Bitter or Better Future for Coffee Producers?

by Morten Scholer, ITC

The coffee market is over-supplied. With the price of coffee at its lowest in a century, there will be winners and losers in the fierce competition for exports. Getting producers to "add value" to coffee and earn more revenue is a commonly proposed solution. However, this proposal is complex and, for many producers, unrealistic.

The collapse of world coffee prices is causing many exporting countries to suffer their worst economic crisis in years. How did this happen to one of the world's largest commodities? The over-supply of coffee is due to several factors: rapid expansion of production in Viet Nam; new plantations in Brazil; higher yields; increased efficiency; and incentives to expand production, such as the liberalization of markets in the 1990s, which led to an increase in coffee farmers' share of the export price.

To this, add what one could call "under demand". Analysts often concentrate on over-supply and overlook the effects of emerging market trends and new technologies in the international supply and demand debate. What also tends to be forgotten is that coffee is not a uniform product: arabica coffee is fine-flavoured, aromatic and usually fetches the highest prices, whereas robusta coffee is normally a cheaper product that is easier to produce. The market share of robusta has grown significantly in the last ten years.

Product quality, production costs and relations with international partners have been coffee trade parameters for years. After more than three years of over-supply and low prices, however, competition has sharpened. For many producers and exporters, survival in the industry depends entirely on complying with market demands for even higher quality; consistency (same quality for repeat deliveries); traceability of origin; transparency (economic, social and environmental); ability to tailor delivery on demand; and capacity for long-term partnerships directly between producer and roaster. Politicians, advocacy groups, and non-governmental and international organizations are grappling with potential solutions. Unfortunately, many of them come as bitter news to already-desperate producers and their families.

Some will be able to capitalize on specialty coffee trends and industry campaigns to promote consumption in new markets. Many, however, will need to diversify, and policy-makers need to plan for this.

Arabica versus robusta

The balance of coffee varieties being consumed is shifting. Arabica, the traditional variety, is losing ground to robusta beans.

About 60% to 65% of the world supply of coffee is arabica, primarily from Latin America. Grown at high altitudes, this fine-flavoured, aromatic type of coffee usually fetches the highest prices. It is often sold as 100% arabica or pure arabica. The largest suppliers outside Latin America are Ethiopia, Kenya, India and Papua New Guinea.

Robusta makes up more than 35% of world supply compared to 25% 20 years ago. This variety is easier to produce, more resistant to diseases and can be grown at lower altitudes. Robusta is traded at about half the price of arabica and is often used as filler in blends. Arabica contains 1% to 1.5% caffeine and robusta approximately 2%.

Flavoured coffee and new coffee drinks can use cheaper grades of coffee beans.

Why not "add value" at origin?

Less than one-fifth of 1% of coffee exports from producing countries is in the form of roast and ground beans. Instant coffee counts for another 5%, and all other coffee is shipped as unprocessed green coffee beans. Coffee that is roast and ground at origin therefore equals less than two cups out of every 1,000 drunk in importing countries. Why is the downstream value-added so low? Many blame import duties on processed coffee. But even if importing countries reduced or lifted duties, the export of finished products is likely to remain modest for several reasons, including:

- ***Market-specific blends and brands.*** Roast and ground coffees are very often blends sold as branded products; roasters are reluctant to change 'the right mix". Blends are tailor-made to appeal to different tastes in the market and to adapt to different water qualities. Also important are availability of substitutes and seasonality of both supply and demand. These factors are all difficult to handle far away from the consumer.
- ***Preservation of quality.*** Unprocessed, green coffee beans have a long shelf life and can remain in warehouses for months, sometimes years. This is not the case for roast and ground coffee, although new packaging materials have extended their shelf life. The best cup quality is usually obtained by processing as late as possible, for example, by grinding just before consumption.
- ***Just-in-time delivery.*** Sellers must be able to deliver within days when roasters suddenly change their blends or quantities. In addition, roasters must accommodate retailers' changing orders. For example, "Delivery next Thursday must be 1 kg packages, instead of last week's 500 gram packages". This situation is not easy to handle 10,000 km from the buyer.

