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Coffee







Market Research Report: Coffee

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About the TPSA Project

TPSA is a five-year C\$12-million project funded by the Government of Canada through Global Affairs Canada. The project is executed by The Conference Board of Canada, and the primary implementation partner is the Directorate General for National Export Development, Ministry of Trade.

TPSA is designed to provide training, research, and technical assistance to Indonesian government agencies, the private sector-particularly small and medium-sized enterprises (SMEs)-academics, and civil society organizations on trade-related information, trade policy analysis, regulatory reforms, and trade and investment promotion by Canadian, Indonesian, and other experts from public and private organizations.

The overall objective of TPSA is to support higher sustainable economic growth and reduce poverty in Indonesia through increased trade and trade-enabling investment between Indonesia and Canada. TPSA is intended to increase sustainable and gender-responsive trade and investment opportunities, particularly for Indonesian SMEs, and to increase the use of trade and investment analysis by Indonesian stakeholders for expanded trade and investment partnerships between Indonesia and Canada.

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Introduction

This report provides an overview of one sub-segment of the coffee trade between Indonesia and Canada. (See box "Coffee Segment Included in Report.") The report describes the research methodology and data that inform it, then provides a brief overview of the global coffee market, followed by an analysis of the Canadian market for Indonesian coffee, including historical trends and growth potential going forward. (See box "Methodology and Data Sources" for details on the approach and data used.) It also outlines the key regulations Indonesian exporters will need to consider for the Canadian market. An analysis of the Indonesian context follows. This includes a discussion of coffee production in Indonesia, as well as the development-related impacts of the coffee sector in terms of poverty reduction, and the effects on employment, gender equality, and the environment. The report ends with a discussion of the role of voluntary frameworks and standards, which offer further potential to improve productivity and quality, as well as the developmental impact of the sector in Indonesia. The report concludes with a summary of key factors in the market for coffee exports.

Coffee Segment Included in Report

The coffee market is defined using a six-digit code from the Harmonized Commodity Description and Coding System (HS), which is an international system used to classify traded products using standardized names and numbers. Within this report, coffee is analyzed for the following sub-segment only:

HS 090111 (Coffee, not roasted, not decaffeinated)

Methodology and Data Sources

This analysis of the coffee market relies on a number of data sources to enable an analysis of global and Canadian trends.

Analysis at the global level was conducted using the United Nations (UN) Comtrade database on both an import and export basis. These data allow for analysis of overall global value and volume trends¹, global and Indonesian implied price² trends, market shares, and rankings.

Comtrade database: <u>https://comtrade.un.org/</u>

At the Canadian level, the coffee market was analyzed at the HS-6 level using the Canadian International Merchandise Trade (CIMT) database produced by Statistics Canada. This information was used to examine value and volume trends of Canadian coffee imports, projected growth in the Canadian market, implied Canadian coffee price trends, market shares, and rankings.

CIMT database: <u>http://www5.statcan.gc.ca/olc-</u> cel/olc.action?objId=65F0013X&objType=2&lang=en&limit=0

Concordance matching was done to connect HS codes to North American Industry Classification System (NAICS) codes so that official (such as Canadian Industry Statistics database) and private (such as IBIS World Canada) databases could be used. In addition to these quantitative sources, the examination of the Canadian market includes an analysis of relevant legislation, regulations, and policies for coffee. This includes information from the Canadian Food Inspection Agency; Health Canada; the Canadian Border Services Agency; Innovation, Science, and Economic Development Canada; and the Department of Justice Canada. These sources provided information on tariff rates and sector regulations, including for product standards and labelling.

The analysis of sector dynamics in Indonesia, including developmental considerations, is grounded in a literature review. Primary resources come from mainstream and grey literature, as well as technical reports and websites of relevant organizations, including the Government of Indonesia (Ministry of Trade, Ministry of Co-operatives and SMEs [small and medium-sized enterprises], State Statistics Office), private companies and industry associations, inter-governmental organizations,³ regional and national associations and research centres,⁴ news sources (including official press releases), academic research papers, and studies by non-governmental organizations.

There are a number of limitations to the methodological approach outlined above. The report is largely the product of a desk-based review, though it should be noted that there is a fairly significant breadth of information on production, poverty, gender, and environment-related issues associated with the coffee supply chain. Nevertheless, the range of academic and policy literature available, as well as support from interview data, ensures that the report is relevant and timely.

Footnotes:

- 1. Trend analysis was done using the compound annual growth rate (CAGR), which calculates the constant rate of growth over a specific time period.
- 2. The implied price was calculated as value (US\$)/volume unit (kilograms). It is a nominal figure, meaning it has not been adjusted for inflation.
- 3. The World Bank, International Monetary Fund, Asian Development Bank, World Trade Organization, International Labour Organization, UN Industrial Development Organization, UN Women, UN Conference on Trade and Development, United Nations Environment Programme, and United Nations Development Programme.
- 4. Economic Research Institute for ASEAN and East Asia, National Bureau of Asian Research, Indonesian National Institute of Sciences (INIS), Centre for Strategic and International Studies, and SMERU Research Institute.

Global Coffee Market

The value of the global export market for coffee stood at US\$20.1 billion in 2014, more than double what it was in 2005. (See Chart 1.) In volume terms, the global export market grew from 4.8 billion kilograms in 2005 to 6.8 billion kilograms in 2014. While trade volumes depict a relatively smooth trend, the value of traded coffee fluctuates considerably, implying that the source of volatility is primarily the result of changes to underlying commodity prices.

After years of strong growth, the global coffee export market shrank in value by 10 per cent from 2008 to 2009 during the financial crisis. Volumes continued to grow— by 3 per cent from 2008 to 2009—although at a slower pace compared to previous years. Coffee prices, on the other hand, contracted by 13 per cent. After the crisis, global coffee exports snapped back

and nearly doubled in value between 2009 and 2011. This increase in value was due mainly to a jump in price from US\$2.25 in 2009 to US\$2.94 in 2011; volume growth was much more modest. The takeaway from this data analysis is that commodity price volatility is a key feature of the coffee market.

Since its peak in 2011, global coffee exports have declined significantly. In 2013, the export market declined both in value and volume terms for the first time. Prices also declined to US\$2.68 per kilogram in 2013. The global market began to recover in 2014.





The global coffee export market is dominated by three players: Brazil, Vietnam, and Colombia. Indonesia is the fourth-largest global exporter. In 2014, the top three exporters accounted for 59 per cent of the market in value terms. (See Chart 2.) Indonesia's share of the global market in 2014 was 5.1 per cent and has ranged between 4 and 7 per cent since 2005 in value terms.

Source: United Nations.



Chart 2 Top 10 Coffee Exporters in 2014 (share of value of global coffee exports)

Source: United Nations.

