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Classification of world agricultural systems

Classification of Agricultural Systems

D. Whittlesey Classification

1. Nomadic herding
2. Livestock ranching
3. Shifting cultivation ("dibble agriculture")
4. Rudimentary sedentary tillage
5. Intensive subsistence tillage with rice dominant
6. Intensive subsistence tillage without rice
7. Commercial plantation crop
8. Mediterranean agriculture (olive, citrus, grape, winter wheat)
9. Commercial grain farming
10. Commercial livestock and grain farming
11. Subsistence crop and subsistence stock farming
12. Commercial dairy farming
13. Specialized horticulture

On the basis of the Classification of Agriculture System of the World

A. On the basis of market and amount of crop production:

B. Population and amount of Land:

C. Regional Specialization:

D. Volume and Difference of Humidity

E. Recurrent (পৌনঃপুনিকতা) of Agro-Land used:

F. Seasonal variation:

G. According to Ownership/ Land Tenancy:

H. On the basis of Social Characteristics:

A. On the basis of market and amount of crop production:

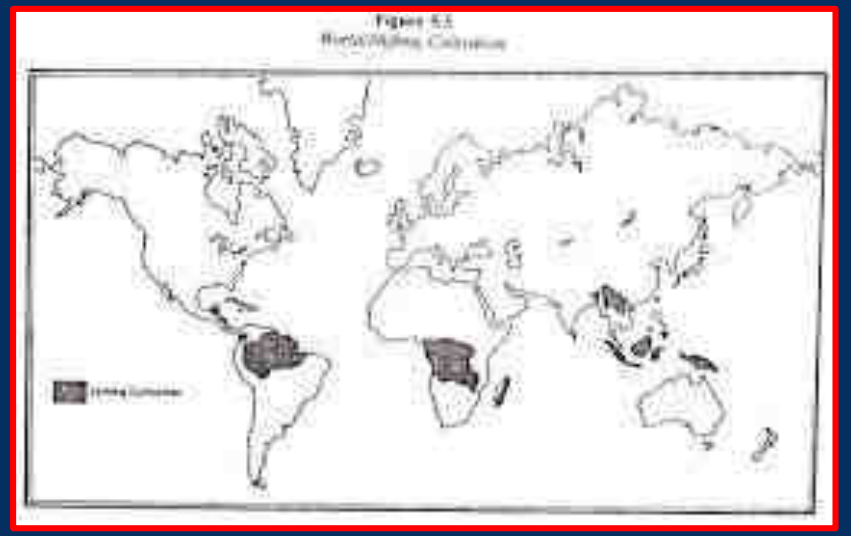
a. Humid subsistence Agriculture:

I. Shifting Agriculture:

Shifting cultivation essentially this is a land rotation system. Farmers using machetes or other bladed instruments chop away the undergrowth from small pat etches of land. Then they kill the trees by cutting of a strip of bank completely around the truck. Afton the dead clean it farm the land. These cleaning techniques have gluten shifting cultivation the name or slash and burn agriculture.

Location:

Shifting cultivations the primitive form of soil utilization usually a tropical rainforests also tropical lowlands hills in the center America, Africa, and Southeast Asia, Indonesia.



Characteristics:

(a) Shifting cultivation is called by different name in different parts of the world. It is generally known as a slash burn and bush fallow agriculture. it, is variously termed as ladang in Indonesia, Milpa in central America, Mohole in the Congo central Africa.

(b) The farmer grow food only for his family in this agriculture systems. Some small surplus if any are exchanged on bartered (exchange of commodity for commodity) or sold for crash in the neigh boning markets.

(c) Shifting cultivation has been described as an economy of which the main chana etenistues arc rotation of fields rather than rotation of crops.

(d) In the hill tracts of north-Cast India Thinning is the dominant economic activity. Our 86 percent of the people living on hill arc dependent on shifting cultivation.

(e) The shifting cultivations grow food grains-rice maize-millet- jobs-beans- vegetables- soybean.

