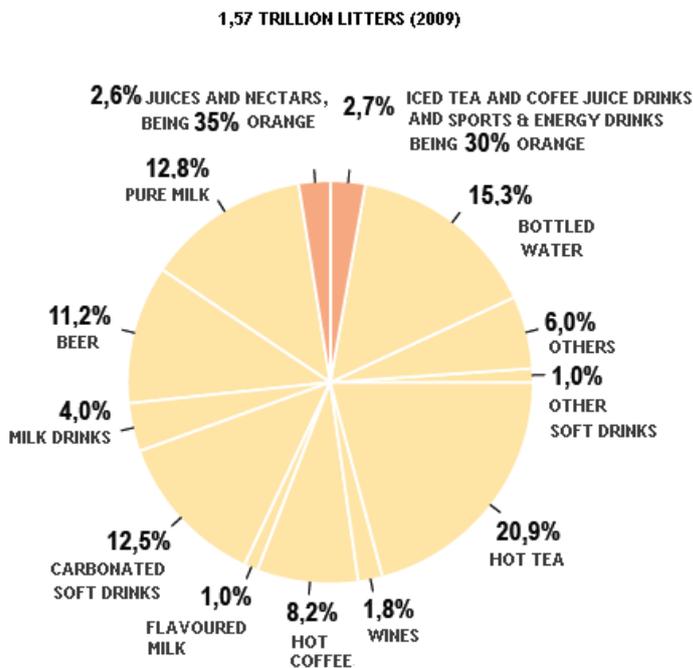


## ORANGE. GOOD FOR YOU, FOR PRODUCERS AND FOR BRAZIL

Three out of every five glasses of orange juice drunk in the world are produced in Brazil. In countries with harsh winter, consumers do not have fresh orange all year, as we have in Brazil. Thus, 97% of the orange juice produced in Brazil is exported. The production chain of orange generates over 200,000 direct jobs in over 300 cities and revenue in exports between \$ 1.5 billion and \$ 2.5 billion annually. The conquering of the world market for orange juice is the result of decades of work, investment and research. Nobody produces orange juice as Brazil. But do not forget: the consumer is boss. Therefore, the production of Brazilian orange juice depends almost entirely of large buyers and consumers abroad.

### CHALLENGES FOR BRAZILIAN ORANGE JUICE IN THE WORLD



A housewife in North America, Asia or Europe finds a wide variety of beverages when visiting the supermarket: one of them is the orange juice, which represents only 1% of total consumption of industrialized beverages in the world.

Among fruit juice beverages, for having low-fruit juice content and being more accessible to emerging consumer markets, nectars and drinks present the fastest growing in the category. Moreover, in the past decade, world consumption of apple juice, which has China as a great producer, rose from 400,000 to 1.6 million tones of concentrate juice per year. In countries like Austria, Russia, Turkey and Ukraine, the per capita consumption of apple juice is greater than orange juice. In the major OJ markets, bottlers, the direct buyers of Brazilian orange juice, are highly concentrated. The same goes for retailers.

### CONCENTRATION OF OJ BOTTLERS AND RETAILERS IN THE MAIN CONSUMER MARKETS

MAIN ORANGE JUICE CONSUMER MARKETS	2009 ORANGE JUICE SALES (EQUIVALENT FCOJ 66 ° BRIX TONS)		PARTICIPATION OF 4 MAJOR BOTTLERS	PARTICIPATION OF 4 MAJOR RETAILERS
<b>WORLD TOTAL</b>	<b>2.406</b>	<b>100%</b>		
UNITED STATES	990	41%	75%	53%
GERMANY	191	8%	62%	76%
FRANCE	165	7%	52%	73%
UNITED KINGDOM	138	6%	84%	63%
CANADA	105	4%	81%	31%
CHINA	75	3%	86%	44%
JAPAN	74	3%	52%	65%
RUSSIA	74	3%	96%	68%
SPAIN	47	2%	82%	72%
BRAZIL	41	2%	83%	87%
MEXICO	40	2%	92%	82%
AUSTRALIA	40	2%	87%	92%
SOUTH KOREA	38	2%	93%	83%
POLAND	37	2%	87%	50%
NETHERLANDS	33	1%	94%	59%
OTHER MARKETS	318	13%		