Indonesian coffee has, until recently, been priced lower than the global average and compared to other major exporters, because most of what is exported is of the cheaper variety, Robusta. (See Chart 3.) In fact, among the top 10 exporters of coffee Indonesia commands one of the lowest prices, with only Vietnamese coffee (among the top 10) priced lower. Indonesian coffee exports commanded a price of US\$1.12 per kilogram in 2005 and US\$2.69 per kilogram in 2014, representing an annual growth of 10.2 per cent, which outpaced the 5.4 per cent annual growth in global prices. Despite the higher growth rate, the price commanded by Indonesia's coffee exports remains lower, although this differential has narrowed over time.

The largest global importers of coffee are the U.S. and Germany, which together account for approximately 40 per cent of the value of global coffee imports. Canada is the eighth-largest importer and accounted for approximately 3.2 per cent of the value of global imports in 2014.

Chart 3 Coffee Export Prices (\$US per kilogram)



Source: United Nations.

Canadian Import Market for Coffee

The total Canadian import market for coffee (HS 090111) grew from C\$347 million in 2004 to C\$714 million in 2014, representing an annual growth rate of 8.3 per cent. (See Chart 4.) Canadian import market trends mirror global ones in that, as described above, in value terms imports have yet to reclaim the highs reached in 2011.



Chart 4 Canadian Imports of Coffee (C\$ millions)

A more relevant period for estimating future growth is the five-year period from 2009 to 2014. During this timeframe, the value of Canadian coffee imports grew at nearly 11.4 per cent per year. Were this rate to continue going forward, Canada's coffee import market could reach C\$1.2 billion by 2019.

Source: Statistics Canada.

In volume terms, the import market grew an average of 2.9 per cent per year, from 133 million kilograms in 2004 to 166 million kilograms in 2014. (See Chart 5.) The volume growth in Canadian coffee imports, while steady, is lower than that seen in the global market.



Chart 5 Canadian Imports of Coffee (millions of kilograms)

Canada's coffee import market is dominated by three players—Colombia, Brazil, and Guatemala—who together accounted for about 65 per cent of the value of the Canadian import market in 2014. (See Chart 6.) Indonesia was the sixth-largest coffee exporter in the Canadian import market in 2014, accounting for just over 4 per cent of Canadian coffee imports.

There are noteworthy differences between the Canadian and global import markets. Guatemala and Colombia have a much higher share in the Canadian market than they do in the global market, while Vietnam has a much lower share in the Canadian market than in the global market.

Source: Statistics Canada.



Chart 6 Share of Canadian Imports by Top 10 Countries (per cent)

Source: Statistics Canada.

Indonesia's 4.1 per cent share in the Canadian coffee import market in 2014 was lower than its 5.1 per cent share in the global market. Since 2003, Indonesia's share in the Canadian market has ranged between 3 and 5 per cent, somewhat lower than its global market share.

Import prices for coffee in the Canadian market have increased from C\$2.70 per kilogram in 2004 to C\$4.30 per kilogram in 2014. (See Chart 7.) In 2014, Indonesian coffee was priced 37 per cent higher than the average import price in the Canadian market. A potential reason for this may be the difference in the type of coffee imported into Canada from Indonesia as compared to the type of coffee Indonesia exports globally (Neilson 2013).¹

¹ This is likely explained by a high percentage of imports of premium coffee blends from Indonesia to Canada vis-à-vis lower quality blends such as Robusta. For example, the blends from Sulawesi and Sumatra, which are recognized as having distinctive flavours, tend to be produced at a high-quality standard.

Chart 7 Canadian Coffee Import Price (C\$ per kilogram)



Source: Statistics Canada.

Contrary to the global market, where Indonesian coffee is consistently one of the lowestpriced among the top exporters, in the Canadian market, Indonesian coffee is one of the highest-priced.² (See Chart 8.)



Chart 8 Canadian Coffee Import Prices C\$ per kilogram

Source: Statistics Canada.

² Among the major exporters and growing exporters, only Kenyan coffee was higher-priced compared to Indonesian.

Import Concentration and Major Canadian Importers

Coffee imports into Canada are highly concentrated in terms of the number of importers. The top 12 importers, listed alphabetically in Table 1, accounted for 79 per cent of total imports in 2014. Several importers are non-residents with addresses outside of Canada. The top nine major importers accounted for 78 per cent of total coffee imports from Indonesia in 2014.

Viajor Canadian Importers, 2014			
Company Name (alphabetical order)	City	Province/State	
American Coffee Corporation	Jersey City	New Jersey	
Atlantic Cocoa Co.	New York	New York	
COEX Coffee International, Inc.	Miami	Florida	
Coffee America (USA) Corporation	New York	New York	
Eland Inc.	Mississauga	Ontario	
Ken Gabbay Coffee Ltd.	Montréal	Quebec	
N. J. Douek & Sons	Montréal	Quebec	
Olam Americas, Inc.	White Plains	New York	
RGC Coffee Inc.	Westmount	Quebec	
Swiss Water Decaffeinated Coffee Inc.	Burnaby	British Columbia	
VOLCAFE USA, L.L.C.	Somerset	New Jersey	
Walker Coffee Trading, LPLP	Houston	Texas	

Table 1Major Canadian Importers, 2014

Source: Canadian Importers Database.

Regulations

Coffee is regulated by the Canadian Food Inspection Agency (CFIA) as a food product. The CFIA has implemented numerous acts and regulations pertaining to coffee, including the <u>Canadian Food and Drug Regulations</u>, <u>Canada Agricultural Products Act</u>, and <u>Safe Food for</u> <u>Canadians Act</u> (SFCA). The SFCA, enacted in 2012, establishes standards for food inspection, as well as general labelling and advertising guidelines for food manufacturers. CFIA has also prepared an <u>Imported and Manufactured Food Program Inspection Manual</u> that consolidates information on the regulatory framework, as well as on food safety standards.

Under Division 5 of the Canadian Food and Drug Regulations, coffee (HS 090111) is listed with the following description:

B.05.001 [S]. Green Coffee, Raw Coffee or **Unroasted Coffee** shall be the seed of Coffee arabica L., C. liberica Hiern, or C. robusta Chev., freed from all but a small portion of its spermoderm.

With respect to environmental issues, coffee manufacturers must meet all laws and regulations falling within the <u>Canadian Environmental Protection Act</u> and <u>Canadian</u> <u>Environmental Assessment Act</u>, applicable to all provincial and federal jurisdictions.

The <u>*Pest Control Products Act*</u> implemented by Health Canada determines which pesticides and sprays are approved for use and governs their application. Coffee producers must ensure pesticide residue levels are within regulation.

