

Background paper for the
**Competitive Commercial Agriculture in Sub-Saharan
Africa (CCAA) Study**

**Sugar
International Market Profile**

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Sugar: International Market Profile

1 Introduction

The international sugar market is one of the most highly distorted agricultural commodity markets. Raw and refined sugar markets are generally characterized by significant and widespread domestic support and trade distorting policies, such as guaranteed minimum payments to producers, production and marketing controls (quotas), state-regulated retail prices, tariffs, import quotas and export subsidies. Although current world sugar prices have largely retreated from the 25-year highs reached in February 2006, the market remains particularly susceptible to large demand swings and price volatility. Generally, international sugar prices have generally trended downward as the production of traditional importing countries increased, largely due to domestic support measures.

International trade is largely defined by preferential trade agreements in which sugar-producing countries enjoy access to the higher priced domestic markets of the EU or USA through preferential access. Trade under preferential agreements is very important to the sugar sectors of many developing countries. Sugar trade between African Caribbean and Pacific countries (ACP) and the European Union, for example, is regulated by two agreements: the ACP/EU Sugar Protocol and the Agreement on Special Preferential Sugar (SPS). Other significant trade agreements in international sugar markets include the Everything But Arms (EBA) initiative, Caribbean Basin Initiative (CBI), African Growth and Opportunity Act (USA), North American Free Trade Agreement (NAFTA), and the Southern Africa Customs Union (SACU). FAO studies have found that EU sugar policy reform implies an erosion of preferences for the ACP countries that export to the EU under the Sugar Protocol, with potential gains for LDCs due to the implementation of the EBA initiative, primarily over the medium to longer term.

Sugarcane offers production alternatives to food, such as feed, fibre and energy, particularly biofuels (sugar-based ethanol) and/or co-generation of electricity. Sugarcane is generally regarded as one of the most significant and efficient sources of biomass for biofuel production, and given expectations of rising oil prices, the considerable potential for expansions in production for biofuel feedstock has resulted in a heightened focus on sugar as an internationally traded commodity. Strong linkages between world sugar and oil prices have emerged in recent years, driven in part by the relationships between sugar as the primary ethanol feedstock in Brazil, the most dominant producer and exporter of both sugar and ethanol in the world.

A wide range of environmental and social issues are connected with sugarcane production and processing, and sugarcane growers, processors, plus energy and food companies, are seeking ways to address concerns related to sugar production, biofuels and sustainability.¹ Continued

¹ See draft ToR, IFC Technical Assistance Project, on the Preparation of Guidance Document on Good Management Practices for Sugarcane, based on the a multi-stakeholder Better Sugarcane Initiative (BSI) created in June 2005 to capture the interests of a wide range of stakeholders in the sugarcane sector including traders, investors, sellers of branded sugar-containing products, banks, researchers, environmental and social concerns of civil society, and sugarcane growing interests from major world growing areas. The BSI approach is to develop internationally-applicable guidelines to define a sustainable approach to growing and processing sugarcane. The initiative complements the IFC Biodiversity and Agricultural Commodities Program (BACP), funded by the Global Environment Fund (GEF), aimed at reducing habitat destruction by leveraging market forces at all levels of the value chain in order

domestic support measures, highly regulated trade and uncertain future policy scenarios (continued price supports for sugar production or preferential trade agreements) may have constrained opportunities for capital investment in biofuels and other renewable energy sources. For countries with the need to diversify or modernize cane sectors to focus on feedstock potential, new forms of public and private cooperation and partnership are necessary.

2 Market Structure

2.1 Production

More than 130 countries produce either sugarcane or sugarbeet, and ten of these produce sugar from both cane and beet crops.² Sugarcane, on average, accounts for 75 to 80 percent of global production per year, and developing countries produce about 70 percent of total global output. Production has become increasingly concentrated since 1980, when the top ten producing countries accounted for 56 percent of global output compared to 2004, when the top ten accounted for 69 percent.³

Production		Consumption	
1 Brazil	28.13	1 India	20.11
2 EU	21.70	2 EU	16.76
3 India	15.22	3 China	11.79
4 China	9.79	4 Brazil	10.95
5 USA	6.78	5 USA	9.25
6 Mexico	5.62	6 Russian Fed	6.60
7 Australia	5.39	7 Mexico	4.88
8 Thailand	4.59	8 Pakistan	4.08
9 Pakistan	2.84	9 Indonesia	4.05
10 Russian Fed	2.72	10 Egypt	2.67
Total	102.78	Total	91.14
World Total	141.31	World Total	141.31
Percent	73%	Percent	64%

Source: ISO Sugar Yearbook 2005

The largest sugar producing countries in the world consist of both beet and cane sugar producers, which combined account for more than 70 percent of global output (see Table 1). Brazil, Australia and Thailand, included amongst the list of the top ten sugar producing countries from sugarcane, are also considered amongst the lowest cost and efficient of global sugar producers. All three are also ranked amongst the top ten sugar exporting countries. Sugar output in the United States, China and Pakistan is derived from both sugarbeet and

to mainstream the adoption of Good Management Practices for various commodities. Sugar is one of the primary commodities covered by the BACP.

