further limited by the tendency for sustainability seals not to include denomination of origin information. When this information is indeed portrayed, the benefits have accrued disproportionately to producers with the marketing capacities and connections necessary to engage in self-promotion. The vast majority of certified species sold with the MSC logo, for example, is from Alaska—as of April, 2007, salmon and Pollock products from this state amount to 67 per cent of total certified species sold with the logo.⁶⁷

There is a difficult trade-off between promoting awareness through the use of the seal and maintaining product integrity by requiring a high percentage of certified content in a particular product. In some cases, use of the seal is prohibited when the item contains an insufficient percentage of certified content—for example, UTZ Certified requires that 90 per cent of product content be certified for use of its seal, and organic regulations require 95 per cent certified content.⁶⁸ Requiring high percentages of certified content limits the overall market penetration of the sustainability standard. Yet, lower requirements for certified content can mislead consumers about the sustainability impacts of their purchases. Rainforest Alliance allows use of its seal for products carrying 30 to 90 per cent certified content (although the percentage must be indicated) (Raynolds *et al.*, 2007, f.n. 13). For example, Kraft's Yuban coffee brand displays the Rainforest Alliance logo, but only guarantees that 30 per cent of the content is certified.⁶⁹

The resistance of large retailers to the use of eco-labels hinders the growth of consumer demand for certified products (Butterfield *et al.*, 2005). The cost of chain-of-custody certification and a low level of consumer awareness have, anecdotally, been received as explanations for disinterest in seafood product labelling at the retail level.⁷⁰ Some Rainforest Alliance clients, such as Nespresso, do not use the Rainforest Alliance seal because it conflicts with their brand strategy, while others find that it cannot compete with the Fairtrade logo.⁷¹ An informal estimate for UTZ Certified suggests that half of the coffee in its system is sold using the seal (Initiative representative cited in Raynolds *et al.*, 2007). Both Rainforest Alliance and UTZ Certified declared that use of their seal on product packaging is not a matter of much concern; rather, they are motivated to make an impact at origin.⁷² Notwithstanding the legitimacy of the motivations for this decision, the absence of labelling clearly reduces the potential for businesses to generate design rents and consumer-led growth of sustainability initiatives.⁷³

⁶⁷ MSC Updates and Progress Report.

⁶⁸ Interview with Certification Manager, UTZ Certified and Raynolds *et al.* (2007, f.n. 12)

⁶⁹ See: <http://www.rainforest-alliance.org/news.cfm?id=yuban>. Accessed January 22, 2009.

⁷⁰ Interviews with former chief executive of MSC and current Associate Director.

⁷¹ Interview with Chief of Sustainable Agriculture, Rainforest Alliance.

⁷² Interviews with Chief of Sustainable Agriculture, Rainforest Alliance and Certification Manager, UTZ Certified.

⁷³ Given our observation throughout this paper that certified markets have been primarily driven by institutional purchasing decisions, it is unclear the extent to which the lack of attention to consumer issues may constrain market growth.

4.6 Summary of Impacts on the Generation of Rent

To summarize the content of this section, sustainability standards can be said to help stakeholders generate economic rents in the following ways:

- Certified producers improve their administrative and technical abilities through conformance with sustainability criteria, and through the formal producer assistance programs provided by most standards organizations. However, it is those producer organizations with relatively high skill levels that are most likely to obtain certification in the first place. This limits the potential of standards to help the most marginalized producer groups become competitive in the marketplace.
- Certification promotes closer relationships along the value chain by focusing buyers' attention on quality and production methods at product origin, particularly for chain-of-custody certificate-holders. Processors and retailers under pressure to provide certified products to their markets have also been documented to contribute to the financing of certification for their suppliers, building closer collaboration along the value chain. Where there is a glut of certified product on the market, as in the coffee sector, these benefits are theoretically diminished since buyers can resort to shopping around for the lowest-cost suppliers rather than investing in the capacities of their existing sources.
- When these “vertical” investments are made along the supply chain, “horizontal” synergies are created within a particular node, although non-certified groups tend to be excluded from the benefits.
- There are strong indications that sustainability initiatives are having an impact on the design and implementation of public policy in producing countries with substantive economic benefits for certified groups.
- Reputational benefits of sustainability certification are created for producers when a seal is placed on the final product giving recognition for the location and conditions of production. In practice, these marketing impacts are reduced by the limited use of logos, and low consumer awareness and understanding of the differences between them.