When relevant, internationally traded products represented as organic must be certified by a <u>CFIA-accredited body</u>. Specifically, only products with organic content that is greater than or equal to 95 per cent may be labelled as organic. Products must show the name of the certification body and are regulated under the <u>Organic Products Regulations</u>, 2009. Coffee is one of the Canadian grocery categories with the most certified organic items, including more than 100 items (roasted and ground) from at least 15 organic producers and brands (Agriculture and Agri-Food Canada 2008).

The CFIA monitors labelling and packaging under the <u>Consumer Packaging and Labelling</u> <u>Act</u> (CPLA). Coffee products fall under the CPLA, which requires that pre-packaged foods either imported or made in Canada must not bear any false or misleading information regarding their origin, quality, performance, net weight, or quantity.

There are separate guidelines for food labelling as it relates to industry and consumers, which are relatively similar across all food products. For industry, the <u>core labelling requirements</u> include bilingual labelling, common name, country of origin, date markings, storage instructions, identity and principal place of business, irradiated foods, legibility and location, list of ingredients and allergens, net quantity, nutrition labelling, and sweeteners. Additionally, there is a list of claims and statements for industry products that include advertising, allergens and gluten, composition and quality, health claims, method of production, pictures, vignettes, logos and trademarks, organic, origin, and nutrient content.

For coffee, there is an exception made for industry labelling requirements regarding a nutrition facts table. Rules of exemption are made to certain products outlined in the <u>Food</u> and <u>Drug Regulations</u>. This is due to the fact that coffee does not require a list of ingredients and can be packaged as individual servings provided by establishments like restaurants and airlines.

For consumers, <u>labelling requirements</u> include origin claim, name and address, allergy statement, list of ingredients, nutrition facts table, date marking, composition claim, principal display panel, brand name, net quantity, nutrient content claim, and common name. These requirements are common to almost all food products.

Maintaining consumer confidence and taking a sound, science-based approach to addressing regulatory issues (such as food safety) is important to ensuring market access to Canadian agriculture and agri-food products. Internationally, the WTO <u>Technical Barriers to Trade</u> (<u>TBT</u>) <u>Agreement</u> covers all technical regulations, voluntary standards, and compliance procedures. In terms of food products, labelling requirements, nutrition claims, quality control, and packaging regulations are also subject to the TBT Agreement for all WTO members.

The <u>World Trade Organization (WTO) Agreement on the Application of Sanitary and</u> <u>Phytosanitary Measures</u> (SPS) also established rules and measures to protect against risks associated with pests and diseases, and to prevent health risks from food additives, toxins, and contaminants in food and beverages. The <u>Codex Alimentarius</u> for food safety, established by the United Nations Food and Agriculture Organization and the World Health Organization, is recognized as consistent with the SPS Agreement.

Tariffs

The Canadian import tariff for coffee (specifically HS 090111 and all applicable HS10 codes) falls under the most favoured nation (MFN) duty rate of zero per cent (or duty-free) in Chapter 9 of the <u>Customs Tariff</u> schedule, which is the rate applicable to Indonesia.

Export Considerations: Indonesian Context

In 2015, Indonesia was the fourth-largest producer of coffee in the world. Coffee production in Indonesia began in the early 18th century and played an important part in the growth of the country. Indonesia is located within an ideal geography for coffee plantations—near the equator and with mountainous regions across the islands—creating microclimates well-suited to coffee.

Indonesia produced an estimated 11 million 60-kilogram bags of coffee in 2015 (International Coffee Organization 2016).³ Of this total, about 7.6 million 60-kilogram bags were exported, with the balance consumed domestically. More than 90 per cent of Indonesia's coffee is grown on small farms (averaging one hectare) by smallholders. A portion of this production is organic, and its exporters are internationally certified to market the coffee as organic. Twenty-five per cent of exports are *coffea arabica* beans and the balance are *coffea robusta*, hereafter referred to as Arabica and Robusta. The main destinations for Indonesia is also well-placed to capitalize on fast-rising demand in the ASEAN region and in China (Global Business Guide Indonesia 2015).

Location

The provinces of North Sumatra and Aceh on the northern part of the island of Sumatra are the largest Arabica coffee producers in the country, producing almost 60 per cent of the total. Robusta coffee is grown at lower altitudes than Arabica. The provinces of South Sumatra, Lampung, and Bengkulu on the southern part of the island of Sumatra are the largest producers. Exhibit 1 maps, in order, the top 10 coffee-producing Indonesian provinces, identified by the type of coffee produced.

Exhibit 1 Map of Indonesia's Top 10 Coffee-Producing Provinces

- 1. South Sumatra (Robusta)
- 2. Lampung (Robusta)
- 3. North Sumatra (Arabica)
- 4. Bengkulu (Robusta)
- 5. East Java (Robusta and Arabica)
- 6. Aceh (Arabica)
- 7. South Sulawesi (Arabica)
- 8. West Sumatra (Robusta)
- 9. East Nusa Tenggara (Robusta and Arabica)
- 10. Central Java (Robusta and Arabica)

³ Coffee production and trade is measured internationally in 60-kilogram bags.



Production and Processing

The Indonesian coffee sector is large, diverse, and geographically dispersed. With most of the large coffee estates replaced by palm oil and other agri-businesses in the last decade, production is currently dominated by an estimated two million smallholders who live mostly in remote villages. Each region varies in terms of how they produce and process the coffee, the quality of the product, and the value chain structure, as well as the environmental impacts. Indonesia's unique geography poses challenges to logistics, new technology dispersion, and development of cohesive industry organizations. Most coffee-producing regions face similar challenges of low productivity (yields) and weak farmer organization and coordination.

Harvesting Techniques and Output Quality

All Arabica coffee in Indonesia is picked by hand, regardless of the size of the farm. After harvest, the coffee is processed in one of two ways, each resulting in its own flavours and aromas. The most traditional method, dry processing, is used by nearly all Robusta farmers in Indonesia, as well as a small percentage of Arabica farmers in Sulawesi, Flores, and Bali. In this method, coffee cherries are dried in the sun and then de-hulled in a dry state.

The second method, wet-hulling ("giling basah"), is used by most farmers in Sulawesi, Sumatra, Flores, and Papua. First, the outer skin of the cherries is removed mechanically using pulping machines. The coffee beans, still coated with mucilage, are stored for up to a day, after which the mucilage is washed off and the coffee is partially dried for sale. The coffee is then hulled in a semi-wet state by collectors and processors, which reduces acidity and increases body and results in the classic Indonesian coffee profile. Larger processors on Sumatra, Java, Sulawesi, and Bali produce "fully washed" coffee.

Robusta coffee is typically grown on small farms averaging one hectare. The crop is first harvested by stripping the fruit from the branch, which results in a mix of ripe and green cherries. Farmers then dry the coffee cherries for as long as three weeks, hull the cherries, and sell them to collectors. In turn, the collectors sell them to exporters and domestic

markets. The exporters dry, sort, and grade the cherries. Rather than being shipped in containers like Arabica coffee, Robusta is exported in break bulk shipments. Robusta, the most often produced type of coffee in Indonesia, is usually ready for export between July and December (ITC 2011).

