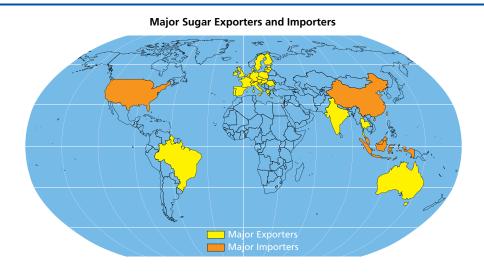
SUGAR



PRICES

Ample supplies to weigh on international sugar price quotations

Since the release of the last issue of the Food Outlook report in November 2018, international sugar prices, as measured by the **International Sugar Agreement's (ISA)** daily prices for raw sugar, have been moving within a narrow price band, ranging between US 12.71 cents per pound (lb)¹ and US 12.90 cents/lb.² Overall, the ISA daily

² Equivalent to USD 284.4 per metric tonne.



prices averaged US 12.52 cents/lb in 2018, which is down by about 22 percent from 2017. The slide is attributed to large expansions in production capacity, notably in India and Thailand, boosted by remunerative returns that prevailed between 2011 and 2016. After averaging US 12.90 cents/lb in November 2018, sugar quotations increased for two successive months, before retreating in March 2019 to US 12.71 cents/lb, and increasing to US 12.81 cents /lb in April 2019. Consequently, over the period January-April 2019, prices were down 3.2 percent compared to the same period in 2018. Reports of large exportable surpluses in India and Thailand, coupled with greater production in traditional sugar importing countries, have put further downward pressure on international prices so far in 2019. Firmer estimates indicating a reduction in sugar production in Brazil in 2018/19, as well as expectations of higher imports by **China**, were not sufficient to reverse the tendency of falling prices.

At these current levels, international sugar prices are below production costs for the vast majority of world producers, including Brazil, where cost of production hovers around US 13.5 cents/lb and US 15 cents/lb. At the same time, the rate of consumption growth that could lift prices is not happening, due to the structural changes taking place on the demand side of the market. These are evidenced by slower population growth and a shift in the attitude of consumers and governments towards sugar consumption. The supply side of the market will therefore have to adjust quite markedly for prices to return

¹ Equivalent to USD 280.2 per metric tonne.

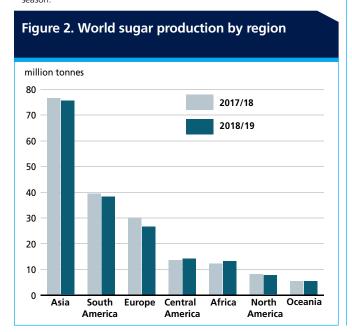
to more remunerative levels. Given the perennial nature of sugarcane crops, the shift in supply will take some time to materialize. Nonetheless, preliminary indications for the 2019/2020 season suggest that world sugar consumption will surpass production, though by a relatively small margin, after two consecutive years of a production surplus. This could help to bring about a more balanced market from the start of next season.

PRODUCTION³

World sugar production to expand significantly in 2017/18

World sugar production is estimated by FAO to reach 179.3 million tonnes in 2018/19 (October/September), a 2.0 percent decline from the 2017/18 record crop. Unfavourable weather conditions, coupled with a decline in planted areas, spurred by shifts to other alternative crops, are expected to lead to lower output in some of the key producing countries, the most notable case being Brazil. The expected fall in world sugar output would mean that production could surpass consumption by 2.6 million tonnes, compared to a 9.8 million tonne production surplus recorded in 2017/2018, the largest in history. The bulk of the decline in world output in 2018/19 is anticipated to occur in the developed countries, where production is forecast to retract by about 3.8 million tonnes, while in the developing countries it is predicted to increase by 100 000 tonnes with respect to the previous season.

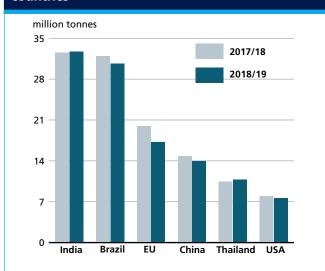
³ Sugar production figures refer to centrifugal sugar derived from sugarcane or beet, expressed in raw equivalents. Data relate to the October/September reason.



