



**General Overview** The pre-European cultures of the New World exhibited considerable variation in their economic institutions and processes. This variation is strongly correlated with the level of sociopolitical evolution of individual societies. Indigenous groups ranged from small bands of hunter-gatherers to large territorial empires. The case studies in the accompanying entries provide a cross section of this diversity, emphasizing the state-level societies most comparable to the Bronze Age civilizations of the Old World. The Aztec and Inca, for example, both ruled extensive empires, but their political economies were radically different. The Aztec Empire, financed through tribute in goods and long-distance trade by merchants, was part of an extensive commercial economy. The economy of the Inca Empire, by contrast, was organized by the state. Tribute was paid in labor, and institutions of commerce were largely absent.

The Classic Maya were organized into city-states ruled by charismatic kings whose level of control over the economy was probably intermediate between the Inca and Aztec examples. The Cahokia polity of North America illustrates another major form of economic organization, the complex chiefdom. Although social classes and bureaucratic organization were absent, craft specialization and trade were extensive, organized by a powerful chief who resided in an urbanized center.

### Technology and Agriculture

Metallurgy had a long history in South America, and by the sixteenth century the Incas and other peoples were highly adept at smelting and working gold, silver, bronze, and other alloys through a variety of techniques. Metals were employed primarily for ritual objects and jewelry. Around 900 ce metallurgy spread from South America to Mesoamerica (Mexico and northern Central America), where again its utilitarian uses were minimal. One reason bronze was not put to use in weapons and cutting tools was the effectiveness of obsidian tools. A volcanic glass, obsidian occurs geologically in mountainous areas throughout the New World. All obsidian tools have sharp edges, and one particular form—the difficult-to-manufacture prismatic blade—has the sharpest edge known to science (sharper than a surgical scalpel). Obsidian was one of the technological highlights of ancient New World cultures.

The evolution of societies from Paleo-Indian hunters through

states was accompanied by innovations in agricultural technology and agricultural intensification. Irrigation technology in the Andes and central Mexico was quite advanced, involving canals that ran for tens of kilometers, aqueducts, and a variety of dams, dikes, and other control features. These areas also saw the extensive use of terracing, both hill slope terraces and cross-channel terraces (check dams). The most important technique of intensive agriculture in the ancient New World was raised fields. This labor-intensive swamp-reclamation method produces dramatically high yields. Raised fields were used widely in South America wherever topography and hydrology permitted, and in Mesoamerica raised fields supported the cities of the Classic Maya and the Aztec capital Tenochtitlan. Although the overall level of technological development was equivalent to the Bronze Age civilizations of the Old World, New World economies lagged in two areas—the small number of utilitarian uses of metal and the rudimentary technology of transport. The concept of the wheel was known (wheeled toys existed in Mesoamerica), but it was not put to use for transport, probably because of the mountainous terrain and a lack of suitable draft animals. Only the Inca and other Andean societies had an effective pack animal, the llama.

### **Production, Distribution, and Consumption**

The household was the basic unit of production and consumption in most New World societies. Artisans in many areas were proficient in the technology of ceramics, chipped stone, lapidary art, textiles (using cotton and, in the Andes, the wool of camelids), and other materials. The production of utilitarian goods was widespread in both rural and urban areas, and artisans for the most part were independent producers working out of their homes. Many were farmers who worked on their crafts part-time. Luxury goods—whose production required costly raw materials and more difficult methods—were typically manufactured in urban settings under the patronage of the elite or the state. In societies with strong governmental control over the economy (for example, the Inca) luxury goods were produced by commoner specialists under the direct supervision of the state. Among the Mixtec and Maya city-states of Mesoamerica, on the other hand, junior members of royal families were the skilled artisans who produced luxury goods. In the commercial economy of the Aztecs, artisans producing jewelry, sculptures, and feather work worked both for elite patrons and independently. There is little evidence for the involvement of temples in the organization of craft production, a common pattern in the Bronze Age economies of the Old

World.

All ancient New World societies engaged in long-distance trade. High transport costs, however, limited the volume of exchange and affected the types of trade goods in most cases. The organization of exchange varied with sociopolitical complexity. Egalitarian (family-level) groups used trade partnerships and other forms of face-to-face exchange to obtain needed goods. In chiefdoms and many states trade, controlled by rulers and elites, was largely limited to luxury goods. Elite gift giving was a major form of exchange. The Aztec and Inca Empires illustrate contrasting state-level distribution systems. The Aztec commercial economy fostered extensive exchange by professional merchants, leading to perhaps the highest volume of exchange (in both luxuries and necessities) in the ancient New World. The Inca redistributive economy, on the other hand, kept exchange within the polity. Imperial bureaucrats assembled goods in state storehouses and supervised their movement within the empire using a state-built infrastructure of roads, bridges, and administrative cities.

Patterns of consumption, like production and exchange, varied with sociopolitical context. Most states for which written evidence exists had some forms of sumptuary rules limiting consumption of certain goods to certain social categories, typically elites. Even where commoners and elites had access to the same goods (for example, the Aztec economy), their patterns of consumption differed. Feasting played a major role in the political and social dynamics of many societies, and this was an important factor in the organization of consumption.

### **Processes of Change**

The most widespread and fundamental processes of economic change in the ancient world were population growth and agricultural intensification. Increases in sociopolitical complexity were almost invariably accompanied by larger populations and intensified agriculture, just as the collapse of cities and states was associated with the reverse processes. The causal relationships among these processes are much debated. In Mesoamerica several other long-term economic trends have been identified. One concerns the status of obsidian goods in the Maya region. In the Classic period (200–900 ce) obsidian was a scarce luxury, often used in ritual activities. In Postclassic times (900–1520 ce) commercial exchange intensified, the supply of obsidian increased, and the cost of obsidian declined as it became more of a necessity than

a luxury to Maya households.

Another case of long-term change was an agrarian cycle in Aztec central Mexico. At the start of the Aztec period (ca. 1100 ce) populations were low. Increased rainfall coupled with an abundance of land and a scarcity of labor led to population growth, the clearing of new land, urbanization, and rising prosperity in a commercial economy. By the Aztec imperial period (1430–1520 ce), however, an abundance of labor was coupled with a shortage of land. Agriculture was heavily intensified, famines occurred, standards of living declined, and most regions fell victim to the expanding Aztec Empire. These are but a few of the cases of economic change documented by continuing archaeological and historical research on the ancient economies of the New World.

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