Markets

Domestic Coffee Market

Most of Indonesia's Robusta is used in instant coffee and other manufactured products. The roasted coffee industry is largely oriented to fulfill domestic consumption, with only 1 per cent of processed products exported (Wahyudi and Jati 2012). The main Robusta markets are the United States, Western Europe, and Japan, although demand from Asian markets is increasing (USDA 2015). Robusta is also an important part of traditional espresso blends.

Rising domestic demand in Indonesia means that the home market is playing an increasingly important role. Although consumption is still low when compared to Europe and the Americas, demand is growing, a trend that is likely to continue and could help boost production in the country. (See box "Growing Domestic Demand for Coffee in Indonesia.")

Growing Domestic Demand for Coffee in Indonesia

Compared to citizens of Europe and the Americas, Indonesians are not coffee lovers—yet. Indonesian per capita consumption of around 1.2 kilograms pales against more than 4 kilograms in the U.S., around 7 kilograms in Brazil, the world's number one coffee producer, and more than 10 kilograms in various European countries. But with Indonesian per capita consumption having already doubled in just a few years, domestic demand looks to be on a fast growth trend. This puts the world's fourth-most-populous country on course to become a leading coffee market.

Local demand is driven by the lifestyle changes that accompany urbanization and economic development. Caffeine consumption tends to increase when a larger part of the labour force works in an office environment. Instant coffee is particularly popular in Indonesia, sold per cup at thousands of low-end cafes and corner shops, while consumers on higher incomes have taken a strong liking to coffee shops. As a result, foreign and local franchises are spreading across the country. Starbucks alone has announced plans to open some 100 new outlets in the country in three years. With awareness for healthy nutrition on the rise, much potential is seen in the market for coffee products that offer additional health benefits, such as coffees enhanced with ginseng or low-acid coffees that are milder on the stomach.

Excerpted from Global Business Guide Indonesia, 2014, "Indonesia's Coffee Industry Needs Growth Capital."

http://www.gbgindonesia.com/en/agriculture/article/2014/indonesia_s_coffee_industry_nee_ds_growth_capital.php (accessed January 15, 2017).

Canadian Market

Coffee is considered a staple household good. According to the Coffee Association of Canada (CAC), coffee-drinking Canadians consume the equivalent of 3.2 cups of coffee per day on

average, and 83 per cent of Canadians drink coffee.⁴ An estimated 14 billion cups of coffee are consumed in Canada each year, making it the most popular hot beverage and the number one food service beverage in Canada (IBIS World Canada 2015; Agriculture and Agri-Food Canada 2010).

Traditional coffee is the most common type, consumed by more than half (55 per cent) of consumers, followed by espresso-based coffee (12 per cent), instant traditional coffee (9 per cent), iced/frozen blended coffee (6 per cent), and decaffeinated coffee (5 per cent). According to a CAC survey, most Canadian coffee drinkers consume coffee at home (78 per cent), while a smaller but growing number (37 per cent) consume out of home. The drip coffee brewing format is dominant (53 per cent prepared using a drip coffee maker), but single-cup machines are now in second place (25 per cent prepared using a single-cup machine). Single-cup brewer ownership is notably higher in Canada than in the United States (38 per cent versus 27 per cent) (CAC 2016).

Canada does not have the climate to produce coffee, but the demand for the product is high. Canadian-based firms import raw input materials for processing and resale into both domestic and export markets (Agriculture and Agri-Food Canada 2010) and import intensity is expected to increase further (IBIS World Canada 2015).

On a domestic demand (or final demand)⁵ basis, the Canadian coffee market has grown from C\$1.8 billion in 2010 to C\$2.2 billion in 2015, representing a CAGR of 3.56 per cent. Domestic demand growth is expected to slow going forward. Between 2015 and 2020, growth in final demand is expected to slow to an annual rate of 2.54 per cent, and the industry is expected to be valued at C\$2.5 billion by 2020 (IBIS World Canada 2015).

The Canadian coffee market is dominated by two types of coffee beans: Latin America's Arabica and the relatively cheaper Asian Robusta. Arabica beans are the type traditionally best-known to Western consumers, but recent price increases for both types as well as increased energy costs have been significant factors affecting profitability and import trends within the coffee manufacturing industry that includes roasters and processors.

The Canadian coffee industry is mature. Revenue growth is similar or slower than the overall economy. Per capita consumption is stable, and growth within the industry is attributable to product differentiation (for example, through fair trade and organic certification).

The concentration of major retail chains is a key feature of the coffee industry, resulting in a high degree of competition for shelf space. The biggest barrier to entry faced by potential new entrants is the extremely well-entrenched position of the industry's major players, who have invested considerable resources in marketing, developing relationships with key suppliers, and building consumer trust. Incumbent firms also enjoy efficiencies due to economies of scale and scope, and as a result of investment in technology and equipment spread over diversified product lines and lower unit costs of production. According to Agriculture and Agri-Food Canada (2010), the Canadian market is supplied by a large number of established producers, which means that competition will continue to be strong.

 ⁴ According to the CAC's 2013 survey, 83 per cent responded as having drunk coffee in the past year.
⁵ Domestic demand represents spending on industry goods and services within Canada, regardless of their country of origin. It is derived by adding imports to industry revenue, and then subtracting exports.

Major market segments in the coffee industry in Canada include grocery stores and supermarkets, mass merchandisers, club stores, and drug stores. Grocery wholesalers occupy the largest market share and make up an estimated 49 per cent of industry revenue. In some cases, large supermarkets with enough purchasing power can bypass wholesalers and maintain contracts with manufacturers directly. This is a growing trend across the industry. Food service contractors also have a moderate demand for coffee and make up one of the major groups buying from coffee manufacturers and wholesalers.

Further downstream, mass merchandisers such as Walmart often sell coffee and tea products in their stores. In the past five years, a number of U.S.-based mass merchandisers have entered the Canadian market, which has led to increasing demand for industry product in this market segment. Similarly, club stores like Costco, which appeal to the budget-conscious consumer, sell coffee in bulk. Interestingly, drug stores and pharmacies have shown increasing demand for coffee, and this segment helps expand their product portfolio. This market is expected to grow over the next five years as consumers increasingly opt to purchase coffee products while shopping for other goods. Other important downstream markets include cafes, restaurants, and other hospitality establishments, which fall under the wider umbrella of food service contractors.

It is important to note that a significant portion of Canada's coffee industry is in the re-export market segment.⁶ Manufacturers and processors import coffee beans and then re-export to countries like the U.S., Australia, Japan, and the United Arab Emirates after the beans have been roasted and ground. In 2015, industry exports accounted for approximately 36 per cent of industry revenue.