In South America, the latest estimates show that production is expected to decline in 2018/19, amid generally unfavourable weather conditions and a higher share of the sugarcane harvest being used to produce ethanol (Brazil). In fact, sugar output in **Brazil** is forecast to decrease, following dry weather conditions that affected the country's centre-south main producing region. A decline in the rate of renewal of sugarcane fields, coupled with reduced use of pesticides and fertilizers due to financial constraints, had further contributed to a contraction in sugarcane output. Brazil's production is now estimated at 30.5 million tonnes, down 1.3 million tonnes from the volume realized in 2017/18. About 65 percent of the sugarcane harvest is expected to be used to produce ethanol – more than last season, when sugar mills converted about 53.1 percent of the crop into ethanol. Brazil's sugar output is influenced by changes in the ethanol parity-price, which is the raw sugar price below which it becomes more profitable to convert cane into ethanol. For 2018/19, and given current market conditions, FAO estimates the parity-price to hover around US 14 cents/ lb. Unless, crude oil prices fall below their current trading range (i.e. USD 60/barrel to USD 70/barrel), it is unlikely that more cane is used for sugar for the remainder of the season, or well into the next season. Elsewhere in South America, sugar production is anticipated to increase in Colombia, the region's second largest producer, and in **Peru**, as a result of favourable growing conditions that prevailed at the onset of the season in the main producing regions. On the other hand, sugar output is anticipated to remain relatively stable in **Argentina**, amid extreme dry conditions during the early stages of the season.

Figure 3. Sugar production in major producing countries

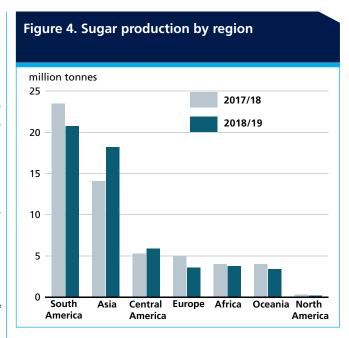
million tonnes



| Table 1. World sugar market at a glance | | | | |
|--|----------------|-----------------------|--------------------------|--|
| | 2016/17 | 2017/18 estim. | 2018/19 f'cast | Change: 2018/19 over 2017/18 |
| | million tonnes | | | % |
| WORLD BALANCE | | | | |
| Production | 169.2 | 183.0 | 179.3 | -2.0 |
| Trade | 65.3 | 55.4 | 55.1 | -0.6 |
| Total utilization | 170.5 | 173.2 | 176.1 | 1.7 |
| Ending stocks | 87.4 | 95.5 | 97.0 | 1.6 |
| SUPPLY AND DEMAND INDICATORS | | | | |
| Per caput food consumption | n: | | | |
| World (kg/yr) | 22.8 | 22.9 | 22.9 | 0.57 |
| LIFDC (kg/yr) | 14.7 | 14.9 | 14.9 | 1.74 |
| World stocks-to-use ratio (%) | 51.3 | 55.2 | 55.2 | -0.1 |
| ISA DAILY PRICE AVERAGE (US cents/lb) | 2017 | 2018 | 2019 Jan-Apr | Change: Jan-Apr 2019 over Jan-Apr 2018 % |
| | 16.01 | 12.52 | 12.84 | -3.39 |

In Central America and the Caribbean, 2018/19 estimates indicate that sugar production in **Mexico** will increase, following a relatively marked expansion of planted area to sugar cane (+5 percent). In **Guatemala**, despite strong competition from alternative crops, notably bananas, which led to a reduction in area harvested in recent years, sugar output in 2018/19 is foreseen to remain at about the same level as in the previous season, on the back of gains in sugar extraction rates. In **Cuba**, sugar production is set to increase by 43 percent in 2018/19, compared to 2017/18, reaching 1.5 million tonnes, as the sugar subsector recovers from the damage caused by Hurricane Irma in 2017. Better sugar recovery rates, coupled with a larger harvested area, account for the increase in 2018/19, as the restructuring of the subsector continues to attract new investments. As part of an ambitious objective to increase the use of bioenergy, the Government of Cuba has developed a plan to expand the country's capacity to produce electricity from sugarcane residues.

In *Africa*, 2018/19 sugar production is set to rise, prompted by continued area expansion and improved processing capacities. **Egypt**, **South Africa**, **Ethiopia** and **Mozambique** are anticipated to harvest larger crops, while output is expected to fall in **Mauritius** due to less than ideal weather conditions. The significant boost in sugar output in **Ethiopia** is the result of substantial expansion projects undertaken by the Government, with a declared strategy of achieving self-sufficiency. A total of six sugar mills are now operational in the country, with plans to expand their current capacity and also build new factories



in the near future. Sugar output in **South Africa** has recently been expanding, but at a moderate rate, as labour disputes and land reform challenges have limited any significant increase. In **Mozambique**, sugar production has expanded by an annual average rate of 10 percent over the past 10 years, driven by investment in irrigation and price incentives offered by trade opportunities in the region. Sugar production is forecast to increase further in 2018/19.