II. Sedentary (স্থায়ী)Agriculture:

Agriculture as practiced in one place by a settled farmer in which fields are not rotated is called sedentary agriculture. The term was used for primitive agriculturists in tropical Africa who farmed the same piece of land indefinitely in contrast to shifting cultivation.

Location: found in coastal California, Greece or countries in the temperate Europe, India etc.

Characteristics:

(a) The farmers settle down in one particular place.
(b) Varieties of crops are grown.
(c) Agricultural activity is carried on in one place.
(d) Crop are raised only for their domestic animals.

b. Traditional Agriculture:

Traditional Agriculture can be defined as a primitive style of farming that involves the intensive use of indigenous knowledge, traditional tools, natural resources, organic fertilizer and cultural beliefs of the farmers. It is noteworthy that it is still used by about 50% of the world population.

Location: It is still prevalent in the tribal region of northeast India.

Characteristics:

(a) Extensive farming with indigenous knowledge and tools
(b) Indigenous tools like axe, hoe, and stick
(c) Method: Slash & Burn, and Shifting Cultivation
(d) Cattle raisin helps to create fallow land
(e) Absence of accountability and responsibility to the Environment
(f) Lacked by surplus production

C. Commercial or Market-based Agriculture:

The specialized commercial cultivation of cosh or estates or plantation is a very distinctive type of tropical agriculture is found many parts of world.

Location:

The term plantation agriculture was originally applied specifically to the British settlements in America then to any Inga estate in north America , west India, south-east Asia which was cultivated mainly by Negro or other colored labor.

Characteristics:

(i) A plantation is a land holding devolved to the specialized production of one tropical or subtropical crop raised for market.

(ii) Climatic hazards' strong winds, topography, drainage soil vegetation condition often handicap or many even prevent the development establishment of plantation stct. Accessibility connectivity availability of labor difficulties of clearing vegetation prevalence of discover sin sect pest , weeds, rapid deterioration of the tropical soil , soil erosion are some of the main problem of plantation agriculture.

(iii) The plantation forms arc generally large and arc found mainly in the thinly populated areas. The size of farm varies from 40 hectares in Malaya India, too 60000 hectares in Liberia. In these estates on large disciplined but unskilled labor force is necessary.

(iv) Some of the main plantation crops are rubber, oil palm, cotton, copra, beverages like coffee, tea, coco, fruits like pineapples, bananas, as well as sugar-cane jute.

(v) The continent wise analysis reveals that Asia is the leading producer of Jute (96%), rubber (90%) tea (87%) coconut (37%) tobacco (46%) of the total world production Asia share in the production of sugarcane is 39% that of banana , oil palm is 25% each **(Hussain 1996).**

(vi) The characteristics features of commercial plantation may be summarized as follows--

(a) Estate farming.

(b) Foreign ownership local labor.

(c) Fanning in estates is scientifically managed.

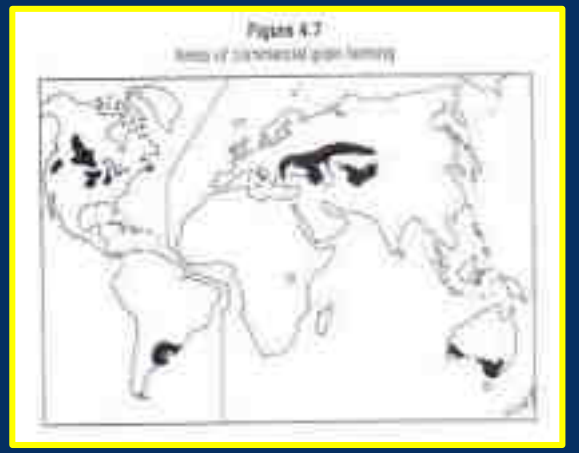
1. Commercial grain farming:

Commercial grain farming is another market oriented type of agriculture in which farmers specialize in growing wheat on less frequently rice or corn.

