Evolution Of Human Societies:
Hunting And Food Gathering, Pastoral Nomadism, Subsistence Farming And Industrial Society

FOR SEMESTER II GEOGRAPHY HONS. (CBCS)

PAPER CC 3; UNIT : II ; TOPIC : 5

Presented and Compiled By

Dr. Rajashree Dasgupta
Asst. Professor,
Dept. of Geography
Government Girls’ General Degree College,
Kolkata -23
HUNTING AND FOOD GATHERING ECONOMY
• A **hunter-gatherer** is a human living in a society in which most or all food is obtained by foraging (collecting wild plants and pursuing wild animals). Hunter-gatherer societies stand in contrast to agricultural societies, which rely mainly on domesticated species.

• **Hunting** and gathering was humanity's first and most successful adaptation, occupying at least 90 percent of human history. Following the invention of agriculture, hunter-gatherers who did not change have been displaced or conquered by farming or pastoralist groups in most parts of the world.
The earliest humans probably lived in **Africa**.

They spread to the rest of the world over the next tens of thousands of years as they hunted and gathered food to survive.

Groups of related families united in **bands** to collect roots, nuts, fruits and seeds. They also hunted together. By co-operating together they met their basic needs for food, clothing and shelter.

They set up seasonal camps in caves or rock shelters wherever the animals were plentiful.
Archaeological evidence:

During the 1970s, Lewis Binford suggested that early humans obtained food via scavenging, not hunting. Early humans in the Lower Paleolithic lived in forests and woodlands, which allowed them to collect seafood, eggs, nuts, and fruits besides scavenging. Rather than killing large animals for meat, according to this view, they used carcasses of such animals that had either been killed by predators or that had died of natural causes. Archaeological and genetic data suggest that the source populations of Paleolithic hunter-gatherers survived in sparsely wooded areas and dispersed through areas of high primary productivity while avoiding dense forest cover.

According to the endurance running hypothesis, long-distance running as in persistence hunting, a method still practiced by some hunter-gatherer groups in modern times, was likely the driving evolutionary force leading to the evolution of certain human characteristics. This hypothesis does not necessarily contradict the scavenging hypothesis: both subsistence strategies could have been in use sequentially, alternating or even simultaneously.
Spreading Through the World

Migrations of Early People

Bands *migrated* when food (plants or animals) became scarce in one location.
Reasons for the Migrations

- Couldn’t find enough food
- Growing number of bands
- Changing climate (desertification)
- Follow animals on the move (hunting)

Ice Age

About 35,000 years ago
Ice sheets covered about 1/3 of the earth
Result...ocean level lower & land bridges made migration to various parts of world possible
People in different parts of the world gradually developed their own cultures (way of life). As bands grew larger, their organization and interactions within the group changed. Band members now performed different tasks (division of labor) and took on different roles according to their abilities and the group’s needs.
Hunting and gathering was presumably the subsistence strategy employed by human societies beginning some 1.8 million years ago, by *Homo erectus*, and from its appearance some 0.2 million years ago by *Homo sapiens*. Prehistoric hunter-gatherers lived in groups that consisted of several families resulting in a size of a few dozen people. It remained the only mode of subsistence until the end of the Mesolithic period some 10,000 years ago, and after this was replaced only gradually with the spread of the Neolithic Revolution.

Starting at the transition between the Middle to Upper Paleolithic period, some 80,000 to 70,000 years ago, some hunter-gatherers bands began to specialize, concentrating on hunting a smaller selection of (often larger) game and gathering a smaller selection of food. This specialization of work also involved creating specialized tools such as fishing nets, hooks, and bone harpoons. The transition into the subsequent Neolithic period is chiefly defined by the unprecedented development of nascent agricultural practices. Agriculture originated as early as 12,000 years ago in the Middle East, and also independently originated in many other areas including Southeast Asia, parts of Africa, Mesoamerica, and the Andes.
• **Forest gardening** was also being used as a food production system in various parts of the world over this period. Forest gardens originated in **prehistoric times** along jungle-clad river banks and in the wet foothills of **monsoon** regions. In the gradual process of families improving their immediate environment, useful tree and vine species were identified, protected and improved, whilst undesirable species were eliminated. Eventually superior **introduced species** were selected and incorporated into the gardens.

• Many groups continued their hunter-gatherer ways of life, although their numbers have continually declined, partly as a result of pressure from growing agricultural and pastoral communities. Many of them reside in the developing world, either in arid regions or tropical forests. Areas that were formerly available to hunter-gatherers were—and continue to be—encroached upon by the settlements of agriculturalists. In the resulting competition for land use, hunter-gatherer societies either adopted these practices or moved to other areas. In addition, **Jared Diamond** has blamed a decline in the availability of wild foods, particularly animal resources.