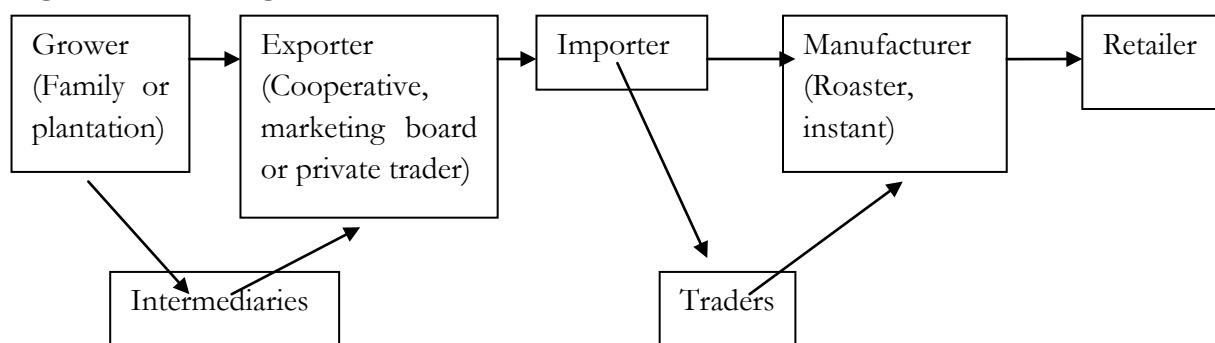
5.0 Impact of Standards on the Distribution of Value Chain Income

The distribution of certified market shares in Section 3 indicated which regions are benefitting the most from markets for certified products. Section 4 pointed toward the different mechanisms that determine how benefits get distributed along international supply chains by analyzing how actors obtain rents. This section gathers available information on the actual distribution of revenues along certified supply chains in an effort to understand how these variables play out in certified markets. Particular attention is paid to financial impacts at the extraction/harvesting node.

5.1 Coffee

5.1.1 Value-added

Figure 7: Basic Stages at which Value is added in the Supply Chain for Coffee



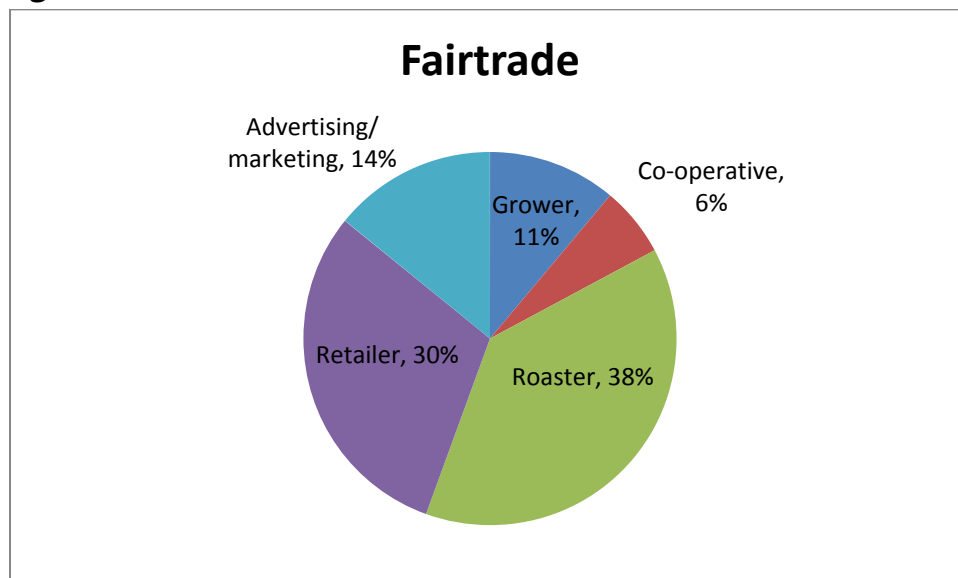
Adapted from Talbot (1997: Figure 1).

The basic structure of the coffee value chain is illustrated in Figure 7. Evidence of the impacts of certification programs on the distribution of value chain income between these players is scarce. More information is available for Fairtrade most likely because it is the only scheme that incorporates pricing conditions in its standard. Some general conclusions can be made from the anecdotal evidence that has been collected.

Figures 8 and 9 summarize the data from a study of the distribution of value-added along two value chains for instant coffee between Nicaragua and the U.K. Fairtrade growers earn 11 per cent of the value-added, an increase from seven per cent in the conventional chain. However, summing the shares of growers and their cooperative reveals that Fairtrade only improves the value-added retained from 15 per cent to 17 per cent. Downstream, there was a seven per cent decrease in the value-added obtained by roasters, but this does not represent a transfer upstream because the share accruing at the advertising and marketing node increased by the same amount. Retailers took 33 per cent of the value-added in the conventional chain and 30 per cent in the Fairtrade value chain. Hutchens (2007, p. 7) concludes from the results of this study that Fairtrade, “does not overcome