Location:

Great wheat belts stretch through Australia the plains of interior North America, the steppes of Russia, the pampas of Argentina, together the United states, Canada farmer, Soviet union.

Characteristics:



(i) The commercial vain fanning is basically extensive. The main characteristics of these systems are--

(a) Big farm size
(b) Comprehensive use of heavy machines
(c) Low use of irrigation fertilizer
(d) Low production rate
(e) Long distance of farm from market.

(ii) Widespread use of machinery enables commercial grain farmer to operate on this large scale indeed plan ting harvesting grain is more completely mechanized than any other form of agriculture.

(iii) Wheat is the main crop; Mize, Barleys, oat ore another important crops. The wheat production regions are divided into two belts.

a. Winter wheat belt.
b. Spring wheat belt.

2. Commercial Livestock & Crop Farming:

Location:

It is found throughout Europe from h eland in the West through central Europe to Russia. It is also found in north America cast at 98'o meridian in the pampas or Argentina, Southeast Australia, Australia, South Africa, New Zealand.

Characteristics:

(a) The main characterized of the mixed farming arc that farms produce both crops livestock the tow enterprises interwove a integrated.

(b) Mixed farms one characterized by high expenditure on machinery farm building extensive use of machinery arm buildings fertilizers also by the skill experts of farmers who need to know about all aspects of farming to grow market their range of product successfully.

(c) Mixed farming is essentially associated wilt the density populated.

(d) Urbanized industrialized societies dependent. A upon high incomes for the sale or its products upon manufacturers industry for the provision of its inputs.

(e) In mixed farming a number of crops one grown. Crenels dominate the cropland use the leading grain varying with climate soil. A large portion of cereals is fed to animals on the farms on sold to Maim factures of feeding stuff. Livestock feed on crop grown on the farm graze the post wire.

3. Commercial Dairy Farming:

Location:

The rearing of the cattle for milk, milk products (butter, cheep, condensed, dried milk etc) is known on daily farming. It is mainly practiced in Europe, Northern USA, Canada, Australia, New Zealand, Denmark, Netherlands, Belgium, Finland, France, and Switzerland. It contributes 40% of agricultural income.

Characteristics:

(a) Dairying is capital intensive farming. A modern dairy farm needs long here's from the farming huge amounts for the development of infrastructural facilities capital is required for the punch ore of mechanical equipments like milking machines milk freezers, feeding towers, born silos for the storage of fodder for winters.

(b) The size of cattle in dairies varies from country to country from farm to farm depending on the size of holding. In the United Kingdom for example the ratio of cattle pasture is one cow after one acre. The average size of dairy cattle in north-west Europe is only five cows per farm.

(c) Nearly 80% of the total milk production of the world is produced in Europe, Russia, Anglo America, Australia, New Zealand (Hussain 1996).

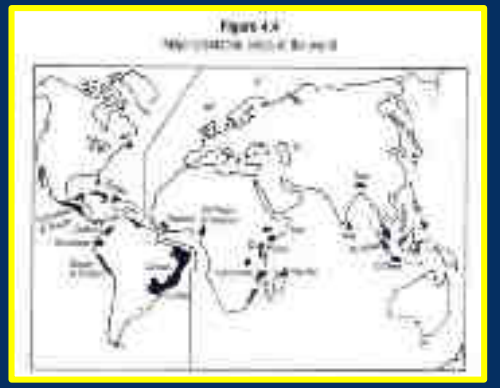
(d) Modern method of daily farming cattle breeding herd management allow high yields of dairy products. A cow in temperate latitudes under normal healthy conditions yield or much as 3000kg of milk pen year.

d. Plantation Agriculture:

Plantation agriculture is a form of commercial farming where crops are grown for profit. Large land areas are needed for this type of **agriculture**. Countries that have **plantation agriculture** usually experience high annual temperatures and receive high annual rainfall.

Location:

The specialized commercial cultivation of cash crops on estates or plantations is a very distinctive type of tropical agriculture and is found in many parts of Asia, Africa and tropical and sub-tropical America.