‘Only a few contemporary societies are classified as hunter-gatherers, and many supplement their foraging activity with **horticulture** or **pastoralism**. Contrary to **common misconception**, hunter-gatherers are mostly well-fed, rather than **starving**.[1]
• In North and South America, for example, most large mammal species had gone extinct by the end of the Pleistocene—according to Diamond, because of overexploitation by humans, one of several explanations offered for the Quaternary extinction event there.

• As the number and size of agricultural societies increased, they expanded into lands traditionally used by hunter-gatherers. This process of agriculture-driven expansion led to the development of the first forms of government in agricultural centers, such as the Fertile Crescent, Ancient India, Ancient China, Olmec, Sub-Saharan Africa and Norte Chico.

• As a result of the now near-universal human reliance upon agriculture, the few contemporary hunter-gatherer cultures usually live in areas unsuitable for agricultural use.

• Archaeologists can use evidence such as stone tool use to track hunter-gatherer activities, including mobility.
NOMADIC PASTORALISM
This is a form of pastoralism when livestock are herded in order to find fresh pastures on which to graze. True nomads follow an irregular pattern of movement, in contrast with transhumance where seasonal pastures are fixed. However this distinction is often not observed and the term nomad used for both—in historical cases the regularity of movements is often unknown in any case.

The herded livestock include cows, buffalos, yaks, llamas, sheep, goats, reindeer, horses, donkeys or camels, or mixtures of species. Nomadic pastoralism is commonly practised in regions with little arable land, typically in the developing world, especially in the steppe lands north of the agricultural zone of Eurasia. Of the estimated 30–40 million nomadic pastoralists worldwide, most are found in central Asia and the Sahel region of North and West Africa, such as Fulani, Tuaregs, and Toubou, with some also in the Middle East, such as traditionally Bedouins, and in other parts of Africa, such as Nigeria and Somalia. Increasing numbers of stock may lead to overgrazing of the area and desertification if lands are not allowed to fully recover between one grazing period and the next.

Increased enclosure and fencing of land has reduced the amount of land for this practice. There is substantive uncertainty over the extent to which the various causes for degradation affect grassland. Different causes have been identified which include overgrazing, mining, agricultural reclamation, pests and rodents, soil properties, tectonic activity, and climate change. Simultaneously, it is maintained that some, such as overgrazing and overstocking, may be overstated while others, such as climate change, mining and agricultural reclamation, may be under reported. In this context, there is also uncertainty as to the long term effect of human behavior on the grassland as compared to non-biotic factors.
In the past it was asserted that pastoral nomads left no presence archaeologically or were impoverished, but this has now been challenged, and was clearly not so for many ancient Eurasian nomads, who have left very rich kurgan burial sites. Pastoral nomadic sites are identified based on their location outside the zone of agriculture, the absence of grains or grain-processing equipment, limited and characteristic architecture, a predominance of sheep and goat bones, and by ethnographic analogy to modern pastoral nomadic peoples.

Juris Zarins has proposed that pastoral nomadism began as a cultural lifestyle in the wake of the 6200 BC climatic crisis when Harifian pottery making hunter-gatherers in the Sinai fused with Pre-Pottery Neolithic B agriculturalists to produce the Munhata culture, a nomadic lifestyle based on animal domestication, developing into the and then into a circum-Arabian nomadic pastoral complex, and spreading Proto-Semitic language Yarmoukian ages.

In Bronze Age Central Asia, nomadic populations are associated with the earliest transmissions of millet and wheat grains through the region that eventually became central for the Silk Road.

By the medieval period in Central Asia, nomadic communities exhibited isotopically diverse diets, suggesting a multitude of subsistence strategies.

Nomadic pastoralism was a result of the Neolithic revolution and the rise of agriculture. During that revolution, humans began domesticating animals and plants for food and started forming cities. Nomadism generally has existed in symbiosis with such settled cultures trading animal products (meat, hides, wool, cheese and other animal products) for manufactured items not produced by the nomadic herders. Henri Fleisch tentatively suggested the Shepherd Neolithic industry of Lebanon may date to the Epipaleolithic and that it may have been used by one of the first cultures of nomadic shepherds in the Beqaa valley. Andrew Sherratt demonstrates that "early farming populations used livestock mainly for meat, and that other applications were explored as agriculturalists adapted to new conditions, especially in the semi-arid zone."

