

Maize – An Introduction

Maize (*Zea Mays*, referred to as corn in North America) originated in central Mexico in around 5,000 BC. The crop was introduced to Europe in the sixteenth century, from where it spread to Africa and Asia. It is now one of the most widely-grown crops around the world in both temperate and tropical regions.

It is among the 10 most important world crops by value.

According to the FAO, world production in 2012 was over 870 million tons, grown on 158 million hectares of land. Sources such as the FAO's Agricultural Market Information System (AIMS) and The International Grains Council have forecasted production increasing to as high as 990 million tons in 2014-2015 grown on almost 200 million hectares.

Over 80% of maize production is located in the Americas (53%) and Asia (28%), followed by Europe (15%). Key areas of cultivation include the US maize belt, north eastern China and Eastern Europe. Major producers in 2012 included the United States (over 270 million tons), China (over 200 million tons) and Brazil (71 million tons), followed by India, Mexico, Argentina, Ukraine, Indonesia, France and Canada. 70% of the total acreage for maize cultivation is in the developing world.

Maize is grown both (as sweet corn) for human consumption and (as field corn) for other uses such as animal feed and biofuels. Worldwide, only around 15% of maize production is used for food consumption with most production going to animal feed. However, the proportion of maize production for food production in developing countries is higher at 25% and even higher in regions such as South East Asia where it is an estimated 30-40%, whilst in parts of Sub-Saharan Africa it can be as high as 70-80%.

The crop is a staple food for an estimated 1 billion people across sub-Saharan Africa, South Asia and Latin America. In Africa maize forms part of the diet for 50% of the population, and consumption can be as high as 328 grams per person per day (in Lesotho).

In Latin America maize consumption can be as high as 267 g/person/day (in Mexico), accounting for 40% of overall cereal consumption in the region. Since the crop is rich in vitamin C and other vitamins and minerals, as well as carbohydrates and dietary fibre, it is a particularly important source of nutrition, supplying a high energy density of 365 Kcal/100g.

Experience



Engagement



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References and further reading

FAO Statistics Division (<http://faostat3.fao.org>)

International Grains Council (<http://www.igc.int/en/grainsupdate/sd.aspx?crop=Maize>)

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Ranum, P. et al., 'Global maize production, utilization and consumption', *Annals of the New York Academy of Sciences*, 2014, 1312.

USDA: Foreign Agricultural Service (www.fas.usda.gov)

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