Characteristics:

Five characteristics of plantation farming :

(i) It is a single crop farming practised on a large area.
(ii) Crops are mainly grown for the market.
(iii) It is both labour intensive and capital intensive.
(iv) It has an interface of agriculture and Industry.
(v) Developed network of transport and communication connecting the plantation processing industries and markets play an important role in the development of plantations.
(vi) Examples of plantation crops are tea, coffee, rubber, sugar cane and banana etc.

e. Horticulture (Garden culture/ Market gardening cultivation & Truck Farming):

Specialized cultivation of vegetables, fruits, flowers is called horticulture. It is practised mainly in the same region as that of mixed farming that consists of cultivation of vegetables fruit and flowers solely for the urban market. It is well-developed in the densely populated industrial districts of north-western Europe (Britain, Denmark, Netherlands, Belgium, and Germany) and in North-Eastern USA. It is also called Truck Farming.

Location:

Horticulture is well developed in the densely populated industrial districts of north-west Europe, Britain, Denmark, Germany, Netherlands, France, Italy.

Characteristics:

(i) In horticultural the farms arc small such farms arc located where communication links the consumption centers arc appreciably good. The land fruits' vegetable gardening is very intensively cultivated. Soil fertilizers Mimi oldie work is done by hand labor.

(ii) The market gardens are scientifically managed to achieve optimum yields hand some returns.

(iii) The important vegetation region are California Rio Ground boring of Texas Florida Netherlands, Rhone valley etc. fruits regions are west of Paris , Rhine valley lake region of Switzerland, Mendoza, Sanjuam of Argentina etc. (grapes production) south western Germany (apple).

(iv) Besides south Arab, Iraq for date. India, South-East Asia for spices, pineapple, mango etc

i. **Florculture:** Flowers cultivation

ii. **Pomumculture:** Fruits cultivation

iii. **Olericulture:** Vegetables cultivation

B. Population and amount of Land:

a. Intensive Agriculture

System of cultivation using large amounts of labour and capital relative to land area. Large amounts of labour and capital are necessary for the application of fertilizer, insecticides, fungicides, and herbicides to growing crops, and capital is particularly important to the acquisition and maintenance of high-efficiency machinery for planting, cultivating, and harvesting, as well as irrigation equipment where required.

Location: It includes interior India and North-East China.

Characteristics:

(a) Land is intensively used & worked primarily by human power.
(b) Farming in these regions suffers from frequent crop failures & famines.
(c) Wheat, Soya bean, Barley, Kaoliang crops are grown

b. Extensive Agriculture.

System of crop cultivation using small amounts of labour and capital in relation to area of land being farmed. The crop yield in extensive agriculture depends primarily on the natural fertility of the soil, terrain, climate, and the availability of water.

Location:

Extensive farming system is practiced in the low population density regions of U.S.A. Canada in N. America; Argentina, Peru, etc. in S. America; Russian Federation in Eurasia; Australia, New Zealand etc.

Characteristics:

(a) Extensive agriculture is distinguished from intensive agriculture in that the latter, employing large amounts of labour and capital, enables one to apply fertilizers, insecticides, fungicides, and herbicides and to plant, cultivate, and often harvest mechanically.

(b) Extensive agriculture produces a lower yield per unit of land, its use commercially requires large quantities of land in order to be profitable.

(c) This demand for land means that extensive agriculture must be carried on where land values are low in relation to labour and capital, which in turn means that extensive agriculture is practiced where population densities are low and thus usually at some distance from primary markets.

(d) Local environment and soil are not damaged by overuse of chemicals.

(e) Lower requirements of inputs such as fertilizers.