² China, Ecuador, Egypt, Honduras, Islamic Republic of Iran, Japan, Mexico, Morocco, Pakistan and the United States produce sugar from both cane and beet, according to FAOStat data (2004).

³ Top ten sugar exporting countries (on average, raw equivalent) include Brazil, the EU, Australia, Thailand, Cuba, Guatemala, India, South Africa, Turkey and Colombia. Sugar: policy insights from analysis of sugar sector reform, FAO Trade Policy Briefs, FAO Rome, 2003.

sugarcane crops. Domestic production in the EU and the Russian Federation is derived from sugarbeet.

Sugar production in developed countries is growing very slowly, with the International Sugar Organization (ISO) estimating growth at less than one percent per year over the past decade. According to the ISO, the proportion of global sugar output attributable to developed countries is on the decline, from 32 percent in 1989 to 25 in 2005. Further decline is likely given the reform of the EU sugar regime that will not only reduce EU output, but also the availability of EU refined sugar exports to the global market. Australia is the only developed country in which sugar plays a significant – although declining- role in the national trade balance. Generally, amongst the largest developing country producers, average growth is nearly 3.4 percent per year, led by Brazil, India, China, Mexico and Thailand. Production in China, Mexico and India is mostly dedicated to domestic demand. Sugar accounts for a relatively small share of overall GDP in these countries, however, due to diversified economies and growth in other sectors. Sugar output in Brazil, where average annual growth rates exceed seven percent, more than domestic consumption of sugar and ethanol combined, have resulted in surplus supply directed to global export markets.⁴

Sugar Production in LDCs: Focus on Sub-Saharan Africa

Sugar production in LDCs is growing rapidly. Annual growth in sugar production in LDCs has averaged more than five percent - the highest amongst all groups of developing countries – although from a relatively small baseline. Growth is expected to continue in the LDC sugar-producing countries given increased transitional EBA sugar quota access and zero-duty access after 2009. LDC sugar production was 1.98 million tons (raw equivalent) in 1996/97, increasing to 3.11 million tons by 2005/2006. Sudan, Ethiopia, Tanzania, Mozambique, Zambia, Malawi and Uganda account for 75 percent of total sugar production for all LDCs. Sudan is the largest sugar producing LDC, with the most rapid production growth year-on-year noted for Mozambique, at almost 30 percent, and Ethiopia, Myanmar and Tanzania, around 10 percent for each country. Sugar export revenues have doubled in the case of Malawi, with sugar currently contributing some three percent of GDP, and also in the case of Zambia, where sugar now contributes one percent. Economic incentives other than the EBA access exist that should support further expansion in LDC sugar production and processing: high sugar yields, long milling campaigns (8 to 190 months), low labor and transportation costs, low processing (ex-factory) costs. Some reports indicate that sugar production costs in Malawi, Zambia and Mozambique are estimated to be some of the lowest in the world, potentially competitive to cost structures in Australia, Brazil, Guatemala and Thailand – considered the most cost effective and competitive sugar producing countries in the world.

Excerpt from Sugar and Economic Development, ISO London, 2006

2.2 Consumption

Developing countries account for 67 percent of global sugar consumption, and are expected to be the primary sources of future demand growth, particularly in Asia. Global consumption continues to expand, averaging between 1.5 to 2 percent, driven largely by rising incomes, population growth and shifting dietary patterns.

⁴ Sugar and Economic Development, ISO MECAS (06)17, London, 2006.

The top ten sugar consuming countries account for 64 percent of global sugar consumption, largely based on population balance, particularly in the case of the EU, and the United States, where sugar demand is largely saturated and mostly keeping pace with population growth rates. Sugar consumption is only one part of total sweetener consumption in the case of the United States, where more high-fructose (corn-based) sweetener is consumed annually per capita than sugar. Globally, sugar consumption has continued to grow over the past decade, from 20.7 to 23.2 kgs, driven primarily by higher population and income growth in developing countries, particularly those in the Far East. Global trends toward more westernized diets in many developing countries have resulted in emerging dietary patterns that include more sugar-containing and processed foods, as well as meat and dairy products.