Growth Opportunities

Capital Investment and Downstream Opportunities

There is room for further growth in the coffee sector, given rising per-capita consumption in Indonesia and other regions. To meet that rising demand, there is a need for investment (Global Business Guide Indonesia 2015).

Currently, most Indonesian coffee is exported as green beans to be processed abroad. This opens up obvious opportunities downstream in the value chain, including roasting, blending, packaging, and marketing. Because downstream processing companies require reliable, high-quality supplies, support to farmers will results in benefits downstream as well.

Recognizing the need for greater pre-export financing, the International Islamic Trade Finance Corporation designed a US\$1 million trade financing operation in Indonesia.⁷ The operation made funds available to exporters to help them meet pre-export financing requirements, and enabled quick payment to suppliers who typically must wait for payments once the coffee is purchased from exporters. This initiative reached five cooperatives and some 6000 farmers.

⁶ Coffee categorized as HS 090111 imported to Canada is unroasted and not decaffeinated—i.e., green beans. ⁷ See <u>http://www.itfc-idb.org/en/content/pre-export-financing-indonesian-coffee-sector-0</u> for further information.

Prospects

Indonesian coffee growers need to take advantage of rising demand by revitalizing their ageing plantations with new trees. At the same time, processing companies need to upgrade their machinery and facilities, and exporters must enhance their marketing and packaging. These efforts will require significant capital investment. Joint ventures with local firms seem the obvious route to take. In addition, capital investment from private equity firms could help Indonesian coffee producers strengthen their position in the global and domestic markets (Global Business Guide Indonesia 2015).

According to the Indonesian Coffee Exporters Association (AEKI), Indonesian farmers do plan to expand and rejuvenate old plantations through intensification programs. By expanding acreage, Indonesia's coffee production is targeted to reach between 900,000 and 1.2 million tons per year in the coming 10 years. Presidential Regulation No. 39 of 2014 limits foreign ownership in plantations to 95 per cent and Government Regulation No. 98 of 2013 limits private plantations to 100,000 hectares.⁸

In addition, Indonesian trade attachés are working to promote exports of speciality coffee, notably in the U.S. market (Ministry of Trade 2015). For example, Indonesia participated in the Speciality Coffee Association of America exhibition in April 2015, where the government promoted speciality coffees originating from Sumatra, Java and West Java, Bali, Sulawesi, Flores, and Papua.

Canadian Market

Growth opportunities exist within the coffee production market in Canada, specifically with respect to organic and ethically-sourced products, ready-to-drink formats, and products differentiated by their geographic origin and blend (e.g., Arabica versus Robusta). The industry has also benefited from an increase in consumer interest in specialized blends, rather than low-cost coffee products sold in bulk (IBIS World Canada 2015).

In an attempt to create new products and capture consumer interest, the coffee industry has also added several specialty and ready-to-drink formats to diversify their product lines. For instance, the adoption of single-cup coffee brewers for at-home coffee consumption has been an important recent innovation and has had a large impact on market differentiation. It has also dampened demand for instant coffee, a typical use for Robusta beans. Nevertheless, demand for Robusta beans has increased as coffee roasters and food service operators are developing new blends that combine lower-priced Robusta beans with more expensive Arabica beans in order to offset the recent increase in global prices (IBIS World Canada 2015).

Market pressures will continue to stem from both retail and food service sectors. Ethical products, upscale blends, and flavoured coffees are generating additional revenue, with many consumers gaining exposure to different products through the food service industry (Agriculture and Agri-Food Canada 2010).

⁸ Statement obtained from Indonesia's official investment agency; see <u>http://www.indonesia-investments.com/business/commodities/coffee/item186.</u>

The coffee industry has seen a visible shift in consumer choices towards ethically derived coffee beans. As a result of many Canadians' willingness to pay a premium for fair trade and organic products, industry revenue rose over the past five years, and this remains an area that Indonesian exporters (provided they are able to meet quality standards) could tap for further growth in the Canadian import market. Geographic labeling and leveraging organic/ethical certification remain areas that Indonesian exporters, including small- and medium-sized exporters, could focus on further, as there is a high level of market receptivity for them, and typically these sub-segments command a higher margin.

Environmental Considerations in the Coffee Supply Chain

Regulations

The legal basis of Indonesia's natural resource and environmental regulations is the 1945 Constitution, which notes that every person has the right to a good and healthy environment and that the organization of the national economy shall uphold principles of sustainability, keeping the environment in perspective. General environmental regulations refer to legislation that applies to all sectors, the most important of which is Law No. 32 of 2009 on environmental management and protection. This law establishes the basic principles of environmentally sustainable development, including environmental planning, natural resource utilization, development, maintenance, restoration, supervision and control of the environment, and law enforcement. There are various environmental management tools such as strategic environmental assessment for policies and programs, eco-regional analysis, and environmental budgets. Environmental impact assessment (EIA or AMDAL) is the key instrument used to prevent environmental damage from new initiatives. Physical activities or businesses that are likely to have a substantial impact on the environment are obliged to follow the AMDAL process. Depending on the extent of the project's environmental impact, a company may be required to issue an environmental impact assessment, an environmental management statement (Surat Pernyataan Pengelolaan Lingkungan or SPPL), and/or an environmental management efforts-environmental monitoring efforts report (Upaya Pengelolaan Lingkungan–Upaya Pemantauan Lingkungan or UKL–UPL).

There is no systemic research on the extent to which laws and regulations are being enforced in the coffee sector, although the government does provide support for farmers to improve quality and productivity.

Post-Harvest Processing

Coffee plants start to bear fruit after 3 to 4 years, with production peaking in 7 to 9 years. The fruits are ready for harvest 6 to 11 months after flowering, depending on the coffee varieties. Most farmers in Indonesia hand-pick the coffee cherries, while big plantations usually use machines. There are two methods to process the ripe cherries into green coffee beans—dry and wet.

Dry processing, which entails sorting coffee cherries and leaving them to dry in the sun, is a more environmentally sound approach (Chanakya and De Alwis 2004). Wet processing, which is favoured in the production of Arabica beans, involves high water use and generates wastewater. Coffee produced by the wet method is usually considered to be of better quality.

Sector Voluntary Frameworks: Labour, Gender, and the Environment

The use of voluntary standards in the coffee sector is seen as an important way to address the social and environmental issues in coffee production (Panhuysen and Pierrot 2014). The coffee sector has a number of certification schemes (such as the Rainforest Alliance and organic certifications), as well as specific schemes developed by major companies in the supply chain. For example, Starbucks, Whole Foods, and Nespresso have private standards for quality and sustainable production. Standards vary in terms of their purpose and scope (for a comparison, see SCAA 2009). The main certification schemes in the coffee industry include Fairtrade Labelling Organisation (FLO), Organic (IFOAM), Rainforest Alliance, UTZ Certified, Starbucks' Coffee and Farmer Equity Practices (C.A.F.E), and the 4C Code of Conduct.

