

# **Sustainability in the Coffee Sector: Exploring Opportunities for International Cooperation**

**A Background Document for Brainstorming Mechanisms for Sustainability in the Coffee Sector**

CONFÉRENCE DES NATIONS  
UNIES SUR LE COMMERCE ET  
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As one of the most important commodities in terms of value traded globally, coffee plays a crucial role in the livelihoods of millions of rural households across the developing world. In addition to the estimated 25 million small coffee farmers who depend directly upon coffee as their primary source of income, coffee contributes significantly to foreign exchange earnings and plays a leading role in determining opportunities for employment and infrastructure development in more than 50 developing countries. The breadth and intimacy of the relationship between coffee producers and a host of intermediary institutions along the coffee supply chain makes the sector of critical importance to sustainable development at the local, regional and global levels.

## **1.0 Challenges to Sustainability within the Coffee Sector**

Although “sustainability” has been defined in a variety of ways over the past several decades, the Brundtland Report (1987) has provided the most widely-accepted and enduring definition at the international level. According to the Brundtland report:<sup>1</sup>

*“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two concepts:*

- *the concept of 'needs,' in particular the essential need of the world's poor, to which overriding priority should be given; and*
- *the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.”*

The report is particularly notable for its insistence on the treatment of social, economic and environmental pillars of sustainability in an integrated and coherent manner. Since the Rio Earth Summit in 1992, the international community at large has endorsed the conception of sustainable development outlined in the Brundtland Report—a commitment recently reaffirmed at the World Summit on Sustainable Development. Coffee production and trade face significant challenges along each pillar of sustainable development in ways that highlight their interconnectedness.

### **1.1 Economic Sustainability**

The current “coffee crisis” has brought the economic situation of coffee producers to the forefront of media and policy discussions. Since the 1980s, oversupply on international markets has resulted in nearly a 70 per cent decline in nominal coffee prices.<sup>2</sup> According to a rough calculation made by the United Nations Conference on Trade and Development (UNCTAD) secretariat, between 1999 and 2002, producing countries earned US\$19 billion less in revenues than if prices had remained at their 1998 levels.<sup>3</sup> For the small farmers that account for approximately 70 per cent of coffee production, declining prices have a direct impact on overall household revenues and access to basic needs. Declining prices are also associated with declining job quality and security for employees serving plantations, many of whom represent the poorest section of the population serving the coffee supply chain. Although low prices on the world market are one of the most important determinants of economic sustainability in the coffee

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<sup>1</sup> World Commission on Environment & Development (WCED), 1987. *Our Common Future*, Oxford University Press, Melbourne, at 43.

<sup>2</sup> OXFAM GB, *The Coffee Market: A Background Study* (OXFAM, 2001), at 1.

<sup>3</sup> 1998 price levels are considered to be a historically “average” price level. United Nations, World commodity trends and prospects, A/57/381, 5 September 2002, at 5.

sector at present, they form part of a larger web of economic constraints generally facing coffee producers.

The damaging effects of long-term declining terms of trade facing coffee producers are exacerbated by significant price volatility. Over the past several decades, global export revenues from coffee have fluctuated between \$5 and \$14 billion per annum.<sup>4</sup> Price volatility together with rigidities of production and the consequent distribution of costs, make it extremely difficult for coffee producers and policy-makers alike to determine optimal production strategies. Meanwhile, fiscal uncertainty at the local and national levels places a significant constraint on the generation of a stable economic base for development. While price volatility has its root in climatic variability, there is evidence of increasing volatility since the 1980s due largely to:<sup>5</sup>

- reduced cooperation at the international level;<sup>6</sup>
- increased speculative activity by large funds in commodities markets;<sup>7</sup> and
- deregulation in national markets.<sup>8</sup>

Coffee, like other agricultural goods, is a seasonal product requiring investments prior to harvest and revenue returns. Small farmers with a low capital and savings base frequently rely on advances and credit to supply requisite pre-harvest inputs and living expenses. In many coffee-producing communities, local coffee buyers fill the credit gap through advance purchases at highly-discounted rates. Although local buyers fulfill an important role through such credit provision, poor infrastructure development and anti-competitive practices regularly result in a net transfer of value down the supply chain, placing still greater financial pressures on producers.

Requirements associated with selling on international markets also present significant barriers to higher revenues for smaller producers. For example, export licence, minimum volume and quality requirements can operate as bottlenecks that effectively reduce the ability of producers to reap the benefits of the international trading system. Meanwhile, tariffs on processed forms of coffee in importing countries can also have an effect on the revenue captured by producer countries from the supply chain. The imposition of such tariffs effectively restricts producing country access to the higher value added associated with processing activities.