A young Maasai cattle herder in Kenya.
Often traditional nomadic groups settle into a regular seasonal pattern of **transhumance**. An example of a normal nomadic cycle in the northern hemisphere is:

- **Spring** (early April to the end of June) – transition
- **Summer** (end of June to late September) – a higher plateau
- **Autumn** (mid-September to end of November) – transition
- **Winter** (from December to the end of March) – desert plains.

The movements in this example are about 180 to 200 km. Camps are established in the same place each year; often semi-permanent shelters are built in at least one place on this migration route.

In sub-regions such as Chad, the nomadic pastoralist cycle is as follows:

- **In the rainy season**, the groups live in a village intended for a comfortable stay. The villages are often made of sturdy material as clay. Old men and women remain in this village when the other people move the herds in the dry season.

- **In the dry season**, the people move their herds to southern villages with a more temporary character. They then move inland, where they stay in tent camps. In Chad, the sturdy villages are called hillé, the less sturdy villages are called dankhout and the tents ferik.

Reindeer milking in a forest; western Finnmark, late 1800s
Nomadic pastoralism was historically widespread throughout less fertile regions of Earth. It is found in areas of low rainfall such as the Arabian Peninsula inhabited by Bedouins, as well as Northeast Africa inhabited by Somalis (where camel, sheep and goat nomadic pastoralism is especially common).

Nomadic transhumance is also common in areas of harsh climate, such as Northern Europe and Russia inhabited by the indigenous Sami people, Nenets people and Chukchis. There are an estimated 30–40 million nomads in the world. Pastoral nomads and semi-nomadic pastoralists form a significant but declining minority in such countries as Saudi Arabia (probably less than 3%), Iran (4%), and Afghanistan (at most 10%). They comprise less than 2% of the population in the countries of North Africa except Libya and Mauritania.

The Eurasian steppe has been largely populated by pastoralist nomads since the late prehistoric times, with a succession of peoples known by the names given to them by surrounding literate sedentary societies, including the Bronze Age Proto-Indo-Europeans, and later Proto-Indo-Iranians, Scythians, Sarmatians, Cimmerians, Massagetae, Alans, Pechenegs, Cumans, Kipchaks, Karluks, Saka, Yuezh i, Wusun, Jie, Xiongnu, Xianbei, Khitan, Pannonian Avars, Huns, Mongols, Dzungars and various Turkics.

A camel trader in Hargeisa, Somalia.
In the Middle Hills and Himalaya of Nepal, people living above about 2,000 m practice transhumance and nomadic pastoralism because settled agriculture becomes less productive due to steep slopes, cooler temperatures and limited irrigation possibilities. Distances between summer and winter pasture may be short, for example in the vicinity of Pokhara where a valley at about 800 meters elevation is less than 20 km. from alpine pastures just below the Annapurna Himalaya, or distances may be 100 km or more. For example, in Rapti zone some 100 km west of Pokhara the Kham Magar move their herds between winter pastures just north of India and summer pastures on the southern slopes of Dhaulagiri Himalaya.

In far western Nepal, ethnic Tibetans living in Dolpo and other valleys north among the high Himalaya moved their herds north to winter on the plains of the upper Brahmaputra basin in Tibet proper, until this practice was prohibited after China took over Tibet in 1950–51.
Sometimes nomadic pastoralists move their herds across international borders in search of new grazing terrain or for trade. This cross-border activity can occasionally lead to tensions with national governments as this activity is often informal and beyond their control and regulation.

In East Africa, for example, over 95% of cross-border trade is through unofficial channels and the unofficial trade of live cattle, camels, sheep and goats from Ethiopia sold to Somalia, Kenya and Djibouti generates an estimated total value of between US$250 and US$300 million annually (100 times more than the official figure). This trade helps lower food prices, increase food security, relieve border tensions and promote regional integration. However, there are also risks as the unregulated and undocumented nature of this trade runs risks, such as allowing disease to spread more easily across national borders. Furthermore, governments are unhappy with lost tax revenue and foreign exchange revenues.

There have been initiatives seeking to promote cross-border trade and also document it, in order to both stimulate regional growth and food security, but also to allow the effective vaccination of livestock. Initiatives include Regional Resilience Enhancement Against Drought (RREAD), the Enhanced Livelihoods in Mandera Triangle/Enhanced Livelihoods in Southern Ethiopia (ELMT/ELSE) as part of the Regional Enhanced Livelihoods in Pastoral Areas (RELPA) programme in East Africa, and the Regional Livelihoods Advocacy Project (REGLAP) funded by the European Commission Humanitarian Aid Office (ECHO).
PRIMITIVE SUBSISTENCE ECONOMY
History of Subsistence Economy

Subsistence agriculture was predominant in parts of Asia especially India and later emerged in various areas including Mexico, where it was based on maize, and in the Andes, where it was based on the domestication of the potato. Subsistence agriculture was the dominant mode of production in the world until recently, when market-based capitalism became widespread. Subsistence horticulture may have developed independently in South East Asia and Papua New Guinea.

