23.6 Agricultural Techniques

The Maya were creative, skillful farmers. They used their knowledge of calendars and seasonal change to help them become even better at growing food. But Mayan farmers faced many challenges. In the end, crop failure may have played a key role in the collapse of the Classic Mayan civilization.



Cutting and burning plants and trees is an easy way to clear land for farming, and the ash from the fire helps fertilize crops. However, this slashand-burn technique uses up the soil quickly and can be dangerous, as fires sometimes get out of control.

slash-and-burn agriculture a farming technique in which vegetation is cut away and burned to clear land for growing crops

Challenges Facing Mayan

Farmers The primary Mayan food was maize, or corn. Other typical Mayan crops were beans, squash, and chili peppers. Fortunately, beans and squash, when eaten with corn, supply people with a naturally healthful and balanced diet.

One of the most difficult challenges the Maya faced was how to grow enough food to feed their growing population. Farming was not easy in the regions where they lived. Their land included dense forests, little surface water (such as lakes or streams), and poor soil.

The Maya responded to this challenge by developing different agricultural techniques for the various environments in which they lived. In the mountainous

highlands, they built terraces, or earth steps, into the hills to create more flat land for planting. In the swampy lowlands, the Maya constructed raised-earth platforms surrounded by canals that drained off extra water. This technique helped them to grow more food without having to increase the amount of land they used.

A different technique was used in the densely forested lowland areas. In city-states like Palenque (in present-day Mexico), the Maya used **slash-and-burn agriculture**. First they cleared the land by cutting and burning plants and trees. Then they planted their crops. Unfortunately, this kind of farming wears out the soil. Lowland soil was not very rich to begin with, so land that was planted for 2 to 4 years had to be left to rest for 2 to 10 years. Slash-and-burn farmers had to have a lot of land, since each year some areas were planted while others were recovering.

The Mayan agricultural system worked as long as settlements were spread out and not too large. As populations increased, the Maya had trouble raising enough food to feed everyone. In the constant quest for land, they drained swamps and cleared hillsides. They also used household gardens in the cities to increase the amount of land available for growing food.