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<sup>4</sup> International Trade Centre, *Coffee: An Exporter's Guide*. (ITC, 2002), at 3.

<sup>5</sup> OXFAM, *supra* note 2 at 13.

<sup>6</sup> The elimination of economic clauses from International Coffee Agreements since 1989 has reduced the effectiveness of international cooperation for stabilizing prices. See, for example, R. Bates, *Open-Economy Politics: The Political Economy of the World Coffee Trade*. (Princeton University Press, 1997).

<sup>7</sup> Increased activity by large funds in commodity futures markets over the past two decades has led to a weakening of the connection between price determination and market fundamentals giving rise to greater price uncertainty. UNCTAD, *New types of Non-trade Related Participation in Commodity Futures Markets* UNCTAD/COM/83 (UNCTAD, 1996).

<sup>8</sup> Stefano Ponte, *The 'Latte Revolution'? Winners and Losers in the Restructuring of the Global Coffee Marketing Chain*. (Centre for Development Research, 2001).

### **1.2 Environmental Sustainability**

Although traditional coffee farming systems have relatively low-level environmental impacts, efforts over the past several decades to increase productivity have intensified the negative impacts of coffee production on the natural environment considerably. Public policy aimed at increasing productivity in Latin America in particular, has led to substantial transition from traditional shade-grown production to “sun” coffee or “mono-culture shade” coffee.<sup>9</sup> In Colombia, for example, it is estimated that 68 per cent of the total area devoted to coffee production has been converted to “technified” systems of agriculture (also known as “modern” or “High External Input Systems of Agriculture”) over the past 30 years.<sup>10</sup> Such production methods pose clear dangers to the environment through the synthetic external inputs and reduced biodiversity they typically introduce.

The traditional sites of coffee production around the world make environmentally-intensive production techniques particularly dangerous to environmental integrity—not just for local ecosystems but also for the planet at large. More than 80 per cent of the 11.8 million hectares devoted to coffee production around the world are planted in areas of former or current rainforest.<sup>11</sup> Coffee is currently grown in 13 of the world’s 25 biodiversity “hotspots”—areas of high biodiversity importance and vulnerability.

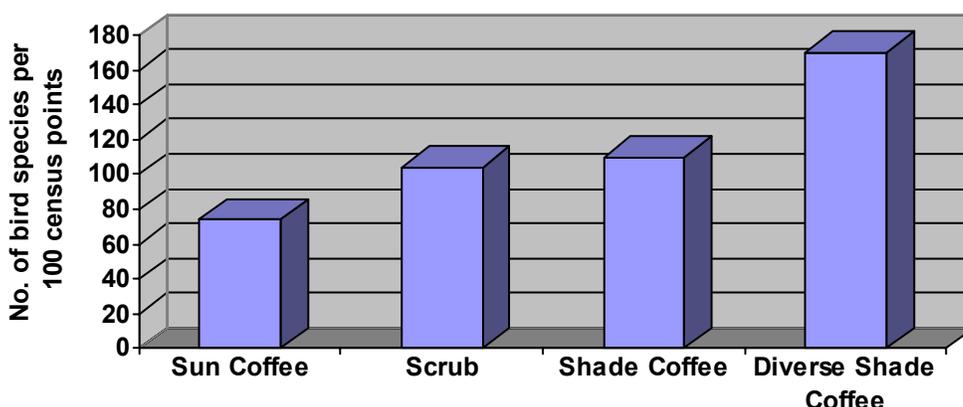
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<sup>9</sup> Different forms of coffee production form a gradient between sun and shade-grown systems. At least five general types of coffee production systems have been identified: traditional; traditional poly-culture; commercial poly-culture; shaded mono-culture; and sun. The “traditional” and “traditional poly-culture” systems utilize the original forest canopy while the commercial and shade mono-culture varieties utilize commercially-introduced shade cover. See Merle D. Faminow and Eloise Ariza Rodriguez, *Bio-diversity of Flora and Fauna in Shaded Coffee Systems*. (CEC, 2001). The average rate of conversion to shade mono-culture and sun coffees for Northern Latin America as a whole has been estimated to be 40 per cent. Rice, R. and J. Ward, *Coffee, Conservation, and Commerce in the Western Hemisphere*. (Natural Resources Defense Council and Smithsonian Migratory Bird Center. Washington, DC, 1996.)

<sup>10</sup> Rice, *supra* note 8.

<sup>11</sup> Halweil B. (2002) “Why Your Daily Fix Can Fix More than Your Head.” *World Watch* Vol. 15. No.3 May/June 2002.

