Changes in trade networks resulted from and stimulated increasing productive capacity, with important implications for social and gender structures and environmental processes.

<table>
<thead>
<tr>
<th>I. Innovations stimulated agricultural production in many regions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Agricultural production increased significantly due to technological innovations.</td>
</tr>
<tr>
<td><strong>The chinampa field system</strong></td>
</tr>
<tr>
<td>Location: Mesoamerica</td>
</tr>
<tr>
<td><strong>Significance:</strong> Floating gardens build in lake beds. Provided ⅔ of all food to Tenochtitlan.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Horse collar</th>
<th>Three field rotation</th>
<th>Swamp draining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Afro-Eurasia</td>
<td>Location: Europe</td>
<td>Location: Earth</td>
</tr>
<tr>
<td><strong>Significance:</strong> Horse values increased as they were able to plow 50% more than oxen with collars. Improved agricultural production</td>
<td><strong>Significance:</strong> Crop rotation where a series of crops are rotated based on season/type in order to improve soil fertility.</td>
<td><strong>Significance:</strong> Increased agricultural lands and decreased diseases from mosquitos</td>
</tr>
</tbody>
</table>
B. Demand for luxury goods increased in Afro-Eurasia. Chinese, Persian, and Indian artisans and merchants expanded their production of textiles and porcelains for export; industrial production of iron and steel expanded in China.

II. The fate of cities varied greatly, with periods of significant declines and periods of increased urbanization buoyed by rising productivity and expanding trade networks.

A. Multiple factors contributed to the decline of urban areas in this period...

**DISEASES**

Justinian’s Plague (Bubonic) of the late 6th Century killed as many as ¼ of Europe’s population. A smallpox/measles outbreak killed off huge chunks of the Han Chinese in 162, 221, and 322. By 742, China had lost ¼ of its population. Increased Classical trade led to the easy spread of these diseases.

**AGRICULTURAL DECLINE**

With the lack of Political authority/safety, the agricultural output of the major cultural centers decreased. The chaos that ensued insured a lower crop yield. Along with the weather change known as the “Little Ice Age”, there was simply not enough food production to feed a large urban center.

**LITTLE ICE AGE**

At the end of this era (roughly 1250-1850), different groups have different ideas as to when this occurred, there was a period of cooling that directly affected population and agricultural output. Winters were colder. Glaciers encroached. Rivers/canals froze. Generally it affected temperatures by only a few degrees and was not a “true Ice Age” in the technical terms.

**OLD CITIES IN DECLINE**

ATHENS, ROME, ALEXANDRIA, CHANG’AN, PATALIPUTRA
B. Multiple factors contributed to urban revival...
III. Despite significant continuities in social structures and in methods of production, there were also some important changes in labor management and in the effect of religious conversion on gender relations and family life.

A. The diversification of labor organization that began with settled agriculture continued in this period. Forms of labor organization...

- **Free Peasant Labor**: Peasants come from paisant (countryside). Majority of the population who were small land owning rural farmers.
- **Nomadic Pastoralism**: Peasants without arable land. Follow animals from pasture to pasture. Move around 150 MI. per year.
- **Craft Production**: Craftsmen worked on a specific craft instead of agriculture. Work performed in their workshop.
- **Guild Organization**: Collection of craftsmen into a guild to protect their craft. In Paris alone there were 350 in 14th century.

- **Coerced Labor**: Coerced labor is forced. This could be serfdom, slavery, or the inca mit'a.
- **Government Labor**: Medieval taxes were paid to the ruling class (king). Could be paid via labor owed the state.
- **Military Obligations**: A serf/peasant would owe military service to the lord. Primary reason for lord to enter feudal contract.
B. As in the previous period, social structures were shaped largely by class and caste hierarchies. *Patriarchy* continued, however, in some areas, women exercised more power and influence...

**Mongols**

- Women moved about freely and refused the burqa from the west and footbinding to the east.
- Women were often top advisors to the great khan, including a 5 year span where Torogene, Genghis’ daughter-in-law ruled the empire.

**West Africa**

- The most prolific traveller of this period, Ibn Battuta was the first person to go to west Africa, come back, and write about it. He noted, “the women are extremely beautiful and more important than the men.”