In Asia, output forecasts for 2018/19 have been revised a number of times since November 2018, and now point to a decline of 1.2 percent compared to the 2017/18 marketing season. The cutbacks in sugar output are attributed to **Japan** (-8.7 percent), **Pakistan** (-7.8 percent) and **Thailand** (-6.3 percent). By contrast, production is set to remain stable in **Turkey**, and to expand in **China**, Indonesia, the Philippines and Viet Nam. In India, the world's largest sugar producer for the second consecutive season, production is expected to be 400 000 tonnes above last season, as late rains did not end up delaying the start of the harvesting season. However, considerable uncertainties still persist regarding the final numbers. To address the supply glut situation that characterizes the domestic market in India, and to help sugar factories reduce their financial obligations towards farmers, the Government increased the minimum price for white sugar at the mill gate. Large cane arrears have been a recurrent feature of the Indian sugar subsector, resulting from a misalignment between the administered sugarcane prices and wholesale white sugar prices. Looking ahead, the greatest uncertainty concerns whether the significant surge in sugar output recorded in recent years represents a permanent shift or a short-lived phenomenon, mostly reflecting the effects of the recent subsidy measures. In

Thailand, unfavourable weather conditions throughout the growing season are expected to lead to a 6.3-percent reduction in the country's sugar output compared to the 2017/18 level. The decline is also underpinned by some shifts to other cultivations, notably rice, in the northeastern part of the country, in response to low sugarcane prices. For the moment, the temporary deregulation of the domestic sugar market, implemented on 15 January 2018 by the Government of Thailand, is not expected to have a negative impact on the sugar subsector. The deregulation calls for the elimination of the sugar price control and the sugar sales administration.

Sugar production in **China** is expected to increase in 2018/19, due to expansion in both sugarcane and beet planted areas, prompted by profitable returns. Favourable weather conditions also helped to boost cane yields, while direct subsidies provided by local governments should sustain additional gains in farm productivity. Production is foreseen to contract in Pakistan, amid an estimated 10 percent decline in planted area, as farmers shifted to alternative crops such as cotton and maize. During 2017/18, the Government of Pakistan introduced a freight subsidy of USD 97 per tonne in an effort to move excess production into the world market. By contrast, **Indonesia's** sugar output is forecast to rise from the 2017/18 level, with planted area and yields both set to increase. The area expansion over the past years occurred mainly in Central Java, Lampung and South Sulawesi. The expansion is largely attributed to remunerative domestic prices, sustained by buoyant demand for sugar by the food and beverage industries. In **Turkey**, the world's fifth largest sugar beet producer, production is not expected to surpass the level of last season. In 2017/18, sugar output rose to 2.7 million tonnes, following a 3-percent growth in cultivated beet area, driven by higher procurement beet prices.

In Europe, FAO's latest estimates for the EU point to a significant cutback in sugar production, amid dry weather conditions during the growing season, which had a negative impact on beet yields. However, the area planted to sugar beet is estimated to remain at about the same level as last season. With the elimination of production quotas, the EU is predicted to become self-sufficient in sugar in the medium term, while the price gap between EU white sugar and world white sugar is anticipated to tighten, as witnessed so far during the 2018/19 season. Nevertheless, there are two main downside risks for the subsector. First, the significant decline in profitability at the mill level has renewed expectations of consolidation in the sector, as economies of scale become critical. Indeed, the average price for white sugar fell by 18.5 percent between

February 2018 and February 2019. Second, the ban on certain neonicotinoids is set to create significant challenges at farm level, as producers will have to look for alternative insecticides to maintain remunerative yield levels. Sugar production in the **Russian Federation** in 2018/19 is expected to fall by 8.6 percent year-on-year, on the back of reduced planted area and lower beet yields. The beet sugar enterprise has been relatively profitable in recent years, yet growth remains hampered by high input costs. Likewise, sugar production in **Ukraine** is expected to decline from last season's level, as planted area has shrunk and yields are reduced due to low soil moisture. The sugar value chain in **Ukraine** is highly integrated, with large agribusinesses controlling the entire production process from farm to retail sales. By contrast, sugar production is anticipated to increase in Australia, as favourable weather conditions and higher sucrose content are set to boost output. In the rest of the world, production in the United States of America is forecast to retract from its 2017/2018 record level, on the back of lower beet production due to cold temperature that hit the growing region of the northern Midwest. The expected output increase from cane sugar is unlikely to offset the declines in beet sugar, and this should result in a substantial reduction in the stock-to-use ratio.

