

NICHE MARKETS FOR COFFEE

SPECIALTY, ENVIRONMENT
AND SOCIAL ASPECTS



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Paper focusing on environmental and social aspects of the international coffee trade targeted at producers, exporters and others involved in the promotion of higher quality and sustainable coffee – describes the scope and trends for specialty coffee in the United States, Japan, and Northern and Southern Europe; discusses the challenges in the production and export of organic coffee; features a detailed comparison of the leading sustainability schemes; provides insights into the use of trademarks and geographical indications to market coffee; describes the role of women in the coffee sectors; annexes include an overview of The Coffee Exporter's Guide (2011), and sample answers from the Coffee Guide Website's Questions & Answers service (www.thecoffeeguide.org).

Descriptors: **Coffee, Certification, Organic Products, Geographical Indications, Sustainable Development, Gender, Marketing, Trademarks**

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English, Spanish (separate editions)

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Foreword

This document is based on Chapter 3 of *The Coffee Exporter's Guide – Third Edition*. First published as *Coffee – An exporter's guide* in 1992 and subsequently updated in 2002 and 2011, this practical handbook has become the world's most extensive and authoritative publication on the international trade of coffee. With neutral, hands-on information about the mechanics of trade in green coffee, the guide addresses value chain stakeholders in both coffee-producing and coffee-importing countries. A detailed overview of the world coffee trade is accompanied by advice on marketing, contracts, logistics, insurance, arbitration, futures markets, hedging, trade credits, risk management, quality control, e-commerce, sustainability schemes, climate change and more.

This technical paper entitled *Niche Markets for Coffee: Specialty, Environment and Social Aspects* – an excerpt from the aforementioned *Coffee Exporters' Guide* – is targeted in particular at producers, exporters and others involved in efforts to promote higher quality and sustainable coffee production. We published this document with the objective to provide these partners with a comprehensive and realistic overview of the opportunities as well the challenges involved in exporting coffee to niche, specialty, organic and socially responsible coffee markets.

It is our hope that this document will serve as an essential training and knowledge-sharing tool, and contribute to enable producers, exporters and those who support them in coffee-producing countries around the world to successfully take advantage of the growing market for high quality and premium priced coffees.

Acknowledgements

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Dominic Stanculescu, Consultant at ITC, sub-edited and formatted the technical paper in collaboration with Isabel Droste.

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Note

Unless otherwise specified, all references to dollars (\$) are to United States dollars, and all references to tons are to metric tons.

The following abbreviations are used:

4C	Common Code for the Coffee Community (Association)
CQI	Coffee Quality Institute
EU	European Union
EUREP	Euro-Retailer Producer Working Group
EUREPGAP	EUREP Good Agricultural Practices
FAO	Food and Agriculture Organization of the United Nations
FOB	Free on board
FLO	Fair Labelling Organizations
FOB	Free on board
GAP	Good Agricultural Practice
GBE	Green bean equivalent
GFH	Grounds for Health
GI	Geographical indication
GIS	Geographic information system
GMP	Good management practices
GPS	Global positioning system
ICE	Intercontinental Exchange
ICO	International Coffee Organization
ICS	Internal Control System (organic)
IFOAM	International Federation of Organic Agriculture Movements
ISO	International Organization for Standardization
ITC	International Trade Centre
IWCA	International Women's Coffee Alliance
JAS	Japan Agricultural Standard
LIFFE	London International Financial Futures and Options Exchange (NYSE Euronext Liffe)
NCA	National Coffee Association (United States)
NGO	Non-governmental organization
NOP	National Organic Program for the United States
NYSE LIFFE	London International Financial Futures and Options Exchange (NYSE Euronext Liffe)
OFPA	Organic Foods Production Act, USA
UNCTAD	United Nations Conference on Trade and Development
RA	Rainforest Alliance
SAN	Sustainable Agriculture Network
SCAA	Specialty Coffee Association of America
SCAE	Specialty Coffee Association of Europe
SCAJ	Specialty Coffee Association of Japan
USDA	United States Department of Agriculture
WHO	World Health Organization
WTO	World Trade Organization

Executive Summary

Large scale processing of coffee may not be economically viable in producer countries; instead value can be added to coffee by enhancing the quality of the green coffee bean exports and by meeting certain environmental and social standards.

The markets for “specialty coffee” – coffee that receives a premium price for being high quality or unique – continue to have important growth potential in consumer countries, but exporters should be aware of the particularities of each of these markets. This document describes the scope and trends in the specialty coffee markets in the United States, Japan, and Northern and Southern European. Likewise, the production of organic coffee – coffee that is produced under specific holistic production systems that promote and enhance agro-ecosystems – also provides opportunities for higher prices; however, the required audit trail and certifications are costly and organic production must be matched with high quality in order to command premium prices. The paper also describes the markets and procedures for importing organic coffee in Europe, the United States and Japan.

Mapping technologies based on geographical positioning systems (GPS) are increasingly used, not only to monitor agricultural production, but also to facilitate the traceability of coffees (from the farms through the supply chain), which is essential for the successful marketing of specialty, organic and “sustainable” coffees. In addition, legally protected trademarks and geographical indications (GI) have served successful coffees to gain consumer loyalty as well as higher prices by protecting products from fraudulent copiers and creating brand reputations.

Sustainability schemes – involving the verification and certification of coffee production according to a certain set of environmental and social standards – also allow producers to gain premium prices by providing a certain guarantee to concerned consumers regarding the sustainability of the production. The paper describes and compares the main sustainability schemes, including Fairtrade Label Organization, UTZ Certified, Rainforest Alliance, and 4C Association.

Finally, it should be noted that gender issues in coffee supply chains are often not a focus of these schemes; this paper describes the role of women in the coffee sector and describes opportunities to promote women’s rights through women’s associations.

Introduction

“Value addition” is generally believed to be the key to increasing the developmental impact of commodity exports in developing countries. In the coffee industry, however, value-addition through further processing of coffee prior to export may not be economically viable on a large scale. The deterrents to roasting, milling and packaging coffee in producer countries are numerous, including the high expenses occurred in marketing small amounts of single blend coffees, and the loss of flavour during shipment and storage of roasted coffees. Instead, value can be added to coffee in countries of origin by enhancing the quality and reliability of the green coffee bean exports, and by meeting certain environmental and social standards.

This paper – targeting stakeholders of the coffee value chain in coffee producer countries, including farmers, traders and exporters – aims to give a general overview of the opportunities for gaining premium prices for green beans in niche, specialty, organic, and certified “sustainable” coffee markets. The relevant environmental and social aspects of coffee production and trade are therefore presented and discussed in the framework of the main sustainability schemes. The paper aims to serve as a realistic and practical guide to interested readers by describing both the opportunities and the challenges of producing and marketing coffee for non-mainstream markets. Relevant sources of additional information are also listed within each section.

Sections 1 and 2 of this paper respectively describe the meaning of “specialty” and “organic” coffee, and discuss the markets for these coffees in the United States, Japan, and Northern and Southern Europe. Section 1 also describes the potential advantages and disadvantages to the producer from exclusive marketing arrangements. Moreover, Section 2 provides detailed information on the regulations for imports of organic coffee to these regions. Section 3 of the document describes the importance of mapping technology in coffee marketing and future applications of these tools. Section 4 provides insights into the advantages of trademarks and logos, geographical indication (GI), and appellation of origin for coffee exporters. Section 5 provides definitions of sustainability and certification terms, and an introduction of certain relevant standards in the industry. Section 6 provides a detailed overview of the main sustainability schemes in the coffee sector; a comparison table including these schemes is also provided. Section 7 describes the importance of certification and verification in the marketing of coffees. Finally, Section 8 describes the roles of women in the coffee sector.

1. The specialty market

It is often neither viable nor possible to add value to green coffee by processing at origin. Many coffees are suitable only for blending or processing into neutral or anonymous end products, including soluble. For such coffees it is not possible to add monetary value as prices are determined solely by market conditions. However, reliable and consistent grading procedures, strict compliance with contractual obligations and regular delivery will add value in the sense that the product will be preferred by primary buyers over those from less consistent origins. Certain growths of coffee, on the other hand, may be highly prized for their flavour characteristics and attract a suitable premium. Examples include Jamaican Blue Mountain, Hawaii Kona, Top Kenya AA and Guatemalan Antiguas.

Some of these growths regularly attract extremely high premiums. For example, in the early 2000s Jamaican Blue Mountain attracted such a large premium that the unit value of coffee exported from Jamaica was over 13 times higher than the average of all ‘Other milds’ producers and more than 16 times higher than the average achieved by all origins. The top Kenyan grades regularly achieve prices more than double that achieved by other growths with some small parcels selling in early 2011 for as high as US\$ 20/lb.

Coffees, especially the winning coffees, sold through the Cup of Excellence programme, (www.cupofexcellence.org) attract exceptionally high premiums, but the lot size is generally very small. The programme involves much more than just promoting the winning lots. The Cup of Excellence programme offers the origin the chance to highlight its coffee quality and focus marketing attention on the country concerned. Colombia has managed to consistently command sizeable price premiums for its coffee because it has always adopted an active marketing and publicity policy, which over time resulted in many brands throughout the world being labelled as 100% Colombian. Over time, other producers could

also try to ensure that the label of the blend containing their coffee at least carries a reference to the composition of the blend. Unfortunately, very few roasters are actually willing to do this. In any case, a roaster who markets such a blend will need to be assured of consistent quality and regular delivery.

Consumer awareness of the origins they drink does lead to product loyalty and the development of a brand image. This results in some, albeit limited, protection from the vagaries of the market. But if roasters are unable to obtain regular supplies from one exporter, they will of course be encouraged to seek alternative sources.

1.1. The meaning of specialty

The term 'specialty coffee' originated in the United States. It was initially used to describe the range of coffee products sold in dedicated coffee shops, in order to differentiate these coffees from coffee generally available through supermarkets and other retail outlets. The term 'gourmet' is also used, but is now applied to so many products that it has lost all relevance.

Specialty today refers both to whole bean sales and to coffee beverages sold in coffee bars and cafés, as opposed to restaurants and other catering establishments. The range includes higher quality coffees, both single origin and blends, unconventional coffees such as flavoured coffees and coffees with an unusual background or story behind them. However, with the rapid growth in the number of specialty coffee retail outlets and more particularly the expansion of the specialty coffee product range into more mainstream outlets such as supermarkets, the term has become much looser. It is fair to say that 'specialty coffee' has become a generic label covering a range of different coffees, which either command a premium price over other coffees or are perceived by consumers as being different from the widely available mainstream brands of coffee. The term has become so broad that there is no universally accepted definition of what constitutes 'specialty coffee', and it frequently means different things to different people.

Given this lack of precision in definition it is extremely difficult to describe the market in a global way. The best approach appears to be to look at the specialty market from different country or regional viewpoints. However, the very notion 'gourmet' or 'specialty' suggests some degree of exclusivity. It is unlikely that one could market thousands of tons of a particular coffee and still call it 'exclusive'.

The first lesson: one should not 'overdo it'. It is, and always has been, a mistake to consider specialty coffee a different industry from the rest of the coffee business. Supply and demand will not only determine the general level of coffee prices, but will also determine the premium paid for 'quality'.

The second lesson: producers need to target any special coffee very carefully because the term 'specialty' covers a large and growing number of different products, each of which has its own niche.

1.2. The definition of niche markets

A niche combines a set of conditions that enable a single species or a single product to thrive within the greater ecological or commercial environment. Much of global coffee production consists of mainstream-type coffees. However, there are many other coffees, often of limited availability, with greatly varying taste characteristics that appeal to different groups of consumers, and which sell at a premium over mainstream coffees. Simply put, where the producers or exporters of such a coffee and such a group of consumers get together, a niche market is created.

Two main factors determine whether a coffee can find a niche market: quality and availability. 'Availability' is easily understood, but 'quality' is a subjective term which means different things to different people. See "Chapter 11 – Coffee quality" in the Coffee Exporter's Guide – Third Edition.

1.3. Quality segmentation of coffees

Broadly speaking, coffees can be divided into three commercial categories.

- **Exemplary quality** coffees have a high intrinsic value with a fine or unique cup. Usually of quite limited availability. Mostly retailed under straight estate or origin names. Usually very well presented

washed coffees, including some superior washed robustas, but also includes some naturals (Ethiopian Harar, Yemeni Mochas, some Indonesian arabicas) and top organic coffees, which are usually, but not always, roasted by comparatively small firms and marketed through fairly exclusive outlets, e.g. retail coffee shops or bars and upmarket delicatessens.

- **High quality or premium brands**, good cupping coffees, well presented but not necessarily visually perfect. Retailed both as straight origins and as blends. Includes good quality, well prepared organic coffees, and washed as well as superior quality natural robustas. The market for this quality band is much broader and includes a good percentage of today's specialty coffee. Also produced by leading multinational coffee companies and marketed through normal retail outlets such as supermarkets.
- **Mainstream quality**, average quality, reasonably well presented, but certainly not visually perfect. Will offer a decent, clean but not necessarily impressive cup.

In today's specialty market all three types of coffee are represented: exemplary and high quality coffees either as stand-alone or as a named blend component, and mainstream quality in many of the ready-to-drink and flavoured drinks that are sold alongside filter coffee and espresso.

Obviously, for smaller exporters of top quality coffee, the exemplary segment initially offers more promise. However, producers or exporters of good quality coffee have three basic options open to them:

- Sell to the leading roasters (through the usual trade channels) if volume sales are required and the coffee sold lacks the flavour characteristics necessary to be marketed on its own.
- Sell to specialty roasters either direct or through importers or agents. The latter in most cases is the more realistic option as these importers or agents have a wide coverage of the small roasters and other retail outlets, which are too small to import direct.
- Focus on specialty coffee retailers either by selling direct (for roasting in store) through specialty wholesalers or by selling through specialty roasters. However, the number of specialty coffee retailers importing direct is extremely small.

Premiums for specialty coffee can be considerable at the retail level, but the premiums available for producers are inevitably much lower, although they can still be significant. It is sobering to realize that mainstream qualities, including robusta, account for an estimated 85%–90% of world coffee consumption, while the share of exemplary and high quality coffee is no more than 10% or perhaps 15% of the world market. This suggests that for many producers it would be inadvisable to ignore the mainstream market altogether. Instead, they should concentrate on both: specialty for their top quality and mainstream for the remainder of their production.

