



## Bananas

To supplement the 5 Themes of Bananas, the Banana Background will put bananas into perspective.

# GeoLiteracy

## Banana Background

Bananas are one of the earliest cultivated fruits that are tropically grown but temperately valued. Grown in tropical rainforests, temperatures must be between 10° to 40°C with annual rainfalls between 200 to 500 mm. If irrigation is used, bananas will grow in semiarid regions. Soils must be deep and well-drained. Otherwise, **envirohazards**, such as wind, frost, and fungus need to be considered seriously.

Trees and undergrowth must be cleared and then, recleared for weed control. Three or four weeks after the roots are planted, a single green leaf will sprout from the root-stock. New leaves grow from the centre of the plant and force the older leaves outward, enlarging the stalk. After nine months, yellow blossoms appear. The first fruit matures 12 to 14 months after planting. When the petals drop off, tiny clusters of bananas appear. As the bananas grow, two to four stalks grow into a clump. Once the stalk bears fruit, it is cut to the ground. New stalks arise from underground suckers. Stalks produce ~25 kg. of bananas/year, that's ~600 bunches/year. Commercial bananas grow on tropical **plantations**, near seaports for shipping to temperate markets (North America and Europe).

Bananas are harvested green. Cutting gangs harvest the fruit with long knife-tipped poles. Nicking the stem, the plant bends and the hacker catches the plant. After chopping it free, a hauler takes the bananas to a plantation's collection centre.

From the plantation, banana trains/trucks carry the cargo to port. Refrigerated ships move the chilled bananas (12°C) to market. At the destination, refrigerated rail cars/trucks move the bananas to wholesalers. Here, the green fruit is ripened in temperature-, ventilation-, and humidity-controlled rooms for three to five days.

The banana is a staple food for many people because it contains elements needed for a balanced diet. In addition to the water (75%), bananas contain fat, natural sugars, protein, potassium, and vitamins A, B complex, and C, all for an energy boost.

Bananas are important to diets because they have twice as many calories as the equivalent amount of meat. Unripe bananas are rich in starch and can be dried into flour. They are used in salads, curries, or are a delicacy for some cultures.

Legend suggests bananas originated in the Asian tropics, being cultivated in India for over 4 000 years. Arab traders moved them to Palestine, Egypt, and Africa. From there, it was exported to Greece and Italy. Portuguese sailors found them on the Atlantic coast of Africa and brought them to the Canary Islands, and then to Portugal and Spain. Spanish missionaries moved plants to the Americas, arriving in North America in 1804.

Several hundred varieties of bananas, usually yellow or red skinned, are grown throughout the world. In North America, yellow Cavendish species, developed in the United



**Cavendish**  
**(United Kingdom)**



**Red Dacca**  
**(India/Australia)**

Kingdom, is the banana of choice. Disease threatens the Cavendish, and it may be lost as was the Gros Michel, a favourite until Panama disease destroyed it. In Europe, it's the Canary Island variety of the dwarf Chinese banana. This banana is smaller, sweeter, and more fragrant than other varieties that bruise easily. Other popular types include: the Ladyfinger, Mensaria Rumph (Malaysia), Lacatan (Philippines), and the Champa (India).

Annual world production is split between the Eastern and Western Hemispheres with North America and Western Europe being the biggest importers. Only 10% of the annual production (75 million tonnes) is exported. With most bananas being eaten where they grow, the largest producers, India, Mexico, and Indonesia, export few bananas. The major exporters are Brazil, Colombia, Ecuador, Mexico, and Honduras, in the west. In the East, it's Uganda, India, Philippines, Tanzania, Rwanda, Indonesia, and Thailand.

Since the 1990's, a banana war erupted between the United States and the European Union (EU). Small producers were caught in the middle when the World Trade Organization (WTO) ruled that the EU violated free trade with a **preferential tariff**. This tariff was offered to Africa-Pacific-Caribbean nations (APC) out of a sense of obligation to former colonies. This act may have been a result of the guilt associated with past exploitations. Or, a banana industry was created to replace failing sugar plantations.

The special protection offered to APC upset American multinationals which faced higher tariffs. *Chiquita* lost \$800 million and 50% of their European market between 1995 and 1998 and faced bankruptcy. *Chiquita's* losses were the result of challenging the EU tariff, building a fleet of refrigerated ships for the EU trade, and buying more plantations. To survive, *Chiquita* eventually merged with the *Fyffies* to create the world's largest producer, shipping 16 billion bananas/year.

*Dole* and *Del Monte* are in better shape because they adapted rather than challenged the EU. Both increased their market share in Europe. Both diversified to stay in Europe. For example, *Dole* bought a Spanish producer. It expanded into new markets and bought into APC operations to gain access into

the EU. They also bought up EU importers for their licences.

To get around the WTO ruling, the EU introduced a licensing plan for banana imports. Dubbed *first-come first-served*, APC bananas would not have guaranteed access. This plan initially hurt APC. They are too reliant on bananas for export earnings and employment, especially after replacing sugar plantations and having guaranteed EU markets.

Generally, APC nations are small, vulnerable single commodity (e.g. banana) producers. APC production comes from small, less than 5 acres, family-run farms, located on steep hills not suited to other crops. Regular incomes from a year-round crop disappeared. Dependence on bananas became dangerous because the banana industry was no longer spending millions/week in each APC nation. Add to this, APC is prone to natural disasters, such as hurricanes, floods, and earthquakes that could quickly plunge them into poverty. Previously, salvation from disasters came from the banana which is quick to reproduce after any disaster. The **multiplier effect**, which had helped other economic activities and contributed to social and political stability, crashed.

Help came from **non-government organizations** (NGOs), such as Oxfam, which led farmers to diversify, compete, and develop other markets. Some farmers turned to coffee and cocoa, and fair trade and organic markets.

The EU has not completely ignored the APC. By providing aid and trade support to organic and fair trade farmers, APC exports are allowed through global **fair trade quotas**.

Public education on the banana issue and a fair trade seal and license enable consumers to distinguish between the multinationals (*Chiquita*, *Dole*, and *Del Monte*) and APC bananas. The EU hopes appropriate choices can be made by consumers.

Unfortunately, some farmers have turned to growing coca, just to survive. Turning to illegal drugs simply introduced greater issues into the banana trade.



**Burro**  
(Philippines/Mexico)



**Paradise**  
(Philippines)



**Ice Cream**  
(Java)