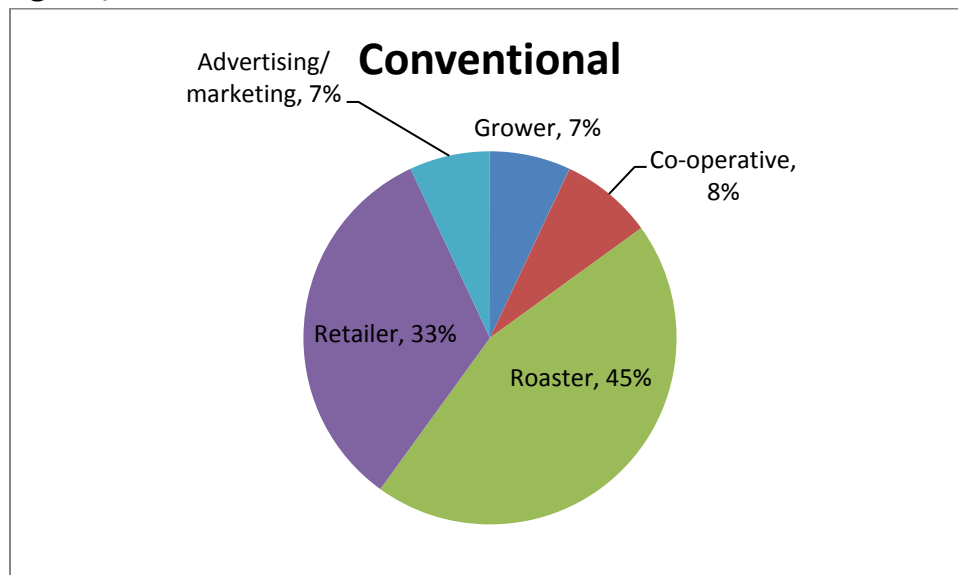
producers' exclusion from ownership of, and participation in, high-value units of production.” Indeed, the premium paid at the producer node is only four per cent, while the final consumer price is 34 per cent higher (Mendoza and Bastiaensen, 2003). On the other hand, the final mark-up helped to “stabilize producer incomes” during a market crisis by creating higher prices along the length of the chain (Mendoza and Bastiaensen, 2003).

Figure 8: Distribution of Value-added in a Fairtrade Coffee Value Chain



Source: Nicholls and Opal (2004, p. 83), adapted from Mendoza and Bastiaensen (2003).

Figure 9: Distribution of Value-added in a Conventional Coffee Value Chain



Source: Nicholls and Opal (2004, p. 83), adapted from Mendoza and Bastiaensen (2003).

5.1.2 Sustainability Premiums

Growers

Over the past two decades, international coffee markets have become increasingly differentiated, giving rise to quality-based price differentials. Certified coffees, by offering a set of “preferred” production practices, provide additional quality attributes for consumers and therefore arguably have a greater potential to bring “quality-based” premiums to certified producers than might be the case in non-differentiated commodity markets. In addition to the quality differential associated with production practices, some environmental practices have been demonstrated to positively impact on physical coffee quality.⁷⁴ Through these two mechanisms, certification can offer new avenues for increased market authority among producers.⁷⁵

Sustainability premiums are generally paid at the level of the export unit, which is to say at the level of producer organizations or larger estates. This means that smaller growers, who may have their coffee pooled together with other sources, may not always receive a premium directly. Differences in transportation and administrative costs, and in the share of the premium withheld for productive investments, mean growers benefit differently from certification depending on the organization to which they belong. By way of example, after reductions for transactions costs, Latin American producers receive anywhere from 50 per cent to 60 per cent of the Fairtrade minimum price. As a further example, Bacon (2004) documented two Nicaraguan cooperatives using nearly half of their Fairtrade and/or organic premiums to pay off debt, meaning that the farm-gate prices received by their members were lower. A sample of producers belonging to organic and Fairtrade markets received US\$0.56/lb in the 2000-01 harvest, on average, while those with conventional sales earned US\$0.40/lb (2004, p. 505).

CIMS (2004) has compared the premiums earned in 2003-04 by Latin America coffee producers with Fair Trade, organic, Rainforest Alliance and Bird Friendly certifications. Table 5 presents their findings for premiums received by growers in 2003. Fairtrade certification ensures a price premium, which fluctuates on a more narrow range than other certifications. The largest potential premium of all sustainability certifications (144 per cent) is earned by producers holding both Fairtrade and organic certificates. There is significant variation in the premiums obtained for organic and Rainforest Alliance certifications, which can be attributed to regional differences in quality and reputation.

⁷⁴ Shade grown coffee, for example, both helps preserve forest cover and biodiversity, but is also attributed with slowing down the ripening process in a manner similar to elevation. A slower ripening process produces a stronger flavour in the coffee berry. See Philippe Vassst *et al.*, 2005, “Shade: A key factor for coffee sustainability and quality,” *20th International Conference on Coffee Science, 11-15 October 2004, Bangalore, India*. Accessed online at: http://www.asic-cafe.org/pdf/abstract/A108_2004.pdf.

⁷⁵ Starbucks, for example, suggests that their suppliers “are not interchangeable” due to their customers’ expectations of a consistent flavour profile. Their producers benefit from stable, long-term trading relationships when they can offer a unique origin and high quality. Interviews with Starbucks’ Vice-President for Corporate Social Responsibility and Manager of Green Coffee Sustainability.