A further point to note is that sales to small roasters are mostly on extended credit terms, something only an importer can easily afford. Inventory costs, late payment costs and even the risk of payment defaults are therefore part of the cost equation. Also, most roasters purchase subject to approval of the quality on delivery. This means the importer will be left with any coffee that does not meet the roaster's expectations. In other words, the premium for specialty coffee at the wholesale level includes many more factors than just the quality.

1.4. Exclusive marketing arrangements

There are times, especially with a new and limited coffee, that a producer may agree to sell this coffee only to a particular company, or to only a few companies that do not compete in the same geographic region. Importers and roasters at times like to have such an arrangement because it prevents their competitors from marketing the identical name at a different price in the same marketplace. They can then create a marketing strategy that sets, them and the coffee – sometimes called 'partnership coffee' or 'relationship coffee' – apart from the competition.

1.4.1. Potential benefits for the producer

- The agreements are usually long term and as such can help create price stability. This expectation of premiums allows producers to focus on the coffee instead of the marketplace, and to be able to pay for the extra effort it takes to maintain the quality.
- An exclusive arrangement generally means roasters will be spending marketing dollars in introducing the coffee to their clients, i.e. a roaster will promote this particular coffee rather than just blend it. Promotional dollars behind the coffee mean increased consumer awareness, which can lead to longer term loyalty.
- Exclusivity creates a certain sense of loyalty and communication between the producer and the importer/ roaster that may otherwise not be possible. It is also in the best interest of the receiving company that the quality is optimal – as such it may provide technical help and other assistance that would otherwise not have been available to the producer.

1.4.2. Potential disadvantages for the producer

- An exclusive arrangement may limit the coffee's exposure. If it is with a smaller company or companies with limited market share, then the chance to create a broader consumer base is lost. This could imply that when the agreement comes to an end the producer is left with a coffee that enjoys only limited awareness and requires further effort to build market share.
- An exclusive arrangement usually contains price constraints. Sometimes beneficial for the producer, but depending on market movements and the demand for this particular coffee, this could also have negative effects. One can find oneself locked in with one buyer when in reality a better price might be available elsewhere.
- The producer is relying on one or a few companies to promote his coffee, but generally has no guarantee this will in fact happen, or that it will be enough to be effective. Even though it is also in the buyer's best interest to ensure this, he or she may in fact not do so.

In conclusion, producers entering into such arrangements must make every effort to know their business partner. There certainly are companies that are less than serious, that make promises they cannot keep, and that sometimes may even forego the agreed payment structure when this suits them. It is imperative therefore that all contractual arrangements are reviewed by a legal adviser, both in the producer's own country and in the buyer's country.

To be effective these agreements must be true partnerships. The producer must do his or her share to deliver the quantity and quality the buyer requires. The buyer must do his or her share to pay a timely, fair price and to promote the coffee to his or her consumer base in a way that ensures on-going demand. In other words, create relationships that can be formalized in a marketing agreement.

1.5. The scope for specialty coffee

On the consumption side the potential for specialty coffee appears to be almost limitless, mostly because of constant product innovation. But not all of today's specialty products necessarily use very good coffee, and some contain very little coffee indeed. Also, there is no universal agreement on what constitutes specialty coffee, and it frequently means different things to different people. But without a clear understanding of what is really specialty coffee, an accurate market assessment becomes extremely difficult.

In the United States the Specialty Coffee Association of America (SCAA – www.scaa.org) describes true specialty grade coffee as having maximum five defects in a standard sample with all cups free of all taints and showing distinctive positive characteristics.

Go to www.scaa.org and/or www.coffeeinstitute.org/resources/scaa-standards-and-protocols for more on the SCAA's definition of what constitutes specialty grade coffee, defect counts, etc.

On the above basis we would estimate that no more than 5% of green coffees could make specialty grade. If we were to include what the SCAA calls high-end premium coffee (eight defects, clean cup) then maybe the specialty market is 10% of all of the green coffee business in the United States, a percentage that many trade sources consider realistic. On the other hand, Daviron and Ponte in their book *The Coffee Paradox* (ISBN 1 84277 456 5 hb – ISBN 1 84277 457 3 pb, published by www.zedbooks.co.uk) estimated the total size of the specialty market in the United States in calendar year 2000 at 17%. The National Coffee Association's National Coffee Drinking Survey 2011 puts Gourmet coffee beverages at 36% of the market, including both roasted coffee and specialty instant coffee products. But the difficulty with specialty or gourmet coffee is to properly define it. For example, is average Starbucks quality specialty coffee or is it high-quality mainstream coffee?

In Western Europe many countries have traditionally consumed high quality coffees, at least equal to the good premium types that are produced by mainstream roasters. This is perhaps why the Speciality Coffee Association of Europe (SCAE – www.scae.com) describes specialty (or speciality) coffee as an end product, rather than as a green bean product, by saying that 'specialty coffee is defined as a crafted coffee-based beverage, which is judged by the consumer (in a limited marketplace at a given time) to have a unique quality, a distinct taste and personality different from, and superior to, the common coffee beverages offered. The beverage is based on beans that have been grown in an accurately defined area, and which meet the highest standards for green coffee, and for its roasting, storage and brewing.'

This interpretation then places the emphasis more on the fact that specialty coffee is not only expected to be different, but also a more luxurious and superior product with a certain element of exclusivity. It also suggests that the term 'specialty coffee' is really a generic label covering a range of different coffees, which either command a premium price over other coffees, or that are perceived by consumers as being different. In Europe, the term often tends to be associated with coffee for the American market, and the name also conjures up images of flavoured coffees.

Therefore, until such time as there is general agreement on what constitutes specialty coffee it is not possible to accurately quantify how much is produced, or how much is consumed. The general consensus appears to be that specialty coffee in all its different forms may account for around 10% of world consumption. It certainly is gaining market share fairly rapidly, but of course world consumption as a whole is rising as well, which makes it likely that the 10% will probably remain the upper limit for some time to come.

1.5.1. The specialty market in the United States

The United States specialty market has seen strong development over the past 20 years or so, which has helped not only arrest the fall in United States consumption, but also grow the overall market. Much of this has been driven by the Specialty Coffee Association of America, which has promoted the whole concept of quality. In the last three to four years there has been tremendous growth in single serve brewing systems, which allow consumers to experiment with different coffees. They are frequently single origin, but also flavoured and other manipulated products, so much so that according to the latest survey from the National Coffee Association of USA, (NCA – www.ncausa.org), single-cup brewing systems are now the second most frequently cited brewing method, with 7% past day penetration. This number is significantly higher than in 2010, when it was 4%, which indicates that single-cup brewing systems are actively growing and at the same time expanding the market for specialty coffees. The only downside is the fact that these systems significantly reduce product waste (i.e. reduce excess brewing) and thus do not necessarily immediately expand the market volume wise.

Increasing sales of espresso-type drinks also means growing demand for low-acid coffees, such as Brazils and robustas, at the expense of traditional specialty mild arabicas. Note also that espresso drinks generate higher profit margins than do traditional cups of coffee. Furthermore, on the roaster/retailer side – coffee bars and shops ranging in size from international chains at one extreme, to firms with just a few stores at the other – the trend has been to follow the example of the Starbucks operation. Not only to get bigger, mostly through merger or acquisition, but also to 'commoditize' and simplify business. This can mean eliminating or reducing the number of 'straight' origin coffees that are carried, resulting in increasing dependence on blends because higher sales mean larger and more centralized buying requirements. This makes it increasingly cumbersome to deal with many small suppliers.

So-called 'signature blends' are often used in the branding strategy of larger companies. At the same time, mainstream roasters have been upgrading their image by offering 'quality' coffees, but many have very different perceptions of what this means. Some of the large United States mega-discount stores have installed 30-pound capacity computerized coffee roasters and are selling freshly roasted 'specialty' coffee at much lower prices than the traditional specialty stores. The quality may not always be there, but the coffee is fresh. Some such chains have also started importing roasted beans direct from some producing countries in partnership with roasters at origin. Major restaurant chains such as McDonald's and Dunkin' Donuts are now offering specialty coffees and this line appears to be enjoying good sales growth. Given this strong industry growth and the accompanying proliferation of specialty coffee products, the SCAA together with the Coffee Quality Institute (CQI – www.coffeeinstitute.org) has created the Q Grading System, which effectively establishes a standard for certified specialty coffee. See details in "Chapter 12 – Quality control" in the Coffee Exporter's Guide – Third Edition. The aim is to provide producers, exporters, importers, roasters and retailers of specialty coffee with the means to have the quality and authenticity of their product independently certified. The programme builds on the existing SCAA Green Coffee Classification System and Grading Chart; see www.scaa.org and www.coffeeinstitute.org.

1.5.2. The specialty market in Japan

The specialty market in Japan is not dissimilar to the market in the United States, and it too has distinctive segments:

- Almost mythical name coffee: Blue Mountain, Hawaiian Kona etc.;
- Good quality, straight origin estate or area coffees;
- Decent standard qualities;
- Branded blends.

There are no dedicated specialty importers, but most importers handle at least some specialty coffees and increasingly service smaller downstream buyers directly; although there is also a network of coffee dealers and wholesalers. Interestingly, larger roasters maintain their own coffee outlets within large department stores – in so doing they of course achieve widespread exposure.

The Japanese market basically offers producers the same sales prospects as does the United States with the exception that it is very difficult to gain recognition for new individual coffees. This is because creating a stand-alone brand image for an individual coffee would be enormously expensive and without guarantee of success. Disclosure of origin at retail level is provided for in consumer legislation, but as the composition of blends is flexible and they are sold under the roasters' own brand names, usually only the main components are identified by country of origin (and never by individual grower or producer). As a result, price resistance in Japan, other than for a few stand-alone top coffees, is probably greater than in the United States specialty market. For more information visit the website of the Specialty Coffee Association of Japan (SCAJ – www.scaj.org).

Other emerging specialty markets would appear to be strongly influenced by trends in the United States. Operators in the United States have opened or franchised specialty stores in Australia, China, Republic of Korea, Singapore and elsewhere.

1.5.3. The specialty market in Northern Europe

The Northern European specialty market is part of the world's largest market for coffee. Europe's total imports are double those of the United States. But the great concentration of buying power in the hands of very few roasters has not made it easy for small producers to add value through improved quality, or through promotion in Europe. This is mainly because their production is deemed insufficient to be considered for sale as straight origin coffee, but also because specialty coffee in Europe is a true niche market in a continent where much good quality coffee is already readily available.

The true specialty target segment consists mostly of real enthusiasts searching for something different, rather than large numbers of people who are disappointed in their daily cup of coffee, as was the case in the United States.

The entry of Europe's mega-roasters into this field demonstrates that they appreciate its potential. Competition between them and smaller specialty roasters will probably limit the latter's potential market more than has been the case in the United States, where until fairly recently the large roasters did not have any real 'quality' to offer.

In many European countries the opposite applies and both sides are therefore targeting more or less the same niche market, with large operators benefiting from economies of scale the smaller ones cannot match. The establishment in 1999 of the Specialty Coffee Association of Europe was an important innovation in this somewhat uneven playing field. By the middle of 2011, the SCAE had almost 1,600 members in 77 countries, so not only in Europe, and had established 35 national chapters. It now organizes regular trade shows, training events and competitions, and offers a growing range of member services. It is also interesting to note the recent massive increase in the number of micro-roasters operating in Europe. They usually either serve a very local area or, as is becoming more frequent, a select clientele via the Internet, or occasionally both.

Exporters should note that the area to be covered is vast, with hugely varying quality preferences. Smaller producers in particular will almost certainly have to depend on specialty importers or agents to access the European market efficiently.

1.5.4. The specialty market in Southern Europe

The Southern European specialty market, mainly Italy, is entirely different from that of most other European countries. Italy is a gateway into a number of Eastern European markets. Many Italian importers and roasters traditionally supply ready-made specialty blends (green or roasted, for roast and ground or for espresso) to nearby countries in Eastern Europe as well as the many small roasters that operate in Italy itself.

The Italian market counts over 1,500 individual roasters. There is a substantial mainstream segment, but many small specialty roasters exist and flourish. Many of these buy ready-made, ready-to-roast green coffee blends from the specialty importers, especially for the strong espresso segment. But many of these smaller roasters are facing strong competition from the larger and medium sized roasters through the introduction of the single-serve pod systems that have been growing at an annual rate of around 20% over the last four years.

Larger specialty roasters, such as Lavazza and Illy, export substantial quantities of Italian espresso blends all over Europe and the United States, so the sales opportunities for specialty type coffee that meets the quality requirements for the espresso trade are quite substantial.

For a review of those requirements and how they differ from traditional specialty coffee see the section on coffee tasting in "Chapter 12 – Quality control," in the Coffee Exporter's Guide – Third Edition.

1.6. The difference between mainstream and specialty roasters

Many people and articles, as well as this guide, attempt to differentiate between what they call the 'mainstream' and the 'specialty' coffee industry. But it is not entirely clear where the one stops and the other begins. For example, if the Swiss multi-national roaster Nestlé is considered to be mainstream, what then is its single-serve capsule-making subsidiary Nespresso? Alternatively, if size or turnover are the criteria, where then to place Starbucks?

Large or mainstream roasters are moving into the specialty market, for example, by offering organic and single-origin coffees or by establishing their own specialty operation, sometimes under a different name. Such moves reflect the growing importance of the specialty segment, but somewhat blurs the distinction between the two. It is therefore better perhaps to ask what causes different retail products to be classified as mainstream or specialty.

'Mainstream' simply reflects the fact that an estimated 85% to 90% of all coffee roasted is of fair average quality, mass-produced and marketed. Such coffees are available in quantity and are usually presented as blends, often through supermarkets, etc. Roasters who are predominantly active in this market segment are therefore known as 'mainstream roasters'. Their buying capacity is huge and there is strong concentration in this market with Kraft and Nestlé currently the world's leading roasters.

'Specialty' usually refers to individually presented coffees, often but not always of somewhat limited availability. With the exception of the Starbucks Company in the United States, the turnover of most specialty roasters is relatively limited but, in recent years the number of small roasters worldwide has shown strong growth. However, the term specialty increasingly also refers to coffees that are different, for example, in the way they are presented. This is part of the specialty attraction, although it is fair to say that for the average latte one does not require top-grade coffee. A simple blend will do.