**Figure 1. Number of different bird species by coffee production method (Peru).**



Source: Greenberg, R. and R. A. Rice. Manual de café bajo sombra y biodiversidad en el Perú. The Peruvian Shade-grown Coffee Primer. Migratory Bird Center, (Smithsonian Institute, 2000).

Research comparing the biodiversity of technified and traditional shade coffee farms has found significantly-higher flora, fauna and mammalian diversity in the latter.<sup>12</sup> In Latin America, a 50 per cent reduction in avian biodiversity has been observed under sun growing conditions. In addition to aggravating soil erosion, reduced forestation associated with sun and mono-culture production reduces overall carbon sequestration. The shift from “diverse shade” systems to “mono-culture shade” systems has been estimated to have reduced carbon sequestration by 30 to 50 per cent in Latin America.<sup>13</sup>

Forest	Forest shade-grown coffee	Forest shade-grown coffee and domestic plants	Diversified shade	Mono-culture shade-grown coffee
196	174	118	101	77

Source: PROCAFE, Differentiating Salvadorian Coffee. Paper presented at the World Bank, October 2001 cited in Kristina Sorby, Background paper to World Bank Agricultural Technology Note 30, “Toward more sustainable coffee” (World Bank, 2002).

Coffee hulling can also have considerable impacts on the environment. Wet processing techniques, which are used for approximately 40 per cent of global production,<sup>14</sup> generate wastewater with a Biological Oxygen Demand (BOD) of up to 150 g/l. The expulsion of high

<sup>12</sup> Faminow, *supra* note 9.

<sup>13</sup> The role of coffee production as a stimulus for deforestation is not, of course, limited to Latin America. Research commissioned by UNCTAD on the environmental effects of coffee production in the Ivory Coast concludes that coffee has played a major role in reducing the country’s forested land from 16 million to three million hectares. Denis Ouhoble Seudieu, *L’impact de la production et de la transformation du café, du cacao et du riz sur l’environnement en cote d’ivoire*. (UNCTAD, 1993) UNCTAD/COM/24.

<sup>14</sup> EDE Consulting, “Coffee and Environment: Study of Environmental Issues Relating to the Coffee Chain Within a Context of Trade Liberalization Through a Life-cycle Approach” (ICO, 2001).

quantities of waste-water in the initial bean processing leads to reduced oxygen levels in water. This can threaten many forms of marine life.<sup>15</sup>

<b>Table 2. Biological Oxygen Demand (BOD).</b>	
<i>BOD defines the amount of oxygen required to biologically break down organic wastes diluted in water. Some typical values:</i>	
Distillery waste-water	100 g/l
Meat processing waste-water	10 g/l
Paper mill waste-water	2 g/l
<b>Coffee waste-water</b>	<b>150 g/l</b>

Source: Enden and Calver, 2002.

### **1.3 Social Sustainability**

Arguably, the greatest threat to the social sustainability of coffee production results from the economic conditions facing coffee producers. Coffee farmers typically depend upon coffee as their primary source of hard currency. As a result, declining and volatile coffee prices can have a direct impact on access to education, housing, food, medical services and other basic necessities. Although producer organizations can provide an important avenue for democratic, equitable representation and infrastructure development, the relative isolation of many small coffee farmers often places prohibitively high transaction costs on effective participation in such organizations.

On the other hand, hired labour serving coffee plantations and estates typically represents the poorest segment of the population serving the supply chain. Although workers are not directly exposed to the vagaries of the market, evidence suggests that the performance of the market is transmitted to workers through general working conditions and wages. In a recent survey of coffee plantations in Guatemala, for example, it was found that *none* paid the country's minimum wage and that a majority of them did not even pay half the minimum wage.<sup>16</sup> Housing conditions among such plantations have also been reported to be below national requirements.<sup>17</sup> Meanwhile, child labour is reported to be widely used on plantations in some countries. In Kenya, for example, it is estimated that 30 per cent of the coffee pickers serving plantations are under the age of 15.<sup>18</sup>

Meanwhile, the shift toward technified farming systems, in addition to threatening overall environmental integrity, poses direct health and safety risks for coffee workers and their communities. The use of the insecticide *endosulfan* on coffee plantations in Colombia, for example, was linked to more than 200 poisonings during 1993–1994. Under-regulated agrochemical use also threatens farmers and other rural residents with exposure to toxic substances in water supplies. In a 1987 case, more than 200 people became sick from drinking

<sup>15</sup> Jan von Enden and Ken Calvert, *Coffee Waste-Water: Post Harvest Processing* (GTZ, 2002).