Table 2 - World Production, Consumption and Ending Stocks ---(thousand tons, raw equivalent)---					
Year	Production	Consumption	Ending Stocks	Per capita consumption kgs	ISA Daily Price⁵ US cents/lb
1995	117883	116422	54036	20.7	13.28
1996	125014	119963	59087	21.1	11.96
1997	124981	122333	61735	21.2	11.37
1998	125856	123199	64393	21.0	8.92
1999	134964	126606	72751	21.3	6.27
2000	130004	127337	72417	21.1	8.18
2001	130644	131687	74374	21.6	8.64
2002	142067	137659	78783	22.4	6.89
2003	148117	141347	85553	22.7	7.09
2004	147243	146685	86110	23.4	7.17
2005	141314	147405	80019	23.2	9.89

Source: ISO Sugar Yearbook 2005

2.3 International Trade

Key characteristics of the international sugar market

Cane sugar is the primary source of internationally traded sugar, as sugarbeets are grown and processed almost exclusively for internal domestic markets, and the most efficient sugarbeet processing technologies result in one-step production for refined (white food grade standard) sugar. Sugarcane is harvested and milled into raw sugar (non-food grade) to further refine at some later date or immediately refined into white (food grade) sugar.

Specifications for sugar purchases will vary according to the specific applications of the end users, with trade volumes and prices broadly categorized as raw or refined types of sugar. Sugar polarity, or degree of refining purity, is a measurement of the degree of purity of the sugar (based on molasses content), how close the color of the sugar is to pure white and

⁵ The International Sugar Agreement (ISA) Daily Price is an average of the New York Coffee and Sugar Exchange Number 11 Contract spot price and the London Daily Price (LDP), FOB Stowed Caribbean port (bulk raw sugar)

dextran content. Dextran is the fibrous content of the sugar that develops when sugarcane is cut during harvest, which tends to make refining the cane more difficult. Polarization is what distinguishes raw from refined sugar, with polarity at 100 percent signifying pure refined sugar. Raw sugar trades according to various polarity specifications, based upon the specific needs of refining and processing facilities as well as refinery sugar production costs. There are four general sugar product types traded in international markets based on polarity: refined (white) sugar; semi-refined or direct white (also called plantation white); very-high polarity raw sugar (VHP); and standard raw sugar. Polarity is also a key determinant of raw and refined sugar pricing.

Future contracts are the most critical element in global sugar pricing, although premiums or discounts based on origin, destination and product specifications, play an important role.⁶ Brazil dominates global trade in raw and refined sugars, and may become more dominant as the EU retreats as a major global supplier of high quality refined sugar due to the end of the EU export subsidy scheme following the ruling of a WTO panel, as well as EU reform of the sugar regime. The ability to forward finance purchases from exporters has become a key prerequisite of global sugar trade, and thus, often only the larger trade houses are able to pre-finance a significant proportion of sugar trade. Several large producing country origins export typically small volumes directly to end users, for example, Australia, Brazil and South Africa, while state-controlled import tendering systems remain in a number of countries in North Africa, the Middle East and Indonesia.

Global Sugar Trade

According to ISO data, world sugar trade averages some 46 million metric tons per year, with nearly 90 percent based on ocean or seaborne trade. Raw sugar accounts for more than 50 percent of internationally traded volumes. Nearly 12 million tons of global raw sugar trade is conducted under preferential agreements. Although many countries produce sugar, ten countries dominate global raw sugar exports, with Brazil, Australia, Thailand, Cuba, Guatemala, South Africa, Mauritius, Colombia, El Salvador and Fiji, accounting for nearly 90 percent of global export trade. Brazil, as the largest producing and exporting country in the world, dominates world trade, accounting for 51 percent of global export trade in 2005, up from 21 percent in 2000 and evidence of the significant expansion of the sugar-ethanol complex in Brazil over the past 10 years. The Russian Federation, EU-25, United States, South Korea and Japan are the world's largest importing nations, although India also emerged as an important importer of raw sugar in 2004 and 2005.

Preferential trade agreements

There are two major preferential trade agreements that govern raw sugar imports by the EU and the United States, although preferential arrangements also exist between Cuba and China.⁷ Globally, preferential trade typically accounts for approximately 4.5 million metric tons of global trade, with nearly all raw sugar trade by ocean going vessel, while a large part of refined sugar trade is based on land transport.

⁶ International sugar market prices can be related futures markets, for raw sugar through the New York Coffee and Sugar Exchange Contract Number 11 and for refined sugar through the London LIFFE Sugar Contract Number 5. Contract terms for the #11 and #5 are included in this report on pages 14 and 15.

⁷ Sugar trade under regional trade agreements are not considered preferential trade in terms of the international market, and thus will not be addressed in this report.