To complicate matters further there is also no denying that the output of some of the larger European roasters has always included top-quality coffees, often far superior to the average specialty coffee. Yet such roasters are usually classified as mainstream because of their size and the conventional marketing methods most employ. Their products are not perceived as being 'different'. At the same time, other retail products elsewhere may be classified as specialty even though they may be based on average-quality or mainstream-type coffee.

The specialty market itself is divisible in three sub-segments: **Exemplary coffees**, usually presented as single origin or single source, **High quality coffees** that may include blends, and **Average quality coffee** that is presented 'differently', for example lattes. Therefore, one should probably classify individual roasters by the products they market, rather than by the type of coffee they may be buying.

The Nespresso Company combines technical innovation (special home brewing equipment) with high-quality coffees. It stands alone from the Nestlé Group, and both the company and its products should definitely be classified as being part of the specialty segment.

In a way, the Starbucks Company does the same because it relies on innovative retail and presentation methods that have set it apart from other roasters/retailers. This includes the constant promotion of high-quality origin coffee, but it is increasingly selling blends as well as its new instant coffee brand 'Via'. However, the company firmly belongs to the specialty segment because it is marketing specialty type coffees.

The Swedish roaster Gevalia is a different example. The company ranks amongst the major specialty sellers (mostly by mail order) in the United States, yet is owned by the multi-national mainstream roaster Kraft Foods.

2. Organic Coffee

Organic products have come a long way since small groups of consumers started buying organic food directly from farms or from small health food shops, where quality was secondary as long as the products were organic. But then in the early 1990s supermarket chains started paying systematic attention to organic food. Year after year they have taken over market share from the specialized shops, to the point where they drive most of the growth in the market share of organic food today.

It is estimated that almost 10 million hectares of land in Europe is cultivated organically. Austria is leading with as much as 20% of the total farm area under organic cultivation. The market share for organic products in Western countries ranges between 0.5% and 8% for food generally, but varies widely for different product groups. The United States remains the largest single market for organic products, followed by Germany. Consumption growth rates have been slowing since 2008 in some countries, especially in the organic sector in the United Kingdom. However, the United States is continuing to grow (almost 10% to US\$ 27 billion in 2010, which is about 4% of all food and beverage sales in that market).

2.1. The meaning of organic

Organic agriculture means holistic production management systems that promote and enhance agro-ecosystem health, including biodiversity, biological cycles and soil fertility. Organic production systems are based on specific and precise production, processing and handling standards. They aim to achieve optimal agro-ecosystems that are socially, ecologically and economically sustainable. Terms such as 'biological' and 'ecological' are also used in an effort to describe the organic production system more clearly.

Requirements for organically produced foods differ from those for other agricultural products. The production procedures, and not just the product by itself, are an intrinsic part of the identification and labelling of, and status claims for, such products. See the FAO/WHO Codex Alimentarius Commission Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (1999) at www.codexalimentarius.net.

Advocates of organic agriculture believe that conventional agriculture, with its use of chemical inputs, will not be sustainable in the long run as it leads to soil degradation and pollution of the environment, and poses health risks for both consumers and producers. Therefore, organic agriculture replaces manufactured inputs (fertilizers, pesticides, herbicides, etc.) by natural compost and vermiculture, biological pest controls and the growing of legumes and shade trees. (Vermiculture is the raising of earthworms to aerate soil and/or produce vermicast: the nutrient-rich by-product of earthworms, used as a soil conditioner.)

The International Federation of Organic Agriculture Movements (IFOAM; founded 1972) has formulated basic standards for organic products. See www.ifoam.org for the full text. These standards are at the base of the legislation that has been introduced in the European Union (1992), the United States (2000), Japan (2001), and a number of other countries (including Argentina, Bolivia (Plurinational State of), India and Mexico) that have created national legislation to regulate the market for organic products.

Western countries have developed extensive legislation for organic products. The conditions that must be met before coffee may be marketed as organic are both comprehensive and well defined. No coffee may be brought to the marketplace and labelled organic unless it is proved to conform to the regulations. In other words, coffee can be marketed as organic only when it is certified as such by a recognized organization or certifier, based on regular inspection of all stages of production, processing, transporting and roasting of the coffee.

The first organic coffee cultivation was recorded at the Finca Irlanda in Chiapas, Mexico (1967). The first organic coffee to be imported into Europe from a small farmers' cooperative came from the UCIRI cooperative in Oaxaca, Mexico (1985).

2.2. Why buy or grow organic coffee?

2.2.1. Why do consumers choose organic coffee?

- **Health considerations.** Many consumers perceive organic foods as healthier. However, this motive is less important for coffee than it is for some other crops in that roasted coffee hardly ever contains harmful residues. But there are also a growing number of consumers whose health worries extend to the workers who have to work with the chemicals that are used in the traditional production system.
- **Demand for specialty coffee.** Although the quality of organic coffee is not necessarily better than that of conventional coffees, the market for organic coffee is increasingly demanding higher quality, which is why organic coffees are often positioned in the specialty segment. The first organic coffees to appear on the market in the 1980s were good quality arabicas from Mexico, but nowadays organic robusta, as well as lower grades of organic arabica are also available. Some quality estates or exporters have their coffees certified as organic to underline their quality, hoping it will be perceived as truly special.
- **Environmental concerns.** Other consumers are concerned about the negative impact of agro-chemicals on the environment. They are not necessarily concerned only about health issues, but

primarily want to be sure that the products they buy are produced in an environmentally friendly way in order to prevent pollution, erosion and soil degradation.

2.2.2. Why produce organic coffee?

In principle producers are motivated by the same concerns as consumers, but in addition they want to secure their social and cultural future by realizing the premium that certified organic coffee obtains. This benefit depends on the demand for organic coffee, which in turn determines the amount of the premium that can be obtained and the extra costs involved in organic production.

2.3. Growing organic coffee

Growing any organic product, including organic coffee, is more than just leaving out fertilizers and other agro-chemicals. Coffee produced in this way should instead be called 'natural' coffee and, to the surprise of many, the industry looks upon this as non-sustainable production. This is because in the long run the soil will be depleted by natural production, which is often referred to also as 'passive cultivation' or 'organic by default'.

To achieve sustainable production it is necessary to make active use of various organic agriculture techniques, including the composting of organic material, mulching of the soil under the trees with organic material, use of biological pest control, and investing in shade regulation. The principle of sustainable agriculture is that a value corresponding to that harvested should be returned to the soil. All possible methods have to be used to enhance the fertility of the soil. This is why passive production of coffee, even when no chemicals are used, is viewed as non-sustainable and not as organic.

Usually, a producer may simultaneously grow both conventional and organic coffee, although this is not recommended. There must be a clear separation between the two types and adequate barriers to prevent contamination with agro-chemicals from neighbouring fields.

Coffee may normally be sold as organic only once organic cultivation has been practised for at least three years before the first marketable harvest. This also means three years of inspection. These years are called the conversion period.

In specific cases, depending on previous agricultural practices, this conversion period may be reduced, but only after approval of the certifying organization, which in turn has to report such a decision to the authority granting the required import permit. For a producer who can prove that no agro-chemicals have been used in the past, it is important to try to reduce the conversion period. If a producer can document that no agro-chemicals have recently been used, it is certainly worthwhile discussing the possibility with the certifier.

2.4. Processing and marketing organic coffee – The audit trail

Not only coffee cultivation, but also all subsequent steps in the production chain, have to be certified. On-farm processing, storage, transport, export processing, shipping, export, import, roasting, packaging, distribution and retailing all have to be certified organic. Contact with conventionally produced coffee must be excluded and so there has to be a separation in space and/or time. Spraying or fumigation with toxic agents is never permitted and special measures must be taken to prevent contact with areas where fumigation has taken place. Adequate records are to be kept of incoming and outgoing coffee so that the entire product flow can be documented and accounted for, often referred to as traceability. All the steps in the chain should therefore be documented and administered in a way that makes it possible to trace back the origin of the product from one step to the next (track and trace), ensuring that no contamination with conventional coffee has occurred. This traceability minimizes the risk of fraud at all stages and is a very important part of the inspection process by certifying organizations.

The flavouring of roasted coffee is permitted when natural flavouring substances or preparations are used. For packaging roasted coffee, flushing with nitrogen or carbon dioxide is permitted. For the decaffeination of coffee, chemical solvents (e.g. methylene chloride) are not permitted, but the water method or the supercritical carbon dioxide method (the CO₂ method) may be used.

2.5. Organic certification and import

As already indicated, the importation and sale as organic of both green and processed coffee must comply with the legal regulations of the consuming countries. This compliance needs to be verified by a third party; the procedure is called certification. It is important to realize that different rules apply in different countries.

The certification procedure includes a number of steps. Note that there is a clear distinction between the certification of an operator to produce organic coffee and the certification of an export shipment to be imported as organic coffee.

- **Registration.** The producer selects a certification organization ('certifier' for short) and signs a contract. The producer provides information on their farm/processing facilities and is registered.
- **Inspection.** At least once a year the certifier inspects the production and processing facilities.
- **Certification.** The inspection report is the basis for deciding whether a master certificate can be granted.
- **Control certificate** (formerly called 'transaction certificate'). This must be issued for every export shipment to the European Union, the United States and Japan, indicating the exact quantity and organic origin, after which the goods may be exported/imported as organic.

The certification process includes an assessment of the grower's production and export capacity against which the authenticity of future export transactions will be tested. This is to ensure that sellers of organic products do not exceed their registered capacity. Also, in the European Union, organic products can be labelled as such only once the entire production and handling chain, from the grower through to the importer, has been inspected and certified.

2.6. Organic regulations

In the initial development stages there was no legal definition of organic food and so farmers' organizations and others formulated their own standards and issued certificates and seals to offer consumer guarantees. The next phase was when IFOAM united these different standards into its 'Basic standards for organic production and processing'. These standards provide a framework for certification bodies and standard-setting organizations worldwide to develop their own certification standards. In an effort to harmonize standards and certification, and to provide a universal quality seal for organic products, IFOAM also has an accreditation programme for certification organizations. See www.ifoam.org for more information on this accreditation programme and for links to other publications, e.g. the differences between European Union and United States regulations for organic agriculture. In the third development phase, different countries or states (e.g. Germany, California) developed laws on organic agriculture and processing, which were eventually incorporated in formal EU or United States regulations.

Today (late 2011), the bulk of organic coffee is certified against one of the following standards:

- Council Regulation (EC) No. 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No. 2092/91 that came into force 1 January 2009 for the European Union;
- National Organic Program for the United States (NOP);
- Japan Agricultural Standard (JAS).

2.6.1. Importing organic coffee into Europe

In the European Union, the market for certified organic food is regulated by Council Regulation (EC) No. 834/2007 and subsequent amendments thereto. (Visit www.eur-lex.europa.eu and type 2007 (year) and 834 (document number) into the search function to see Regulation 834/2007 and subsequent additions). All major European certifying organizations are subject to this regulation, although in some respects some,

such as Naturland in Germany or Soil Association in the United Kingdom, apply stricter standards. For more information see also www.ifoam.org.

Equal values. The international trade in organic products and regulations for their certification are based on equivalence or 'equal values'. That is to say, organic products imported into the EU must have been produced in accordance with standards that are equivalent to those applicable within the EU itself. This is clearly stated in Article 33 of EC 834/2007. But equivalence is not always interpreted in the same way, for example, when an individual competent body insists on the foreign standard being identical, rather than equivalent, to the corresponding EU regulation. In some instances such differences could be considered as non-tariff or technical trade barriers.

The same article provides that a non-EU country can be approved by the European Commission if its production system complies with principles and inspection measures, equivalent to those laid down in EC 834/2007. Such a country is then added to a list of approved countries.

Accreditation of certification organizations. The European standard known as EN 45011 and the corresponding ISO 65 guide both stipulate that certification organizations should be accredited by a recognized accreditation body. Aspiring exporters of organic coffee to the European Union should therefore verify that:

- The proposed certifying organization has an EN 45011/ ISO 65 accreditation, which they should be able to submit on request. It is important to note that the European Union does not recognize certifiers that certify clients against organic standards that do not conform to EU specifications. For example, the use of sodium nitrate is permitted by some non-EU certifiers, but is prohibited under EU regulations.
- The proposed certifier can certify directly against EU regulations because a certifier may certify against a number of different standards.

Importation and inspection. Aspiring exporters should satisfy themselves that the proposed importer is fully aware of and follows the required EU customs documentation, i.e. that importer is certified against EU regulations. But exporters must also be aware of the fact that for each shipment EU customs will demand to see an original inspection or control certificate (formerly called 'transaction certificate') for verification and endorsement. Therefore, exporters must apply for these on time because without such documentation EU customs will only clear a shipment as conventional coffee.

Inspection certificates are issued by the certifying body and this is where the earlier inspection of production capacity comes in, i.e. the master certificate that was issued by the certifier to confirm the seller's authenticity and capacity. At the end of a year it can then be seen whether the total exports for which inspection or control certificates were issued correspond with the production capacity stated in the master certificate.

Once cleared through EU customs the organic product enjoys free movement to other member states. But when all or part of a consignment is to be re-exported as organic to a destination outside the EU then, depending on the country of destination, the original EU importer may have to obtain a new inspection certificate from a competent EU certifying organization. This is by law, but because the market requires it.

EU organic production logo. Most certifying bodies have their own quality labels. As a result, many different labels exist in the European Union for the designation of organic products. Increasing trade in roasted coffee within the European Union therefore forces roasters to display several labels on their retail packets, an arrangement that does not provide the clarity one would expect.

Regulation EC 834/2007 now stipulates that the EU organic production logo shall be obligatory for all organic pre-packaged food produced within the European Community. However, the simultaneous use of national or private logos shall not be prevented.

For more information on organic certification and regulations in the EU, in addition to www.ifoam.org, also visit to www.intracen.org/exporters/sectors. Click on Organic Products and then Certification. The site also provides a useful glossary of organic certification concepts.

2.6.2. Importing organic coffee into the United States

Prior to 2002, private and state agencies certified organic practices and national certification requirements did not exist.

As a result, there were no guarantees that 'organic' meant the same thing from state to state, or even locally from certifier to certifier. Consumers and producers of organic products therefore jointly sought to establish national standards to clear up confusion in the marketplace, and to protect the trade against mislabelling or fraud.

As required by the Organic Foods Production Act (OFPA), the National Organic Standards (part of the National Organic Program, NOP) became effective on 21 October 2002. OFPA itself was adopted in 1990 to establish national standards for the production and handling of foods labelled as 'organic'.

