TWO-YEAR
POST-GRADUATE DEGREE PROGRAMME (CBCS)
IN
GEOGRAPHY

SEMESTER-III

Paper Code: GEO/CC/T-313

Paper: Social Geography, Cultural Geography and Economic Geography

Self-Learning Material

DIRECTORATE OF OPEN AND DISTANCE LEARNING
UNIVERSITY OF KALYANI
KALYANI-741235, WEST BENGAL

COURSE MATERIALS COMPILED BY:

Units		Compiled By
Unit-1	Development of Social Geography, Concept of Human Ecology, Concept of Space: Place, Space and Locale.	
Unit-2	Society: Elements, Structure and Processes; Social Exclusion and Inclusion	
Unit-3	Geography of inequality: race, ethnicity, gender and caste; Ethno-ecology of PVTGs in India	
Unit-4	Welfare Geography : Social Well-being, HDI, GEM	
Unit-5	Development of Cultural Geography and Cultural Ecology	Dr. Kalosona Paul
Unit-6	Mosaic of culture, culture, language, religion and customs	Assistant Professor in Geography
Unit-7	Role of technology for the evolution of culture	Sidho-Kanho-Birsha University
Unit-8	Migration and Diaspora: Indian Diaspora in USA	Purulia
Unit-9	Concept of agricultural region, changing perspective of agriculture; Concept of industrial region, Changing perspective of Industry	Purulia-723104
Unit-10	Theories and Models of Spatial Interaction (E. Ullman and M.E. Hurst)	
Unit-11	WTO in International trade: Role of GATT in LPG Economy and its impact on Industry and trade forwarding trading and E-commerce	
Unit-12	From Export Processing Zone to Special Economic Zone; Exclusive Economic Zone	

June, 2025

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Director's Message

Satisfying the varied needs of distance learners, overcoming the obstacle of Distance and reaching the unreached students are the three fold functions catered by Open and Distance Learning (ODL) systems. The onus lies on writers, editors, production professionals and other personnel involved in the process to overcome the challenges inherent to curriculum design and production of relevant Self-Learning Materials (SLMs). At the University of Kalyani a dedicated team under the able guidance of the Hon'ble Vice-Chancellor has invested its best efforts, professionally and in keeping with the demands of Post Graduate CBCS Programmes in Distance Mode to devise a self-sufficient curriculum for each course offered by the Directorate of Open and Distance Learning (DODL), University of Kalyani.

Development of printed SLMs for students admitted to the DODL within a limited time to cater to the academic requirements of the Course as per standards set by Distance Education Bureau of the University Grants Commission, New Delhi, India under Open and Distance Mode UGC Regulations, 2020 had been our endeavor. We are happy to have achieved our goal.

Utmost care and precision have been ensured in the development of the SLMs, making them useful to the learners, besides avoiding errors as far as practicable. Further suggestions from the stakeholders in this would be welcome.

During the production-process of the SLMs, the team continuously received positive stimulations and feedback from **Professor (Dr.) Kallol Paul, Hon'ble Vice-Chancellor, University of Kalyani**, who kindly accorded directions, encouragements and suggestions, offered constructive criticism to develop it with in proper requirements. We gracefully, acknowledge his inspiration and guidance.

Sincere gratitude is due to the respective chairpersons as well as each and every member of the PG-BoS (DODL), University of Kalyani. Heartfelt thanks are also due to the Course Writers-faculty members at the DODL, subject-experts serving at University Post Graduate departments and also to the authors and academicians whose academic contributions have enriched the SLMs. We humbly acknowledge their valuable academic contributions. I would especially like to convey gratitude to all other University dignitaries and personnel involved either at the conceptual or operational level of the DODL of University of Kalyani.

Their persistent and coordinated efforts have resulted in the compilation of comprehensive, learner-friendly, flexible texts that meet the curriculum requirements of the Post Graduate Programme through Distance Mode.

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Director
Directorate of Open and Distance Learning
University of Kalyani

Syllabus

Semester –III

Paper Code: GEO/CC/T-313

Paper: Social Geography, Cultural Geography and Economic Geography

Internal Evaluation/Assessment–10; Examination/Report/Viva Voce–40
(Semester end Examination); Credit–4; Marks-50

Unit-1   Development of Social Geography, Concept of Human Ecology, Concept of Space: Place, Space and Locale.