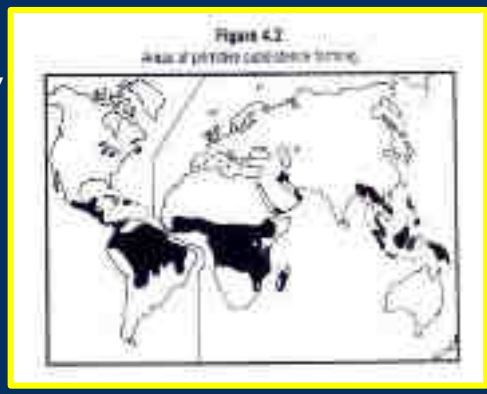
(f) The use of machinery and scientific methods of farming produce a large quantity of crops.

c. Self-sufficient or Subsistence Agriculture:

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.

Location:

This form of agriculture is widely practised by many tribes of the tropics, especially in Africa, in tropical South and Central America, and in South-East Asia.



Type:

Types of subsistence farming are 1. Primitive or Simple Subsistence Farming
2. Intensive Subsistence Farming.

Characteristics:

(a) The cultivated patches are usually very small; about 0.5-1 hectare (1-3 acres) scattered in their distribution and separated from one another by dense forests or bush.

(b) Cultivation is done with very primitive tools such as sticks and hoes, without the aid of machines or even drought animals. Much manual labour is needed in land clearance to produce food for a few people.

(c) Few crops are raised in the ladings. The main crops are starchy foods, e.g., tapioca, cassava or manioc, yams, maize or corn, millet, upland rice, beans and bananas.

C. Regional Specialization:

a. Monsoon Agriculture:

This from of agriculture is best developed in partially confined to the monsoon lands of Asia.

Location:

Intensive subsistence tillage dominated by paddy is practiced mostly in the tropical Asia. It is carried on mainly in China. Japan, India, Bangladesh, Myanmar, Thailand, Srilanka, Malaysia, Philippines etc.

Characteristics:

(a) Farming is also intensive that double or treble cropping is practiced. That is several crops are grown on the same land during the course of a year.

(b) Where only one crop of' paddy can be raised. The fields one normally used in the dry season to raise other food or cash crop such as sugar tobacco on oil seeds on the fiber crop jute.

(c) Asian farmer one now producing even greater yields per acre because of the recent introduction to improved varieties of hybrid rice.

b. Mediterranean Agriculture:

Within the Mediterranean climatic region where there is winter rain summer drought a distinctive type of agriculture has evolved.

Location:

Agricultural typology is confined to the coastal areas the Mediterranean sea in Europe, Asia, Minor, North African coastal strip. Outside the Mediterranean cost this system is found in California (USA). Central Chile the south-cast of cape province (South Africa) South-West of Western Australia.

Characteristics:

(a) This type of farming is also found in irrigated semi-descent descent areas in similar latitudes.

(b) The agricultural landscape of Mediterranean region has been largely affected by long day summers occurrence of rains during the winter season devices for artificial irrigation during drought periods of summers.

(c) Traditional Mediterranean agricultural is bored on what barely cultivation in the rainy wastes season raising drought resistant vine tree crops like the grape olive, fig, small livestock herding particularly of sheep goats pigs.

(d) In recent times farmer have begun using irrigation ill 1 major way which has led to the expansion of crops such as the citrus fruits.

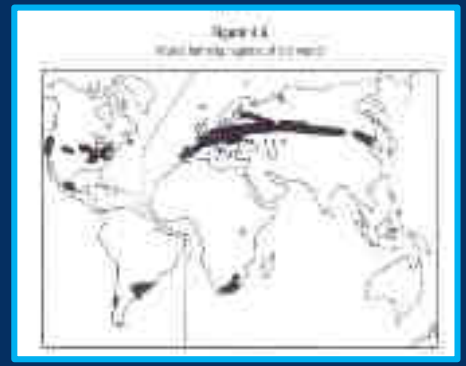
(e) The Mediterranean land in fact the Orchard lands of the world the hart of the worlds wine industry.

c. Mixed or Diversified agriculture:

Mixed farming is a type of agriculture which involves both crops and livestock. This is not to be confused with mixed cultivation, implying merely a series of different crops.