Trends in demand pushed prices down

Recent years have seen a steady decline in coffee prices overall. One challenge for producers is that most cannot add value at origin. Another problem is that demand is growing slowly. Market trends and new technologies are, in many instances, working against producers' interests. Below are some of the factors that are often forgotten in the supply and demand debate:

- ***Cleaned robusta expands its use.*** Robusta coffee is used as cheap filler in many blends, but undesirable off-flavours set a limit to how much one can add. Roasters have responded to the growth in supply by adopting technologies (for example, steam-cleaning) to increase the use of robusta.
- ***Flavoured coffees can use cheaper beans.*** Adding flavours such as vanilla, hazelnut and raspberry to coffee has become fashionable in North America. Some coffee magazines in the United States have up to ten full-page advertisements for syrups and other additives, sometimes giving the impression that the flavours are more important than the coffee. Flavoured coffees can be prepared with lower-grade beans.
- ***New coffee drinks can use cheaper beans.*** Today, the traditional "cup of coffee" is sold alongside products such as cappuccino, café latte and mochaccino, in which coffee is only one of several ingredients. Darker roasts are often used to secure the taste of the coffee when blended with milk, cream or ice. Darker roasts allow for lower grades to be used.
- ***Fewer beans per cup.*** Thirty years ago, around 8 grams of roast and ground coffee was the norm for a home-brewed cup of coffee (1.5 dl) in some European countries. Today, instructions on packages often recommend 6 or 7 grams. New technologies in roasting, grinding, blending and brewing can squeeze more out of a gram of coffee. A reduction of 1 gram per serving is about 12%, which corresponds roughly to the percentage of African coffees in world production.
- ***Higher stimulant effect from robusta.*** Caffeine is a stimulant for most consumers, but too much of it can have undesirable side effects, for example, on the heartbeat rate. Robusta has a higher caffeine content than arabica and, with more and more robusta being used in blends, some consumers reach their daily dose after fewer servings of coffee, resulting in lower overall consumption.
- ***More espresso equals more robusta, fewer beans.*** Espresso, which is in growing demand, sometimes requires fewer beans per serving than traditional coffee. Moreover, to increase the "kick" from caffeine and the spicy taste demanded by some consumers, some espressos contain a considerable amount of robusta.
- ***Rising out-of-home consumption.*** Cafés, coffee shops, restaurants and canteens account for a growing percentage of coffee consumption. This has created some new consumers, but has also had two opposite effects: When coffee is prepared by professionals the percentage wasted is smaller (less coffee poured into the sink) and overall consumption thereby drops. Higher prices per cup at cafés, coffee shops and

restaurants make consumers think twice before ordering a second or third cup.

- ***Competing beverages.*** The coffee industry is facing tough competition from other beverages, such as soft drinks and ice tea consumed by young people.

Search for solutions

Faced with increasing production, stagnant consumption and a three-year record slump in prices, many players are looking into possible solutions. One is TechnoServe, a non-profit organization working to support rural businesses in the developing world. The United States Agency for International Development and Procter & Gamble are among the organizations that fund TechnoServe's work on coffee. Its 2003 report, *Business Solutions to the Coffee Crisis*, prepared with support from McKinsey & Company, coffee organizations and firms, examined various possible solutions (*see graph*). It ranked three as holding the highest potential to achieve a sustainable impact:

- Promote coffee consumption in producing countries and emerging markets.
- Support specialty coffee producers to secure market premiums.
- Encourage diversification for marginal coffee producers without the potential to supply "specialty" or niche markets.

The World Bank drew conclusions along the same lines in a detailed March 2004 report, *Coffee markets: new paradigms in global supply and demand*. When presenting the report, the World Bank stated there is no "silver bullet" to stop the dramatic decline in world coffee prices. They recommend that producers organize themselves and, with support from the international community, find ways to diversify their coffee production or enter a different trade.

These suggestions are valid. But only some of the many affected producers and exporters are likely to benefit from them.

Promoting consumption

The International Coffee Organization (ICO) and others have initiated generic promotion programmes, including in new and potential markets such as China and the Russian Federation, where consumption per capita is very low. Consumption is also low in all major coffee producing countries with a few exceptions, such as Brazil and Ethiopia. Promotion campaigns can be very successful, as in Brazil, which now consumes almost 40% of its production. However, they are also costly and time-consuming and can take a long time to show results.

The ICO introduced minimum export standards under its Resolution 407 in 2002, which stipulates minimum quality criteria such as defects and moisture content. This standard has two objectives: to improve the quality of coffee in general, thereby stimulating consumers to drink more; and to reduce the overall supply of coffee by eliminating lower grades.

Specialty coffees

Specialty coffee refers primarily to high-quality coffees and coffees with an unusual background or story behind them — often related to sustainability. There is no universally accepted definition of specialties, which make up about 10% of total production.

Coffees certified as organic (produced without agro-chemicals) comprise about 0.7% of world production. Producers have usually received premiums which more than compensate the cost of certification, extra work and (for some) lower yields. However, premiums have dropped in recent years, as the supply has grown.

Fair trade certified coffees make up about 0.3% of world production. Many of them are also certified organic. Fair trade is a social scheme involving labelling, which guarantees a minimum of US$ 1.26 per lb. FOB (free on board) for coffees currently traded at around US$ 0.70 per lb.