Subsistence agriculture had largely disappeared in Europe by the beginning of World War I, and in North America with the movement of sharecroppers and tenant farmers out of the American South and Midwest during the 1930s and 1940s.

As recently as the 1950s, it was still common on family farms in North America and Europe to grow much of a family's own food and make much of its own clothing, although sales of some of the farm's production earned enough currency to buy certain staples, typically including sugar; coffee and tea; petroleum distillates (petrol, kerosene, fuel oil); textile products such as bolts of cloth, needles, and thread; medicines; hardware products such as nails, screws, and wire; and a few discretionary items such as candy or books.

Many of the preceding items, as well as occasional services from physicians, veterinarians, blacksmiths, and others, were often bought with barter rather than currency.

In Central and Eastern Europe subsistence and semi-subistence agriculture reappeared within the transition economy since about 1990.
Contemporary practices of Subsistence Economy

Subsistence farming continues today in large parts of rural Africa, and parts of Asia and Latin America. In 2015, about 2 billion people (slightly more than 25% of the world’s population) in 500 million households living in rural areas of developing nations survive as "smallholder" farmers, working less than 2 hectares (5 acres) of land.
Shifting agriculture

- In this type of agriculture, a patch of forest land is cleared by a combination of felling and burning, and crops are grown.

- After 2–3 years the fertility of the soil begins to decline, the land is abandoned and the farmer moves to clear a fresh piece of land elsewhere in the forest as the process continues.

- While the land is left fallow the forest regrows in the cleared area and soil fertility and biomass is restored.

- After a decade or more, the farmer may return to the first piece of land.

- This form of agriculture is sustainable at low population densities, but higher population loads require more frequent clearing which prevents soil fertility from recovering, opens up more of the forest canopy, and encourages scrub at the expense of large trees, eventually resulting in deforestation and land erosion.

- Shifting cultivation is called *dredd* in India, *ladang* in Indonesia, *milpa* in Central America and Mexico and *jhumming* in North East India.
While this "slash-and-burn" technique may describe the method for opening new land, commonly the farmers in question have in existence at the same time smaller fields, sometimes merely gardens, near the homestead there they practice intensive "non-shifting" techniques until shortage of fields where they can employ "slash and burn" to clear land and (by the burning) provide fertilizer (ash).

Such gardens near the homestead often regularly receive household refuse, and the manure of any household, chickens or goats are initially thrown into compost piles just to get them out of the way. However, such farmers often recognize the value of such compost and apply it regularly to their smaller fields. They also may irrigate part of such fields if they are near a source of water.

In some areas of tropical Africa, at least, such smaller fields may be ones in which crops are grown on raised beds. Thus farmers practicing "slash and burn" agriculture are often much more sophisticated agriculturalists than the term "slash and burn" subsistence farmers suggests.
Nomadic herding

- In this type of farming people migrate along with their animals from one place to another in search of fodder for their animals. Generally they rear cattle, sheep, goats, camels and/or yaks for milk, skin, meat and wool.

- This way of life is common in parts of central and western Asia, India, east and southwest Africa and northern Eurasia. Examples are the nomadic Bhotiyas and Gujjars of the Himalayas.

- They carry their belongings, such as tents, etc., on the backs of donkeys, horses, and camels. In mountainous regions, like Tibet and the Andes, yak and llama are reared.

- Reindeer are the livestock in arctic and sub-arctic areas. Sheep, goats, and camels are common animals, and cattle and horses are also important.
**Intensive subsistence farming**

- In intensive subsistence agriculture, the farmer cultivates a small plot of land using simple tools and more labour.

- Climate, with large number of days with sunshine and fertile soils permits growing of more than one crop annually on the same plot.

- Farmers use their small land holdings to produce enough, for their local consumption, while remaining produce is used for exchange against other goods. It results in much more food being produced per acre compared to other subsistence patterns.

- In the most intensive situation, farmers may even create terraces along steep hillsides to cultivate rice paddies. Such fields are found in densely populated parts of Asia, such as in the Philippines. They may also intensify by using manure, artificial irrigation and animal waste as fertilizer.

- Intensive subsistence farming is prevalent in the thickly populated areas of the monsoon regions of south, southwest, and southeast Asia.
Subsistence agriculture occurs when farmers grow food crops to meet the needs of themselves and their families.

In subsistence agriculture, farm output is targeted to survival and is mostly for local requirements with little or no surplus.