**Japan**

- Although often isolated during the Heian period (794-1185CE), Lady Murasaki taught herself to write & wrote earth’s 1st novel, *Tale of the Genji*. In feudal Kamakura (1185-1333 CE) restrictions were lifted; some women even became samurai.

**S.E. Asia**

- Women in S.E. Asia have traditionally had more freedoms as their work was agricultural, they controlled the markets, there was no financial burden due to brideprice and men moved in with/near the wife’s family.
C. New forms of coerced labor appeared, including serfdom in Europe and Japan and the elaboration of the mit’a in the Inca Empire. Peasants resisted attempts to raise dues and taxes by staging revolts. The demand for slaves for both military and domestic purposes increased, particularly in central Eurasia, parts of Africa, and the eastern Mediterranean.

<table>
<thead>
<tr>
<th>Serfdom on Europe</th>
<th>Serfdom in Japan</th>
<th>Mit’a System in the Inca Empire</th>
</tr>
</thead>
<tbody>
<tr>
<td>A form of corvee (unpaid labor owed to the lord by the vassal) that dominated Europe from around 1000 CE to the mid-1800s. Serfs had their own land, but had to work a plot of land for the lord (also had to work mines, forests and roads)</td>
<td>Japanese serfdom mirrored their western counterparts at the same time. Japanese serfs owed their lords (daimyo) and would pay it back in the form of coerced labor and/or military service in defense of the daimyo’s land.</td>
<td>The Incan Empire required all males (age 15-50) to complete mandatory public service (corvee). Inca made sure to allow the people time to work their own land. Public service could be in the form of agriculture, road building, military, etc.</td>
</tr>
</tbody>
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**BASIL THE COPPER HAND, 932 CE**

Don't start thinking revolutions just yet; these are revolts of peasants were often caused by socio-economic pressures from the upper-classes. Basil had previously had his hand cut off for impersonating a dead general. He had it replaced with a copper one (hence the name). He then led a group of angry free peasants from Bithynia (Turkey). They were refusing to pay the high taxes. The Byzantines sent in the army, ended the rebellion, & burned Basil alive.

**RED TURBAN REVOLT, 1351-68 CE**

Not all of these revolts end like your boy Basil. The Red Turban Revolt was a group of Chinese peasants in the 1340s & 50s that were fed up with Yuan (Mongol) rule. The Yellow River was continuously flooding & the Yuan were doing nothing to stop it. So, the White Lotus Society (Buddhist millenarians) began the rebellion that lasted decades. One leader of the rebellion was Zhu Yuanzhang, a former beggar/monk who went on to found the Ming Dynasty (1368-1644).
D. Buddhism, Christianity, Islam and Neoconfucianism were adopted in new regions and often caused significant changes in gender relations and family structure.
Despite significant continuities in social structures and in methods of production, there were also some important changes in labor management.

**NEW FORMS OF LABOR MANAGEMENT**

1. **FREE-PEAasant AGRICULTURE**
   - **FREE PEASANT AGRICULTURE** is what you probably think of when you think of peasants during the POST-CLASSICAL PERIOD. They were the majority of the population. A _Peasant_ comes from the French word _Paisant_ meaning _countryside_. Peasants are typically small farm owning rural farmers. It later took on a negative connotation by the upper classes (ex: “Bloody Peasant” – King Arthur).

2. **NOMADIC PASTORIALISM**
   - Think of **NOMADIC RANCHERS** as **PEASANTS** without arable land. They follow their animals from pasture to pasture depending on the season. These people are generally associated with warrior-based cultures that became fearsome to settled people. They tend to move around 150 miles per year (in rotation). **Examples:** Cattle, Yaks, Sheep, Goats, Reindeer, Horses, Donkeys, Nerfs.

3. **GUILDS**
   - **GUILDS** are simply a collection of craftsmen of a similar trade. They were originally organized similarly to a trade union or secret society. The goal of these GUILDS is to regulate their industry. GUILD members would be experienced tradesmen or “masters”. You enter the guild as an **APPRENTICE**, then becoming a **JOURNEYMAN**. Once you have created a **MASTERPIECE**, you then become a **MASTER**. GUILDS are a global entity from China, India, Persia, Africa, and Europe. The word GUILD comes from the Old English “gegyld” meaning “payment”. By the 14th Century, for example, Paris had 150 guilds.