Location:

This type of agricultural systems is found in the highly developed parts of the world: **north-western Europe, eastern North America, Russia, Ukraine, and the temperate latitudes of parts of the southern continents**. Farming is very intensive and sometimes highly specialised. Traditionally, farmers have practised a mixed economy by raising animals and growing crops on the same farm.



Characteristics:

(a) The mixed farming is done for (a) Sustenance of animals, (b) For own consumption, and (c) For commercial sale.

(b) In mixed farming about 90 per cent land is devoted to agriculture.

(c) In mixed farming crop rotation is followed in order to maintain soil fertility.

(d) The sequence of cultivation in mixed farming is cereal and vegetable production for own consumption, followed by hay, alfalfa, clover, etc., for livestock consumption, and finally, some amount of cereal production, wheat, maize, etc., for commercial sale.

(e) This farming is more mechanised. The use of heavy machines like tractors, harrowers, thrashers, etc., is very common.

(f) There is a large-scale use of both organic and inorganic fertilizers.

D. Volume of Humidity:

a. Humid or Wet Agriculture:

Humid farming is prevalent in areas where rainfall is abundant, excess water is stored and provided to the farmlands — systematically. Rainy season is sowing season, harvesting is done in the dry months. According to the nature and characteristic of rainfall, cropping pattern varies from one region to another.

Location:

Humid farming is practiced all over monsoon-Asia, Tropical Africa and Mediterranean regions.

Characteristics:

(a) Wet farming is a type of farming which depends mainly upon rain.
(b) This type of far-ming is prevalent in the North, North-Eastern, Eastern India and the Western slopes of the Western Ghats.
(c) Farming method is comparatively cheaper than other methods.
(d) Farming begins at the onset of rainy season.
(e) Types and characteristics of crops are governed by the amount of annual rainfall.

(f) Rice, jute, sugar-cane, etc., are the important crops.

b. Irrigation Agriculture:

Irrigation farming is prevalent in areas where rainfall is seasonal and confined in a particular season. The excess amount of water in the wettest months are preserved in such a way that they can be provided to the agriculture fields during the dry months through systematic irrigation network.

Location:

The densely populated regions of South-east Asian monsoon land—along with sub-tropical Asia and Africa—practice this type of agriculture system. Large dams are built across the vast mighty rivers like Ganga, Indus, Irrawaddy, Menam, Mekong, San-Joaquin which provide ample water in the drier parts of the year for irrigation purpose.

Characteristics:

(a) This system is costly as it requires construction of dams, canals etc. To compensate this high cost of production, costly cereals like sugarcane and jute are produced.

(b) Irrigation enables cultivation throughout the year; even the marginal lands are cultivated.

(c) Cultivation aims at both domestic and international market.

(d) Farming is practiced intensively. Agricultural inputs like fertilizers, H.Y.V. seeds, pesticides and machines are employed to increase productivity.

c. Dry Agriculture:

Dry farming is widespread in areas where annual rainfall is as low as 50 cm or less and irrigation is not practicable. Due to inadequate rainfall, all efforts are made to optimize the scanty available water utilization. Dry farming is an age-old practice in semiarid regions, sub-desert regions and dry interior plateau areas.

Location:

(a) Western parts of U.S.A. and Canada in N. America.
(b) Plateau areas in interior Mexico in Central America.
(c) Lebanon, Israel, Egypt, Syria, Turkey and Palestine areas in Middle-East.
(d) Western Rajasthan and Central China, etc.

Characteristics:

(a) Dry farming is that farming in which moisture is maintained by raising a special type of crops.
(b) Soil is kept very loose by intense ploughing so that rain water can penetrate deeper.
(c) Loose soil dust is usually sprayed over the field to protect evaporation and soil erosion from wind action.
(d) Wells or deeper canals are constructed to contain rain-water.
(e) This is practised in dry areas of the country such as, North Western India.
(f) Gram and peas are the important crops.