Today organizations that are fully NOP-compliant (certified) may label their products or ingredients as organic, and may use the 'USDA Organic Seal' on organic products in the United States, irrespective of whether they are produced domestically or are imported. As a result of NOP, there is a single national label in the United States to designate organic products, thereby avoiding the label confusion that exists in Europe. A list of accredited certifying agents can be found on the websites of the United States Department of Agriculture, www.ams.usda.gov/nop and the Independent Organic Inspectors Association, www.ioia.net.

Like the European Union, the United States also requires a control or transaction/export certificate for each shipment, showing date, weight/quantity, and origin. However, unlike to European Union, NOP does not require the 'master certificate' for the processing unit.

Information on trade in organic products can also be found at www.ota.com, the website of the Organic Trade Association – look for about/sectorcouncils/coffee/index.html.

2.6.3. Importing organic coffee into Japan

The Japan Agricultural Standard (JAS) for Organic Agricultural Products entered into force in April 2002. Enacted by the Ministry of Agriculture, Forestry and Fisheries, JAS regulates the production and labelling of organic food items produced in Japan. Although coffee is not grown in Japan, JAS nevertheless also covers organic coffee (and tea) under 'organic agricultural products'. The JAS standard has been further revised in 2005. For more information visit www.maff.go.jp/e/jas/index.html.

Only ministry-accredited certifying bodies may issue JAS organic certification for coffee to be imported into Japan. Interested certifying bodies in producing countries may also apply for accreditation under JAS. Subject to meeting the JAS standard for their products, set by the Agriculture Ministry, suppliers of organic coffee and tea may display the JAS mark, which also gives Japan a single organic label for the entire Japanese market.

2.7. World market for organic coffee

Different trade sources have varying views on the size of the market for certified organic coffee. This is not helped by the fact that few consuming countries register organic coffee imports separately. To note also that the 27 EU member countries increasingly report coffee imports as a single market, making provision of individual country data even more difficult. Nevertheless, indications are that consumption of certified organic coffee in North America and Europe has been growing fairly strongly since 2005, with growth figures averaging 5% to 10% annually, although this has slowed in the last couple of years.

A 2010 study by ITC (Trends in the Trade of Certified Coffees by J. Pierrot, D. Giovannucci and A. Kasterine; March, 2011 – See www.intracen.org/exporters/organic-products – Information and Technical Papers) puts 2009 imports at around 1.7 million bags or almost 1.4% of the 126 million bags of 2009 world gross imports (excluding re-exports). Of this, 45% went to Europe, 41% to North America and 14% to Asia and elsewhere. Estimates for 2010 suggest that the market might have grown by around 3% to 1.75 million bags.

Peru remains by far the leading exporter, with exports of 406,000 bags in 2009 and 423,000 bags in 2010. Other leading producers include Colombia, El Salvador, Ethiopia, Guatemala, Honduras, Indonesia and Mexico, with Ethiopia, Honduras and Mexico currently each exporting over 100,000 bags annually. However, it should be noted that official or recorded export figures are not always complete as not all exporting countries provide the necessary data, making it difficult to be precise.

Growth in Japan is very much linked to quality: organic coffee of excellent quality generates increasing consumer interest, something that suggests further growth in this segment. Growth potential for average quality organic coffee on the other hand is limited.

North American growth is also linked to quality. The fact that profit margins on certified products as organic usually are higher plays a role as well, so mainstream roasters and retail chains are showing increasing interest. Almost half of all Fairtrade certified coffee is certified organic as well, whereas certification by both the Rainforest Alliance and Utz Certified is not only growing strongly, but also includes a substantial amount of certified organic.

On the production side there remains the mistaken belief amongst some that organic coffee does not need to show quality. As a result, some organic production simply cannot find premium buyers and ends up being exported uncertified, i.e. as conventional coffee.

Nevertheless, premia for decent quality organic coffees have probably stabilized somewhat and, under normal market conditions, may range from about 10% upward, however always depending on quality. Therefore, moving into organic coffee continues to remain out of bounds for producers who are unable to provide the required quality, or who underestimate the cost (fees, learning costs, workload and sometimes lower yields, at least in the first few years) that go with making the move.

2.8. Organic coffee and small producers

Numerous grower organizations and smallholders are aware of the market for organic coffee. Because many of them do not use, or use a minimum of agro-chemicals, conversion seems a logical option especially when coffee prices are low. As well as the problem of possible oversupply, potential producers should also carefully consider the costs of certification. They have to assure themselves not only that their future output will be in accordance with the rules of organic production, but also that the proposed inspection system is in accordance with the regulations in the import markets that are to be targeted.

To assist in this regard the organic sector has developed an internal control system (ICS) that provides a practical and cost-effective inspection option. Generally, if a grower group has more than 30 members it qualifies for an ICS. Although an ICS can be quite burdensome, it is a means to reduce the costs of inspection. Otherwise each individual member must be inspected every year, which is extremely expensive, especially for larger groups with a geographically far-flung membership. With a proper ICS, only a random sample of the total number of producers has to be inspected by an independent certifying organization. Major ICS elements include:

- Internal standards, including sanctions;
- Personnel;
- Infrastructure;
- Training and information;
- A 100% internal farm control at least once a year;
- Monitoring of product flow.

The magnitude of the random sample to be taken by the external inspection body under an ICS system is a major item of debate within the European Union, but as a rule of thumb most competent authorities seem to accept the square root method for external inspections, i.e. 100 members = 10 inspections, 400 members = 20 inspections and so forth. Note also that some roasters submit random green coffee samples for chemical analysis to verify the accuracy of the inspection and certification process.

2.9. Certification costs and viability

Production and export

It is impossible to give a precise indication of the cost of certification. It depends on the time needed for preparation, travel, inspection, reporting and certification, and the fees the certification organization charges. Not only the agricultural production of the coffee, but also the wet and dry processing as well as the storage and export process have to be inspected and certified. Fee structures vary considerably and it is therefore advisable to review in detail which inspection and certification organization offers the best service at the lowest price. Some charge a fee per hectare, others a percentage of the export value. As a norm, the cost of inspection and certification should not exceed 3%–4% of the sales value of the green coffee, although it should be noted that some grower organizations pay more than this.

Local certifiers (i.e. those established in the same producing country or region) are usually, but not always, cheaper than the international agencies. However, local certificates are not necessarily or easily recognized by importing countries, so their validity has to be carefully checked. A number of international certifiers have branch offices in producing countries and locally employed staff carry out inspections at lower expense than external personnel. Another option for international certifiers is to use a recognized local inspection body with which they have a cooperation agreement.

Also to be taken into account are increased production costs and sometimes a fall in the yield per hectare. So, not only does the producer have to bear the inspection and certification costs, but production might also fall, at least for a couple of years. Some sources suggest yields may fall by some 20%.

Inspection costs tend to be higher in the initial phase as the certifiers need time to get to know the producer and to register fields and facilities. To overcome the start-up problems during the conversion period, coffee growers in a number of countries can have access to funds to finance the costs of certification. Nevertheless, if the average annual inspection and certification cost for example comes to US\$ 5,000 or more there is little financial point in converting to certified organic if the annual exportable production amounts to only two or three containers. These costs are extremely difficult to assess because they depend entirely on the nature and intensity of the conventional cultivation practices before the conversion to organic agriculture.

A further cost and a real problem for the producer is the conversion period from conventional to full organic production. During this time the coffee cannot be sold as organic and so does not realize any premium. Meanwhile, premiums for organic coffee are difficult to indicate because they depend on the quality of the coffee and on the market situation at a given moment. In recent years premium quotations have ranged from 10 cts/lb to as high as 75 cts/lb, depending on quality and availability. As a rule of thumb, however, the potential producer premium (FOB) for the organic version of a particular coffee compared to the equivalent non-organic quality can probably be put at 10% to 20%. This compares with consumers generally accepting to pay retail prices of around 20% more for organic coffee than they do for conventional coffee. Some exceptional coffees realize higher premiums, but there is a strong feeling in trade circles that, realistically, this is the maximum that should be expected. Consumer interest tails off rapidly if premiums go beyond this unless the coffee's quality is absolutely outstanding.

The high of 20% is an indication only. Actual producer premiums fluctuate alongside coffee prices as a whole: high coffee prices probably reducing the premium percentage and, conversely, low coffee prices probably encouraging somewhat higher premium percentages. It remains to be seen therefore whether or how the much higher coffee prices ruling in early 2011 may alter this picture (Fairtrade offers a fixed premium for organic coffee over its minimum guaranteed price for conventional coffee that meets Fairtrade criteria). See table 2 for details.

Contrary to popular belief the liquor of organic coffee is not necessarily better than that of its conventional equivalent. Where it is not, the premium over conventional coffee has to be justified purely by the organic aspect and is therefore strictly limited by supply and demand unless and until the quality is such that the organic coffee in question can achieve a true stand-alone position in the market – its own niche. Then the premium potential becomes entirely demand driven, just as is the case for some well-known conventional specialty or gourmet coffees, and such organic brands achieve premiums of 25% or even higher over conventional coffee.

But as the supply of organic coffee grows, so growers should be more cautious when venturing into this field. Just as producers of conventional specialty coffee have experienced, it is equally difficult to launch new stand-alone brands of organic coffee. Organic coffees that do not offer quality as such, or that are available in large quantities, will sell at much lower premiums over their conventional equivalent. Perhaps as low as 5% because, just like any other standard type coffee, they end up as bulk blenders. “Chapter 11 – Coffee quality” in the Coffee Exporter’s Guide – Third Edition, makes it clear that to produce good quality coffee of any kind takes much work and strict management. Organic certification will always complement such efforts, but cannot replace hard work and integrity.

Remember:

- Check which certifier is the most acceptable and the most appropriate for the target export market. If possible, determine which certifier the prospective buyer(s) may prefer. Make sure the preferred certifier is accredited and approved in the target market.
- Obtain quotations from various certifiers and ask for clear conditions (especially how many days will be charged) and timelines. Conditions are usually negotiable. Remember certifiers are offering a service, not favours, and should serve their clients, not the other way around.
- Ensure your potential export production warrants the conversion cost, i.e. calculate the opportunity cost of converting to organic production.

Information on costs and current sales prices for comparable coffees is available on many websites and can relatively easily be compared.

Importing, roasting and retailing

The green coffee importer and the coffee roaster also have to be inspected and certified. Inspection costs in the European Union vary from US\$ 500 to US\$ 900 per year per import/production location. In addition, the importer (who does not process the coffee, but only trades it) pays a licence fee of 0.1% to 0.7% of the sales value or US\$ 0.20/kg to US\$ 0.50/ kg, depending on turnover. Roasters pay a licence fee of 0.1% to 1.5% of the sales value of the roasted coffee, depending on turnover. As already mentioned, every EU importer of organic coffee must apply for an individual import permit for each of their suppliers and for each consignment.

See ITC’s website at www.intracen.org/exporters/organic-products for more general information on organic products and organic certification.

3. Mapping technology in coffee marketing: GPS and GIS

3.1. Using GPS and GIS – The principle

Modern agricultural mapping technology is one of the key elements in the implementation of efforts to reduce poverty and to monitor agricultural activities in developing countries. Remote sensing technology in the form of multi-spectral satellite imagery, geographical positioning systems (GPS) and digital aerial photography has improved dramatically in recent years and forms the foundation of geographical information systems (GIS).

GIS and remote sensing, in combination with geographical positioning systems, are the instruments that are being used to measure and audit agricultural activities. The importance of mapping agricultural activities in developing countries is firstly to assist in monitoring and calculating agricultural activities on an on-going basis. Secondly, land use and land management forms an integral part of agricultural development but this process can only really be successfully managed using GIS and updated remote sensing technology.

If you cannot measure it, you cannot manage it.

Using GIS as part of the mapping process assists in the creation of spatial models that indicate the most viable agricultural activities in particular areas. This in turn enables authorities to improve infrastructure around viable agricultural activities, whereas GIS web map capabilities can be used as a marketing tool to encourage investment and create agricultural concession areas. Finally, GIS platforms to monitor agricultural activities, land use and land management enable both governments and the donor community to plan ahead in the fight against poverty.

A number of governments, most notably in the coffee sector in Brazil and Colombia, combine satellite imagery information with data collected regularly from a large number of ground stations in order to reduce the margin of error in their coffee crop estimates. Apart from coffee, satellite imagery also assists in the collection of information on soya, maize, rice, sugar cane, citrus, wheat and cotton crops.

3.2. Mapping technology in coffee marketing

Not only can authoritative information about where or how a coffee is grown contribute to making it a successful specialty or organic coffee, but it can also help prevent misrepresentation. Modern technology enables one to show on a map not only where a coffee is grown, but also the special characteristics of that area such as altitude, soils, vegetation type, slope, rainfall and special environmental attributes. By demonstrating this information in maps or graphics, producers can show why their coffee is unique, or at least different from the majority of other coffees in their country or region. If, in addition, producers seek an authorized, enforceable 'appellation' for their coffee then they also need the spatial information necessary to legally or formally define the extent of the appellation zone and thus lead to the authentication of the appellation and the coffee in question. A growing number of consumers also demands more assurance that the coffee was produced in an environmentally friendly way, that it was properly harvested and processed, and that it actually comes from a specific region or farm. Technologies are now available and are being applied in the field to help producers' and farmers' organizations address these issues and many more.

Actual projects

The United States Agency for International Development (USAID) is funding projects in Peru, Guatemala, Costa Rica, the Dominican Republic and some African countries that use the following approach to address these issues.

- The physical location of each farm (longitude, latitude and altitude) is mapped and recorded by project extension agents using a global positioning system (GPS) unit.
- Data are collected on how producers grow their coffee including varieties, altitude, application of pesticides, and other details that may be important for marketing or certifying. Extension agents also collect data on practices and quality and whatever else defines the 'uniqueness' of the coffee at the farm, farmers group, or 'appellation zone' levels. Socio-economic data are collected as well.
- This information (production and location) is entered into a spatial database or geographic information system (GIS). This works like a more traditional database, but includes location information for each record.
- Maps are created showing not only where the farms are located, but also whatever characteristics are of interest about each farm and the coffee produced on that farm.