Fairtrade certifications typically guarantee a floor price and make the link between producers and those consumers who demand ethical production. Under the Fairtrade mark, buyers pay a minimum price or the market price, whichever is higher, plus a premium. In the case of organic coffee, an organic differential is added. The minimum price varies by quality, ranging from an additional US\$1.05 to US\$1.40 per pound, with the fair-trade premium of US\$0.20 per pound and the organic differential at an additional US\$0.30 per pound.⁹

While Fairtrade represents a small portion of the overall total sustainable coffee, all forms of certification concern themselves with social performance, such as addressing work conditions and providing benefits to the community. Regarding women, all certification types call for compliance with national legislation relating to gender equality and non-discrimination in employment.

The premium paid for organic-certified coffees is generally 15 to 35 per cent above the price of conventional coffee (CBI n.d.). Premiums can also be much higher depending on origin, though they vary according to supply and demand.

Certification in Indonesia

Certification programs require that the product meet certain social, environment, economic sustainability, and product traceability standards. At present, 46 Indonesian coffee companies have been certified, with 47,000 tonnes per year of total certified coffee (Wahyudi and Jati 2012).

By the end of 2012, an estimated 7 per cent of Indonesia's coffee exports were certified or verified as sustainable, just below the global average. Within the Robusta segment, 5 per cent of Indonesia's sales are certified or verified (TechnoServe 2014).

The main types of certification for coffee employed in Indonesia are listed in Table 2.

⁹ See http://www.fairtrade.net/fileadmin/user_upload/content/2009/standards/documents/2012-10-

¹⁰_EN_Fairtrade_Minimum_Price_and_Premium_table_01.pdf for the full list of premiums.

Table 2Prominent Certification Schemes for Coffee in Indonesia

Certification providers	Remarks
Organic (JAS,	Organic farming and processing practices. Federal standard with practices for producers
USDA/NOP, EU)	and handlers applies to all organic product sold in the United States. Similar but unique standards are applied internationally. All markets accept it.
UTZ Certified	Sustainability (economic performance through productivity and farm professionalism); environmental standards to preserve flora and fauna shade, buffer zones; worker health and safety. Market: mainstream and specialty.
Bird Friendly	The Smithsonian Migratory Bird Center has developed the only 100 per cent organic and shade-grown coffee certification available: Bird Friendly. The certification guarantees that every bean is produced organically and under high-quality shade. The certification scheme aims to ensure tropical "agroforests" are preserved and migratory birds find a healthy haven when they travel.
Starbucks C.A.F.E	C.A.F.E. (Coffee and Farmer Equity) Practices is a private standard established by the
Practices	Starbucks Coffee Company. The scheme was developed by SCS (Scientific Certification Systems), which is the entity responsible for training and approving third-party verifiers.
<u>Fairtrade</u>	Socio-economic and environmental sustainability for farmers and their communities. Minimum price and social premium to cover costs of production and community-elected development programs. Premium for organic coffees. The model empowers small farmers organized into democratically run cooperatives to compete on a global scale. Promotion of women in skill training and leadership.
Rainforest Alliance	Sustainable farm management in a holistic sense: social, environmental, economic, and ethical improvements as the cornerstones of the program. Market: global, with special emphasis on North America, Europe, Japan, and Australia.
Geographic Indication	A geographical indication (GI) is a sign used on products that have a specific geographical origin and possess specific qualities or reputation. In Indonesia, GI is under the Ministry of Law and Human Rights at the Directorate General for Intellectual Property.
Organic Indonesia	There are certification bodies verified by Organic Food Competency Authority of the Ministry of Agriculture and accredited by the National Accredited Committee (KAN). They provide organic certification using Indonesia's National Standard—SNI 01-6729- 2013. However, it should be noted that this certification body does not have an organic equivalency arrangement with Canada.

Although Indonesia is known for exporting Robusta, only 25 per cent of certified Indonesian coffee is Robusta (Ibnu and others 2015). Seventy-five percent of certified coffee is Arabica, largely in the form of organic certification (Ibnu and others 2015; Wahyudi and Jati 2012).

Most certification or verification programs in Indonesia have been funded and run by private exporters (both local and international). Under these programs, exporters invest in organizing and training farmers, and certifying that practices are sustainable. The business case for the exporter is typically premised on growing market share and/or passing the added cost down the supply chain.

Finally, regarding women-owned SMEs and cooperatives, there is a lack of information and awareness regarding the procedures to receive certification, limiting the extent to which they can benefit from such schemes. In recognition of this challenge, the International Finance Corporation (IFC) stepped up efforts to target women in certification schemes. Working with ECOM Coffee Group, the IFC set up farmer training centres to promote quality awareness and better practices for sustainable coffee cultivation. The project, which began in 2006, was scaled up in 2011. IFC found that without special attention to women's needs, women in the coffee sector assumed that the training was for men. As such, in the second phase of the project, additional efforts were deployed to ensure women's participation in the program,

leading to nearly 1,600 women trained by 2014. (See box, "Ensuring Women Benefit from Sustainable Coffee Production.")

Ensuring Women Benefit from Sustainable Coffee Production

Working with ECOM, IFC began investing in training centres in 2006 to improve coffee quality and promote better practices for sustainable coffee production. During the first phase of the project (2006–2011), it became clear that women, despite playing a significant role in coffee cultivation, were not benefiting from the training centres. To address this issue, IFC took additional measures during the second phase of the project, including identifying women's role in on-farm supply-chain work and adjusting training schedules to accommodate women's needs. Moreover, gender-specific training materials were developed and deployed to trainers for ECOM staff and local communities. IFC also deployed women trainers and women volunteers, and engaged leaders of women's unions, farmer associations, and village heads. Finally, IFC introduced a financial management tool to help women track and analyse household and farm expenditures (as women typically manage household income). The program led to a significant increase in the number of women trained (27 per cent of those trained in phase two over 16 per cent in the first phase). An impact survey found that production training improved the quantity and quality of coffee more when women were included in technical training. Groups with both female and male workers who received training showed a 102 per cent increase in productivity, while groups where only males received training indicated an 82 per cent increase. IFC plans to replicate this approach with other commodities in which women play a key role.

Sources: IFC n.d.; IFC 2015; IFC 2016.

Certification in Canada

Coffee was the first agricultural product to be certified as fair trade (in 1988). Fair trade coffee is available at retail and food service outlets in Canada. There is a growing niche of consumers concerned about ethical conditions in traditional coffee production and harvesting practices in rural or developing areas. In Canada, this translates to consumers who are willing to pay a premium for fairly traded products.