The EU has traditionally imported nearly 1.3 million tones of raw sugar under the African, Caribbean, Pacific (ACP) Sugar Protocol, plus additional volumes as necessary to supplement internal EU market needs under the Special Preferential Sugar (SPS) agreement. The Sugar Protocol is a trade agreement of indefinite duration in which the EU agreed to purchase and import specific quantities of cane sugar (raw or refined) from ACP countries at preferential (internal) prices. The ACP group consists of 17 countries, eight of which are also considered Least Developed Countries (LDCs), that hold duty free quota access totaling 1.3 million metric tons.⁸ For most ACP Sugar Protocol countries, the socio-economic contribution of sugar production and trade is very significant, providing direct and indirect employment and livelihoods opportunities for millions of people. For example, sugar accounts for more than 17 percent of GDP in Guyana, 24 percent in Swaziland, and more than 5 percent in Fiji.⁹

Reform of the EU sugar regime reduces the preferential price received by ACP sugar exporters by 36 percent over four years, starting with the 2006/2007 marketing year.¹⁰ Export revenues to ACP countries are expected to decline 56 percent, from EUR 524 per metric ton to 335 per metric ton CIF basis, by 2009/2010. The ISO estimates that the loss in ACP Sugar Protocol export earnings could total EUR 462 million between 2006 and 2010. Mauritius, Fiji and Guyana are expected to experience the largest decrease in export earnings due to EU sugar reform.¹¹ Transitional programmes and monetary compensation from the EU through Economic Partnership Agreements (EPAs) is expected to mitigate the loss of export earnings due to EU sugar reform and loss of preferential access.

Residual sugar access formally granted ACP exporters under the phase-out of the SPS, will also be replaced by increased access for LDC sugar exporters under Everything-But-Arms (EBA) transitional quotas. This transitional quota increases from 74 185 tons in 2001/2002 to 197 335 tons in 2008/2009, at which point sugar exports from LDCs will be granted duty-free access to the EU sugar market under the EBA trade agreement. There are, however, provisional constraints remain on year-to-year increases in export volumes of zero-duty raw sugar imports for refining starting 2009/2010.

The other major preferential trade agreement for raw sugar is the United States Tariff Rate Import Quota (TRQ). The US TRQ allocates approximately 1.7 million metric tons of raw sugar to 40 sugar supplying developing countries, with the exception of the TRQ access granted Australia, plus 252 954 metric tons allocated to Mexico under the North American Free Trade Agreement (NAFTA) and 87 720 metric tons allocated to El Salvador, Guatemala, Honduras and Nicaragua under the Central American Free Trade Agreement (CAFTA). Raw cane sugar, refined sugar, sugar syrups, and specialty sugars enter the United States primarily under two tariff-rate quotas (TRQs), under which U.S. importers pay either a nominal or zero duty.¹² Sugar imports under the Caribbean Basin Economic Recovery Act, the Andean Trade

⁸ The ACP Sugar Group signatory countries include Barbados, Belize, Congo, Cote d'Ivoire, Fiji, Guyana, Jamaica, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Swaziland, Tanzania, Trinidad and Tobago, Zambia and Zimbabwe. St Kitts and Nevis was one of the original 18 member states of the ACP Sugar Group until 2005, when the sugar industry closed.

⁹ The ACP Countries and the Reform of the EU Sugar Regime, Background Document for the Press, June 2005, ACP Sugar Group (www.acpsugar.org), and FAO.

¹⁰ More recent information on EU sugar regime reform and transitional programmes, refer to Forthcoming Changes in the EU Banana/Sugar Markets: A Menu of Options for an Effective EU Transitional Package, Gillson, Hewitt and Page, Overseas Development Institute, London, 2005.

¹¹ The loss of export earnings from preferential prices will be exacerbated by the phase-out of the SPS quotas, additional access granted when Finland and Portugal acceded to the EU at 85 percent of EU preferential prices.

¹² For more information on the US Sugar Programme, TRQ, HTS codes and speciality sugar products, refer to www.fas.usda.gov/info/factsheets/sugar.asp

Preference Act, and the US Generalized System of Preferences also enter at a zero duty. The U.S. Trade Representative (USTR) allocates the raw sugar TRQ among supplying countries, currently using a formula based on share of exports to the United States between 1975 and 1981.

Table 3 - Top 10 Exporters of Raw Sugar (metric tons, raw equivalent)

Countries	2000	2001	2002	2003	2004	2005
Brazil	4,344,075	7,085,072	8,132,267	9,332,148	10,846,709	12,944,549
Australia	3,735,339	3,453,000	3,783,160	3,944,590	4,203,743	4,086,059
Thailand	2,415,119	2,238,634	2,136,541	2,747,276	2,328,257	1,581,482
Cuba	3,417,820	2,925,930	3,067,822	1,788,372	1,937,960	769,503
Guatemala	1,094,383	1,276,398	1,097,057	996,216	881,836	1,351,554
South Africa	1,111,068	1,201,747	599,152	752,071	603,675	852,350
Mauritius	382,029	633,565	605,880	517,287	583,529	539,316
Colombia	687,303	628,267	625,506	633,809	567,502	403,711
El Salvador	262,923	306,818	245,960	275,777	287,820	349,305
Fiji	330,296	249,351	286,555	273,756	261,677	303,039
Total	17,780,355	19,998,782	20,579,900	21,261,302	22,502,708	23,180,868
World	20,438,505	22,607,529	22,850,051	23,579,443	25,051,844	25,774,916
Percent	87.0	88.5	90.1	90.2	89.8	89.9