These projects are implemented by the US Geological Survey's National Center for Earth Resources and Science (EROS), national coffee agencies and agricultural research institutions, and the Tropical Agricultural Centre for Training and Research (CATIE) for Costa Rica. The initiative is called GeoCafe due to its combination of geographic and coffee information. The GeoCafe systems being developed lead to better overall production management; promote the establishment of mechanisms that facilitate coffee monitoring and trace-back; and facilitate access to information over the Internet on coffee production, processing and marketing. At the same time, they provide information about the coffee to potential buyers, thereby assisting the marketing effort. For example: Where is a particular type of coffee produced and by whom? Which farms are located at a certain altitude? What are the climatic and soil conditions on these farms? What forest cover is there?

Although for individual small farmers the need for such systems is limited, it is a very useful information and management tool for farmers' organizations, cooperatives and estates, particularly those promoting their coffee under specific logos or appellations.

The results of the GeoCafe projects can be viewed on the Internet. Any user can look at the maps, zoom in and out to see details, or even ask to see all of the farms meeting some criteria (e.g. 'show me all farms in this zone growing arabica at an altitude over 1,000 m').

Visit the following sites to view actual maps: www.guatemalancoffees.com, edcintl.cr.usgs.gov/ip/geocafe.

The technology behind GeoCafe is well known and mature. GeoCafe is fully customizable and no complex programming is needed to operate and maintain a basic application. The costs of implementation are not high, since the technological platform has been already developed, and most of the data acquisition is done by partner agencies using internal resources (when available). With minor adaptations, the GeoCafe system can be adapted to other crops or other uses (e.g., watershed management and conservation, and environmental monitoring).

The website of the US Government Geological Survey, www.usgs.gov, provides information on a large number of different applications that are of interest to those working with GPS and GIS.

3.3. Future uses of GPS and GIS – The way forward

New technologies are being developed to aid in data collection. Handheld devices already exist that combine spatial data (GPS locations) and traditional data collection (specific non-spatial information). These data are entered into the device and downloaded into the database at the end of each day or week.

On-going initiatives open the way for online querying, information access, and mapping projects in other agricultural areas and sectors, not only in Latin America but also elsewhere, for example in Africa. And also for products such as cocoa, cashew nuts, or bananas to name a few.

In the area of authentication – proving that a coffee or a product actually comes from a specific area or source – technologies such as smart tags are also being developed. Such tiny computerized tags, attached to each bag or container, can contain any set of information required to meet the market's authentication requirements, and could even be tracked by satellite if such control was necessary.

Remote sensing and spatial mapping today provide information on natural vegetation, watersheds, land-cover, land-use, forestry and other crop areas, etc. But of course, the benefits are not limited to agriculture. The same technologies assist with urban development and town planning, infrastructure verification, protection of wetlands, and mapping of informal settlements. The list is almost endless and covers matters of interest to developed and developing countries alike.

As an example see www.geospace.co.za. For more information, a search on Google using the words Geographic Information Forum produces a lengthy list of relevant websites like, for example, www.ppgis.net – the Open Forum on Participatory Geographic Information Systems and Technologies. Advanced users of mapping technology and related subjects will find www.registry.gsdi.org/index.php of interest.

3.4. Potential sources of geographical positioning equipment

This guide does not recommend any particular equipment or supplier. But a quick search on the Internet, using the key words: GPS equipment manufacturers or suppliers, produces a huge amount of information.

The amount of available information is overwhelming and the best approach would probably be to make contact with the projects mentioned earlier to determine their preferred choice of equipment. Sources close to these suggest that Garmin International, www.garmin.com/us supplies many sets to coffee producing areas. Another leading supplier is Magellan System Corporation, www.magellangps.com. Both of them supply simple but robust models – some of them at a few hundred dollars or less. Other sites offering a selection of equipment include www.tvnav.com and www.thegpsstore.com, but the list of potential supply

sources is almost endless. For use in the coffee sector one should always select a model with altimeter. Some mobile phones (cell phones) have a GPS facility built in.

In most countries, institutions such as the National Mapping or Geographical Survey Service and others, including some government departments, already use GPS equipment and should be able to offer advice on local experience and preferences. Especially for use in remote areas, simplicity and durability of the equipment are of paramount importance. In other words, do not invest in unnecessarily sophisticated features that are unlikely to be used.

GIS software – for creating a spatial database and mapping – is primarily used by groups of cooperatives and large estates. See ESRI at www.esri.com as an example.

Box 1. Latitude, longitude and altitude

For an introduction to latitude/longitude visit, for example, www-istp.gsfc.nasa.gov/stargaze/Slatlong.htm. For detailed educational and technical information on GPS/GIS use any Internet search engine combining the words Geographical Positioning Systems or visit www.trimble.com/gps/index.shtml.

Here is a GPS reading example from Ethiopia: N 07 01 44.0 E 038 50 16.1 1,720 m.

- The latitude North of Equator. 07 are degrees (from 0 to 90), 01 refers to minutes (from 0 to 59) and 44.0 are seconds (from 0 to 59);
- The longitude East of the Greenwich line (which goes North-South through Greenwich in London, United Kingdom), also in degrees (from 0 to 180), minutes and seconds; and
- The altitude above sea level.

4. Trademarking and geographical indications in coffee

4.1. Trademarks and logos

A registered trademark or logo can help protect a successful product from being fraudulently duplicated. The Colombian Juan Valdez trademark needs no explanation or description. It is virtually known worldwide and is protected against fraudulent use because it is registered in all the main import markets. But the cost of developing and registering a trademark can be high and prospective applicants may even find that their favourite choice is already in use, or is too close to an existing registration to be accepted.

It is advisable therefore to begin by conducting a search of existing registrations to see if anyone else has already claimed your proposed mark or name. Searches can be made over the Internet on the sites below that also provide information on procedures and regulations pertaining to trademarking and related matters generally in the EU, the United States and Japan:

- European Union: www.oami.europa.eu
- United States: www.uspto.gov
- Japan: www.jpo.go.jp

The EU and US sites also provide information on the Madrid Agreement that deals with the International Registration of Marks. Information on trade related aspects of intellectual property rights (TRIPS) generally is found at www.wto.org – look for TRIPS under trade topics, then Intellectual property. For the registration of both trademarks and geographic indications (or appellations of origin, which is possibly more appropriate for coffee) an application will have to be filed first of all with your national authorities. These authorities will also be able to advise whether anyone else has already registered what you wish to protect because you cannot register the same (or even a similar) mark or name that someone else may have registered before you. This principle of prior verification applies to foreign countries as well.

Eventually one will have to employ a legal firm to conduct a search of existing registrations. Note also that the degree of protection offered by trademark legislation varies from country to country. These

considerations suggest that trademarking should be considered only where the product warrants it, and where the degree of protection is such as to make the effort and cost worthwhile. But certainly, where a producer goes to the trouble and cost to create an appellation for their coffee and backs it up with registration in a GIS database, then trademarking of the name will complete the safeguarding process.

4.2. Trademarks versus geographical indications

A trademark provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorize another to use it in return for payment. The period of protection varies, but a trademark can be renewed indefinitely beyond the initial time limit on payment of additional fees. Trademark protection must be enforced by the registered owners of the mark at their own expense, utilizing appropriate legal redress where necessary. In most legal systems courts have the authority to enforce trademark ownership rights against infringement.

In a larger sense, trademarks promote initiative and enterprise worldwide by rewarding the owners of trademarks with recognition and financial profit. Trademarks also hinder the efforts of unfair competition. For further details visit www.wipo.org, the website of the World Intellectual Property Organization (WIPO) Geneva, Switzerland.

Almost all countries in the world register and protect trademarks by maintaining a register of trademarks. Trademarks may be one or a combination of words, letters and numerals. They may consist of drawings or logos, symbols, three-dimensional signs such as the shape and packaging of goods, etc.

A geographical indication (GI) provides an indication of where something comes from. It can be used on goods or services that have a specific geographic origin and that possess qualities or a reputation that are intrinsically due to that place of origin. As we know, all agricultural products typically have qualities that derive from their place of production and are influenced by specific local factors, such as climate and soil but some have acquired a certain distinctiveness and recognition. As such, GIs may be used for a wide variety of agricultural products, such as for example 'Tuscany' for olive oil produced in a specific area in Italy; or 'Champagne' for sparkling wines from a well-defined region in France, or Jamaica Blue Mountain for its coffee.

A geographic name itself is not necessarily a GI. In order for a geographic name to function as a GI, it must indicate more than just origin; it must communicate that the product from this region has a particular quality or has a particular reputation that is specifically connected to the noted region.

Appellation of origin is a special kind of geographical indication. It is used for products that have a specific quality that is exclusively or essentially due to the geographic environment in which the products are produced. The concept of geographical indications encompasses appellations of origin. Wines from France are maybe the products most frequently associated with appellations, e.g. AOC Alsace means Appellation d'Origine Controlée Alsace. This certifies that the wine is from the Alsace region.

Logos used for trademarks and geographical indications

A trademark is a sign (logo) used by an enterprise to distinguish its goods and services from those of other enterprises. It gives its owner the right to exclude others from using that trademark.

A geographical indication tells consumers that a product is produced in a certain place and has certain characteristics that are due to that place of production. All producers who make their products in the place designated by a geographic indication, and whose products share typical qualities, may use it. Producers outside the geographic indication may not use the name or logo, even if the quality of their product is the same or better. Usually it is more difficult (but not impossible) to register trademarks that lay claim to a geographic name. This because of the realization that it is not always obvious that an applicant for such a mark can claim to represent all potential interested parties from the region, area or district in question. One way around this could be to obtain officially sanctioned approval for the application from a relevant governmental or semi-governmental body from the target geographic region, area or district. Another approach could be to use a graphic (i.e. decorative) logo that refers to the area, and which would be used by many in that area subject to specified requirements. Rather than a geographic 'word mark', the graphic trademark is then filed as a collective mark for goods produced from that area, by members of the area.

For a complete overview on the subject of geographical indications, including several coffee case studies, look for ITC's Guide to Geographical Indications on the ITC website www.intracen.org/publications where the book can be downloaded free of charge in pdf format.

Presentations made during a seminar on Geographical Indications for Coffee held at the International Coffee Organization in May 2008 can be viewed at dev.ico.org/event_pdfs/gi/gi.htm.

5. Sustainability and social issues in the coffee industry

Coffee has always been connected with emotions and opinions; therefore the debate about socio-economic aspects of coffee production is decades old already. One regular topic, especially in times when coffee prices are low or when there is political turmoil in coffee producing areas, is the working and living conditions of coffee farmers and workers on coffee plantations.

Advocacy groups and NGOs lobby for improved livelihoods and fair treatment of coffee growers and plantation workers. Some consumer activists wanted to change the system from within and started constructing alternatives to the dominant free market coffee economy. They began to import coffee, tea and other commodities from small producer organizations, which they sold through so-called 'Third World' shops.

These early steps blossomed, boosted by an initiative in the Netherlands in 1988 when an NGO, Solidaridad, took the initiative to start the Max Havelaar certification system for Fairtrade coffee (and subsequently also for other products) with the goal of bringing these coffees into conventional supermarket channels. This in turn spurred the creation of other certification labels orientated towards sustainability, which retailers and manufacturers embraced, seeing such cause-related marketing as a means of product differentiation, but at the same time promoting sustainability as well as fulfilling their corporate social responsibility objectives. Producers in turn generally receive better prices for their coffee, although not all schemes necessarily guarantee a better return.

A more recent general development is that the mainstream coffee industry is increasingly accepting responsibility for the conditions under which the coffee is produced. Coupled with growing interest in and support for environmental causes in importing countries generally, this has led to the introduction of terms such as responsibly produced or environment-friendly or environmentally sustainable coffee. For a good introduction to the subject go to www.conservation.org, the website of Conservation International, and look for the Conservation Principles for Coffee Production, which are listed as sustainable livelihoods for coffee producers; ecosystem and wildlife conservation; soil conservation; water conservation and protection; energy conservation; waste management; and pest and disease management.

All these and related aspects gained considerable public interest during the years 2001-2005 when the ICO Composite Indicator Price fell below 50 cts/lb. This period of shockingly low producer prices became known as the Coffee Crisis and motivated the appearance of new initiatives as, for example, the 4C Coffee Association that promotes a mainstream verification standard. As a result, differentiation of coffee products through sustainable certification labels now comes in many forms, but the main agencies are as follows:

- Fair Trade; www.fairtrade.net
- Rainforest Alliance; www.rainforest-alliance.org
- Utz Certified; www.utzcertified.org
- The Common Code for the Coffee Community (4C Association) www.4c-coffeeassociation.org

These various initiatives are rapidly gaining market share and by 2010 it was estimated that they represented around 5% of the total world trade in coffee.

5.1. Sustainability, certification, verification, corporate guidelines

Sustainability has been defined by some as 'meeting the needs of the present generation without compromising the ability of future generations to meet their needs'. It can then be further defined in environmental, economic and social dimensions with biodiversity perhaps as the key measure of

environmental sustainability in the natural world. This concept appeals to coffee growers and consumers who are not necessarily interested in, or who see no rationale to the production of organic coffee as such, perhaps because they believe that low yields coupled with increasing availability of organic coffee will always prevent small growers from generating the high incomes that some proponents of organic coffee production believe can be achieved. Others do not see the market potential as sufficiently large, and still others simply believe that it is possible to achieve more or less the same objectives without going the organic way, which for mainstream producers would be very difficult if not entirely impossible to do.

This is not the place to pronounce for or against any of these arguments, but if a production process maintains biodiversity presumably one may consider that it sustains rather than harms the environment. If so, and when linked with consideration for social and ethical issues, this concept presents a broad alternative for the more directly focused objectives of some individual labels.

Sustainability in itself, of course, does not need the guarantee of a certification or verification. Often, producers are already improving performance and efficiency significantly through the use of good agricultural practices (GAP) and/or good management practices (GMP). Certainly, this does not imply the need for an audit procedure. Nevertheless, consumers generally wish to be able to place a certain trust in claims such as 'this is an environmentally friendly' or 'socially responsible' product. Hence, the existence of different ways and means to provide such guarantees to roasters and retailers alike that allow them to offer what is sometimes also called 'no-worry coffee'.

Certification guarantees (through a certificate) that specific rules and regulations of voluntary standards are met in a certain environment (e.g. individual producer, producer group, cooperative or even region). These producers have to meet certain requirements – social, economic, environmental – and certification calls for independent third-party confirmation of this status, conducted by an accredited auditor. Mostly, certifications have to be renewed on an annual basis.