E. Recurrent (পৌনঃপুনিকতা) of Agro-Land used:

a. Single – cropped Agriculture:

Monocropping is the agriculture practice of growing a single crop year after year on the same land, in the absence of rotation through other crops or growing multiple crops on the same land poly-culture. corn, soybeans, and wheat are three common crops often grown using monocropping techniques.

Risk of residual transfer of pests, diseases, and weeds from one season to the next

b. Double-cropped Agriculture:

Double cropping means planting several crops in the same area and in the same crop year so that the same land is used to generate more than one crop per year. In Brazilian agriculture, double cropping is practiced for maize, peanuts, potatoes, and beans.

c. Multi-cropped or Crop-rotation Agriculture:

Two or more species growing on the same piece of land, where at least part of the growth cycles of different species overlap.

Plants of different species are close enough to allow interactions between them, usually at different stages of their growth

d. Inter-Culture

A multicrop composed of two or more annual crops grown simultaneously on a piece of land within a single growing season.

Intercrops may retain the same population as the sole crops that they are composed of in which each plant of one species is replaced by a single plant of one or more other species ("replacement intercrop") or additional plants of one or more species may be fitted into an existing population of sole crops ("additive intercrop")

F. Seasonal variation:

a. Kharif-crop Agriculture:

The word "Kharif" is Arabic for autumn since the season coincides with the beginning of autumn or winter. Kharif crops also are known as *monsoon or Autumn crops*. These are the crops that are cultivated in the monsoon season. The Kharif season differs in every state of the country but is generally from June to September. These crops are usually sown at the beginning of the monsoon season around June and harvested by September or October. Rice, maize, bajra, ragi, soybean, groundnut, cotton are all Kharif types crops.

b. Rabi-Crop Agriculture:

The Arabic translation of the word "Rabi" is spring. These crops' harvesting happens in the springtime hence the name. The Rabi season usually starts in November and lasts up to March or April. Rabi crops are mainly cultivated using irrigation since monsoons are already over by November. In fact, unseasonal showers in November or December can ruin the crops. The seeds are sown at the beginning of autumn, which results in a spring harvest. Wheat, barley, mustard and green peas are some of the major rabi types of crops that grow in India.

C. Zaid Agriculture:

There is a short season between Kharif and Rabi season in the months of March to July. The crops that grow in this season are Zaid crops. These crops are grown on irrigated lands and do not have to wait for monsoons. Some examples of Zaid types of crops are pumpkin, cucumber, bitter groud.

G. According to ownership:

a. Co-operative or Collective Agriculture:

In **cooperative farming**, **farms** are owned by several **farmers** who pool their resources voluntarily, work together and share the profit in *certain areas of activity*.

b. Government or State Sponsored Agriculture:

A State Agricultural Farm (Polish: Państwowe Gospodarstwo Rolne, PGR) was a form of collective farming in the People's Republic of Poland, similar to Soviet Sovkhoz and to the East German Volkseigenes Gut.[1] The state ran many specialised farms, which bred and trained horses (especially Arabians, e.g.Bask), bred cows, fishes, produced certified seed and potatoes. Farms were created primarily on the basis of the earlier estates. Many of these households were founded on the *Regained Territories*.

c. Collective (যৌথ) Agriculture:

Collective farming is when a group of farmers pool their land, domestic animals, and agricultural implements, retaining as private property enough only for the members' own requirements. The profits of the farm are divided among its members. In cooperative farming, farmers retain private ownership of the land.

d. Individual/Private Agriculture:

i. Personal Proprietorship Agriculture (কৃষক-মালিকানা চাষ):

This farming is a system of agriculture whereby farmers cultivate crops or raise livestock on own lands.

ii. Tenant Agriculture (বর্গাদারি চাষ):

Tenant farming is a system of agriculture whereby farmers cultivate crops or raise livestock on rented lands. A tenant farmer typically could buy or owned all that he needed to cultivate crops; he lacked the land to farm. The farmer rented the land, paying the landlord in cash or crops.

