



BRASIL **BRAZILIAN** TROPICAL AGRICULTURE

OPENNESS, INNOVATION AND TRANSPARENCY

*Brazil is a leader
in providing food
security to the world*

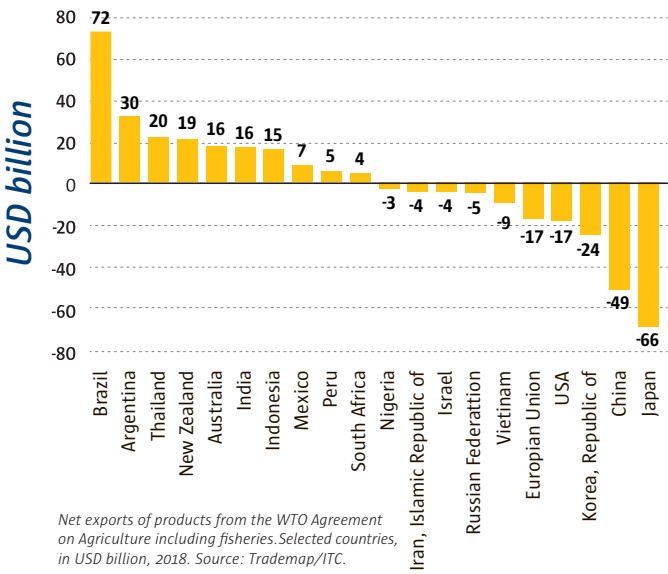
A SUCCESS STORY

BRAZIL'S TRAJECTORY

Brazil has a huge potential for agricultural production, but this has not always been the case. In the mid-70s, Brazil was a large food importer. Four decades later, we have evolved to be **the largest net food exporter in the globe**.

As a consequence of migratory movements by farmers from the South and Southeast towards the Central West and Northeast regions of Brazil and of the research developed by public and private institutions, which have allowed for crops in less fertile lands in the country, Brazil has become one of the main global players in the agriculture and livestock sectors. Currently, the sectors contribute to **over 20% of Brazil's GDP**.

Brazil: the country with the world's largest positive net balance in the food product trade



A TROPICAL COUNTRY

*Abundant or sufficient water availability
throughout almost the entire territory*

Deep, well-drained soils with productive capacity in the Cerrado (biome in the Central region of Brazil), with improved fertility resulting from soil acidity correction.

only
9%

OF THE CROP AREA IN
BRAZIL USES IRRIGATION,
CONTRIBUTING TO MEET
GLOBAL CHALLENGES OF
WATER SCARCITY

**SOYBEAN
CROPS
IN BRAZIL USE
BIOLOGICAL
NITROGEN
FIXATION**

Brazil's rainfall regime and lack of extreme temperatures ensure that **production remains viable all year round**, with no need for irrigation in most areas.

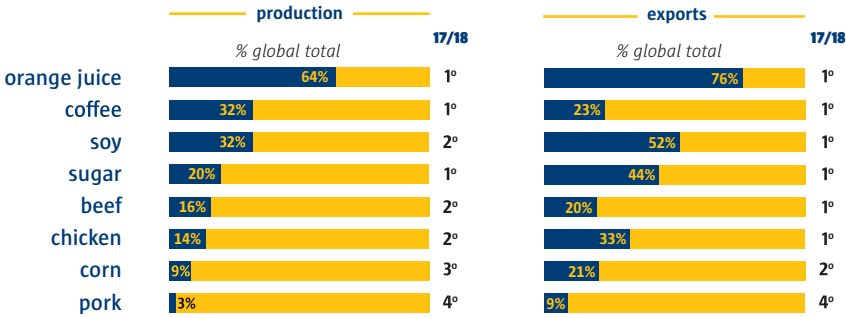
The ample use of biological nitrogen fixation in our tropical agriculture reduces the application of nitrogenated fertilizers and, as a result, **avoids CO2 emissions**.

**Percentage of other
countries' cultivated
area equipped for
irrigation:**

Source: FAO/2012-2016

China - **52%**
India - **42%**
Costa Rica - **29%**
Mexico - **29%**
USA - **17%**
EU - **16%**
Switzerland - **12%**

BRAZIL RANKING IN GLOBAL PRODUCTION AND EXPORTS



Source: USDA (2017/2018)

UP TO 30 YEARS AGO,

the leading food-producing countries were those with temperate climates, and the natural conditions in Brazil were not right for the technology available then. Moreover, a considerable portion of Brazilian soil presents low fertility and acidity issues, which limit agricultural production.