Unit-2   Society: Elements, Structure and Processes; Social Exclusion and Inclusion

Unit-3   Geography of inequality: race, ethnicity, gender and caste; Ethno-ecology of PVTGs in India

Unit-4   Welfare Geography : Social Well-being, HDI, GEM

Unit-5   Development of Cultural Geography and Cultural Ecology

Unit-6   Mosaic of culture, culture, language, religion and customs

Unit-7   Role of technology for the evolution of culture

Unit-8   Migration and Diaspora: Indian Diaspora in USA

Unit-9   Concept of agricultural region, changing perspective of agriculture; Concept of industrial region, Changing perspective of Industry

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Unit-12   From Export Processing Zone to Special Economic Zone; Exclusive Economic Zone

1.1. Introduction:

This paper aims to introduce social sciences, cultural geography and economic geography to the students of geography of the third semester. It is one of the most important disciplines and it helps to correlates with societal development perspective. Hence, this paper will help the students to get an exposure to overall development in terms of social, cultural, economic trades and migration-Diaspora practices.

1.2. Learning Objectives:

- Development of Social Geography; Concept of human ecology; Concept of space: Place, space and locale,
- Society: Elements, structure and processes; Social exclusion and inclusion
- Geography of inequality: race, ethnicity, gender and caste; Ethno-ecology of PVTGs in India
- Welfare Geography: Social well-being, HDI, GEM
- Development of Cultural Geography; Concept of cultural ecology
- Mosaic of culture, language, religion and customs
- Role of technology for the evolution of culture; Cultural landscape; Cultural diffusion
- Migration and Diaspora; Indian Diaspora in USA
- Concept of agricultural region, Changing perspective of Agriculture; Concept of industrial region, Changing perspective of Industry
- Theories and Models of spatial interaction (E. Ullman and M.E.Hurst)
- WTO in international trade; Role of GATT in LPG Economy and its impact on Industry and trade; Forward trading and E-commerce
- From Export Processing Zone to Special Economic Zone; Exclusive Economic Zone

1.3. Assessment of Prior Knowledge:

Student should have prior knowledge when they may ask;
- What is meant by socio-cultural economic geography?
- What are the present and emerging roles of technology on it?
- What are requirements to study socio-cultural economic geography?

1.4. Learning activities:

This module will offer to build knowledge, individual, group discussion, debates and interaction with teacher-students. Classroom seminars/ discussions regarding various topics covered under this paper may be done. During the personal contact programmers, learners may be assigned to prepare assignment in various on socio-cultural issues, trade and technology and industrial economy etc.

Classroom seminars/ discussions regarding various topics covered under this paper may be done

1.5. Feedback of learning activities:

Once the learning process has been completed and internal assessment will be done. On the basis of evaluation reports of the internal assessment some areas of the syllabus will be refocused depending upon student's requirement.

1.6. Self-assessment Questions

- Briefly discuss the concept of space, place and locale.
- Distinguish between social exclusion and inclusion
- Defined the ethno-ecology with suitable example
- Discuss the broad features of race, caste and ethnicity in geography.
- Critically assess the welfare approach in geography.
- Briefly explain the role of culture, language and religion into the societal development.
- Defined Diaspora. Briefly illustrate the scenario of Indian diaspora in USA.

Unit-1

Development of Social Geography, Concept of Human Ecology, Concept of Space: Place, Space and Locale

Definition of Social Geography :

Social Geography is of recent origin. It is a branch of Human Geography (a geography of the man -made world). Social geography was first defined in 1946 by **Fitzgerald** who equated it with almost whole of human geography.

J. W. Watson (1957) defined it 'as the identification of different regions of the earth according to associations of social phenomena related to the total environment'.

According to **R. E. Pahl (1965)** "social geography is the study of the pattern and processes in understanding socially defined populations in their spatial setting".

Buttimer (1968) gave the definition of social geography as the study of real patterns and functional relations of social groups in the context of their social environment; the internal structure and external relations of the nodes of social activity and articulation of various channels of social communication. There were further attempts to define the discipline by geographers like **J. Eyles (l974)** and **E. Jones (1975)** in recent years.