Roasters buying certified coffee benefit from the guarantee provided by the certificate and by using the logo and related information on their retail packaging. Certification protects both buyer and supplier, often also resulting in better marketing opportunities because there is a specific demand for certified products

Verification also ensures that certain agreed criteria and practices are met, but does not use a certificate to market the claim to the final consumer. Instead, company standards or internal supply chain standards rely on verification processes that are not as rigid and costly as a certification process that has to be conducted by appointed auditors. Instead, local third-party actors such as NGOs – or even second-party actors – may be asked to verify adherence to specific criteria. In addition, the timing between repeat verifications may be significantly less onerous than an annual re-certification process. In the coffee sector the most prominent example of a verification scheme is the 4C Association – the Common Code for the Coffee Community. 4C offers guidelines for better coffee farming that link up with GAP and GMP, while aiming at continuous improvement. The claims 4C makes are therefore not as specific as those of certification schemes and it refrains from using an on-pack (retail) logo.

Corporate guidelines or buying standards broadly pursue the same objectives and also set standards that aim at improving sustainability. Different from open certification and verification schemes, corporate guidelines or standards are company-specific. That is, retail credit can only be claimed by the buyer that initiated the standard. By far the best-known examples of such standards are the Starbucks C.A.F.E. Practices Program and the Nespresso AAA Sustainable Quality™ both of which, in addition to the usual sustainability issues, also deal with coffee quality.

For more on this see: www.scscertified.com/retail/rss_starbucks.php and www.nespresso.com.

The quest for sustainability does not end with coffee production. The end objective for the coffee industry is to extend sustainability throughout the entire supply chain. In this respect it is noteworthy that in March 2011 the well-known roaster Illycaffè (www.illy.com) in Trieste, Italy, was formally awarded the certification of Responsible Supply Chain Process by the certifiers DNV Business Assurance, a unit of Det Norske Veritas (www.dnv.com). The event marked the 20th anniversary of the introduction of the Ernesto Illy Brazil Award for Coffee Quality. The certification marks the organization's ability to provide a sustainable approach to processes and stakeholder relations all along the production chain, and specifically in the supply chain.

5.2. Integrated farming systems

Integrated farming systems, which are one such linked approach and might in the end perhaps be the most promising, focus on minimizing the use and negative effects of agro-chemicals. Basically this means that in all phases of production and processing one tries to minimize the impact on the environment. This approach does not exclude the use of agro-chemicals, but rather attempts to reduce their use to a minimum. Moreover, more attention is given to the reduction of energy consumption, packaging materials, and so on. Documentation and certification can be achieved within the framework of the ISO 14001 system, with the producer or processor documenting where and how in each step of the production and processing system they are reducing the environmental impact (see www.iso.org). See also “Chapter 12 – Quality control” in the Coffee Exporter’s Guide – Third Edition, which covers the ISO 9001 standard used by some coffee estates and commercial coffee growers.

5.3. The European Retail Protocol for Good Agricultural Practice

The European Retail Protocol for Good Agricultural Practice (EUREPGAP) was originally introduced by European retail chains for sourcing their fresh produce purchases.

Eurepgap forms the basis of this code. The protocol was established by over 30 leading European retailers working together in the European Retailers Produce Working Group (EUREP) to harmonize their agricultural standards for fruits and vegetables. The protocol is now an established part of their sourcing strategy and enjoys wide acceptance. It is consumer-driven and provides an assurance of basic good agricultural practices and social conditions.

Work was completed in 2004 to allow green coffee supplies to be brought under the same principles, more appropriately called a code of conduct or a code of practice. See www.globalgap.org/

5.4. Codes of conduct

Codes of conduct or codes of practice such as Eurepgap are a good example of how purchasing power translates into change at the producing end. The retailer demands certain assurances of the roaster, who in turn requires their suppliers to conform. This is not to say that all this has come about entirely spontaneously. The 1990s saw a number of food scares that have undoubtedly focused consumer attention on the how and what of the food and drink they consume. But even so, as in some other industries, one can probably mark the 1990s as a turning point for the policies of the larger roasters with respect to social responsibility. Pressure through lobbying and campaigns may have contributed to this attitude change. An increasing number of individual companies and associations such as the Specialty Coffee Associations of America and of Europe are engaged in a variety of activities related to what may broadly be called codes of conduct or initiatives which address social accountability, i.e. the Starbucks Coffee Company C.A.F.E. Practices, the Nespresso AAA Sustainable Quality™ Program, and some of the initiatives undertaken by Coffee Kids Organization.

For further information on social accountability issues (SA8000 framework) see www.sa-intl.org, the website of Social Accountability International. See also www.saiplatform.org.

6. The main sustainability schemes in the coffee sector

6.1. Fairtrade Label Organization

The Fairtrade initiative aims to enable organizations of smallholder producers of coffee (and cocoa, tea, honey, bananas, orange juice and sugar) to improve their conditions of trade, e.g. more equitable and more stable prices. Currently, Fairtrade efforts in coffee and other products like cocoa, honey and rice are concentrated on smallholder producers only. Conversely, in products like tea, sugar, bananas and other fruits the emphasis is also on estates (improving conditions for the labour force).

The Max Havelaar Foundation was established in the Netherlands in 1988, and since then another 25 countries have followed suit. In 1997 the different national institutions established an umbrella organization known as the Fairtrade Labelling Organizations International (FLO) with offices in Bonn, Germany.

Their objective is to provide the necessary instruments to assist and enable small growers to take their development into their own hands. This is achieved by incorporating in the producer price not only the cost of production, but also the cost of providing basic necessities such as running water, healthcare and education, and the cost of environmentally-friendly farming systems. Consumer support for this more equitable trading is then linked to participating growers through the Fairtrade labels on retail packaging in consuming countries. Simply put, the higher prices consumers pay for Fairtrade products reach the growers' organization through a combination of guaranteed minimum prices and premiums.

The FLO's role is to:

- Promote Fairtrade coffee in consumer markets (this is done by the national labelling initiatives);
- Identify and assist eligible groups of small growers to become inscribed in the FLO coffee producers' register, i.e. to obtain FLO certification;
- Verify adherence by all concerned to the Fairtrade principles, thus guaranteeing the label's integrity;
- Fairtrade is a certification programme that all smallholders' organizations and roasters who satisfy the criteria can join. But in the end success in the retail market depends on consumer support.

Table 1. Total worldwide sales of FLO-certified coffee, 2004–2010 (60 kgs bags)

	Not comparable to new (green bean) data				New and comparable		Estimated
	2004	2005	2006	2007	2008	2009	2010
Europe	279 400	352 065	429 915	521 065	767 300	855 717	950,000
North America	123 385	210 685	430 600	504 565	578 567	636 917	700,000
Australia / New Zealand	n.a.	1 650	4 765	7 500	18 500	26 567	35,000
Japan	915	2 165	2 450	3 685	5 833	6 533	7,300
Others						483	600
Total	403 700	566 565	867 730	1 036 815	1 370 200	1 526 216	1 692 900

Source: FLO/Bonn and TransFair USA.

NB: Due to reporting differences, the data for 2008 and 2009 are green bean equivalent and comparable with other certifications. However, 2004–2007 are not. 2010 figures are estimates based on extrapolated growth rates. Calculations are based on FLO consumer country sales rather than coffee exported from origin with average distribution being roasted (97%) and soluble coffees (3%) – converted to GBE.

The Fairtrade labels aim to make the initiative and the growers behind it visible and therefore marketable on a sustained basis. The labels enable FLO and others to provide sustained publicity and support where it counts most – in the consuming countries – for example, by building a public image of quality, reliability and respect for socio-economic and environmental concerns that consumers recognize and appreciate.

Fairtrade does not aim to replace anyone in the traditional marketing cycle and works on the basis that there is a place for each, provided all accept the Fairtrade goal of selling the largest possible volume of smallholder coffee at a fair price: fair for growers and consumers alike. The labels provide a guarantee to the consumer of adherence to this principle while leaving production, purchasing, processing, marketing and distribution where it belongs, in the coffee industry.

Using Fairtrade labels

Coffee to be sold under a Fairtrade label must be purchased directly from groups certified by FLO. The purchase price must be set in accordance with Fairtrade conditions of which the following are the most significant:

- The purchase price should be the reference market price or the Fairtrade minimum price (whichever is higher), plus the Fairtrade premium, plus the organic differential where applicable.
- Reference market prices are those of the New York (arabica) and London (robusta) futures markets, as described below:
 - Arabicas: the New York ‘C’ market at NYSE: ICE shall be the basis plus or minus the prevailing differential for the relevant quality, FOB origin, and net shipped weight. The price shall be established in United States dollars per pound.
 - Robustas: the London terminal market at NYSE Liffe shall be the basis plus or minus the prevailing differential for the relevant quality, basis FOB origin, and net shipped weight. The price shall be established in United States dollars per metric ton.
- Fairtrade minimum prices are guaranteed minimum prices. They have been set as per the table below, differentiated according to the type of the coffee. If the reference price is below the Fairtrade minimum price level, then the Fairtrade minimum price applies.
- These prices (either reference price or minimum price) shall then be increased by a fixed premium of 20 cts/ lb (of which at least 5 cts for productivity and/or quality improvements).
- For certified organic coffee with officially recognized certification, which will be sold as such, a further organic differential of at least 30 cts/lb per pound of green coffee will be due.
- This calculation took effect on 1 April 2011.

Table 2. Fairtrade premium

Type of coffee	Fairtrade minimum price regular or conventional \$/lb	Fairtrade premium cts/lb	Organic premium cts/lb
Washed arabica	1.40	20	30
Natural arabica	1.35	20	30
Washed robusta	1.05	20	30
Natural robusta	1.01	20	30

The Fairtrade price formula can effectively be summarized as (a) the Fairtrade minimum price or, if market prices are higher, the relevant futures market price (plus or minus the normal differential that would apply to that coffee) plus (b) the Fairtrade premium (listed in the above table) plus (c) any differential that might be applicable for organic coffee.

Minimum tonnage

Mention has already been made of the difficulty of shipping small lots that do not fill an entire container. FLO itself does not impose minimum volumes on grower organizations, but for practical reasons shipments must be in container size lots, meaning a minimum exportable production of about 18 tons.

In practice, small producer groups in some countries do manage to combine shipments so as to fill a container, for example by establishing an umbrella organization to coordinate this and other activities to achieve the necessary economies of scale. FLO’s start-up requirements also serve a developmental objective. Taking into account membership and other characteristics, producer groups should at least have the potential to reach a volume of business that will achieve sustainable development impact.

Applying for FLO certification

FLO certification provides access to all FLO member organizations. See www.fairtrade.net. Participating organizations of small coffee growers must meet criteria consisting of requirements against which the

producers will actually be monitored. (Look for Generic Fairtrade Standards for Small Farmers' Organizations on the same website.) Criteria include:

- Minimum entry requirements, which all must meet when joining Fairtrade, or within a specified period;
- Progress requirements, i.e. show improvement over the longer term.

The applying organization directs its request to FLO International. The certification unit of FLO sends an application pack to the applicant containing general information on FLO and the Fairtrade market, FLO standards, detailed information on the initial certification process and the application form. If the first evaluation, based on the application form, is positive, the applying organization will be visited by an FLO inspector who will examine the organization on the basis of the minimum requirements of FLO. All relevant information is then presented to the FLO Certification Committee charged with the certification of new producer groups. Once approved the certification will be formalized by means of a signed producer agreement with FLO and a certificate indicating the duration of validity of the certification (to be renewed every two years).

6.2. UTZ CERTIFIED

UTZ CERTIFIED – Good inside (UTZ) was until early 2007 known as Utz Kapeh = 'good coffee' in a Maya language from Guatemala. UTZ is one of the largest sustainability programmes for responsible coffee production and sourcing in the world. Founded as a producer-industry initiative, UTZ is an independent organization. By setting a 'decency standard' for coffee production and helping growers to achieve it, UTZ recognizes and supports responsible producers.

The UTZ sustainability programme is centred on the UTZ CERTIFIED Code of Conduct. This Code is based on international production standards and contains a set of strict product specific criteria for socially and environmentally appropriate coffee growing practices and economically efficient farm management. Independent third-party auditors are engaged by UTZ CERTIFIED to check whether the producers meet the code requirements.

UTZ CERTIFIED believes that increasing sustainability should also reinforce the independent position of farmers, which is why farmers are trained in the professionalization of their agricultural practice and operational management to improve the quality, volume and value of their crops.

UTZ certification is available to any interested parties, roasters and growers alike. Interested growers (individuals or groups) receive technical assistance to help them implement the changes necessary to achieve certification.

A web-based system, the traceability system, monitors the UTZ CERTIFIED coffee throughout the coffee chain, allowing roasters and brands to always trace back where and how their coffee was produced. The UTZ certification provides roasters with the assurance that coffee they have purchased was grown and harvested in a responsible way. In 2011 UTZ CERTIFIED joined the 4C Association with the aim of increasing cooperation and aligning the two organizations' codes of conduct in order to create a mechanism or means of support to enable producers to step up from the 4C baseline standard to the UTZ CERTIFIED level.

Different from some other certification schemes, UTZ CERTIFIED offers a way forward towards a type of market-driven recognition that is open to all who can qualify, that is available to both mainstream and specialty coffee, and that precludes no one from participating. As a result, the agency is increasing its penetration and in 2010 over 121,000 metric tons of UTZ CERTIFIED coffee was sold by registered UTZ CERTIFIED companies in 42 countries. This represents an increase of almost 50% in the volume sold the previous year. By the end of 2010, a total of 162 individual producers (in groups – mostly smallholders) and 476 others (estates and others) had been certified by the agency in 23 origin countries.

Visit www.utzcertified.org for more information.

6.3. Rainforest Alliance

In terms of environmental and sustainability requirements the Rainforest Alliance (RA) certification scheme is certainly amongst the more ambitious. Based on multi-crop farm management guidelines continuously developed since 1992 by the Sustainable Agriculture Network, or SAN, a coalition of independent NGOs, its work has attracted considerable support, including substantial grant funding from the United Nations Development Program.