4. **COERCED LABOR**
   - Let’s not dance around the issue: **COERCED LABOR** are different ways to force someone to do work for you...
   - **SERFDOM**
     - In both Europe and Japan, SERFS work a specific plot of land for a **LORD** in return for protection. They are the lowest class of feudal society.
   - **MITA**
     - MITA was Incan CORVEE (unpaid, required labor).
     - It was tribute owed to the Inca. Generally, people did large community projects.

5. **GOVERNMENT-IMPOSED LABOR TAXES**
   - **TAXES** aren’t new. Medieval taxes were paid to the ruling class (usually to the King). The tax was often on land or came in the form of custom duties (taxes paid on moving from place to place). A prime example is the **GELD**. It was raised in England starting in 1012 to pay for **MERCENARIES**. It was later replaced with taxes on personal income and property.

6. **MILITARY OBLIGATIONS**
   - As a part of **FEUDALISM**, a **PEASANT** who worked the land of a **LORD** would owe military service for that **LORD** in return for land usage. The **VASSAL** (someone who pledged loyalty to a **LORD**) using whatever means they could attain, would have to defend the **LORD**’s territory. This was THE primary reason why the **LORD** entered into these **FEUDAL** relationships.
Free peasants resisted attempts to raise dues and taxes by staging revolts

THREE EXAMPLES:

BYZANTINE

Basil the Copper Hand

Back in the 10th Century, there lived a man named Basil. Basil’s most notable physical feature was his copper hand. How did he get a copper hand? Well, he tried to imitate a dead general to take power in Ireland (North Anatolia). His plan was discovered and he was quickly taken back to Constantinople and given his family’s most infamous ship on the wrist. Sans hand, he had it replaced with a copper one. Hence the name. Looking like a Super Villain, he attempted to lead an peasant rebellion against the Byzantine Empire. He gathered the discontent and disaffected peasants of the region who were upset at the Byzantine taxes they were forced to pay. Notice the lack of tax funds coming in from Byzantium, the Emperor sent in the Byzantine Army. Used to fighting Persians and Arabs, the peasant army of Basil the Copper Hand didn’t stand a chance. He was caught, chained, and returned to Constantinople. After a quick trial, he was burned at the stake.

EUROPEAN

Peasant Revolt in Flanders

In the 1320s, a series of small scale peasant revolts joined forces into an all-out rebellion that lasted for 5 years. What drove these otherwise docile peasants to revolt? The answer is simple: TAXES. The people were mad at Louis I for raising taxes. So, they proceeded to revolt and take over the majority of the Flanders region. They even captured the Count of Flanders, Louis II. This became such a problem, that the King of France had to step in and quell the insurrection. A hastily agreed to peace treaty was signed, but quickly forgotten as the rebellion continued. It wasn’t until the Battle of Cassel that the rebel army and its peasant leaders were defeated.

CHINESE

Red Turban Rebellion AKA White Lotus Rebellion

It’s difficult to find anyone who would ever say anything bad about the Mongols (varnum). But, there was a group of Chinese peasants in the 1340s who were fed up with the Yuan (Mongol) rule. The Yellow River had been constantly flooding along with other natural disasters). A Mahayana Buddhist sect known as the White Lotus Society (who worshiped a Mother Goddess who would gather her children at the millennium) started the rebellion against Mongol rule. After 30 years of war, the rebellion was successful. The Mongols were constantly fighting themselves and therefore couldn’t handle the rebellion. In 1668, the Zhu Yuanzhang, former beggar/布衣 monk, claimed the Mandate of Heaven and declared himself the Hongwu Emperor of the new Ming Dynasty.