UTILIZATION

Per capita sugar consumption to increase in 2018/19

Global sugar consumption is forecast to reach 176.1 million tonnes in 2018/19, up around 3 million tonnes, or 1.7 percent, from 2017/18 and slightly above the 10-year trend. Large supply availabilities and lower domestic sugar prices are foreseen to underpin increases in per capita sugar intake in 2018/19. Domestic prices are already falling in several countries, particularly in the EU, China, the Russian Federation, Mexico and India, although in the latter case, the Government recently announced an increase in the minimum white sugar prices. One noticeable exception is **Brazil**, where domestic prices have been rising over the past year in both local currency (Real) and US dollar terms. Under current prospects, world per capita sugar consumption is set to rise slightly, from 22.9 kg in 2017/18 to 23.1 kg in 2018/19. In developing countries, aggregate sugar use is estimated to expand from 131.3 million tonnes to 133.5 million tonnes, equivalent to 75.8 percent of the world total use, underpinned by expansion in Africa, Asia and the Caribbean. In the generally saturated markets of the developed countries, both total and per capita consumption are estimated to remain relatively unchanged.

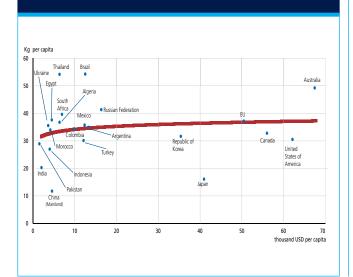
Three elements of uncertainty underpin the outlook on the consumption side. First, should the economic outlook for 2019 deteriorate further, current forecasts for sugar consumption growth may turn out to be lower than anticipated. Strong economic growth usually leads to dynamic derived demand for sugar, as beverages and food processing sectors – which account for the bulk of aggregate sugar use – are positively influenced by positive economic conditions. Second, a number of countries have introduced legislation to tax sugar-sweetened beverages. At this point, the impact of these taxes on consumer demand for beverages, and hence sugar, remains ambiguous, as manufactures can decide either to absorb the tax or modify their product formulas to retain consumers. Nonetheless, both **Thailand** and **South Africa** have reported a decline in the use of sugar by the beverages subsector since the introduction of the sugar excise tax. More evidence on this will become apparent over time. Finally, movements in the value of currencies of major sugar net importing countries with respect to the US dollar can alter the cost of sugar imports, and hence overall consumption.

TRADE

Sugar trade to contract in 2018/19

The forecast for world trade in sugar in 2018/19 (October/ September) is pegged at 55.1 million tonnes, slightly down from the previous season. A key feature of international sugar trade in 2018/19 is the greater availability of supplies in the traditional largest importers, including **China, Indonesia** and the **United States of America**. Occasional large importers, such as **India**, are also expected to produce substantial quantities of sugar. **Brazil**,

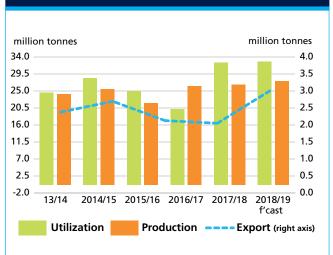
Figure 5. Sugar consumption per capita, 2018



although not expected to export more than in 2017/18 given the cutbacks in sugar production, is set to supply about 35 percent of world exports in 2018/19. The bulk of Brazilian exports is in raw form and mainly shipped to the markets of **Algeria**, **Bangladesh** and **Egypt**. However, the final volume that Brazil will export will depend on the quantity of sugarcane processed into ethanol, especially given the tighter relationship between gasoline and hydrous ethanol domestic prices. In addition, any further appreciation of the Brazilian *Real* against the US dollar could limit Brazil's exports beyond current estimates.

Propelled by large accumulated inventories, **Thailand**, the world's second largest sugar exporter, is expected to consolidate its position and raise its foreign sales from about 7.1 million tonnes in 2017/18 to 10 million tonnes in 2018/19. Around 60 percent of the country's exports are forecast to be shipped in raw form to neighbouring countries, including Indonesia, Cambodia, China and Japan. Thai exports to the Association of Southeast Asian Nations (ASEAN) countries benefit from duty free access, with the exception of Indonesia, Myanmar and the **Philippines**, where a tariff of 5 percent is charged. Likewise, as a result of relatively elevated stocks, as well as recently approved measures to cut the export duty on sugar (from 20 percent to 0 percent), shipments from India are foreseen to rise by over 46 percent. The objective of the support measures, most notably a transportation subsidy, is to provide sugar millers with additional cash flow through export revenues, which can help to address accumulating sugarcane arrears. India's exports are composed of raw sugar and geared towards markets in Africa and Asia. **Brazil** and **Australia** recently asked the World Trade Organization (WTO) to begin a consultation with India