Rainforest Alliance coffee production standards incorporate the ten Social and Environmental Principles of the Sustainable Agricultural Network:

- **Social and Environmental Management System.** Agriculture activities should be planned, monitored and evaluated, considering economic, social and environmental aspects and demonstrate compliance with the law and the certification standards. Planning and monitoring are essential to efficacious farm management, profitable production, crop quality and continual improvement.
- **Ecosystem Conservation.** Farmers promote the conservation and recuperation of ecosystems on and near the farm.
- **Wildlife Conservation.** Concrete and constant measures are taken to protect biodiversity, especially threatened and endangered species and their habitats.
- **Water Conservation.** All pollution and contamination must be controlled, and waterways must be protected with vegetative barriers.
- **Fair Treatment and Good Conditions for Workers.**
- **Agriculture should improve the well-being and standards of living for farmers, workers and their families.**
- **Occupational Health and Safety.** Working conditions must be safe, and workers must be trained and provided with the appropriate equipment to carry out their activities.
- **Community Relations.** Farms must be “good neighbours” to nearby communities, and positive forces for economic and social development.
- **Integrated Crop Management.** Farmers must employ Integrated Pest Management techniques and strictly control the use of any agrochemicals to protect the health and safety of workers, communities and the environment.
- **Soil Conservation.** Erosion must be controlled, and soil health and fertility should be maintained and enriched where possible.
- **Integrated Waste Management.** Farmers must have a waste management programme to reduce, reuse and recycle whenever possible and properly manage all wastes.

SAN standards are based on an internationally recognized Integrated Pest Management (IPM) model, which allows for some limited, strictly controlled use of agrochemicals. Farmers certified by the Rainforest Alliance do not use agrochemicals prohibited by the US Environmental Protection Agency and the European Union, nor do they use chemicals listed on the Pesticide Action Network’s ‘Dirty Dozen’ list.

RA considers that by following the standards, farmers can reduce costs, conserve natural resources, control pollution, conserve wildlife habitat, ensure rights and benefits for workers, improve the quality of their harvest, and earn the Rainforest Alliance Certified seal of approval. The seal allows producers to distinguish their coffee. This is helpful in establishing long-term marketing relationships because the certification guarantees that the farm is managed according to the highest social and environmental standards. The certification process includes: (i) preliminary site visit by SAN technicians to determine the changes necessary to achieve certification (diagnostic); (ii) a comprehensive audit of farm operations (certification audit); (iii) based on an evaluation report, the certification committee determines whether the

farm merits certification; and (iv) a contract that governs and monitors the use of the Rainforest Alliance Certified seal of approval, the handling of certified products and marketplace promotion.

In 2010, sales of RA-certified coffee were 114,884 metric tons green bean and are the culmination of phenomenal annual growth for the past eight years. RA-certified coffee is now produced on 44,648 coffee farms around the world.

For more information on RA and SAN visit www.rainforest-alliance.org.

6.4. The 4C Association – mainstreaming sustainability

Like other major food sectors, the mainstream coffee sector witnesses growing general concern over issues as food safety, import security, producer well-being, environmental and climate change related problems, and transparency, and how final consumers react to some of these topics. Even though mainstream consumers are not necessarily looking for labelled products, they are increasingly interested in social and environmental conditions generally. These consumers believe and expect that their suppliers are taking care to provide them with 'no worry products' that are both safe and of good quality. They certainly would not want to hear one day that they have been 'buying' child labour, forced evictions or the application of prohibited chemicals.

Inspired by these facts and developments such as the UN Millennium Goals, the 4C Association (www.4C-coffeeassociation.org) emerged as an initiative of important stakeholders across the entire coffee sector in 2003 and was officially established in December 2006. The 4C Association is an inclusive, membership driven organization of coffee farmers, trade and industry, and civil society. Members work jointly towards improving economic, social and environmental conditions in the coffee chain through the promotion of more sustainable and transparent practices for all who make a living in the coffee sector.

The main pillars of the 4C Association are a Code of Conduct, Rules of Participation for trade and industry, Support Services for coffee farmers, a Verification System and the participatory Governance Structure.

4C has three membership chambers: Producers, Trade and industry, and Civil society. Chamber members elect their representatives to the 4C Council, the Association's managing body. The council in its turn appoints a small Executive Board. This democratic arrangement ensures that the Association's decision-making organs are under the control of its members with guaranteed equal representation for all three categories. The Association is funded through membership fees and public contributions, including co-funding from government agencies. Membership fees are weighted according to financial means, thus differentiating significantly between small-scale producers and industry members such as coffee traders, roasters, soluble manufacturers or retailers with private label coffee.

4C's Common Code for the Coffee Community introduces baseline criteria for the sustainable production, processing and trading of green coffee and eliminates unacceptable practices. Through its global network, the 4C Association provides support services to coffee farmers, including training, access to tools and information. Many tools and support services are free of charge for coffee producers as they are funded in large parts from the membership fees from the trade and industry members and complemented by public contributions. In addition, 30% of the membership fees of industry and 50% to 70% of those of the intermediary buyers go directly to the 4C Support Services budget.

Through the continuous improvement concept of its Code Matrix and the Support Services, 4C helps farmers of all sizes, particularly also smallholders, and their business partners to access a baseline level of economic, environmental and social sustainability.

The 4C Standard is a pure business-to-business concept for the coffee supply chain, offering an entry level sustainability baseline for producers from which they might step up towards more demanding sustainability standards. Conceptualized as a business-to-business standard and not as a consumer label, the 4C Association is pre-competitive and does not provide a label to market 4C Compliant Coffee towards the final consumer on the coffee pack.

Instead, 4C industry members may communicate their commitment and membership using a membership statement on coffee packs. The membership statement does not refer to the quality or quantity of roasted

coffee, but is a means for 4C industry members to emphasize their support of the 4C Sustainability Approach. Except on coffee packs, the logo of the 4C Association may be used widely in publications, websites, brochures etc.

4C Units are the suppliers of 4C Compliant Coffee. The 4C Association believes that sustainability is not in the hands of coffee farmers alone – all actors along the chain need to join forces to make sustainability happen. Therefore, 4C verification is performed at the 4C Unit level and a 4C Unit may be established at any stage of the coffee chain, from producer/producers' groups to roaster level. 4C Units have to be located in producing countries. The managing entity of the 4C Unit assumes responsibility and coordinates the implementation of 4C with its individual suppliers. This mechanism actually allows the 4C Association to also address and include the manifold unorganized smallholders who would otherwise not have access to the market for sustainable coffee. Everyone in the coffee market chain from producers to transporters, collectors and warehouses, millers and processors, traders and exporters, roasters, and retailers can register as a 4C Unit.

4C Verification is the backbone of credibility for the 4C system. In the 4C system, 4C Verification checks compliance against the baseline standard of 4C, consisting of 28 parameters that represent a mix of environmental, social and economic considerations. All defined 10 Unacceptable Practices must be excluded and at least a minimum level of compliance (called 'average yellow') is required within each dimension of sustainability to successfully pass verification. All 4C verification is conducted by independent third party verification or certification organizations that have successfully participated in 4C verifier training and are accredited to ISO/Guide 65.

4C and other standards are benchmarking that benefits the coffee industry. Being designed as a baseline standard for the mainstream sector, and therefore complementary to more demanding standards, the 4C Association aims at benchmarking with other standards in order to reduce the burden of multiple certification/verification for producers, while also directing its support services to those producers that are not certified. The first benchmarking was achieved with the Rainforest Alliance in mid-2008. The 4C Code of Conduct being a baseline standard, benchmarking with the Rainforest Alliance's Sustainable Agriculture Network (SAN) standard is non-reciprocal. This means that holders of the Rainforest Alliance Certificate may apply for a 4C License without additional costs or verification procedures, whereas 4C License holders need to step up to SAN standards in order to become Rainforest Alliance certified. Being 4C Compliant of course makes it easier for such growers to make the move upwards. As a result of the 2008 benchmarking exercise, 4C members holding Rainforest Alliance certification are now being offered an additional marketing window because they can sell any surplus production as 4C Compliant Coffee. As mentioned earlier, UTZ Certified began the process of benchmarking in 2011.

6.5. Other sustainability labels

Biodynamic coffee usually is high-quality arabica at high premiums with a low market share. A well-known example is coffee from the Finca Irlanda (Chiapas, Mexico) where organic cultivation began in the 1960s. Biodynamic products are organic and can be marketed as such, but they meet even higher production standards and represent a true niche market. For more see www.demeter-usa.org.

Especially in the United States and Canada, there is a market for so-called bird-friendly or shade grown coffee. Limited use of agro-chemicals is permitted and the emphasis is put on the conservation of shade trees on plantations in order to preserve bird life and biodiversity. Shade grown coffee is not the same as organic coffee, but there are specific standards and a certification system has been developed by the Smithsonian Migratory Bird Center, www.nationalzoo.si.edu/scbi/migratorybirds/coffee, and other institutions and NGOs in Canada, the United States and Mexico. Shade grown represents a step along the way towards environmentally sustainable coffee. So far the market for such coffees is small and mostly limited to North America.

7. Certification and marketability in coffee

Over time certification has become an almost indispensable marketing tool for many agricultural products, particularly perishables such as fruit and vegetables. The flower label required on principle by many Western retail chains for imported fruit and vegetables is a good example.

However, these are products that are sold directly to the end-consumer, i.e. they are not transformed, and, as such the certification is used to ensure market access. This is because the label proves to the end-user that producers subscribe to good agricultural and management practices; protect the environment; practice safe pesticide use; and engage in resource protection generally. Thus, the product is accepted as both safe and environmentally friendly. For coffee the situation is rather different because coffee growers in the main provide green coffee to overseas roasters who in turn produce and retail the finished product. Therefore, in most instances the identity of the producing countries, let alone the individual producer, is not known to the end-user. Consequently there is much less consumer awareness of the production process and whether certification (or verification) by itself enhances a coffee's marketability, is therefore a pertinent question.

In the coffee industry, certification schemes also guarantee that specific rules and regulations of voluntary standards are met. On-pack labels then make this known to the end-user on the producer's behalf and, often, the end-user is expected to pay a premium to recompense the grower for this specific effort.

Verification similarly ensures that certain agreed criteria and practices are met, but does not use certificates or on-pack claims to market this to the end-user. Typically a mainstream market tool that offers market access rather than premia, verification is meant to improve efficiency, sustainability and profitability for growers on the one hand, whilst enabling buyers to make more informed decisions on the produce they purchase and process. Currently, the mainstream market accounts for between 85% and 90% of all green coffee exported from producing countries.

Over time, it may be expected that buyers of mainstream coffee will increasingly insist on certain guarantees as regards the manner in which the coffee they buy is produced, perhaps to the gradual exclusion of those producers unable or unwilling to provide them. Verification would appear to be the most likely tool for this, in many cases enhanced by certification for a particular type of niche market.

It should also be noted that the scope for premium priced coffee, purely based on quality, is in theory unlimited because it has direct and universal appeal to many more end-users. The market for quality or specialty (gourmet) coffee is increasing constantly, i.e. this market segment is demand driven and is showing strong growth.

However, the scope for premium prices based on certification rather than on quality is limited because of demand reasons. This is so because for many if not a majority of end-users the intrinsic quality of a product is of more importance than is certified compliance with a code of conduct or standard. Therefore, the potential for certified coffees that require to be sold at a premium mostly lies in niche markets. However, the supply of such coffees is not necessarily always demand driven and over time some may be subject to oversupply. While certification definitely adds to a coffee's image and may enhance its value, in the longer term certification by itself (so without the 'quality') is no guarantee for premium prices. But it can add to a coffee's marketability.

For more information on standards visit ITC's www.standardsmap.org.

Table 3. Comparative overview of sustainability schemes for coffee

Aspect	Organic	Fairtrade	Rainforest Alliance*	UTZ Certified	Common Code 4C
Premium	No assured premium paid – it varies considerably from market to market (but 15 to 20 cts was paid in some countries in 2011, if double certified with Fairtrade then it gets an automatic 20 cts premium).	Fixed premium always assured (but overall level of demand not always in tandem with production).	No assured premium (but 5 to 8 cts range was common in 2011).	No assured premium paid (but 2 to 5 cts was common in 2011).	No assured premium (but may be paid in certain circumstances if seller/buyer so agree)
Yield and quality	Short-term impact on yields may be negative; possibly positive impact on quality.	Only indirect (and possibly positive) impact on yields and quality (through higher income, thus increased possibility of purchasing inputs and hiring labour).	Potentially negative yield impact; positive impact on quality.	Possibly positive impact but limited.	Possibly positive impact through improved farming and processing methods.
Labour inputs	Higher labour inputs.	Higher labour inputs linked to collective processes such as coordination, meetings etc.	Higher labour inputs.	Moderately higher labour inputs.	Moderately higher labour inputs.
Other income impacts	Possibility of selling other organic products from the farm; income diversification.	Possible indirect impact through wider trade networking offering possibility of selling other Fairtrade products.	Possibility of selling forest by- products and fruit.	Increasing visibility of UTZ may improve conditions of trade.	Over time improved conditions of trade may be possible.
Market access, networking	Access to well established and reliable market.	Access to well-established, reliable market; technical assistance from Fairtrade importers.	Buyers and markets increasing steadily.	Number of buyers and markets increasing steadily.	Potentially easier access to large segment of the mainstream market.
Extension, credit	Possibly more effective extension from field staff supported by NGOs and some buyers, but limited support from public system.	Access to trade financing and traditional credit sources due to Fairtrade membership and improved financial position of cooperatives.	More effective agro-forestry extension from supportive NGOs, but limited support from public system.	Potentially better extension services from supportive NGOs and some buyers, but limited support from public extension services.	Potential support from 4C-support platform and participating buyers; limited support from public extension services.
Organizational capacity; community impact	Potential increase in mutual support among farmers to solve farming management problems.	Increased organizational capacity of participating farmers; access to training; better organizational ability to serve members; community projects.	Mutual support amongst farmers for forest management.	Strengthening organizational capabilities (if registration is done via farmer groups rather than as individuals).	Strengthening of organizational capabilities through potential assistance from 4C-support platform; access to training.
Environment	Potential adoption of new farming techniques to improve soil fertility as well as drought and erosion resilience.	Limited environmental benefits.	Improved bio-diversity and agro-ecological conditions; enhancement of soil fertility.	Limited environmental benefits through the gradual elimination of inappropriate farming and processing methods.	Limited environmental benefits through the gradual elimination of inappropriate farming and processing methods.
Risk, planning capabilities	Risk reduction through reduced external inputs; no mono-cropping; improved soil resilience; planning may improve.	Better planning for coffee production, personal and household needs; guaranteed price reduces risk.	Reduced pest management and social risk; planning may improve.	Potential for some reduced pest management and social risk; planning may improve.	Better planning and reduced risk through improved market access may be possible.

Source: Based on original work and further input from Daniele Giovannucci and Stefano Ponte; 4C table by Jan van Hilten.