IN REVIEW

Key Concept 3.3: Increased Economic Productive Capacity & Its Consequences

Post Classical Interactions Have Major Economic Consequences

- Production
  - Crop yields increase due to new technology
  - Champa rice
  - Champa as one of the three main crops
  - Waru-Waru
  - Terracing
  - Horse-Collar
  - Crops transplanted to similar climates
  - Artisans & merchants increased exports

- Urbanization
  - Growth
    - Invasions cease
    - Safe trade/travel
    - Rise in commerce
    - Rise in temp.
    - Increase in agric.
    - More people/labor
  - Downfall
    - Invasions decrease
    - Agricultural decline
    - Little Ice Age

- Social
  - Labor management changes
    - Free Peasants
    - Nomadic pastoralist
    - Guilds
    - Coercing
    - Govt. Labor taxes
    - Military obligations
  - Spread of religion
    - Buddhism
    - Christian
    - Islam

- Gender roles/status
  - Family & gender roles

- Religion led to major changes
  - Free Peasants Revolt
  - Religious Revolt (Great Jihad)
## Continuity and Change Over Time (660-1450 CE)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Characteristics at Beginning of period</th>
<th>Key Continuities</th>
<th>Characteristics at End of period</th>
<th>Analysis of Changes/Continuities</th>
</tr>
</thead>
</table>
| **1. Human-Environment Interaction** (Demography, disease, migration technology) | • world pop ~200 mill  
• environmental damage, deforestation, desertification, erosion  
• cities/capitals served as centers of relig, trade, & political activity | • diseases/pathogens still spread easily, though amount/degree of spread increased dramatically (e.g. Bubonic Plague) | • world pop ~400 mill  
• spread of languages, cultures, religions  
• hemispheric exposure to diseases (Afro-Eurasia) | • migrations & trade → diffusion of languages, religions, cultures, technologies |
| **2. Culture** (Religions, philosophies, Science, technology, art, architecture) | • cities served as cultural centers, relig, politics  
• each empire had its own religion(s) (e.g. Buddhism, Christianity, Confucianism, Hinduism, Judaism)  
• Islam, 622 C.E. | • Confucianism & Buddhism in E. Asia  
• new constructions (Grand Canal)  
• Shi'ah (Catholic-E. Orthodoxy)  
• Muslim tech (medicine, hospitals, algebra)  
• Islam's spread: Iberia→Arabia→SE Asia  
• Confucianism spread→Japan & SE Asia | • dar al Islam  
• greater contact among cultures (Crusades, Silk Roads, dar al Islam) | • Merchants & missionaries traveling into new areas → cult diff (Sufi Muslims → India; Buddhism → SE Asia & → Silk Roads; Christianity → Kievan Rus) |
| **3. Politics** (State-building, conflict, Political structures, Empires, Revolts and revolution) | • Empires: Large, Regional in Size (Maya, Byzantium, Urartu, Gupta, Tang)  
• established administrative bureaucracies | • traditional symbols & methods of power & legitimacy (temples, patriarchy)  
• political diffusion (political ideas from one empire to another)  
• privilege of elites over lower classes  
• new methods of managing empires: city-states (E Africa, Sultanate Ottoman, Delhi)  
• caliphate & caesaro-papism combined political & religious authority | • Regional and Trans-Regional Empires (Mongols, Delhi, Ottomans, Ming, Aztec)  
• traditional & new administrative techniques | • larger empires → cult diffusion  
• admin methods → larger empires |
| **4. Economics** (Agric, trade, commerce, labor systems, industrialization, capitalism, socialism) | • trade = regional/inter-regional  
• specialized labor in urban areas  
• slaves do least desirable work | • luxury goods still common in trade routes  
• slavery | • regional trading zones:  
• Indian Ocean  
• Silk Roads  
• trans-Saharan  
• Mediterranean  
• E Asia (Zheng He)  
• E Atlantic coast  
• Americas | • larger trans-regional empires → easier long-distance trade  
• new/improved technologies → increased trade |
| **5. Social** (Gender roles/relations, family, racial & ethnic constructions, social and economic classes) | • social hierarchies, political & relig elites  
• patriarchy in politics & religion | • social hierarchy mostly patriarchal, class/caste-based.  
• some cultures gave women greater autonomy (Mongols, W Africa, Japan, SE Asia)  
• large empires incorporated dozens of ethnic groups | • clear social hierarchies w/in empires  
• variation among empires  
• patriarchy still most common | • size of empires required toleration of multiple ethnicities  
• biological basis/rationalization (?) of patriarchy |