Source: ISO MECAS (06) 18

Table 4 - Top 10 Importers of Raw Sugar (metric tons, raw equivalent)

Countries	2000	2001	2002	2003	2004	2005
Russian Fed	4,782,978	5,707,921	4,531,512	4,112,330	2,609,634	2,893,000
EU25	1,662,234	1,654,926	1,860,260	1,690,514	1,991,742	1,864,948
USA	1,373,705	1,211,753	1,271,700	1,446,101	1,386,637	1,770,284
South Korea	1,462,457	1,515,710	1,516,818	1,560,939	1,597,236	1,623,437
India	0	0	0	0	1,215,688	1,546,310
Japan	1,603,589	1,568,095	1,507,549	1,509,044	1,431,036	1,372,277
Malaysia	1,157,081	1,230,376	1,176,358	1,355,148	1,384,686	1,351,309
Algeria	42,296	71,031	170,026	479,016	627,228	1,345,377
Canada	1,115,549	1,142,011	1,145,150	1,414,188	1,081,589	1,247,900
China	595,515	1,019,119	1,061,872	648,843	997,502	1,203,667
Total	13,795,404	15,120,942	14,241,245	14,216,123	14,322,978	16,218,509
World	20,634,088	22,229,325	22,441,316	22,929,273	23,668,383	25,555,482
Percent	67%	68%	63%	62%	61%	63%

Source: ISO MECAS (06) 18

Major destinations for raw sugar are the Russian Federation, European Union, the United States, South Korea and Japan. Brazil is a key exporter to the Former Soviet Union (FSU), Middle East and North America. Far East origins, such as Thailand, supply a major portion of the deficit in the Far East as well as exports to North America, Western Europe and the Former Soviet Union. Sugar exports from Sub-Saharan Africa are typically directed to Western European destinations.

Global trade in refined sugar

The top ten exporters of refined sugar account for nearly 80 percent of global refined trade. The EU, Brazil and Thailand account for a major proportion of global trade, with sporadic entry with high volumes into the global refined market by India. As the largest white sugar exporter until 2006, the EU consistently exported to the Middle East and West Africa. Although the EU has been the major exporter of high quality refined sugar in past years, Brazil has steadily gained market share through exports of a lower quality white sugar. Large destination refineries in the Persian Gulf are increasingly important as domestic and regional suppliers of refined sugar. Destination refineries usually import high quality raw sugar (VHP) which helps defray refining costs. Globally, refined sugar import volumes are much less concentrated amongst the top ten importing countries than in raw sugar trade.

The role of quality in sugar trade

Trade in raw sugar is typically differentiated by polarity and color, based on ICUMSA ratings.¹³ Refineries pay premiums for raw sugar with polarity over 96 degrees.¹⁴ The higher the polarity, the less additional refining throughput is necessary, lowering overall refining costs. Payments of premiums above or below the notice price against the New York Number 11 raw sugar contract are determined through polarization samples upon delivery. A standard discount of 5.5 percent is charged against the contract price when the sampled raw sugar is between 95 to 96 polarity. Premiums are paid for polarity above the contract standard of 96 percent, ranging from 1.5 percent for 96 to 97 polarity to 3.79 percent for 99.3 percent polarity.¹⁵

Origin and quality typically differentiate refined sugar trade. The European Union was a consistent exporter of four to six million tons of high quality refined sugar to the world market, irrespective of world market prices for 25 years, due to EU subsidies of surplus domestic sugar. The export subsidies essentially shielded EU exporters from the need to capture sufficient refining margins in world prices received for their refined sugar, and ensured that the EU would become the primary supplier for nearly 60 percent – averaging four to six million tons - of total world trade in refined sugar. The WTO ruling against EU sugar export subsidies restricts total EU exports to an annual limit of 1.3 million tons from 2006/2007, and represents a serious structural shift in global refined markets.