Table 5: Premiums at Grower Level for Certified Coffees in Latin America (average premium as per cent of average conventional price)⁷⁶

Node	Fairtrade and Organic	Fairtrade	Organic	Rainforest Alliance	Bird Friendly
Farmgate	108 (72-144)	57 (50-72)	39 (14-122)	35 (20-93)	43 (27-66)

Source: CIMS (2004).

Exporters

The premium at the export level was as high as 120 per cent for those with both Fairtrade and organic certifications in the CIMS study. Organic premiums at the export level ranged from US\$0.15/lb to US\$0.25/lb, representing a premium between 23 per cent and 28 per cent over the New York “C” price of US\$0.65/lb that year. This figure is roughly in accordance with a 2006 study of U.S. importers of certified organic coffee, which found they paid premiums ranging from US\$0.10/lb to US\$0.60/lb and averaging US\$0.24/lb (amounting to 20 per cent) (Giovannucci and Villalobos, 2007). Premiums for Rainforest Alliance certification ranged between US\$0.10/lb and US\$0.20/lb (15 per cent to 31 per cent above the C price) in the CIMS study. A similar estimate was obtained by Giovannucci, Liu and Byers (2008), who calculated that premiums for Rainforest Alliance certified coffee are US\$0.08/lb to US\$0.12/lb on average, and can range from US\$0.04/lb to US\$0.20/lb. A more modest estimate of 10-12 per cent was provided by Rainforest Alliance staff, although it was noted that premiums were higher for scarce origins.⁷⁷ UTZ Certified premiums were US\$0.05/lb for Arabica and US\$40/ton (or slightly less than US\$0.018/lb) for Robusta beans in 2006. In 2007, they rose to US\$0.054/lb and US\$48/ton (US\$0.021/lb), and 2008 Arabica estimates near year end were US\$0.06/lb.⁷⁸

Importers, Roasters and Retailers

To some extent, the receipt of a premium by upstream value chain players in certified markets depends on whether they operate in the specialty or the conventional industry. Specialty coffee is that which is not sold as a “traditional industrial blend” because of its high quality or scarcity (Ponte, 2002). Regardless of certification, it commands a premium due not only to superior physical characteristics, but also due to “experiential” aspects of consumption such as branding or in-person service in a coffee house.⁷⁹

Importers and roasters in the CIMS study did not receive a price premium as a result of their business dealings in certified coffee. This corresponds with comments from the Rainforest Alliance

⁷⁶ Fairtrade premiums reported are representative of the crop year studied. The Fairtrade price is referenced against the world price and, therefore, the size of the premium will fluctuate.

⁷⁷ Interview with Chief of Sustainable Agriculture, Rainforest Alliance.

⁷⁸ Interview with Certification Manager, UTZ Certified.

⁷⁹ For a more detailed explanation of how quality attributes have affected the distribution of economic benefits along the specialty coffee value chain, see Daviron and Ponte (2005).

representative who observed that retailers are, “pushing back and saying ‘we’re not paying more,’” resulting in the costs of sustainable production being absorbed at the manufacturing and branding stages.

At the retail level, CIMS found that a premium exists for certified coffee sold in the “mass consumption” market, but not in specialty markets where quality determines price. Specifically, average premiums were negligible for certified coffee in the European specialty market and as high as 31 per cent in the European commercial grade market. The sustainability premium was about seven per cent in the American specialty market. Starbucks, a specialty coffee retailer, said it does not pass on the higher price of Fairtrade coffee to consumers; rather its strategy is to, “keep it in line with house-blend pricing—the most affordable price point.”⁸⁰

In its most recent Annual Report, UTZ Certified announced that producers received a weighted average premium of US\$cents4.7/lb in 2007, an increase from US\$cents4.4/lb in 2005 and 2006. In 2007, producer premiums ranged from US\$cents1/lb to US\$cents34/lb for UTZ coffee. Premiums further upstream were not reported.

In a comparison of premiums paid along the supply chain for sustainable coffees, Giovannucci, (2001, Table c.1) found that the largest premium was typically received by roasters (from retailers) for organic and shade coffee, while in the Fairtrade supply chain, the largest premium was received by exporting organizations (from importers). More specifically, at the export level premiums of US\$0.35/lb and US\$0.36/lb were received for shade and organic coffee, respectively, while Fairtrade earned a premium of US\$0.74/lb. Premiums between US\$0.60/lb and US\$0.65/lb were paid to roasters (by retailers) for each sustainable coffee type. It is important to note that the Fairtrade premium received at the export level fluctuates significantly year-by-year, depending on the world price. Furthermore, sustainable coffee markets have grown substantially since the time of this survey, implying that premiums may have changed significantly.

5.2.2 Costs of Certification

The standards organizations studied have different systems for regulating the costs of certification. Fairtrade and Rainforest Alliance have single-certifier systems, and thus there is no competitive incentive to reduce auditing costs. UTZ Certified, by contrast, encourages “strong price competition” between its numerous accredited certification bodies so that producers can minimize their costs of certification.⁸¹

Standards organizations recognize the importance of ensuring that producers are not excluded from certification programs due to cost, but also to not foster dependence on external funding. As such,

⁸⁰ Interview with Starbucks’ Manager of Green Coffee Sustainability.