Most of OJ buyers also bottles and distributes other beverages, preferring raw materials with lower costs or low juice content, which offer a higher profit margin. Sales of orange juice exports from Brazil occur mainly in individual negotiations between Brazilian exporters and major European bottlers, who buy 80% of our exports. These transactions take into account the New York Stock Exchange prices, which reflect the expected future behavior of the international market; the forecast for the harvest of oranges; stocks of juice and estimates of world consumption, among others. In this process, there is a clear relationship between the price of frozen concentrated orange juice sold in the international market, with historical averages ranging between \$ 2,000 and \$ 700 per

ton in 66 Brix, and the price of oranges in the Brazilian market. The production and exportation of orange juice imply high costs and technological skills, strong demand for working capital and strong financial risk. The juice remains stored for 10 months at  $-8^{\circ}\text{C}$ , following numerous specifications, in huge refrigerators called tank-farms, spread across factories in the interior, on ships and port terminals in Belgium, Holland, Japan, Australia and the United States, into being sold and delivered truck by truck to the bottlers. But beyond the costs of technology is the high financial risk. After the purchase of oranges in a particular crop, the industry has no assurance about the price to be paid for the juice. Another major challenge is the stagnation of the world's orange juice 100% consumption, compared to the growth of consumption of soft drinks, orange nectars and other beverages. Each year, new competitors enter in the beverage markets of Europe and North America. Emerging countries, like China, will take years to become a relevant alternative for Brazilian exports. We have great opportunities and great challenges.

### CHALLENGES OF ORANGE JUICE IN BRAZIL

Brazilian orange juice industries cultivate about 30% of the fruit used to produce juice, acquiring most of their raw material from independent producers. The citrus chain in Sao Paulo works similarly to the citrus chain of Florida, in the United States. The industry buys the orange from citrus growers in some business models, such as long-term contracts with pre-determined prices, long-term contracts with variable pricing pegged to the real price (audited) of the juice industry sales abroad (with or without minimum guaranteed price), purchase of oranges during the harvesting in the price of the day (called

"spot market") and through leases or long term sharecropping. Prices of oranges in each model are determined by the supply and demand situation the orange juice market at the time that each contract is signed. Orange juice demand and supply in the market is largely reflected in the price of juice listed on NYSE. As these prices and other market conditions can vary greatly over time, it is natural that, in the same season, there are contracts with very different prices for oranges, depending on market conditions at the time of signature. Each contract type has its own advantages and risks. The fixed price contracts protect the producer against adverse fluctuations in the price of juice. On the other hand, if the price of orange juice rises, the producer with fixed price contract will not be benefited. In the variable price contracts, the producer earns more or less according to the sales of the juice industry. The spot market, in turn, is unpredictable, reflecting market conditions in a specific crop. When orange juice prices are high, as now, growers who sell their oranges in the spot market can have prices that exceed the long-term contracts.

When the international market prices are low, generally growers with fixed price contracts get better results. The citrus industry, like agriculture in general, has been changing with new patterns of scale and efficiency, resulting in a clear predominance of the more efficient producers over the least efficient ones. The production cost of orange groves with low productivity is at least two times greater than the cost of producing in orchards of high productivity. Several factors have determined the success or failure of citrus growers their activity: in the environment, microclimates and regional incidence of diseases and location of plantings; in logistics, the distance of the plantations to the factories of juice; in science, the genetic origin of plants and the best combinations of rootstocks and varieties for each type of soil and climate; in addition, relevant levels of aggregation of the orchards, the applied knowledge of the owner who implements and keeps the crop, the know-how applied to the better management of orchards and effective treatment of pests. The individual strategies of reinvestment for renewal of orchards and implementation of irrigation in regions of higher water deficit, as well as the scale in the purchase of agricultural inputs, contribute to proper management and scheduling of harvesting activities and logistics to the delivery of



oranges to the juice industry. These factors, combined with competition with other crops, determinate the continuity or not of citrus growers in their activity, or even their migration to other groves and regions.

**EVOLUTION OF ORANGE PRODUCTION (IN MILLION BOXES OF 90 POUNDS)  
IN SAO PAULO CITRUS BELT**

CITRUS REGIONS *	2005-06	2006-07	2007-08	2008-09	2009-10
NORTHWEST AND NORTH	118	114	116	93	81
CENTER	123	150	151	134	132
SOUTH AND CASTELO BRANCO	62	87	89	96	104
<b>TOTAL</b>	<b>303</b>	<b>351</b>	<b>356</b>	<b>323</b>	<b>317</b>

(\*) Total production of Sao Paulo orange belt considering only the four main varieties (Pera, Natal, Valencia and Hamlin)

Northwest and North: Votuporanga, Rio Preto, Frutal, Barretos, Bebedouro, Monte Azul, Taiúva and others.