<sup>16</sup> Bart Ensing, "The viability of a code of conduct in the coffee sector in Guatemala," Fair Trade Organizatie July 2000; The Guatemalan government regards minimum wage as being sufficient to cover only 40 per cent of basic needs. See OXFAM, *supra* note 2 at 12.

<sup>17</sup> GTZ, *Working and Living Conditions in Large Scale Coffee Production in Latin America* accessed at [http://www.die-gdi.de/DIE\\_Homepage.nsf/ViewAttach/51EFF03B641F9792C1256C2F0029A34E/\\$File/Summary-e2.pdf?OpenElement](http://www.die-gdi.de/DIE_Homepage.nsf/ViewAttach/51EFF03B641F9792C1256C2F0029A34E/$File/Summary-e2.pdf?OpenElement)

<sup>18</sup> OXFAM, *supra* note 2 at 11.

water contaminated with agricultural pesticides and fertilizers in the western Mexican state of Jalisco.<sup>19</sup> Meanwhile, the use of nitrogen fertilizers in Costa Rica has been linked with unsafe levels of groundwater pollution.<sup>20</sup> High levels of exposure to agricultural pesticides have also been linked to reduced activity of cholinesterase—an enzyme essential for proper neuro-muscular activity—among the population in Nicaragua.<sup>21</sup>

Finally, the coffee sector, like other agricultural sectors, exhibits traditional gender distinctions that can place women at a social and economic disadvantage. In addition to outright gender discrimination observed in plantation settings,<sup>22</sup> there is evidence that the role of women in household decision-making is often disproportionate to the work they devote to actual coffee production.<sup>23</sup> The coffee trade can reinforce gender inequity by maintaining patriarchal supply chain structures. Alternative trading structures may hold the opportunity of improving the gender balance along the supply chain.

## **2.0 Sustainability in Action: Past and Present**

Over the past half-century, the social, environmental and economic problems facing the coffee sector have inspired the creation of a wide range of initiatives each addressing specific aspects related to sustainability within the sector. Among such initiatives there has, however, been a general tendency to treat the economic or “market” aspects of “sustainability” separately from its “social” and “environmental” components—a trend which presents an opportunity and a need for the development of new approaches that draw upon the conception of sustainability called for by the Rio and WSSD processes.

Since the first International Coffee Agreement in 1962, national governments have sought global mechanisms for the creation of more stable and lucrative coffee markets, primarily by setting in motion conditions for effectively matching supply and demand at the macro-economic level. The use of export quotas in ICAs prior to 1989 as a means of controlling the supply (and thus price levels) on the international coffee market, provides the most explicit example of the macro-economic approach that has distinguished the ICA system to date. More recently, Resolution 407 set a quality standard for international export with the intent of reducing overall supply and improving demand, thus raising prices, of coffee on the international market. The macro approach

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<sup>19</sup> Ivan Restrepo, 1992 *Los Plaguicidas en México* (México, D.F.:Comisión Nacional de Derechos Humanos), at 126-127, 130.

<sup>20</sup> Levels in excess of World Health Organization acceptable levels have been documented in Costa Rica. Olman Segura B. and Jenny Reynolds, “Environmental Impact of Coffee Production and Processing in El Salvador and Costa Rica,” (Geneva: UN Conference on Trade and Environment, UNCTAD/COM/20, August 27, 1993), at 15-16. In high concentrations, nitrates can cause infant methemoglobinemia (“blue-baby syndrome”), a potentially fatal condition that impedes oxygen transport in infants’ bloodstreams. Other human health concerns surrounding nitrate contamination of groundwater include suspected links between nitrates and certain cancers, birth defects, hypertension and developmental problems in children. E.G. Nielson and L.K. Lee, 1987 *The Magnitude and Costs of Groundwater Contamination from Agricultural Chemicals*, (Washington, D.C.: USDA Economic Research Service), at 22.

<sup>21</sup> Rice, *supra* note 9.

<sup>22</sup> Ensing, *supra* note 16.

<sup>23</sup> In Uganda, for example, it is estimated that women provide 60 per cent of the labour for coffee production with only 17 per cent reporting *any* input into spending decisions within the household. Diane Elson and Barbara Evers, *Gender Aware Country Economic Reports: Working Paper No.2 Uganda* (University of Manchester, 1997) at 25.

of the ICO/ICA structure is notable for its emphasis on the “economic” pillar of sustainable development.

Another series of “sustainability” initiatives focuses on providing a structure for implementing, administering and monitoring social and environmental standards through the product chain—particularly at the production level. These initiatives typically incorporate certification and labelling as a means for accessing a growing consumer interest in “sustainable goods.” Table 3 below provides a brief overview of some of the initiatives developed or are currently underway for the coffee sector.