Planting decisions are made principally with an eye toward what the family will need during the coming year, and secondarily toward market prices.

Tony Waters writes: "Subsistence peasants are people who grow what they eat, build their own houses, and live without regularly making purchases in the marketplace."

Despite the primacy of self-sufficiency in subsistence farming, today most subsistence farmers also participate in trade to some degree, though usually it is for goods that are not necessary for survival, and may include sugar, iron roofing sheets, bicycles, used clothing, and so forth. Most subsistence farmers today reside in developing countries. Although their amount of trade as measured in cash is less than that of consumers in countries with modern complex markets, many have important trade contacts and trade items that they can produce because of their special skills or special access to resources valued in the marketplace.
INDUSTRIAL ECONOMY
Features of industrial society:

- Industry based economy
- Emergence of no. of technical and professional jobs
- Rapid means of transport
- Wide network of communication
- Based on mechanical power
- Migration to cities.
ADVANTAGES OF INDUSTRIAL SOCIETY

- Increase free trade between nations
- Increase in capital allowing investors to finance the country.
- Global mass area tied around the world.
- Spread of democratic ideals to other nations.
- Increase in environmental protections.
- Greater ease of transportation of goods and people.
**DISADVANTAGES OF INDUSTRIAL SOCIETY**

- Norms and values take a backseat.
- Turns human being into alienated beings.
- Social distance between the people within a society and diminishing impact on the primary relation.
- Increase in problem of unemployment.
- Increase gap between poor and rich people will lead to social inequalities.
- Will effect the relation between the people within the society.
• Less high powered machinery
• Limited production
• Less variation of social classes
• Complexity of surplus production
PRE INDUSTRIAL SOCIETY

- Pre-industrial lifestyle worked with the resources of the earth and within the bounds of natural ecosystem.
- No desire to over use earth resource and nature could recover from the environmental impact of mankind’s economic activities unaided.
PRE - INDUSTRIAL SOCIETIES:

- Small scale production (i.e. artisanship rather than mass production)
- Primarily agricultural economy geared towards self sufficiency, not market exchange little surplus.
- Little division of labor.
- Limited variation in social classes.
- Parochialism: undeveloped transportation limited contact with outside world.
DIFFERENCES BETWEEN:
PRE-INDUSTRIAL SOCIETY AND
INDUSTRIAL SOCIETY

• Demography
• Production
• Commerce
• Capital
• Redistribution of health
• Culture, ethics, and moral value
A POST INDUSTRIAL SOCIETY IS BASICALLY A INFORMATION SOCIETY

Daniel Bell

COMPARISON OF URBAN & RURAL IN POST INDUSTRIAL PERIOD

- Large-scale industries
- Large urban population
- Limited areas of 'wilderness'
- Intensifying agriculture
The post-industrial society is the stage of society's development when the service sector generates more wealth than the manufacturing sector of the economy.

- Change happened with industrial revolution
- Organic solidarity - social interdependence based on a web of specialized roles.
- These specialized roles make members of society rely on each other for goods and services.

- People work with other people to deliver a service
- Transformation of working class to professional middle class
- Emergence of knowledge elites
- Growth of multiple networks
- Divide in society
- Majority sell labour at cheap rates Post-industrial turn
- Towards social and economic polarization:
  - Knowledge and information
Uses Of Electricity In Our Daily Life

- Motion or Power
- Heating/Cooling
- Communication
- Light

- Motor
- Oven
- Trans
- Refrigerator
- Air Conditioner
- Portable Devices
- TV
- Flashlight
- Lamp
- Power Lines
- Sun
- Electricity Generation

Dept. of Geography, GGGDC, Kolkata
EFFECTS OF INDUSTRIAL REVOLUTION ON SOCIETY

- It led to globalization and world economic connectivity.
- It led to the massive rise of the corporation.
- It led to the rise of unions and collective bargaining.
- It led to government oversight and the creation of such traditions as the 40-hour work week, safe working conditions, and the idea of benefits.
- It led to worldwide pollution, all sorts of related diseases (especially cancer), and global warming.
- It led to an exponential rise in human technology.
CONCLUSION:

- Industrial societies are characterized by the emergence of industrialization as the primary means of labor, business, and commerce.

- Industrial societies differ markedly from agricultural societies, wherein members are primarily involved in plant cultivation for their own subsistence.

- With improved technology, labor in industrial societies has become more specialized. In addition, better working conditions and higher wages have resulted in improved standards of living for highly skilled or educated workers.
References:


https://www.slideshare.net/brijeshkumar98837/industrial-society

https://www.slideshare.net/crow0317/hunters-and-gatherersppt