Organic certified and fair-trade certified coffees are high profile examples of specialty coffees, yet combined they make up just under 1% of the market. Production and sale are growing, but even if doubled or tripled in a number of years from now, these niches will still be relatively small.

Diversifying production

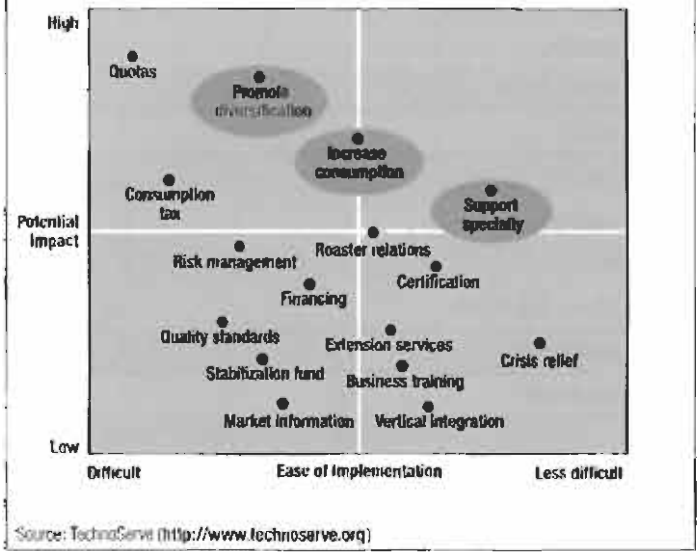
Diversification can be difficult. Green coffee has a long shelf life, and in some terrains there are few alternatives for crops. Also, prices are low for many other agricultural produce, some of which compete with subsidized products in developed countries.

At the same time, cultural attachments to growing coffee are very strong. Expectations are usually that prices will rise one day, which is similar to attitudes of farmers in Europe and the United States.

Making decisions with ITC

Coffee producers and exporters need to optimize their day to day business and make major decisions for their future.

Some market solutions



Source: TechnoServe (http://www.technoserve.org)

ITC helps trade policy- and decision-makers who are considering moving into specialty coffee, promoting consumption or diversifying production. ITC also provides assistance to improve the competitiveness of those staying in the business. It works through country-specific projects or projects that benefit all producing countries. The examples below illustrate the diversity of ITC's support to the coffee sector:

- ***The Gourmet Coffee Project*** (1998–2000) in Brazil, Burundi, Ethiopia, Papua New Guinea and Uganda developed exports of quality coffees with a potential for higher prices. In cooperation with the ICO and the Common Fund for Commodities, the project tested many new methods of producing, processing and marketing gourmet coffees. It included the world's first Internet coffee auction which took place in Brazil in 1999 and led to the Cup of Excellence® competition and auction programme (http://www.cupofexcellence.org), now used in several countries.
- ***Coffee — An exporter's guide*** (2002–2003) provides information and practical advice to optimize trade practices at all stages in producing countries. The 330-page guide focuses on mainstream coffee (90% of the trade) with some coverage of specialty niches such as organic and fair-trade production. Aimed at coffee exporters, the guide is also of interest to coffee producers, coffee authorities, importers, banks, customs authorities and shipping companies.

It reviews coffee trade contracts, logistics, insurance, arbitration, futures markets, risk management and hedging, financing and coffee quality control, as well as electronic commerce.

- ***The Ethiopia Coffee Quality Project*** (2003–2006) aims to improve quality, consistency and traceability of different coffees, to meet market demands. ITC provides support to cupping laboratories, training and marketing activities.
- ***Interactive coffee web site,*** the first of its kind in the coffee sector, will host a panel of experts to offer tailor-made answers, in three languages, to questions from the coffee industry in developing countries (from late 2004).

A Snapshot of the Industry

Three large producers

Coffee is produced in more than 50 countries. Annual production (110 million 60 kg bags, or 6–7 million tonnes) and export value (US$ 5–6 billion) are both twice that of cocoa and tea.

Three countries, Brazil, Colombia and Viet Nam, account for almost 60% of world production. Latin American countries combined account for 63%.

Brazil currently supplies about a third of world production but the proportion has varied significantly over the years: 48% in 1852; 75% in 1900; 19% in 1964, jumping to 46% a year later in 1965; and 26% in 1993. Brazil has a cost advantage due to high efficiency, for example, through automatic harvesting and irrigation. Frost and drought have been the main causes for fluctuations in production, with a corresponding influence on world prices.

Viet Nam entered the scene in the late 1980s. It increased production from around 500,000 bags in 1986 to about 12 million bags yearly since 2000 — around 11% of world supply. Almost all coffee from Viet Nam is robusta.