⁸¹ Interview with Certification Manager, UTZ Certified.

FLO has a formal Certification Fund that first-level producer organizations can apply to for grants of up to 75 per cent of certification costs, but producers may apply to the fund only twice.⁸² The money disbursed from this fund comes from FLO itself. Rainforest Alliance and UTZ Certified also provide support for particularly disadvantaged groups, either directly or through their NGO affiliates. They noted in interviews that producers' ability to recover the costs of auditing is the key to preserving the long-term viability of certification.⁸³ This approach helps producers overcome the typically high "start-up costs" associated with certification, while allowing them to take over financial responsibility as they learn to comply with the auditing process more efficiently.⁸⁴ The similarities between initiatives also imply that organizations already holding one certification are likely to have an easier time taking on another.⁸⁵

5.2 Seafood Value Chain

5.2.1 Sustainability Premiums

In principle, certification in the fisheries sector creates a differentiated product for which downstream value chain actors are willing to pay a premium, particularly if their markets demand certified products and there are few available (Roheim, 2003). The MSC has not attempted to quantify its impact on prices or market access, thus only limited evidence on the economic impacts of certification exists. On a general level, the MSC representatives reported that some of their clients have obtained higher prices while others have experienced no change. The British Thames herring producers, who received their MSC certificate in 2000, enjoyed a price increase of 50 per cent in the first year of certification (Roheim, 2003). The premium was not sustained, however, because all the certified herring had been purchased by a single buyer who had overestimated demand.⁸⁶ A similar financial impact was observed for the New Zealand hoki fishery, which was first certified in 2001: in the first year after certification, the price of frozen-at-sea hoki blocks rose about 10 per cent (Roheim, 2003). Three representatives of fishermen's associations in Canada and the U.S. interviewed for this study confirmed that certification leads to a premium, which was estimated at 10 per cent and 20 per cent in two cases. It was also suggested that there are market benefits for fisheries in the pre-assessment phase that are located in geographical proximity to a certified fishery producing the same species.

Others have reported that premiums for MSC certification are rare. Processors of MSC-certified fish in Uganda claim not to have received a premium over conventional prices, nor do they expect improvements in price or market access in the foreseeable future (Ponte, 2005 and 2008). According to the participants of a recent APFIC workshop (FAO, 2007c, p. 2), "the costs associated with compliance with most certification schemes are not offset by price premiums or other documented

⁸² Visit: http://www.fairtrade.net/certification_fund.html.

⁸³ Interviews with Chief of Sustainable Agriculture, Rainforest Alliance and Certification Manager, UTZ Certified.

⁸⁴ Interview with Organic Commodity Products Inc., researcher/trader.

⁸⁵ Interview with Organic Commodity Products Inc., researcher/trader.

⁸⁶ Interview with MSC Associate Director.

benefits.” Particularly for small-scale operators, local niche markets were perceived to generate a higher premium for sustainable, high quality fish than MSC certification.⁸⁷ Early market entrance is key to reaping the financial benefits of compliance with sustainability standards (Ponte, 2005). In theory, the first providers of a certified product will have greater market authority due to strong demand for the differentiated products they provide. A consultant from the BC Seafood Alliance working for seven West Coast fisheries seeking MSC certification noted in an interview that her clients do not expect to receive premiums: “if you’re first in there’s some prospect; if you’re Canada and are doing it to compete, there’s no prospect of a premium.” Her clients are seeking certification simply to maintain “any volumes whatsoever.”⁸⁸

Despite this discouraging evidence for price premiums, MSC representatives reported that economic benefits have arisen in other forms. Gaining access to new markets, greater market stability, receiving preferred supplier status and re-entrance to markets from which producers had previously been excluded are fairly consistently achieved by their clients.⁸⁹ A critical NGO interviewee observed, however, that the benefits of market access do not extend to smaller operators once large volume producers have obtained certification and the market has been flooded.⁹⁰

5.2.2 Costs of Certification

The process of obtaining MSC certification is a costly venture that typically requires external funding. Fishing industry respondents fairly consistently reported a cost of approximately CDN\$100,000 to certify a Canadian fishery, although this number is expected to rise to nearly CDN\$400,000 for a sockeye salmon fishery on the West Coast, which has received 37 “conditions.”⁹¹ There is also an annual inspection cost, which was estimated by one certified fishery at US\$10,000.

The length and complexity of the process have a large impact on costs. There are not enough certifiers to meet demand in a timely fashion, and these delays have been exacerbated by a, “lack of consistency in the interpretation of the standard.”⁹² Furthermore, the information that fisheries require to demonstrate that they meet standards is sometimes managed by the government, which can lead to barriers to access.⁹³ These factors reduce opportunities for small fisheries with limited resources to become certified, even though they may be more likely to be practicing environmentally sustainable fishing methods.