Brazil emerged as a major refined sugar exporter in the mid-1990s, introducing very high polarity (VHP) that ranged (in terms of sucrose content, color and purity) between raw and refined sugar. VHP sugar must have a minimum 99.4 percent polarity. Brazilian cane refiners are generally able to produce a very high polarity, almost semi-refined, sugar very economically and efficiently, primarily due to co-production of ethanol and sugar. Brazil VHP sugar currently dominates world trade in raw sugar and has become benchmark for high quality raw sugar trade. Globally, an increasing number of suppliers, such as Australia, Thailand and

¹³ ICUMSA is a color grading scheme based on the recommendations of the International Commission for Uniform Methods of Sugar Analysis (ICUMSA). The highest quality sugar is rated 45 ICUMSA as the closest to pure white color, with any darker colors, such as semi-refined or raw sugars from Brazil or Thailand, rated 100 to 150 ICUMSA, priced at a discount to the lower ICUMSA ratings. For refined sugar according to EU standard quality white sugar specification of minimum 99.7 polarity and 45 ICUMSA.

¹⁴ 96 degree polarity could also be considered 96 percent pure sucrose.

¹⁵ Typical raw sugar quality varies by origin, with 99.9 percent polarity and 45 ICUMSA from the EU and South Africa, 99.7 to 99.8 percent polarity and 45 or 150 ICUMSA from Brazil, and 99.8 percent polarity and 45 or 100 ICUMSA from Thailand.

Central American countries, export VHP sugar. Large destination refineries in the Near and Middle East, West Africa and China have been constructed in recent years that focus on the cost savings associated with using high quality (VHP) raw sugar to reduce refining time (eliminate the affination process), as well as the growing demand in these regions for refined sugar due to population growth, increased incomes and shifting diets.

Countries	2000	2001	2002	2003	2004	2005
EU	6,203,304	6,059,598	4,713,201	5,055,950	4,292,528	6,657,225
Brazil	2,158,300	4,083,350	5,255,979	4,053,933	5,448,019	5,454,690
Thailand	1,926,255	1,125,388	2,067,285	2,737,482	2,564,825	1,723,743
Persian Gulf	713,623	684,762	946,998	956,610	1,532,820	981,401
Colombia	358,614	290,871	503,330	653,449	665,285	775,932
India	201,293	1,208,603	1,257,046	1,677,809	124,991	38,960
Belarus	276,785	268,684	324,232	321,511	758,426	523,603
South Africa	180,042	14,257	408,842	324,521	355,207	283,815
South Korea	315,534	320,770	316,993	310,657	315,739	321,591
Mexico	263,009	114,520	592,149	160,238	110,060	436,254
Total	12,596,759	14,170,803	16,386,055	16,252,160	16,167,900	17,197,214
World	16,067,315	18,549,494	20,655,729	21,452,159	20,830,441	22,113,225
Percent	78.4	76.4	79.3	75.8	77.6	77.8