The most relevant schemes for coffee in Canada include Fairtrade, ISO 22000, Rainforest Alliance, C.A.F.E., and organic labels. To export to Canada, coffee exporters must receive organic certification from an accredited body. In Indonesia, <u>BIOCert Indonesia</u>, based in Bogor, West Java, is accredited by the CFIA. The company, which was established in 2002 by the <u>Indonesian Organic Alliance</u> and is accredited under ISO 17065, has served as the auditing body for Rainforest Alliance's Agriculture Certification Program since 2008. Once certified by BioCert Indonesia, exports can choose to use the Canadian <u>organic logo</u>. In addition to the main certification schemes noted above, according to the International Trade Center's <u>Standards Map</u>, there are 24 standards relevant for Indonesian coffee destined for Canada. Appendix A provides an overview.

Conclusions

The Canadian market for coffee is generally mature, with consumption growing at or below the growth level of overall domestic income. Indonesian coffee is considered to have a very distinctive taste. The Canadian market, geared toward organic and fair trade-certified coffees, presents an opportunity for Indonesia, as does the unique taste of Indonesian coffee, which appeals to a certain segment of Canadian consumers. Realizing this opportunity will require efforts on the part of Indonesian exporters to obtain the required fair trade and organic certifications and to effectively market their product in Canada to niche markets.

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Appendix A: Standards for Indonesian Coffee Exports to Canada

Full List of Standards for Coffee from Indonesia to Canada According to the ITC Standards Map ¹⁰		
Standard	Description and Scope	
ISO	ISO 22000 Certificate for Food Safety Management, ISO 9001 (year 2000), ISO 14000.	
НАССР	Management system in which food safety is addressed through the analysis and control	
	of biological, chemical, and physical hazards from raw material production,	
	procurement and handling to manufacturing, distribution, and consumption of the	
	finished product.	
Global Coffee	The 4C Association is a multi-stakeholder sustainable coffee platform guiding the	
Platform	coffee sector in a pre-competitive manner. It operates the 4C Code of Conduct—an	
(Common Code	entry level standard that sets baselines for social, economic and environmental	
for the Coffee	principles for the sustainable production of green coffee. The 4C Association has a	
Community)	verification/certification process. It also cooperates with other sustainability standards	
57	such as Fairtrade International and UTZ Certified.	
Business Social	BSCI is a business-driven initiative supporting retailers, importers and brands to	
Compliance	improve working conditions in supplying factories and farms worldwide. The BSCI has	
Initiative (BCSI)	a code of conduct and a single implementation system that is meant to enable	
Code of Conduct	companies sourcing all kinds of products to deal with complex labour issues in their	
	supply chain. The BSCI is neither an auditing company nor an accreditation system, but	
	rather offers a methodology. It does not provide certification.	
EcoVadis	EcoVadis aims to improve companies' environmental and social practices by leveraging	
	the influence of global supply chains, and operates as a collaborative platform providing	
	supplier sustainability ratings. EcoVadis has a methodology for corporate social	
	responsibility (CSR) analysis which covers 21 criteria across four themes: environment,	
	fair labour practices, ethics/fair business practices, and supply chain. It offers training	
	and consulting, and aims to find solutions for buyers and suppliers.	
	ETI is an alliance of companies, trade unions and NGOs promoting respect for workers'	
Ethical Trading	rights around the globe. The ETI Code is based on the Conventions of the International	
Initiative (ETI)	Labour Organisation, and aims to support members in establishing ethical trade	
	strategies within their own supply chains.	
Fair for Life	Fair for Life aims to ensure fair and positive relations between producers and their	
	cooperatives or contracting companies, between workers and their employer, and	
	between sellers and buyers on the world market, while ensuring performance of	
	standards. The initiative offers two certification schemes: Fair for Life Social & Fair	
	Trade Certification Programme and Social Responsibility Certification. Fair for Life	
	offers brand-neutral third-party inspection and certification in initial production,	
	manufacturing, and trading. It combines strict social and fair trade standards with	
	adaptability to local conditions. The system is designed for both food and non-food	
	commodities (like cosmetics, textiles or tourist services).	
Fairtrade	Fairtrade International is an independent, non-governmental, not-for-profit	
International	organization. With its member organizations, Fairtrade International represents the	
	world's largest and most-recognized fair trade system. The organization coordinates	
	Fairtrade labelling at the international level and is based in Bonn, Germany.	
FLA Workplace	Fair Labor Association (FLA) is a collaborative effort of universities, civil society	
Code of Conduct	organizations, and socially responsible companies dedicated to protecting workers'	
	rights around the world. The FLA Workplace Code of Conduct defines labor standards	
	that aim to achieve decent and humane working conditions. The Code's standards are	
	based on International Labor Organization standards and internationally accepted good	
	labor practices. It has also created an independent monitoring, remediation, and	
	verification process to achieve compliance with this Code.	

¹⁰ Does not include standards identified for other countries, such as the British Retail Consortium Global Standards or the U.S. Department of Agriculture Organic Program, for example. Information drawn directly from the <u>Standards Map</u>.