Initiative	Criteria Coverage	
	Environmental	Social
<b>Rainforest Alliance: Eco-OK label</b>	Integrated pest management; eco-system conservation; waste management, etc.	Health and safety; labour standards.
<b>UTZ Kapeh Foundation</b>	Reduced pesticide use.	Health and safety; labour standards.
<b>International Federation of Organic Agriculture Movements (IFOAM)</b>	No synthetic pesticides or chemicals, soil conservation, no GMOs, etc.	
<b>Smithsonian Migratory Bird Centre</b>	Shade-grown; No synthetic pesticides or chemicals, soil conservation, no GMOs, etc.	
<b>European Coffee Federation: Draft “Ethical Sourcing Guidelines”*</b>	(Further developments possible.)	Labour standards.
<b>Eurepgap Coffee Protocol*</b>	Environmental management; (further developments possible).	Health and safety, labour standards; (further developments possible).

\*Draft guidelines under development

Although the breadth and approach of these types of initiatives vary considerably, they share an emphasis on:

1. influencing individual or institutional decision-making along the supply chain; and
2. ensuring that supply chain decision-making promotes social and environmental sustainability.<sup>24</sup>

<sup>24</sup> Many of the initiatives also address economic components on a case-by-case basis.

The focus of these initiatives thus provides a clear contrast with the macro-economic approach adopted by the ICO system. While most of these initiatives are built on the development of transparent, verifiable criteria, the growth in the number of initiatives without effective inter-initiative collaboration poses a threat to their ability to meet stated objectives on a broad scale.

Project- and institutionally-based initiatives, launched variously by industry, NGOs and government, form a third general category of sustainability initiatives within the coffee sector. Although it would be impossible to do justice to the large number of such projects undertaken at this level, a few examples emanating from the private sector include:

- Procter and Gamble has signed a partnership agreement with Technoserve to promote capacity building of small coffee farmers in ways that enable higher returns on international markets;
- Kraft and Douwe Egberts, through a public-private partnership with GTZ, have undertaken work aimed at identifying, among other things, more environmentally-sound production and processing techniques available to Vietnamese coffee producers; and
- Starbucks has undertaken work with the Global Environment Facility and Conservation International aimed at helping Mexican farmers become certified to shade and organic standards.

Although these initiatives show the greatest flexibility for adapting to specific geographic and institutional requirements, they are nevertheless limited in their ability to address problems associated with the macro-economic conditions of the market at a systemic level. They are also vulnerable to many of the same challenges facing eco-labelling initiatives such as lack of consistency across initiatives and reduced access to economies of scale. Although the experiences arising from such work provide important lessons for action at the international level, the absence of a clear, transparent forum for implementation has hindered movement in such a direction.

### **3.0 An Integrated Approach: Rationale and Challenges**

The Rio Earth Summit presented an international consensus recognizing the need for adopting an *integrated* approach to sustainable development based upon the simultaneous treatment of the social, economic and environmental branches in a coherent and holistic manner. At the World Summit on Sustainable Development in the late summer of 2002, the international community recognized the need for designing specific tools at the global level for implementing the integrated approach underlined in the Rio process. The interdependency of the three pillars on a global scale within coffee production and trade makes the development of such instruments for the coffee sector an imperative.

Direct dependence upon the international coffee market for revenue generation at the household, community and national levels makes the inter-relationship between the social and economic pillars particularly evident in the case of coffee. Economic uncertainty and declining terms of trade at the international level translates directly to reduced resources for basic needs such as education, medical services, safe living spaces and other environment-related goods. Sustainable economic conditions are thus a clear pre-requisite to fulfilling the social and environmental objectives of sustainable development within the sector.

At the same time, however, the adoption of environmentally-sustainable production practices holds the promise of improving economic returns to producers over the short and long term. On one hand, certified socially- and environmentally-responsible coffees typically receive a

considerable price premium over conventional coffees.<sup>25</sup> On the other hand, transition to sustainable production practices on a large scale has the potential to improve the macro-economic sustainability of the coffee sector. Some maintain, for example, that certain environmentally-sustainable production practices produce coffees of a higher quality than their highly-technified counterparts.<sup>26</sup> In addition to earning higher returns over the short term for producers, the transition to environmentally-sustainable production could have a positive influence on overall rates of coffee consumption (and thus prices across the coffee market as a whole). There is also evidence suggesting that environmentally-sustainable production practices produce smaller but more stable crop yields than technified practices.<sup>27</sup> To the extent that this is the case, large-scale transition to sustainable practices could improve stability and price levels on the international market—key criteria in determining the overall economic sustainability of the sector.