Center: Taquaritinga, Itápolis, Matão, Araraquara, Brotas, Porto Ferreira, Casa Branca and others.

South and Castelo Branco: Limeira, Conchal, Itapetininga, Tatuí, Botucatu, Bauru, Avaré, Ubirajara and others.

In the case of citrus in Sao Paulo, there is a known migration from North and Northwest to the South and the Castelo Branco Highway region, where land is cheaper, with a privileged climate, lower incidence of diseases, allowing crops more technologically advanced and dense, with an adaptation of the orchards on a scale more economically favorable. The strong appreciation of the real, which on one hand helped to control inflation, has been reducing the historic competitiveness of citrus in the country. It is estimated that if the dollar exchange rate was R \$ 2.40 instead of \$ 1.85 in the harvest 2009/2010 of Sao Paulo, there would be an additional income of \$ 1 billion in the citrus belt. With the exchange rate of the dollar to \$ 2.80, this additional income would be \$ 1.7 billion.



**RANGE OF AGRICULTURAL PROPERTIES PRODUCTIVITY IN SAO PAULO CITRUS BELT – CROP 2009/2010**

PRODUCTIVITY RANGE	% OF HECTARES	% OF BOXES	PRODUCTIVITY BOXES/HECTARE
UP TO 1,400 BOXES PER HECTARE	2%	5%	1.655
BETWEEN 1,100 AND 1,399 BOXES PER HECTARE	7%	13%	1.209
BETWEEN 800 AND 1,099 BOXES PER HECTARE	19%	29%	933
BETWEEN 500 AND 799 BOXES PER HECTARE	28%	30%	639
BETWEEN 200 AND 499 BOXES PER HECTARE	36%	21%	345
LESS THAN 200 BOXES PER HECTARE	8%	2%	138
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>607</b>
TOTAL UP TO 500 BOXES PER HECTARE	56%	77%	909
TOTAL LESS THAN 499 BOXES PER HECTARE	44%	23%	280

## CONSECITRUS: BRINGING TOGETHER GROWERS AND INDUSTRY, INCREASING TRANSPARENCY IN THE SECTOR



To face all these challenges, the rapprochement between industries and growers is the wiser path. For the growers it is interesting that the industries sell more orange juice, fight for reduction of tariff barriers and for increasing OJ consumption, to have certainty in the sale of oranges produced, at prices that adequately remunerate their activity. The industries, in turn, depend on the efficiency of producers in the supply of oranges in compatible costs, so the juice may compete with all the many beverages available to consumers on supermarket shelves abroad. More than ever, citrus growers and industry must work together to maintain the leadership of Brazil's production of orange and orange juice. For achieving a sector increasingly transparent, bodies representing growers and industries agreed to work together in creating the Consecitrus. Following the model used by the sugarcane sector since 1998, citrus agents are negotiating the formation of a council made up of industries and growers who will determine a reference price for the orange boxes. The Consecitrus will reveal the costs of production and storage, international distribution and sales of Brazilian orange juice and also the calculation of income from by-products and derivatives, all audited by international auditing companies, creating a transparent, voluntary membership. It proves that together, producers and industries of orange juice can overcome great challenges, helping Brazil to grow.

### A POSITIVE AGENDA FOR THE BRAZILIAN CITRUS CHAIN

- Strengthen associations with broad representation basis to enrich the debate in favor of the union in the supply chain;
- Forming an association along the lines of Orplana (from Consecana), which may represent all the current associations of citrus growers;
- Build reliable technical solutions for the payment of orange for "soluble solids";
- To disseminate the best management practices aimed at increasing agricultural productivity and competitiveness of the chain;
- Establish partnerships with universities in the agribusiness sector, aiming to create excellent technical and economic databases, disseminating relevant information with greater transparency to the sector;
- To promote campaigns to incentive the growth of Brazilian consumption of oranges and orange juice;
- Seek to continuously reduce tariffs in the importing markets of Brazilian juice;
- Act with government institutions aiming at raising funds to support the citrus industry.

**CITRUSBR – ORANGE JUICE, THE FAVORITE JUICE OF BRAZIL AND THE WORLD**



\*This is a translation of an announcement published by CitrusBR in the main newspapers of Brazil (August/2010), in order to promote awareness of what is Consecitrus and to approximate OJ industries and Brazilian orange growers. Check our website in Portuguese to see the original announcement.