# Pre-Columbian Agriculture in Mexico

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## Introduction

The term pre-Columbian refers to the cultures of the Americas in the time before significant European influence. While technically referring to the era before Christopher Columbus, in practice the term usually includes indigenous cultures as they continued to develop until they were conquered or significantly influenced by Europeans, even if this happened decades or even centuries after Columbus first landed in 1492. Pre-Columbian is used especially often in discussions of the great indigenous civilizations of the Americas, such as those of Mesoamerica. Pre-Columbian civilizations independently established during this era are characterized by hallmarks which included permanent or urban settlements, agriculture, civic and monumental architecture, and complex societal hierarchies. Many of these civilizations had long ceased to function by the time of the first permanent European arrivals (c. late fifteenth-early sixteenth centuries), and are known only through archaeological evidence. Others were contemporary with this period, and are also known from historical accounts of the time. A few, such as the Maya, had their own written records. However, most Europeans of the time largely viewed such text as heretical and few survived Christian pyres. Only a few hidden documents remain today, leaving us a mere glimpse of ancient culture and knowledge.

## Agricultural Development

Early inhabitants of the Americas developed agriculture, breeding maize (corn) from ears 2-5 cm in length to perhaps 10-15 cm in length. Potatoes, tomatoes, pumpkins, and avocados were among other plants grown by natives. They did not develop extensive livestock because there were few suitable species; however the guinea pig was raised for meat in the Andes. By the fifteenth century, maize had been transmitted from Mexico and was being farmed in the Mississippi embayment, but further developments were cut short by the arrival of Europeans. Potatoes were utilized by the Inca, and chocolate was used by the Aztec.

### Olmec Civilization

**The Man of Crops** is a fertility figure in Mesoamerican mythology. The Man of Crops was a human man or boy who chose to give his life so that his people might grow food. The heroic Man of Crops is sometimes mentored or assisted by a god figure from the other world. Among the Olmec, gods are often depicted with a distinct cleft on the forehead, perhaps identifying this characteristic as divine. The Maize God is depicted with corn growing and with the snarling face associated with the jaguar.

### Zapotec Civilization

The Zapotec or Oaxaca civilization lacked a strong agricultural base, thus their economy was based on collecting tribute from surrounding tribes or groups. Although occupying the largest amount of land of any civilization, the agricultural needs of the Zapotec far exceeded the area of the Mifla River alluvium and the people rose and fell from power rapidly. A recent archaeological survey uncovered 122 chile peppers at an Oaxaca site!

### Mixtec Civilization

The agriculture of this civilization was hindered by rugged geography, restricting the people to narrow valleys on the highlands and a few coastal areas. Cocoa, cotton and salt were among the goods imported from coastal sites, while maize, beans and chiles were abundant in mountainous regions.

### Teotihuacan Civilization

For the Teotihuacan people, irrigation was necessary to ensure a crop due to the arid climate. Irrigation was small-scale, family or village level. Archaeological evidence suggests that there were small scattered farming villages. Agricultural productivity was estimated to be enough to sustain the population based on local production. There was not believed to be intense competition for basic subsistence needs, meaning there was enough farmland to go around.

### Toltec Civilization

The Toltec Empire were mainly agricultural, depending on several crops to sustain life. They were able to grow beans, squash, and cacti, used for its fruit, but the main crop was maize. Their diet also included the meat of rabbits and dogs. While they depended mainly on these crops, they also traded goods, especially artwork, with other regions. A possible reason for their downfall is that the Toltec land became extremely barren and could no longer support the growing population.

### Maya Civilization

The Mayans were once believed to utilize shifting cultivation, but are currently thought to have used the following sophisticated methods of food production:

1. Permanent raised fields
2. Terracing
3. Forest gardens
4. Managed fallows
5. Wild harvesting

The Mayans cultivated maize, manioc, sunflower seeds and cotton in association with deforestation.

### Aztec Civilization

The Aztecs utilized four methods of agriculture:

1. Rainfall cultivation
2. Terrace agriculture in hilly areas
3. Irrigation farming, which allowed for harvesting on a regular basis
4. Complex and intricate canal systems, which provided irrigation to large areas of fields.

The Aztecs also introduced chinampas, which were the first “raised beds”. The chinampas consisted of alternating raised beds of mud and plant matter. These original seedbeds were very fertile and could yield up to seven crops annually. Like most Mesoamerican cultures, maize was the most important crop.