⁸⁷ Interviews with the Guysborough County Inshore Fisherman’s Association and Ecology Action Centre.

⁸⁸ Interview with BC Seafood Alliance.

⁸⁹ Interviews with Director, MSC Developing World Fisheries Programme and MSC Associate Director.

⁹⁰ Interview with Ecology Action Centre.

⁹¹ Interview with BC Seafood Alliance.

⁹² Interview with BC Seafood Alliance. An anonymous fisher claimed that the auditor was “sloppy and inaccurate” and that he had “dragged it out indefinitely.”

⁹³ Interview with BC Seafood Alliance.

Certification costs are typically funded by some combination of charitable donation, processors' contributions and by the fishery itself. Certification of the fisheries participating in the MSC developing world program has been funded entirely by external sources, primarily by NGOs and to a lesser extent by processors.⁹⁴ Fisheries in developed countries are just as likely to require external funding as those in developing countries.⁹⁵ In the case of one certified Alaskan fishery, 50 per cent of the US\$120,000 cost was received from the Sustainable Fisheries Partnership, and a "small payment" was requested from processors.⁹⁶ Among four certifications on the West Coast, two obtained funding from processors and the others are being funded by the harvesters themselves. In addition, the provincial government had contributed to pre-assessments and the assessment of the heavily conditioned salmon fishery. The reliance on external funding to obtain certification raises questions about the MSC's potential to broaden its market reach and to remain viable over the long term.

5.3 Forest Products

5.3.1 Sustainability Premiums

Timber species with value-added potential or in scarce supply are most likely to garner a premium price once certified (Butterfield *et al.*, 2005). For example, a study of sales of FSC-certified timber from Pennsylvania state forests between 2001 and 2006 found that a 10 per cent premium from Chain-of-Custody certificate-holding buyers was primarily attributable to the relatively high value of black cherry (Newsom, Bensele and Bahn, 2008). Anecdotally, an FSC representative noted that certified producers in the Amazon may receive a premium of 10 to 15 per cent.⁹⁷ Bass *et al.*, (2001, pp. 63-65) emphasize that premiums are high for the first producers of a particular species to be certified; thereafter suppliers expect them to diminish as the market imbalance is resolved. Their study found a number of examples of premiums being paid for certified timber products to producers in a variety of countries, in one case up to 30 per cent.

In general, producers receiving a price premium under the FSC label are reported as "the exception rather than the rule" (Butterfield *et al.*, 2005, p. 21). A survey of FSC forest management certificate-holders in the U.S. found that their high expectations of price premiums and market access were not met (Overdevest and Rickenbach, 2006). Another study of certified forest owners in North America found that expectations of improved market share and prices fell the shortest of all benefits anticipated to arise from certification (although strategic learning and signalling stewardship met or exceeded expectations—Cubbage *et al.*, 2008). Disappointment with the generation of a premium led the former coordinator of the GFTN Peru office to say that he does not promote certification as a

⁹⁴ Interview with Director, MSC Developing World Fisheries Programme.

⁹⁵ Interview with Director, MSC Developing World Fisheries Programme.

⁹⁶ Interview with anonymous fisher.

⁹⁷ Interview with Treasurer of the Board, FSC.

means of obtaining a higher price. Rather, internal markets have been more lucrative.⁹⁸ Nonetheless, it is important to note that the primary economic benefit of certification for producers is the creation of market access (Butterfield *et al.*, 2005) and of market security. According to the first executive director of the FSC, “companies won’t pay extra... but they will promise to come back and keep buying from you.”⁹⁹

Pressure to participate in markets for certified wood tends to originate from large retailers seeking to demonstrate corporate social responsibility. Retailers who were originally opposed to the idea now see certification as a “normal” part of doing business.¹⁰⁰ Retailers tend to participate in certified markets to manage their risk and reputation (Bass *et al.* 2001, p. 64). They rarely charge a price premium because they have to remain competitive with non-certified sellers, particularly for larger items where a small percentage increase amounts to a significant sum of money.¹⁰¹ They also buy in much larger volumes than most certified producers can sell, meaning they can use their bargaining power to obtain leverage over the market (Bass *et al.*, 2001).

Similarly, manufacturers are generally not willing to pay premiums unless they can shift the higher prices onto consumers (Fischer *et al.*, 2005). One study of U.S. manufacturers found that many of them would become involved in certified markets if the higher costs of raw materials could be recovered, but only nine per cent would pay a premium for certified raw materials if there was no such guarantee (Vlosky and Ozanne, 1997).¹⁰² Inconsistent commitments to certified wood procurement reinforce market power imbalances and reduce the likelihood of a premium at the harvesting stage.