GLOBALG.A.P.	GLOBALG.A.P. is a private-sector body that sets standards for the certification of the
Crops	production processes of aquaculture and agricultural products. GLOBALG.A.P. is a
	pre-farm-gate standard dealing with all farming activities from pre-harvest (e.g., feed
	and seedlings) to post-harvest (e.g., handling, packing and storing) activities, and is
	intended to reassure consumers that products were produced with respect for the
	environment and welfare of both workers and animals. The GLOBALG A P green
	coffee standard covers issues such as irrigation fertilizer use and soil or waste
	management GLOBALG A P certifies over 97 000 producers and is recognized in
	over 100 countries
International	The International Education of Organic Agriculture Movements (IEOAM) is a
Enderation of	The international redefation of Organic Agriculture Movements (IFOAM) is a
<u>Federation of</u>	grassroots and democratic organization that unites /50 member organizations in 116
Organic	countries. The IFOAM Norms are the basis for approval of certification bodies under
Agriculture	the IFOAM Accreditation and the IFOAM Global Organic System Accreditation
Movements	Programs. IFOAM's Organic Guarantee System (OGS) is designed to facilitate the
<u>(IFOAM)</u>	development of organic standards and third-party certification worldwide, and to
	provide an international guarantee of these standards and organic certification.
International	Since 1919, the International Labour Organization, a specialized agency of the United
<u>Labour</u>	Nations, has maintained and developed a system of international labour standards aimed
Organization	at promoting opportunities for women and men to obtain decent and productive work,
(ILO) Labour	in conditions of freedom, equity, security, and dignity. International labour standards
Standards	are legal instruments drawn up by the ILO's constituents (governments, employers, and
	workers from 185 member states) and set out basic principles and rights at work.
ISCC PLUS	ISCC PLUS is one of the leading certification systems for sustainability and greenhouse
	gas emissions. The ISCC PLUS system is built upon a set of obligatory basic
	requirements in production and with respect to chain of custody. Additionally, there are
	voluntary add-ons that exceed the obligatory sustainability requirements. Companies
	can choose these add-ons as voluntary additional modules in order to prove compliance.
	to a specific matter e_{α} specific biodiversity measures or low greenhouse gas
	emissions
Naturland	Naturland is an independent, non-governmental, non-profit organization which
Inaturiana	romotes organic farming with social responsibility and fair partnerships on a regional
	promotes organic ranning with social responsionity and fair business portnerships while
	national, and global level. It supports long-term and fail business particleships while
	bath on anomic formers' accepting projects with small-scale faillers. Naturation is
	both an organic farmers' association with farmers as members, delegates, and directors,
	as well as a standard-setting and certification body with its own label. It is run with the
	principles of grassroots democracy. Standard-setting and certification are a trailblazing
	working area, with new standards being developed beyond organic agriculture, such as
	social responsibility, organic aquaculture, organic forestry, North-South fair
	partnerships, and sustainable capture fishery. Apart from its offices in Germany,
	Naturland works with a network of representatives in Egypt, Ecuador, India, Peru,
	Bolivia, Tanzania, and the U.S. Currently, more than 40,000 farmers manage an area of
	some 250,000 hectares according to the Naturland standards.
Safe Quality Food	The Safe Quality Food (SQF) Program is a global food safety and quality certification
Program (SQF)	program designed to meet the needs of retailers and food service providers around the
	world who require HACCP and ISO-based food safety and quality management systems
	from their suppliers. It offers independent certification to ensure that a supplier's food
	safety and quality management system complies with international and domestic food
	safety regulations.
Sustainable	The SAI Platform has developed the Farm Sustainability Assessment to support farmers
Agriculture	and companies in their procurement of sustainably produced agricultural raw materials.
Initiative (SAI)	The SAI Platform covers the food industry, including sector-specific agricultural
Platform	products SAI's scoring mechanism covers environmental social and economic aspects
<u>I iutioiiii</u>	and provides farmers with an overview and certification of their farm's sustainability
Sedex Global	Sedex is a not-for-profit membership organization dedicated to driving improvements in
<u>BUUER CIUDAI</u>	sthical and responsible business practices in global supply shains. Soday was founded
	by a group of LIV rateilars in 2004 with two main goals; to ease the burden on suppliers
	by a group of OK retainers in 2004 with two main goals, to ease the builden on suppliers
	the athiest performance of aloged surplus design. As the least of the set of
	ine enrical performance of global supply chains. As the largest collaborative platform
	for sharing ethical supply chain data, Sedex is an effective supply chain management

	solution, helping companies to reduce risk, protect company reputation, and improve
	supply chain practices. Sedex also has a best practice guide.
<u>Social</u>	Social Accountability International is a non-governmental, not-for-profit organization
Accountability	that promotes the human rights of workers through the development of a voluntary
International	standard, SA8000. The core normative elements are derived from ILO standards and
<u>(SAI) SA8000</u>	include issues such as health and safety, right to collective bargaining, and working
	hours.
<u>Sustainability</u>	The FAO Guidelines: Sustainability Assessment of Food and Agriculture systems
Assessment of	(SAFA) provide an international reference for sustainable management, monitoring, and
Food and	reporting in food and agriculture at all levels of the supply chain. SAFA is not a
<u>Agriculture</u>	sustainability index, sustainability standard, or a labelling tool. SAFA defines what
systems (SAFA)	sustainable food and agriculture systems are, including environmental integrity,
	economic resilience, social well-being, and good governance; it outlines a procedure for
	an integrated analysis of all dimensions of sustainability, including the selection of
	appropriate indicators and rating of sustainability performance (best, good, moderate,
	limited, unacceptable); and it describes sustainability themes, sub-themes, and
	indicators. SAFA is objective-oriented. Indicators are designed to fulfil the theme's
	goals and the sub-theme's objectives. Thus, individual practices are addressed only
	implicitly in terms of their achievement of the stated objectives.
<u>Sustainable</u>	The Sustainable Agriculture Network (SAN) is a coalition of non-profit conservation
<u>Agriculture</u>	and rural development organizations in the Americas, Africa, and Europe promoting the
<u>Network (SAN)</u>	environmental and social sustainability of agricultural activities through the
	development of good practice standards, certification, and the training of rural
	producers throughout the world. The Rainforest Alliance (RA) works to conserve
	biodiversity and ensure sustainable livelihoods by transforming land-use practices,
	business practices, and consumer behavior. SAN and RA are co-owners of the
	certification system. Compliance with the SAN Sustainable Agriculture Standard is
	indispensable for farm certification and the right to use the Rainforest Alliance Certified
	trademark seal on agricultural products.
<u>Unilever</u>	The Unilever Sustainable Agriculture Code was launched in 2010 as the basis of the
<u>Sustainable</u>	Sustainable Sourcing programme, inspired by the company's sustainability commitment
Agriculture Code	that by 2020 Unilever will buy all its agricultural raw materials from farms applying
	sustainable agricultural practices. The sustainable sourcing programme relies on
	compliance with the Unilever Sustainable Agriculture Code, either through self-
	assessment and verification against the Code or through external certification standards
	recognised as equivalent to the Code, such as those of Rainforest Alliance or the RSPO.
	Through mandatory and good practice standards it defines a process of continuous
	improvement. This Code applies to all of Unilever's suppliers of agricultural raw
	materials, the farmers producing them, and contractors working on farms. Suppliers
	must comply with the Code's Scheme Rules, which detail external certification
	standards and self-verification methods.
UTZ Certified	UTZ is an independent, non-governmental, not-for-profit sustainability label and
	program dedicated to create an open and transparent marketplace for socially and
	environmentally responsible agricultural products. UTZ has two standards: The Code of
	Conduct and the Chain of Custody. The UTZ Traceability System allows consumers to
	verify, via a web-based system, the supply chain of their product from producers to
N . C 1 C 1	buyers.
Verified Carbon	Verified Carbon Standard (VCS) is a comprehensive quality-assurance system for
Standard (VCS)	carbon credits issued in voluntary markets. Projects use VCS requirements to ensure
	their carbon reductions meet accepted quality standards and are independently verified,
	uniquely numbered and transparently listed in a central database.
World Fair Trade	The World Fair Trade Organization (WFTO) is a global network of organizations
Organization	representing the Fair Trade supply chain. WFTO is the home of fair traders: producers,
<u>(WF10)</u>	marketers, exporters, importers, wholesalers, and retailers who demonstrate 100 per
Guarantee System	cent commitment to Fair Trade. The goal of the WFTO is to enable small producers to
	improve their livelihoods and communities through sustainable Fair Trade. It does this
	by delivering market access through policy, advocacy, campaigning, marketing, and