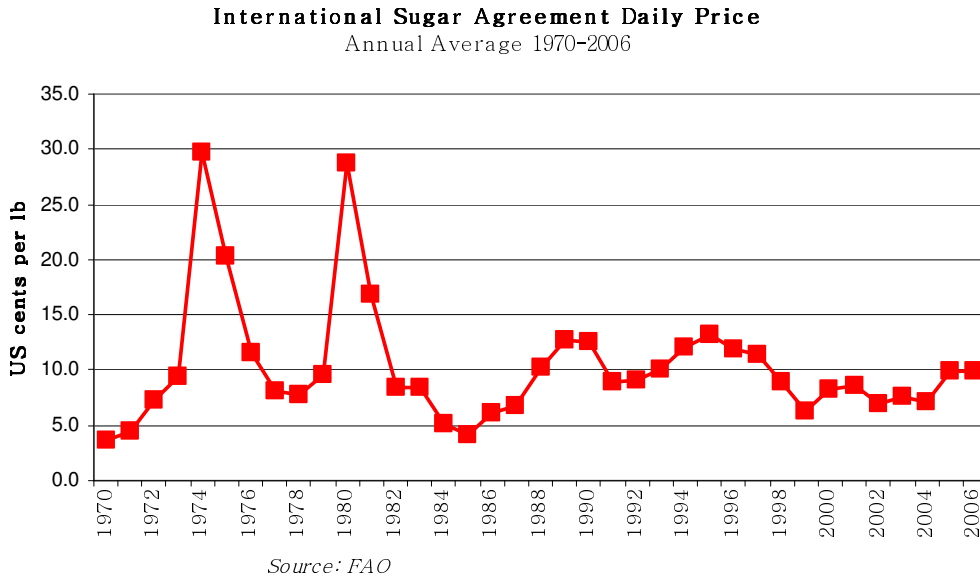
Source: ISO MECAS (06) 18

Countries	2000	2001	2002	2003	2004	2005
Indonesia	564,402	839,656	1,129,632	1,194,394	1,195,875	1,114,233
Syria	516,031	874,275	881,541	1,059,906	965,943	966,570
Pakistan	824,674	319,248	5,698	10,498	11,312	928,000
Russian Fed	505,325	295,674	469,099	836,130	1,018,233	679,567
Bangladesh	396,857	425,193	395,662	579,264	898,560	677,524
Persian Gulf	579,268	923,809	495,353	334,405	691,179	594,953
Algeria	913,550	900,301	952,373	597,627	572,033	574,725
Yemen	531,609	425,166	458,437	668,433	409,108	561,909
Sri Lanka	424,310	454,239	529,921	564,740	534,843	556,154
EU25	572,714	550,425	796,009	890,567	441,852	551,894
Total	5,828,740	6,007,986	6,113,725	6,735,964	6,738,938	7,205,529
World	14,328,798	15,656,311	18,199,172	18,928,661	18,808,088	19,236,451
Percent	41%	38%	34%	36%	36%	37%

Source: ISO MECAS (06) 18

2.4 International market prices

Generally, there are two broad considerations in the determination of global sugar prices - the related raw or refined sugar futures contract price together with the relative premium or discount. Spot or cash price is the indicative price for immediate delivery. The New York Contract Number 11 is widely used for settling maturing physical contracts as well as a world indicator price for sugar. The key indicator price for white sugar is the Contract Number 5 for refined FOB European ports. World sugar prices are volatile, and trade well below average global production costs (raw sugar).



ISA annual prices averaged 10.34 US cents per pound between 1986 and 1996. Global raw sugar prices generally declined, however, over the next decade as Brazil continued to emerge as the dominant world sugar exporter and prices averaged 8.79 US cents per pound. Brazil has the lowest production costs for sugar in the world, with reports indicating costs between four to five cents per pound, compared to a global average cost closer to 15 or 16 US cents per pound (LMC). Given the exportable surplus of Western Hemisphere suppliers and dominant position of Brazil, sugar from the Far East has tended to trade at a premium to Western Hemisphere sugar. As a traditionally sugar deficit region, the Far East tends to attract raw sugar trade flows from Latin America and the Caribbean. Thus, the 'Far East' premium is largely the freight advantage held by Far Eastern suppliers, such as Thailand, over Western Hemisphere suppliers.

An additional pricing consideration is the relationship between world raw and refined sugar prices, referred to as the raw-refined differential. This differential, averaging US 71.60 per ton in recent years according to ISO data, is very important for large destination refineries and toll refiners (refiners that charge a refining free to end users that originate their own raw sugar). Given the significant changes in the structure of the global refined sugar market, the refined premium may be more volatile as markets adjust to reduced availability of EU export volumes. However, over the longer term, the refined sugar premium may be pressured by excess refining capacity – particularly given reports of some 8.5 million tons of planned greenfield refineries or capacity expansions in the near to mid-term – compared to the

expected loss of 5.5 million tons of EU refined sugar exports over time due to EU sugar reform.

Freight rates are a key consideration in sugar pricing, particularly for trade in refined sugar which has been reliant on a decreasing number of small 'handysize' vessels of 10 000 to 40 000 tons to transport mostly bagged refined sugar. According to an ISO study, freight rates for bagged refined sugar shipped in containers tend to be lower than for bagged sugar shipped in conventional vessels, and currently some 20 percent of refined sugar is shipped in containers. This percentage may increase, however, given that refined sugar can be shipped easily and economically from the EU and Dubai in containers charging low backhaul rates for the return to the Far East region. Increasingly, raw sugar is shipped in larger vessels that help reduce costs per ton, as well as more economic handling as a bulk raw sugar product, versus bagged and smaller volumes of refined sugar. Generally, the trend in bulk raw sugar is toward large vessels, ranging from 40 000 to 60 000 tons (Handymax) and 60 000 to 80 000 tons (Panamax). However, vessels of this size require specialized terminals, equipment and deep draft port facilities – which may pose future challenges for raw sugar exporters and importers, and increase the importance of destination refinery trade as importer of raw sugar and exporter of refined.

3 Market Situation and Outlook

The global sugar market is complex and experiencing fundamental shifts in terms of the recent focus on sugar as a feedstock for ethanol, the loss of the EU as the major refined sugar supplier and loss of preferences by many traditional ACP sugar exporters due to EU sugar reform. At the national level, the range of sugar products and qualities is much more extensive than the product quality traded internationally, particularly for large industrial users and food processors. The emergence of VHP sugar exports from Brazil in the 1990s was an important development in global sugar markets, as it introduced a new type of sugar and supported the development of destination refineries, in North Africa and Middle East, particularly. Furthermore, now that the quality of raw sugar available to the market has become increasingly differentiated by polarity, other origins (such as Thailand) have had to take steps to become more efficient and improve their own refining processes.