**Table 4. Potential macro-economic impacts of a transition to environmentally-sustainable coffee production.**

<u>Macro-economic impact</u>	<u>Technified (sun, mono-culture, synthetic inputs)</u>	<u>Parameter</u>	<u>Sustainable (shade, organic, IPM)</u>	<u>Macro-economic impact</u>
-	+	Yield	-	+
-	+	Risk	-	+
-	-	Quality	+	+

The experience of the last century also indicates however, that increased returns at the individual level can be achieved over the short term without noticeable improvements and, at times, even at the expense of improvements, in the social and environmental conditions of many of those serving any given supply chain. The presence of coordination and information problems within the coffee market can give rise to frequent opportunities for market failure which operate as a major obstacle to the adoption of sustainable practices on a broad basis.

It is well known, for example, that producers and producer countries commonly seek methods for *increasing* production as a response to declining prices—despite the fact that price declines are principally the result of oversupply.<sup>28</sup> In the absence of guarantees that others will restrict output, increasing output is the “rational,” albeit sub-optimal, strategy. Similar public goods problems face producers<sup>29</sup> and consumers<sup>30</sup> with respect to the maintenance of social and environmental

<sup>25</sup> A 2001 survey of U.S. coffee importers revealed premiums of between US\$.11 and US\$1.10 per pound for certified organic coffees from Latin America.

<sup>26</sup> See, for example, “Coffee Contact” at <http://www.geocities.com/RainForest/Canopy/1290/basics.html#shade>

<sup>27</sup> The transition from sun to shade production techniques can entail up to one-third reductions in output. Gerd Fletscher, *Agriculture Technology Notes* (Rural Development Department, World Bank) June 2002 at 3. See also Greenberg, R. and R. A. Rice. (2001): *Manual de café bajo sombra y biodiversidad en el Perú. The Peruvian Shade-grown Coffee Primer*. Migratory Bird Center, Smithsonian Institution.

<sup>28</sup> The fact that high coffee prices also lead to increased production suggests that market signals are not working effectively in the sector.

<sup>29</sup> Where the cost of maintaining sustainable social and environmental conditions associated with production are not reflected in actual prices, producers have an incentive avoid such costs as a means to remaining competitive. Since social and environmental benefits, unlike economic benefits, are shared with others, individual producers have a “rational” interest in promoting their individual economic interests at the expense of the larger social and environmental interests—even where they are directly impacted by social and environmental degradation.

goods (through their respective production and consumption practices). The existence of market failure throughout the coffee sector, underlines the intimacy of the relationship between the social, environmental and economic components of sustainability.

Fair trade labelling, as administered by Fair Trade Labelling Organizations International (FLO), stands out among existing sustainability initiatives as one of the most explicit efforts to integrate the three branches of sustainable development under a single initiative. The case of fair trade labelling provides a particularly vivid example of the depth of the relationship between market and supply chain forces that give rise to public goods problems and other sources of market failure in coffee sector. As such, it provides a useful case study for considering the challenges and opportunities facing international strategies toward the development of an integrated approach.

### **3.1 Fair Trade Labelling**

The core of the FLO system is built upon a certification scheme designed to ensure that select social, environmental and economic criteria are maintained throughout the coffee supply chain.

The principal eligibility requirements for FLO coffee certification are:

1. that a minimum price covering basic production and living costs be paid for the coffee;
2. that producer organizations provide opportunities for democratic producer self representation;
3. that importers offer partial advance payment to producers when requested;
4. that producers commit to environmentally-sustainable production practices; and
5. that producer groups commit premiums received from the sale of FLO-certified coffee to investments in diversification and reinvestment in community projects.

By combining price, producer representation, diversification, stable long-term contractual relations and sustainable production practices, FLO offers one of the broadest coffee sustainability systems to date.<sup>31</sup> Despite this achievement however, FLO products have been unable to earn a large-scale presence within mainstream markets. For coffee, fair trade labelling's banner product, total global sales account for a mere 0.24 per cent of total world coffee production.<sup>32</sup> The current low level of market penetration for Fair Trade products, despite its international presence, operates as a significant obstacle to the overall effectiveness of fair trade

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<sup>30</sup> At the global level, consumers are faced with imperfect information on the production practices behind the products they purchase so they often cannot act on social and environmental values effectively. Even where credible information on socially- and environmentally-sustainable products is available, consumers may be uncertain as to the effects of such purchases on the overall environment in the absence of information on the actions of others. In the face of such uncertainty, consumers (and consumer governments) are more likely to opt for the status quo, forcing producers (and intermediaries) to compete on the basis of externalized social and environmental costs.

<sup>31</sup> FLO provides licensing through national initiatives in 17 consuming countries around the world and sources coffee from producers in 23 countries.