Figure 6. India: Sugar production and exports (million tonnes, raw value)

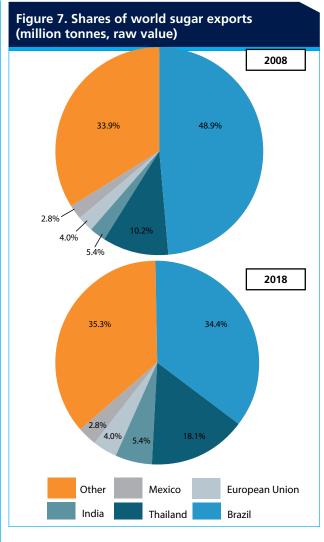


regarding its subsidy programme, claiming it distorts world sugar trade. Deliveries from **Australia**, the world's third largest raw sugar exporter, are forecast to decline to 3.1 million tonnes in 2018/19, down 16.8 percent from the previous season. The country is able to supply the world market with sugar throughout the year, supported by a vast network of bulk port terminals. The recently concluded free trade agreement between **Australia** and **Peru** provides **Australia** with a sugar duty-free quota access of 30 000 tonnes per year, increasing to 90 000 tonnes after 18 years. **Australia** and **Indonesia** signed a similar agreement, which could provide new trade opportunities for the Australian sugar industry.

After surging to 3.1 million tonnes in 2017/18, corresponding to a 136 percent increase from 2016/17, the **EU** sugar exports will likely retreat by 28.4 percent in 2018/19, on the back of the anticipated decline in production and low world sugar prices. On the other hand, sales by **Mexico** are anticipated to expand, underpinned by greater production and the market opportunities offered under the assigned maximum quota allotment of sugar to be exported to the **United States of America**. Exports by **Guatemala**, the second largest sugar exporter in *Latin* America and the Caribbean, are foreseen to remain about the same level as in 2017/18, supported by ample stock availabilities and competitive pricing. Sugar has become a key source of foreign exchange earnings for the country, which has increasingly focused on gaining market shares in the refined sugar segment. Deliveries from **Cuba** are also forecast to increase, following the bumper crop expected for 2018/19. The bulk of export sales are directed to China, as part of an export agreement between the two countries.

Imports by *Asian* countries are estimated to remain stable compared with 2017/18, given larger domestic availabilities, notably in **India**. Despite a larger sugar crop in 2018/19, greater sugar purchases are foreseen for **China**, where demand for sugar remains robust. Imports do not account for informal trade, which, as in the past, can constitute a sizeable volume. For 2018/19, **China** is expected to retain its rank as the world's largest sugar importer. Likewise, sugar imports by **Indonesia** are set to remain strong, underpinned by robust domestic demand, especially from the beverage and food processing industries. The Government of **Indonesia** regulates the level of sugar imports by allocating permits at the beginning of each year.

In *Europe*, imports by the **EU** are forecast to decline by 5.5 percent from the previous season, as the domestic market has become well supplied, following the abolition of the sugar production quota regime. With lower imports by the EU, duty-free preferential imports from Everything



but Arms (EBA) countries are expected to be halved, while the WTO's CXL quotas⁴ are most likely to remain unused. In the **Russian Federation**, as a result of declining domestic production, imports are anticipated to grow in 2018/19. However, any depreciation of the Russian Ruble against the US dollar (beyond current levels) could limit purchases. Belarus and Australia are the main suppliers to the Russian Federation. Imports by **Kenya** and **Morocco** are expected to fall, contrary to those by the **Sudan**, which are set to increase. Consignments to the Islamic Republic of Iran might go up, in view of the recent flooding that caused severe damage to sugarcane crops and sugar factories. The Government has already signalled its intention of importing up to 800 000 tonnes of sugar. In the rest of the world, imports by the **United States** of America, about half of which are managed through a tariff-rate quota system of 1.56 million tonnes for 2018/19, are set to contract, while African countries are expected to import less than last season, owing to anticipated gains in their sugar production.

⁴ CXL quotas result from a compensation agreement following the 1995 EU enlargement to account for traditional sugar imports from Austria, Finland and Sweden. The countries of origin of the sugar are mainly Brazil and Cuba.