5.3.2 Costs of Certification

Cubbage *et al.* (2008) analyzed costs of certification for over 100 firms with FSC and SFI certificates in North America and the Southern Cone countries. These authors found that average per hectare costs are lower for firms managing a large forest area, which could distribute the costs of auditing over a larger space and were more likely to already have tight management systems in place. Specifically, median average total costs for firms with less than 4,000 ha certified by the FSC were US\$6.45/ha annually, falling to US\$0.54/ha for areas between 4,001 and 40,000 ha. Firms with 40,001 to 400,000 ha had median average total costs of US\$2.40/ha, but this was believed to be due to the small sample size in this range; costs fell again for the few firms with over 400,000 ha. Costs for small producers have been high enough to act as a deterrent to certification, while forest enterprises with large areas of land probably pay only an additional one per cent in operational costs for certification (Cubbage *et al.*, 2008, pp. 24-25). By all size categories, certification was more

⁹⁸ Interview with WWF/ Global Forest and Trade Network, Peru.

⁹⁹ Interview with Timothy Synnott, founding Executive Director, FSC.

¹⁰⁰ Interview with Treasurer of the Board, FSC.

¹⁰¹ Interview with Treasurer of the Board, FSC.

¹⁰² Note that this study was conducted in 1997 and that certification has made greater inroads into mainstream decision-making since that time.

expensive on average in South America than in Canada and the U.S., although this relationship was not found to be statistically significant. However, since the costs of certification in South American forests tended to be paid by central offices, they stayed in the program longer than forest managers in North Carolina, who had to cover the costs themselves.

Fischer *et al.* (2005) and Bass *et al.* (2001) report that large corporations can use their market power to shift the costs of compliance onto producers, which helps explain why a price premium is not necessarily created. These costs are sometimes compensated by new market access. The Pennsylvania Bureau of Forestry, for example, had an initial cost of certification of US\$70,000 and spends US\$10,000-\$15,000 for its annual audit, but has received up to US\$2 million annually in additional revenue thanks to purchases from FSC chain-of-custody certificate-holding buyers (Newsom, Bensele and Bahn, 2008). However, small and tropical country producers are less likely to have the marketing skills necessary to offset the additional costs of certification.

5.4 Summary of Distributional Impacts

A few general observations can be summarized here:

- Price premiums at the producer level are fairly consistent in certified coffee markets and have generally been disappointing in certified fisheries and forest product markets, even though there is an excess supply of certified coffee and supply pressure on certified timber.¹⁰³ Possible explanations for this counterintuitive result might be that certified coffee has achieved a greater degree of quality differentiation than certified timber; that timber certification is more commonly driven by retailers than from “below,” and thus can be used as a means of maintaining rather than redistributing value chain authority; or that Fairtrade has set the expectation of a premium in the coffee sector, which does not exist for wood products.¹⁰⁴
- Across sectors, market access and market security are a more consistent economic benefit for producers than price premiums. These benefits are at least partially attributed to the high degree of differentiation they have achieved by virtue of their low share in global trade. As sustainable commodities become less scarce, these market benefits could be diminished.
- The evidence of the impact of sustainability standards on value chain income is largely limited to the coffee sector. It seems that premiums at the intermediary levels—trading and processing—are rare, and premiums at the retail level are inconsistent. However, given the significant costs of certification that producers face, it would be preliminary to conclude that value chain profits are redistributed toward producers.
- Costs of certification, including direct auditing costs and expenses incurred indirectly through operational changes, present a consistent barrier to participation by small and

¹⁰³ Wood market comments attributed to Treasurer of the Board, FSC.

¹⁰⁴ The latter point was suggested by a representative from the Rainforest Alliance.

resource-deficient groups. The provision of external funding by NGOs, downstream value chain actors, and standards organizations has helped reduce their exclusion, but reliance on external support could jeopardize the long-term viability of the certification model unless this is systematically recognized by the market framework.

6.0 Recommendations

This paper has surveyed the economic impacts of sustainability standards in three commodity sectors, focusing on their potential to create market benefits for developing country producers. It has analyzed this issue in terms of the market penetration of sustainability standards, their impacts on the distribution of value chain income and their potential to change intra- and extra-supply chain relationships with positive impacts on producers. In light of the evidence presented, some general recommendations are made to increase the potential of sustainability standards to offer substantive economic benefits to commodity producers.

6.1 Improve Availability of Market Information

Our research on the impacts of voluntary initiatives on value chain distribution relied heavily on anecdotal accounts provided by experts working within the respective sectors and supply chains. While such sources of information provide an indication of broad trends and, as such, serve the purposes of this paper, more accurate and detailed information on market trends and economic distribution would facilitate the strategic development of sustainability initiatives. Moreover, up-to-date market information can play an important role in enabling smaller players to negotiate equitable terms of trade.

However, the availability of robust information on the performance of sustainable markets remains persistently out of reach—not just for producers, but for the stakeholder community more generally. It is difficult to gather accurate information due to the absence of systems for distinguishing products on the basis of their production methods. Although standards regularly make such distinctions, trade statistics typically do not.

In 2008, Canada was the first country to apply separate harmonized system (HS) codes for organic products, making it possible to collect data on organic markets. The expansion of such practices, in organic as well as other sustainable markets, should be encouraged in other importing countries. Until such systemic trade data are made available, there is a need to track market trends in sustainable products using other data gathering methods.