<sup>32</sup> Calculated on the basis of FLO statistics 2000 and "Coffee Review of 2001" in *F.O. Lichts International Coffee Report* Vol. 16, No. 15. at 1.

labelling as a tool for improving the conditions of commodity producers in developing countries on a large scale.<sup>33</sup>

A key challenge facing the FLO system stems from its reliance upon supply chain relations alone for the administration and management of its “sustainability criteria.” Although fair trade attempts to provide a mechanism for “economic” sustainability at the producer level, it does not offer a response to the macro-economic conditions of the market fundamentally responsible for price and credit behaviour. The solution to such market problems, on the fair trade model, is sought through the development of a consumer market for fair trade-labelled coffees.

To date, the market for fair trade coffees has primarily been built through the persistent publicity efforts of Northern-based NGOs. Despite consumer surveys showing high levels of awareness and willingness to purchase fair trade-labelled coffees in some markets, actual market shares for such coffees remain well below the five per cent mark with the European average at around two per cent of total coffee sales.<sup>34</sup>

Research in the North American context suggests that fair trade’s attention to the economic criteria through supply chain approach aggravates the public goods problems facing the adoption of sustainable practices generally. Coffee roasters, retailers and consumers all display high price sensitivity in their decision-making behaviour.<sup>35</sup> Fair trade coffee is roughly 50–150 per cent more expensive than comparable coffees at the retail level.<sup>36</sup> Fair trade coffee is more expensive due not only to the minimum floor price associated with such coffee, but also due to the licensing and transaction costs associated with certification *per se*. The additional costs associated with fair trade on the consumption side of the supply chain present a significant obstacle to the generation of larger market penetration.

Meanwhile, on the production side, there is a risk that the fair trade pricing scheme may not be sufficiently responsive to market conditions to promote sustainable development on a widespread basis. On one hand, the establishment of a minimum floor price, through supply chain standards alone, has the potential to provide incentives toward oversupply thus aggravating overall price decline.<sup>37</sup> On the other hand, the detachment of the fair trade pricing system from coffee quality has the potential to reduce the capacity of producers to respond efficiently to international market conditions thereby leading to increased vulnerability in the long run.

The specific constraints facing fair trade demonstrates the overall importance of building sustainability in a way that reflects the forces of the market while acknowledging the need for

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<sup>33</sup>Despite low overall market shares, it is important not to overlook the significant positive benefit provided through FLO to coffee producers. In 2001 it is estimated that \$30 million in additional revenue was earned for coffee farmers through the FLO system. FLO Annual Report 2001-2002 at 9.

<sup>34</sup> Jean-Marie Krier, *Fair Trade in Europe 2001: Facts and Figures on the Fair Trade sector in 18 European countries* (EFTA, 2001) at p. 14 accessed at <http://www.eftadvocacy.org>; See also Oxford Policy Management, *Fair Trade: Overview, Impact, Challenges* (U.K.: Department for International Development, 2001) at 14.

<sup>35</sup> Although coffee consumers display low price elasticity with respect to overall coffee consumption, they nevertheless show considerable price sensitivity between competing brands.

<sup>36</sup> Note this figure applies to conventional retail markets. Fair trade is only marginally (about five per cent) more expensive than specialty coffees on the North American retail market.

<sup>37</sup> This problem may be inherent to the application of a single minimum price across all producers. Without a technique for distinguishing between different production environments, fair trade will likely be prone to generating market distortions in some cases at least.

adjusting the market in ways that prevent market forces from threatening sustainability over the long term. The orientation of mainstream coffee markets towards positive change fundamentally depends upon the identification of a meeting ground between these two points and forms the fulcrum of an integrated approach.

#### **4.0 The Potential for International Cooperation**

Coffee production is intimately inter-twined with international markets. Since the vast majority of coffee is produced for export, the circumstances of coffee production and trade are, to a large degree, a direct response to signals from such markets. The information and coordination problems that present obstacles to producer and consumer transition to sustainable coffees are also operative at the national level. In the absence of clear information and coordination between national actors, the “rational” strategy for reducing overall losses is also often sub-optimal at the macro level. The prevalence of public goods problems at the international level provides a basic rationale for internationally-coordinated action towards the adoption of sustainable markets and production practices.