Annual average coffee production

2000–2003 in million 60 kg bags

Country	Arabica	Robusta	Total	
Brazil	29	7	36	
Colombia	12	–	12	
Mexico	5	–	5	
Guatemala	4	–	4	
Others, Latin America	12	1	13	
Latin America	62	8	70	63%
Ethiopia	4	–	4	
Côte d'Ivoire	–	3	3	
Uganda	–	3	3	
Others, Africa	3	2	5	
Africa	7	8	15	13%
Viet Nam	–	12	12	
Indonesia	1	5	6	
India	2	3	5	
Others, Asia/Pacific	1	2	3	
Asia/Pacific	4	22	26	24%
World total	73	38	111	
	65%	35%	100%	

Source: Data is primarily from ITC's *Coffee — An exporter's guide* and the ICO. Figures are rounded to show magnitudes and trends in recent years rather than details. "–" means less than 0.5 million 60 kg bags.

Consumer profiles

Country	Million 60 kg bags	Arabica/robusta ratio	Kg. per capita 2001–2002
United States	19	76/24	4.0
Canada	4	75/25*	4.7
Germany	11	76/24	6.7
France	6	50/50*	5.4
Italy	5	56/44	5.4
United Kingdom	2	50/50*	2.2
Nordic countries	4	96/4	9.3
Japan	7	73/26	3.2
Russian Federation	2	35/65*	0.6
Brazil	14	65/35	4.0

* Figures for countries with high imports of blends are estimates.

"Nordic countries" refer to Denmark, Finland, Iceland, Norway and Sweden, which have about 20 million inhabitants combined with very similar profiles for coffee consumption.

Colombia also produces about 12 million bags per year, all of it arabica.

Consumer profiles vary

The Nordic countries have the world's highest coffee consumption per capita with close to 10 kg per year, almost all of it being arabica. The United States is the world's largest market, but the annual per capita consumption is much lower. It has dropped during the last 30 to 40 years from about 7 kg to 4 kg. It is noteworthy that Brazil is the second largest market in the world and has a per capita consumption as high as that of the United States.

But coffee is not just coffee! Robusta makes up around 24% of consumption in the United States and Germany — up from around 13% in 1990. In some countries robusta now makes up 50% or more of consumption.

The meaning of "coffee price"

The price for coffee is usually expressed in US$ per pound (lb.), FOB (free on board) as agreed between an exporter and an importer. The dominating benchmark is the price of the "C" contract for a well-defined minimum-quality arabica coffee traded at the New York Board of Trade (NYBOT).

Other common references are the price for standard robusta coffee contracts traded at the London International Financial and Futures and Options Exchange (LIFFE) and the International Coffee Organization (ICO) composite indicator price based on a basket of four types of coffee calculated by the ICO.

Coffee prices varied significantly in the 1990s, but the price for the "C" contract was, on average, twice the level of today's price. On 29 April 2004, the three benchmark prices were:

- NYBOT — 70.10 US cents/lb. FOB (arabica)
- LIFFE — 32.75 US cents/lb. FOB (robusta)
- ICO — 58.18 US cents/lb. FOB (basket of four coffees)

For several years, fair-trade organizations have used US$ 1.26 per lb. as the minimum price for the arabica quality currently traded at around US$ 0.70. Farmers/producers are typically paid about 60% to 70% of the FOB price. The percentage depends on several factors, including the ownership of processing facilities, services provided by others and government policies.

Standard contracts and futures markets

Most of the international trade of coffee is based on standard contracts from the European Coffee Federation (ECF) or the Green Coffee Association (GCA) in the United States. Seller and buyer must agree on quantity, quality, packing, shipment, price and payment conditions. Parallel to this physical market is the futures market, also known as the commodity exchange or terminal market.

The primary purpose of the futures market is to transfer the price risk of a commodity from those who do not want to accept it (the above-mentioned sellers and buyers of coffee — "hedgers") to those who do accept the risk against a premium ("speculators").

The main futures markets for coffee are NYBOT, which is the parent company of the Coffee, Sugar and Cocoa Exchange (CSCE) for arabica coffee and LIFFE for robusta. Smaller futures markets for coffee are found in Brazil, France, India and Japan.

Trading houses and roasters

Five international coffee trading houses cover about 40% of the total volume of green coffee imports worldwide (in alphabetical order): Dreyfus (France); EDF Man/Mercon (UK); Esteve (Brazil); Neumann (Germany); and VOLCAFE (Switzerland).

Ten roasters account for 60% to 65% of all sales of processed coffee, most of it sold under brand names. The four largest groups are (in alphabetical order): Kraft Foods (USA); Nestlé (Switzerland); Procter & Gamble (USA); Sara Lee/DE (USA/The Netherlands). ◗

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