The international community could take the following actions for addressing the lack of access to market information:

- Implement specialized HS codes for certified products on a certification-by-certification basis, to enable better market tracking and analysis.
- Provide support for shared and compatible approaches to market performance and impact

assessment of sustainability initiatives and certification systems.

- Strengthen reporting requirements placed on enterprises participating in sustainable supply chain initiatives, whether they are mandated by the initiatives themselves or by public authorities.

6.2 Build Developing Country Access to Sustainable Markets

Our research reveals important discrepancies between the shares of developing country production for conventional and for sustainable markets. In the global fisheries and forestry sectors, developed country producers have a greater market share of sustainable products than they do of conventional products. This means that the benefits of improved prices and more secure market access are more readily available to developed country producers than to their developing country counterparts. These results could be interpreted to suggest that the implementation of voluntary sustainability initiatives, whether intentionally or not, leads to de facto protectionism of developed country production across global markets and unequal access to benefits.

Any effort to promote the transition to sustainable production must address the issue of market access for developing country stakeholders. Although the barriers are many, limited access to finance and technical assistance represent two of the most important hurdles.

The international community could address these issues by taking the following actions:

- Establish a global technical assistance fund aimed at enabling marginalized producers to enter sustainable markets through the adoption of sound production and management practices.
- Identify and establish hybrid instruments for increasing access to finance for marginalized producers seeking entry into sustainable markets, such as a global guarantee facility for sustainable production.
- Promote harmonization and consolidation of processes associated with the implementation of sustainability standards, such as certification and auditing, to increase efficiencies and reduce costs.

6.3 Encourage Widespread Take-Up of Chain-of-Custody Certification

Many of the challenges facing sustainable markets identified in this paper can be addressed if a greater share of certified products were brought to market through certified supply chains. At present, retailers can pressure producers to become certified without incurring costs of certification and organizational adjustment on the same scale. This allows them to use certification as a means of reaffirming their market and value chain authority. A more equal sharing of the costs of adjusting to sustainable supply chain practices can be achieved by more widespread uptake up chain-of-custody

certification. Ultimately, this should help standards meet their potential to redistribute value chain income and profits towards commodity producers.

Further, more widespread use of eco-labels and sustainability seals would increase consumer awareness of, and demand for, sustainable products. This could help rectify the glut of certified products in some sectors, and would help shift responsibility for sustainable practices onto retailers. Finally, governments and private sector actors can play a direct role in promoting the adoption of chain-of-custody certification by adding certification to their procurement policies.

Actions that could be taken to promote expanded use of full chain-of-custody certification include:

- Stipulate a preference for certified products in the procurement decisions and policies of private and public authorities.
- Adopt preferential sales taxes or tariffs based on whether a product is certified or not.
- Adjust internal pricing and margins within corporate strategies to enable faster market growth of certified products.
- Adopt systemic financial assistance from the public and private sectors to reduce the costs associated with certification per se.

7.0 Interview Participants

Position or Relationship to Standard	Interview Date ¹⁰⁵	Interviewee Country
Former Chief Executive, MSC	21/10/2008	U.S.
Former Trademark Manager, FSC	5/11/2008	Canada
Former Director of Rainforest Alliance Sustainable Agriculture program	6/11/2008	Costa Rica
Researcher/trader, Organic Commodity Products, Inc.	6/11/2008	U.S.
David Suzuki Foundation	12/11/2008	Canada
Greenpeace USA	12/11/2008	U.S.
Root Capital, Vice-President of Business Development	14/11/2008	U.S.
Root Capital, Field and outreach technician	14/11/2008	U.S.
WWF Peru, GFTN	14/11/2008	Peru
FSC Mexico	14/11/2008	Mexico
Greenpeace Canada	17/11/2008	Canada
Ecology Action Centre	17/11/2008	Canada
Representative of fishery undergoing MSC assessment	18/11/2008	Canada
Representative of non-certified fishery	20/11/2008	Canada
Founding Executive Director, FSC	21/11/2008	Mexico
MSC Associate Director	24/11/2008	England
Representative of certified fishery	24/11/2008	U.S.
FSC, Treasurer of Board	24/11/2008	The Netherlands
UTZ Certified, Certification Manager	25/11/2008	The Netherlands
Rainforest Alliance, Chief of Sustainable Agriculture Program	25/11/2008	England
BC Seafood Alliance	26/11/2008	Canada
Starbucks, Vice-President of Corporate Social Responsibility	8/12/2008	U.S.
Starbucks, Manager of Green Coffee Sustainability	8/12/2008	U.S.
Fairtrade certified coffee importer	17/12/2008	Canada
MSC, Director of Developing World Fisheries Programme	17/12/2008	England
FLO, Director of Standards Unit	7/01/2009	Germany

¹⁰⁵ Some dates are approximate.

8.0 References

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