* Also applies to most shade grown coffee.

8. Sustainability and gender

8.1. Women's employment and ownership in coffee

Most if not all sustainability initiatives pay considerable attention to social and labour issues, but the status of women in the coffee sector is generally not singled out. The 2010 Stanford Social Innovation Review, www.ssireview.org found that only 1 out of the 10 initiatives it assessed listed gender governance as a requirement, four listed women's labour rights and three listed women's health and safety. The assumption may well be that general attention to labour rights and other social aspects in the coffee sector also takes care of this. But even so, this does not really do justice to the important role so many women actually play.

In 2008, ITC conducted a survey on the role of women in the coffee sector. Twenty-five persons, mainly women, in 15 coffee producing countries in Africa, Asia and Latin America, provided information. The survey showed considerable differences between individual countries with, for example, women doing little of the field and harvest work in Brazil (highly mechanized and often alternative jobs for women), but as much as 90% in some African countries (nearly all manual). Women play only a small role in in-country trading in most countries, whereas in Viet Nam this is around 50%. The data gathering was limited to 15 very different countries only, but at least made it possible to indicate a kind of 'typical' role of women in the sector.

Female ownership in the value chain in coffee producing countries is also variable, but generally modest at all levels. Ownership is difficult to describe for several reasons, for example, the distinction between ownership and user-rights is sometimes unclear as is co-ownership for married couples. The findings showed significant variations, but simplified one could say that women typically own around 15% of land, of traded products (coffee) and of companies related to coffee in coffee producing countries.

Table 4. Women employment in the coffee sector

Women in the workforce in % of total	Variations low – high	'Typical'
Field work	10 – 90	70
Harvest	20 – 80	70
Trading in-country	5 – 50	10
Sorting	20 – 9	75
Export	0 – 40	10
Other (certifications, laboratories, etc.)	5 – 35	20

Table 5. Women ownership in the coffee sector

Women's ownership in % of total (including co-ownership)	Variations low – high	'Typical'
Land used for coffee production – including user rights	5 – 70	20
Coffee – when harvested	2 – 70	15
Coffee – when traded domestically	1 – 70	10
Companies in the coffee sector (exporters, laboratories, certifiers, transportation, etc.)	1 – 30	10

8.2. Women's associations in the coffee sector

Possibly the most opportune way to advance women and promote women's rights in the coffee sector is through women's associations where there is joint agreement on objectives, where issues and matters of particular interest to women can be discussed freely, and where there is an absence of peer pressure. Topics at the top of the agenda in the associations are typically (i) lack of access to land (linked to heritage legislation), (ii) lack of education and skills, (iii) lack of access to capital and options for savings, and (iv) the inability to locate good markets for coffee.

The potential of such associations is receiving increasing attention from donor organizations with an interest in gender issues and it is becoming more common to find specific gender components in coffee sector projects. In addition, the need to economically empower women in coffee is seen as a major opportunity by women who participate in associations.

Women's coffee associations were first initiated in the United States in 2002. The most prominent are today the following:

- International Women's Coffee Alliance, IWCA, www.womenincoffee.org coordinates information sharing and training of women. It has established so-called chapters in primarily Central America (Costa Rica, El Salvador, Guatemala and Nicaragua), the Caribbean (Dominican Republic) and South America (Colombia and Brazil (in formation)). New chapters were established in 2011 in Africa (Burundi, Kenya and Rwanda) where more are in preparation, including Ethiopia, Uganda and United Republic of Tanzania. Chapter members include women and men representing various segments of the coffee supply chain. They are legalized entities that have a voice in their countries and seek the support of national trade support institutions, corporations and not-for-profit organizations.
- Café Femenino Foundation, www.coffeecan.org, commenced by assisting poor communities in Peru. It currently works in around 10 countries in Latin America and is now turning to Africa.
- The Coffee Quality Institute, CQI, www.coffeeinstitute.org offers a leadership programme with mentors (from the United States) and fellows primarily in Central America and South America. Availability depends on funding which, currently, is restricted.

A few countries have small national or in-country regional associations or women's groups in the coffee sector, for example in Mexico, Colombia, Peru, Kenya and India.

Worth mentioning here is also the valuable work done by Grounds for Health (GFH), www.groundsforhealth.org. GFH is a not-for-profit organization founded to provide healthcare services to women in coffee-growing communities. GFH offers cervical cancer screening and treatment in several Latin American countries and more recently in East Africa.

Appendix I Overview of The Coffee Exporter's Guide (2012)

The Coffee Exporter's Guide is the world's most extensive source of information on all aspects of international coffee trade. The guide covers the following topics:

Chapter 1	World coffee trade – An overview	Trends in global trade Grading and classification Stocks and consumption patterns in producer countries Trends in global consumption and inventories The International Coffee Organization (ICO)
Chapter 2	The markets for coffee	The structure of the international coffee trade The structure of the retail markets The evolution in demand for various types of coffee products Value addition in producer countries
Chapter 3	Niche markets, environment and social aspects	The specialty market Exclusive marketing arrangements The production and trade of organic coffee Mapping technology for coffee marketing Trademarking and geographical indications The main sustainability schemes in the coffee sector Sustainability and gender
Chapter 4	Contracts	Commercial or “front office” aspects: quality, delivery time, weights, payments conditions, intermediaries, etc. Documentation or “back office” aspects: letters of credit, shipping, bill of lading, certificates, etc. Standard forms of contract: ECF and GCA contracts UCP 600 in sales contracts Incoterms
Chapter 5	Logistics and insurance	Shipping services and hubs Ocean freight, surcharges and terminal handling charges Bills of lading and waybills Carrier's liability and obligations Options and logistics for small lots Shipping in containers: condensation, bulk, lining and filling, discharge, sampling, weights, customs, seals, etc. Insurance: risks, standard insurance contracts and claims
Chapter 6	E-commerce and supply chain management	The ICE eCOPS system Supply chain security and efficiency Paperless trade: legal framework, title registry, compliance and verification Dispute resolution
Chapter 7	Arbitration	Types of disputes and claims Common errors Arbitral proceedings in the United Kingdom, Germany, France and the United States
Chapter 8	Futures markets	Price risk and differential Volatility and leverage Clearing houses The main futures markets for coffee: The New York arabica contract, the London robusta contract, the Bolsa de mercadorias & futuros (Brazil), and the Singapore Exchange Ltd.

Chapter 9	Hedging and other operations	The buying and selling hedge The price to be fixed (PTBF) contract Options Arbitrage and commodity speculation Technical analysis of futures markets
Chapter 10	Risk and the relation to trade credit	Types of risk Credit insurance Conditionalities for credit Risk management Trade credit in producing countries Letters of credit Collateral management Credit and risk for smallholders Microfinance
Chapter 11	Coffee quality	Processing methods Quality segmentation Quality and production techniques
Chapter 12	Quality control	ICO minimum export standards ISO quality systems Hazard analysis critical control points (HACCP) systems Food safety and bio-terrorism Mycotoxins, residues and contamination Obsolete pesticides Mould and OTA prevention Coffee tasting (liquoring)
Chapter 13	Climate change and the coffee industry	Possible effects of climate change on coffee production Possible interventions and support measures From strategy to actual responses Carbon credits and markets
Chapter 14	Questions & answers	Selections from the over 240 detailed answers in English, French and Spanish offered by the Q&A service on the Coffee Guide Website www.thecoffeeguide.org



Download the Guide: www.intracen.org/The-Coffee-Exporters-Guide---Third-Edition/



Find us on Facebook: www.facebook.com/ITCcoffeeguide

Appendix II Questions & answers at www.thecoffeeguide.org

Find detailed answers to these and many more questions on the Coffee Guide Website Q&A service in English, French and Spanish www.thecoffeeguide.org

- Q&A 007: Where to find coffee import data and details of the market structure for major European markets?
- Q&A 009: Can a geographical (district or area) name be trademarked?
- Q&A 011: Can one register a district (or area name) as a Trademark or a Collective Mark in the United States? At what cost and how?
- Q&A 015: How to register trademarks in the EU and what is the cost?
- Q&A 027: What are the pros and cons of exclusive marketing arrangements?
- Q&A 029: How to approach the Italian market?
- Q&A 032: How to approach potential buyers?
- Q&A 033: How to identify arabica buyers?
- Q&A 036: How to start promoting a new specialty coffee?
- Q&A 039: What effect will rising production of organic coffee have on premia and, what is being done to reduce the cost of certification?
- Q&A 044: How to register a trademark in Japan and at what cost?
- Q&A 047: How can growers minimize the cost of organic certification?
- Q&A 048: Does it pay to exhibit at coffee trade shows?
- Q&A 052: How do producing and consuming countries, and the ICO, promote coffee consumption?
- Q&A 057: Where to find really detailed information on imports into different consumer markets?
- Q&A 059: What marketing strategy for good quality arabica?
- Q&A 065: How to find buyers in Europe or North America for Malawi specialty grade coffee?
- Q&A 073: How to go about identifying good quality roasted coffee for the Moroccan market?
- Q&A 074: Which Geographical Positioning Equipment (GPS) to use and where to find it?
- Q&A 081: Why is green coffee blended?
- Q&A 085: How much specialty coffee does the world consume?
- Q&A 086: How to market specialty coffee domestically in a producing country?
- Q&A 087: Where to find suppliers, specifications and quotes for complete roasting and packaging lines?
- Q&A 100: In a Code of Conduct or coffee standard, what is the difference between certification and verification?
- Q&A 102: Does 'certification' by itself enhance a coffee's marketability (value, price, quality)?
- Q&A 110: What is the difference between gourmet coffee and specialty coffee?

- Q&A 114: Is espresso coffee 'specialty' or 'mainstream'?
- Q&A 116: How should one approach the Japanese market?
- Q&A 124: How much organic coffee is sold in France?
- Q&A 128: What is the exact difference between a Trademark and a Geographic Indication?
- Q&A 131: How to differentiate between the mainstream and the specialty industry?
- Q&A 140: Why is the teabag system not used in the coffee sector?
- Q&A 141: What is the demand for certified coffee like Utz, and what drives major players to take an interest?
- Q&A 144: Are consumer tastes in Germany changing?
- Q&A 147: What are the advantages and limits of (brand) loyalty in coffee marketing?
- Q&A 150: For robusta, is there any difference in yield between dry and wet processing?
- Q&A 151: How to enter the export market for organic coffee?
- Q&A 154: Is the USDA changing the Internal Control System (ICS) arrangement for organic smallholder coffee?
- Q&A 162: Organic coffee – where are the main producers?
- Q&A 165: How has the Central American coffee industry changed in recent years in the face of new consumption tendencies?
- Q&A 166: How to promote premium coffee in a price-conscious environment?
- Q&A 168: How to export very small lots, say 50 bags or less?
- Q&A 173: Where to find help in growing coffee from seed in Australia?
- Q&A 176: Is the entry of the McDonald's Corporation into specialty coffee positive for the coffee industry?
- Q&A 183: What rules and norms apply to the import of organic coffee into Japan?
- Q&A 192: Can coffee growers, especially smallholders, benefit from carbon offsets?
- Q&A 205: Are there any Internet auctions that market specialty coffee?
- Q&A 214: What is the average cost of the coffee certification process?
- Q&A 220: How does the market appreciate Puerto Rican coffee?
- Q&A 222: Are certifications improving farmers' net incomes?
- Q&A 228: Where to find statistics on the role of women in the coffee sector?
- Q&A 232: Is the quality of Brazilian specialty coffee progressing?
- Q&A 235: Does (organic) coffee production affect climate change?
- Q&A 240: Is it advisable to concentrate on one particular client model only?
- Q&A 241: Is the indication OGST (Organic/Sustainable) internationally acknowledged?
- Q&A 242: What are the terms of trade and premium for 4C-Compliant Coffee?

Sample Q&A

Q&A 168: How to export very small lots, say 50 bags or less?	
Background	We read about the Cup of Excellence auctions which are very interesting. But our question is: how are those small lots physically exported? They are much too small for a container load so I guess they are combined with other coffee?
Asked by	Miller/processor – India
Answer	<p><i>Answer posted on October 18, 2007</i></p> <p>Exporters and buyers of very small parcels not only face logistical and cost constraints, but must also face the fact that many buyers will not consider anything less than a full container load*. This effectively bars many small producers of specialty and organic coffee from direct participation in the overseas market...</p> <p>The background to this is the constant evolution of modern shipping. Today about all international coffee shipments are carried in containers, both in bags and in bulk (loose). Modern container vessels have largely displaced what were previously known as 'break-bulk' vessels: ships capable carrying all kinds of loose cargo in their holds, including small coffee parcels in bags. Container vessels however carry containers only...</p> <p>Furthermore, larger and larger vessels are being constructed: already vessels capable of carrying around 11,000 containers are at sea! Such vessels do not call at smaller ports, concentrating instead on what are today called 'hub ports'. Just as in the airline industry such 'hubs' receive cargo from smaller regional ports, through feeder lines. This means more transshipment – some shipments may be transhipped more than once even: for example from a small port to a regional or national port to a hub port.</p> <p>To answer your specific question, the following opportunities exist to ship very small lots:</p> <ul style="list-style-type: none"> • Cup of Excellence parcels are often combined with other coffee that successful bidders buy directly in the country in question, thus arriving at a full container load; • Alternatively a number of buyers jointly nominate one exporter to ship their purchases together in one container – either with some other coffee added or they accept to pay for any unused or 'dead' space; • In some cases buyers requiring very quick delivery, for example ahead of the Christmas season, have used airfreight – of course an expensive solution. <p>In other words, the logistical arrangements for Cup of Excellence coffees are mostly tailor-made. But for individual exporters of conventional small parcels the options are basically two-fold only:</p> <ul style="list-style-type: none"> • Consolidate (combine) with other coffee to fill a container: this depends on the buyer's willingness to accept this and the availability of suitable additional cargo. Can be very difficult for organic coffee. • Ask the buyer to accept to pay for any unused or dead space in the container. This is not unusual where the quantity is say 150 bags or so, particularly in the case of organic coffee that may not be mixed with other goods. <p>Therefore, what this really means for smaller producers is that only those with exceptional coffees should anticipate bypassing the traditional export/import chain. This is because, as is often said: if the middleman (read exporter/importer) is eliminated, who then shall fulfil that function?</p> <p>* Full Container Load or FCL: around 300 bags of 60 kg, depending on the type of coffee.</p> <p>In shipping LCL means Less than Container Load.</p>
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