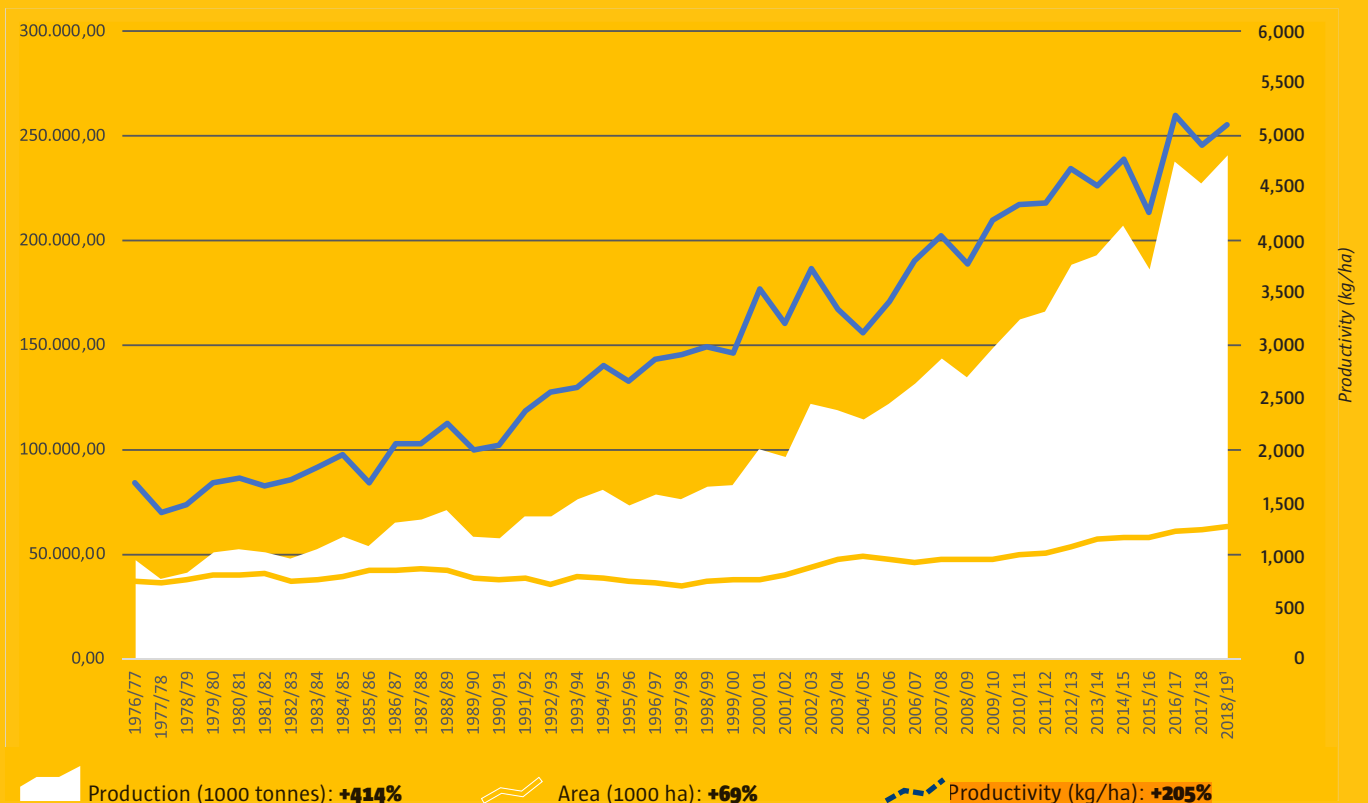
Science and innovation in soil chemistry and physics, crop management; pest, disease and weed control; animal nutrition and health; genetics and agricultural meteorology have been decisive for the achievements in Brazil's agriculture and livestock sectors.

More recently, productivity gains in Brazil have attracted multinational companies and overseas investors, who promote innovation in agricultural techniques adapted to tropical conditions.

BRAZIL PRODUCES OVER 80 types of vegetables



EVOLUTION OF CROP AREA & GRAIN PRODUCTION IN BRAZIL



Comparisons of harvests from 1976/1977 until 2018/2019. "Grains" include barley, beans, castor beans (*Ricinus Communis*), corn (maize), cotton, oats, peanuts, rice, rye, soybeans, sorghum and wheat. Data for 2018/2019 consists of a forecast by CONAB.