Given the retraction of the EU from global refined sugar markets, and the dominant position of Brazil, refined sugar trade may fundamentally change, with less of a focus on global raw-refined differentials (refined premiums), and the possible emergence of regional premiums that address regional availabilities, refinery capacities and trends. The future role of destination refineries is very important, and Brazil, Thailand, Guatemala, Colombia and South Africa (possibly India) are expected to benefit from the decline in EU refined sugar exports.

Sugar should continue to play a key role in the development of the agricultural sectors of sugar-producing LDCs, many of which have attracted capital investment in either the expansion of current farmgate production, refining capacity or greenfielding sugarcane refineries. Rapid growth is already underway as some of the most efficient sugar-producing LDCs start to expand production and processing facilities to capitalize on duty-free access to EU markets under the EBA after 2009/2010. However, the ability of LDCs to access EU markets, at lower preferential prices post-EU sugar regime reform, will be constrained by their ability to expand domestic production, invest in infrastructure and export throughput facilities, and compete globally with lower cost competitors.

ANNEX: SUGAR PRICE CONTRACTS

NEW YORK RAW SUGAR CONTRACT NUMBER 11

The contract calls for delivery of cane sugar, stowed in bulk, FOB from any twenty-eight foreign countries of origin as well as the United States, deliverable under Sugar No. 11 Futures Contract shall be sound raw centrifugal cane sugar based on 96 degrees average polarization. Raw sugar is any crystallized sugar product from a cane sugar production facility delivered in bulk. Contract terms below are effective with the March 2007 delivery month and all future delivery months.

Contract Size	112,000 pounds (50 long tons)
Contract Months	March, May, July, October
Contract Settlement	Physical Delivery
Price Quotation	Cents per pound
Minimum Price Movement	1/100 cent/lb., equivalent to \$11.20 per contract.
Daily Price Limit	None
Last Trading Day	Last business day of the month preceding delivery month.
First Notice Day	1st business day after the last trading day.
Last Notice Day	1st business day after the last trading day.
Delivery/Settlement Terms	
Grade/Standards/Quality	Raw centrifugal cane sugar based on 96 degrees average polarization.
Deliverable Growths	Growths of Argentina, Australia, Barbados, Belize, Brazil, Colombia, Costa Rica, Dominican Republic, El Salvador, Ecuador, Fiji Islands, French Antilles, Guatemala, Honduras, India, Jamaica, Malawi, Mauritius, Mexico, Mozambique*,Nicaragua, Peru, Republic of the Philippines, South Africa, Swaziland, Taiwan, Thailand, Trinidad, United States, and Zimbabwe.*Mozambique becomes a deliverable origin beginning with the March 2007 contract.
Delivery Points	A port in the country of origin or in the case of landlocked countries, at a berth or anchorage in the customary port of export. Subject to minimum standards established by the Exchange's rules.

LONDON SUGAR CONTRACT NUMBER 5

Euronext-Liffe White Sugar Futures

Unit of trading	Fifty tons
Quality	White beet or cane crystal sugar or refined sugar of any origin of the crop current at the time of delivery, free running of regular grain size and fair average of the quality of deliveries made from the declared origin from such crop, with minimum polarization 99.8 degrees, moisture maximum 0.06%, and color maximum 45 units ICUMSA attenuation index (except that sugar originating in the EU shall satisfy the color specification set out or referred to in the ASSUC Rules), all at time of delivery to vessel at port.
Delivery months	March, May, August, October, December, such that eight delivery months are available for trading.
Price basis	US dollars and cents per ton FOB and stowed in vessel's hold at one of the following designated ports: Amsterdam, Antwerp, Bangkok/Kohsichang, Bilbao, Bremen, Buenaventura, Buenos Aires, Cadiz, Calais, Delfzijl, Dunkirk, Durban, Eemshaven, Flushing, Gdansk, Gdynia, Gijon, Guangzhou, Hamburg, Huangpu, Imbituba, Immingham, Inchon, Itajai, Jebel Ali, Laemchabang/ Sri Racha, Le Havre, Leixoes, Lisbon, Maceio, Marseilles, Matanzas, Natal, New Orleans, Paranagua, Penang, Port Kelang, Puerto Quetzal, Recife, Rosario, Rostock, Rotterdam, Rouen, Santander, Santos, Savannah, Shekou, Singapore, Szczecin, Ulsan, Vitoria1, Xiamen, Zeebrugge. Freight differentials, as from time-to-time determined and published by the Board, shall apply to any non-European port.
Minimum price movement (tick size and value)	10 cents per ton (\$5)
Last trading day	Sixteen calendar days preceding the first day of the delivery month (if not a business day then the first business day immediately preceding).
Notice day/Tender day	Fifteen calendar days preceding the first day of the delivery period (if not a business day then the first business day following)
Tender period	The specified delivery month and the following month
Trading hours	09:45 - 17:30