D. According to Climate:

a. Equatorial Agriculture:

b. Tropical /Monsoonal Agriculture:

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d. Nomadic Herding / Agriculture:

This is an extensive farm of animal grazing on natural pasturage involving constant on seasonal migration of the nomads their flocks nomadic handing is confined to rather sparsely populated parts of the world where the natural. vegetation is mainly grass.

Location:

Nomadic handing at present is mainly concentrated in Saharan Africa (Mauritania, Mali, Niger, Chad, Sudan, Libya, Algeria). The south western central parts of Asia the not pails of Scandinavian countries (Norway, Sweden , Finland) northern Canada.

Characteristics:

(a) Nomadic herding ism ecological or rear ecological systems of agriculture It is carried mainly to produce food for the family to fulfill the needs of clothing shelter recreation.

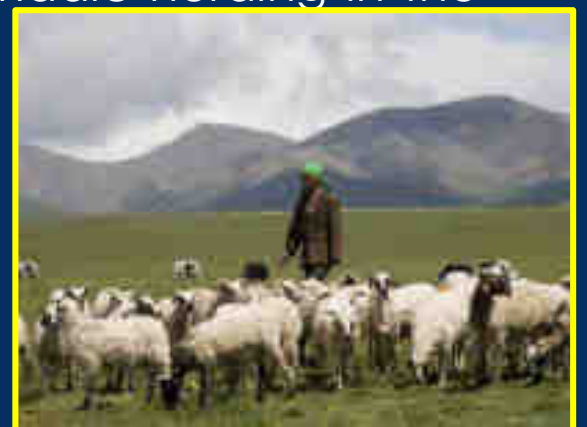
(b) It is a declining type of agriculture continues to become less important.

(c) The main characteristics of nomadic herding is the continued movement of people with their livestock in search of forage for the animals.

(d) The Bedouin of Saudi Arabia the taurag of the Sahara also practice nomadic herding in the desert semi desert areas of North Africa south west Asia.

(e) The chief characteristics of nomadic herding are described below--

- Seasonal pattern of movement.
- Many kinds of animals grazed.
- Transhumance



H. On the basis of Social Characteristics:

a. Capitalistic Agriculture:

A plantation is a large scale farm that primarily grows perennial crops, e.g., trees or bushes or shrubs, frequently in a one crop system. The produce is usually processed industrially in the plantation's own processing plant and is destined for export (sugar cane, bananas, tea, coffee, cacao, sisal, oil palms, coconut, etc,). Examples are the farming corporations in North America, the ranches in Latin America, and the agro-industrial konbinats in Eastern Europe.

b. Socialistic Agriculture:

The socialist system of agriculture is based on State (public) and cooperative collective farm ownership of the means of production. The system includes collective farms, machine and tractor stations and State farms. Socialist agriculture plays an important part in the securing of the maximum satisfaction of the constantly growing material and cultural needs of the whole of society. It is the food base, supplying the population with foodstuffs, and the *raw materials base* for the light and food industries, which produce objects of mass consumption.

c. Feudalistic Agriculture:

Feudalistic agriculture is an agrarian system, where agricultural activities were manipulated by large landholders. A certain class of people, who had power and land, controlled the agricultural production process. The prices of those agricultural products were also regulated by the big landlords.

Problems of present agriculture

- Decline in agriculture growth rate.
- Problems of Farm labours due to large scale migration.
- Static or decline in food production.
- Decline in factor productivity.
- Increasing malnutrition.
- Low farm income.
- Increasing environmental pollution.
- Shrinkage in net cultivable area.
- Increasing cost of production.
- Depleting round water table.

CONCLUSION

By agriculture many of the necessities of life especially food, drink, fibers is produced. In this modern period, most of people are depends on agriculture for this food livelihood. But at this stage, many portion of the world suffers from food deficiency. So, a modern cultivation method should apply for achieving sufficiency in food.

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Thank you