On the other hand, growth in the number and diversity of market-based social and environmental initiatives addressing the coffee sector entails a risk of generating new non-tariff barriers as well as providing inconsistent stakeholder representation. A multi-stakeholder mechanism for establishing and administering the implementation of flexible, coherent and transparent sustainability criteria at the international level could play an important role in ensuring a trade-neutral path toward sustainable development within the sector.<sup>38</sup> An enhanced system of collaboration and coordination between existing initiatives could also improve the rate of adoption of sustainable production practices throughout the coffee market on the whole by reducing costs associated with criteria administration, development and enforcement.<sup>39</sup>

The following “principles for sustainable development,” drawn from existing initiatives within the coffee sector, provide a broad foundation for the development of an integrated approach within the coffee sector:

#### **Principles for Sustainable Development in Coffee Trade<sup>40</sup>**

- Principle 1: Producers should be paid a price/wage that covers production, living and environmental costs within a competitive framework and which displays a measured degree of stability.
- Principle 2: Employment relationships should be maintained in accordance with core ILO conventions and local law.
- Principle 3: Production practices should be environmentally sustainable.
- Principle 4: Producers should have enhanced access to credit and opportunities for diversification.
- Principle 5: Producers should have enhanced access to trade information and trade channels.

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<sup>38</sup> Trade neutrality, being the cornerstone of obligations under WTO agreements, is likely a pre-requisite to earning significant policy support on a systemic basis.

<sup>39</sup> TerraChoice Environmental Services Inc., *Environmental and Other Labelling of Coffee: The Role of Mutual Recognition—Supporting Cooperative Action*. (Commission for Environmental Cooperation, 2000).

<sup>40</sup> Principles for sustainable development drawn from, *inter alia*, the UN Global Compact’s nine principles, Fair Trade Labelling Organizations International Fair Trade Generic Criteria and the Conservation Principles for Coffee Production, Utz Kapeh Foundation criteria.

The potential benefits, micro and macro, associated with the transition to socially- and environmentally-sustainable production practices provide a clear rationale for the adoption such practices on a large scale. The general separation between the social, economic and environmental aspects of sustainability among past and present sustainability initiatives within the coffee sector, presents a special opportunity for the identification of hybrid mechanisms toward this end. The presence of widespread market failure, on the other hand, suggests the need for multi-stakeholder and multilateral cooperation at the international level. The impending question before the international community remains, “how?”

On the basis of the above, there is a need and an opportunity to improve the sustainability of the coffee sector through the adoption of *multilateral, multi-stakeholder, market-based* approaches that integrate economic sustainability within social and environmental sustainability. While a wide range of potential instruments for combining these approaches is possible, themes for consideration include:

- mechanisms for streamlining the administration and efficiency of sustainable practices at the global level through multi-stakeholder processes (coffee stewardship council; inter-initiative collaboration; coordination with multilateral agreements (ICA));
- mechanisms for ensuring higher and/or more stable returns to coffee produced according to social and environmental criteria (use of hedging tools, price differentials, floor prices, long-term contracts, etc.);
- mechanisms for improving access to credit for those involved in social and environmental production practices (financing of credit, development of new, more accessible credit instruments);
- mechanisms that build in opportunities for diversification either along the value chain or through the development of other product areas with the adoption of social and environmental production practices (financing for diversification linked to sustainable production practices); and
- mechanisms for ensuring enhanced market access to producers involved in social and environmental production practices (preferential tax treatment; financing for the development of trade institutions and channels of sustainable coffee).

The Sustainable Commodity Initiative, a joint project of the United Nations Conference on Trade and Development (UNCTAD) and the International Institute for Sustainable Development (IISD),<sup>41</sup> will offer a neutral, multi-stakeholder forum for assessing the potential of *concrete* instruments addressing these and other themes within the coffee sector.

Through a process of workshops and meetings, producer, NGO, industry and government representatives will be invited to explore:

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<sup>41</sup> Established in 1964, the United Nations Conference on Trade and Development is the focal point within the United Nations system for intergovernmental and multi-stakeholder deliberations aimed at promoting sustainable development within the international trade arena. Pursuant to this role, UNCTAD has played a critical role in the establishment and development of many International Commodity Bodies. The International Institute for Sustainable Development, a Canadian-based NGO established in 1990 in response to the Brundtland Report, has played a key role in advancing the sustainability debate at the international level since the Rio Earth Summit. IISD offers extensive research experience on the linkages between trade and sustainable development, particularly as these issues relate to developing country perspectives.

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- sustainability with respect to social and environmental issues from macro and micro perspectives;
- opportunities for collaboration among existing sustainability initiatives; and
- the potential of new global instruments for the sustainable management of commodities trade through public/private/civil society partnerships.

The SCI will provide a preliminary testing ground for proposed initiatives through a process of stakeholder feedback and rigorous analytical research. By leading a constructive and proactive process, the SCI hopes to provide a foundation for further multi-stakeholder collaboration and the eventual implementation of global strategies for addressing sustainability in the coffee sector at large.