So, Social Geography is concerned with man and how he lives; with the geography of population and settlement; with the forms and process of social interaction in space; and with the cultural attitudes that produce landscapes and affect ways of life.

Development of Social Geography

Nineteenth century Social Geography :

The term social geography was introduced, as an equivalent to human geography, in the 1880s. When exploring the foundations of regional specificities, French geographers discovered, in the early 1900s, that genres de vie did not rely only on technical bases. They also reflected social conditions. E. Hahn studied the evolution of livelihood and explained the religious and social origins of some economic practices.

One of the most significant precedents of social geography in the nineteenth century was the work of Frcderic La Play. To him the key units of society are "Place, Work, Family".

Twentieth Century Social Geography :

Vidal-de-la-Blache, a French geographer explained (1902) that society could not be explained entirely by biological, psychological or environmental interpretation. It was rather an intricate ideas and bonds that provided stability and orientation to human life within geographical milieus.

Bobek had made an attempt to construct a socio-temporal framework for world society (1959).

Most of the earliest work of social geography entails regional aspects and more descriptive than analytical.

The late 1960s saw rapid and radical social change, dominated by such events as the Vietnam War and wars of liberation in remaining colonies. The social relevance movement in the contemporary social sciences also affected geography and issues such as race, crime, health and poverty received an increasingly large attention. The advancement of social geography in the decades since 1960 has taken into several main paths, each cluster of research acquiring the status of a school of thought in its own way.

1. A welfare or humanistic school mainly concerned with the state of social well-being as expressed by territorial indicates of housing, health and social pathology largely within the theoretical framework of welfare economics. Humanistic geography studies human awareness and human agency, human consciousness and human creativity. It, therefore, deals with the meaning, value and human significance of life events.

2. A radical school which employed Marxian theory to explain the basic causes of poverty and social inequality. This school of thought related the contemporary social problems to the development of capitalism. For example, cities and the communities within the city were perceived as organised spatially in response to the class relations and the Marxian interpretation was that a welfare approach might not to be helpful.

3. The main theme of 'Possibilism' is that the nature or physical surroundings provide a range of possibilities to man and man makes a choice. This choice depends on

his needs, aspirations and capacities. Man establishes relationships with nature not as an individual, but as a group or society. In other words, man views this relationship through the filter or prism of culture. 'Culture' here includes beliefs, institutions, traditions, attitudes, religion, language, diet, habits, customs, skills and technology, etc. In this way, man creates his own habitat, the local modified environment within which the man lives, works or acts. This habitat is a distinct landscape created or developed because of man's occupancy, imprint and usage. The present ways of life of a society, its cultural, socioeconomic and overall development, is the result of the history of its occupation of the physical surroundings.

4. Behavioral approach to social geography attempts to understand human activity in space, place, and environment by studying it at the disaggregate level of analysis-at the level of the individual person. Behavioral geographersanalyses data on the behavior of individual people, recognizing that individuals vary from each other. This approach holds that models of human activity and interaction can be improved by incorporating more realistic assumptions about human behavior.

2. CONCEPT OF HUMAN ECOLOGY :

The term Ecology *refers to the scientific study of living organism 'at home' which is the 'environment'*. The term derived from Greek words "Oikos" means "house or dwelling place" and "Logos" means "study of". German biologist **Ernst Haeckel** coined the term "ecology" in 1869.

Ecologydeals with the interrelationship between biotic and abiotic components of nature as well as relationship among the individual of the biotic component where **Human Ecology** explores not only the influence of humans on their environment but also the influence of environment on human behaviour and their adaptive strategies as they come to understand those influences better. It is a way of thinking about the world and a context in which we should define our questions and ways to answer those questions.

Human Ecology puts together the ideas and methods from various disciplines, including anthropology, sociology, biology, economic history and archaeology. Our multidisciplinary approach enables us to comprehensively talk to the issues of environmental justice, sustainability and political ecology. Human Ecology studies human life and human activity in different ecosystems and different cultures in the present and in the past in order to gain a better understanding of the factors which influence the interaction between humans and their environment.It implies even more than it says apparently because virtually everything which

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humans are or do (and the same goes for any species) affects themto understand human behavior (e-Pathshala, 2020).

THE PLACE OF HUMAN ECOLOGY IN THE SYSTEM OF ECOLOGICAL SCIENCES

Source: Author's calculation
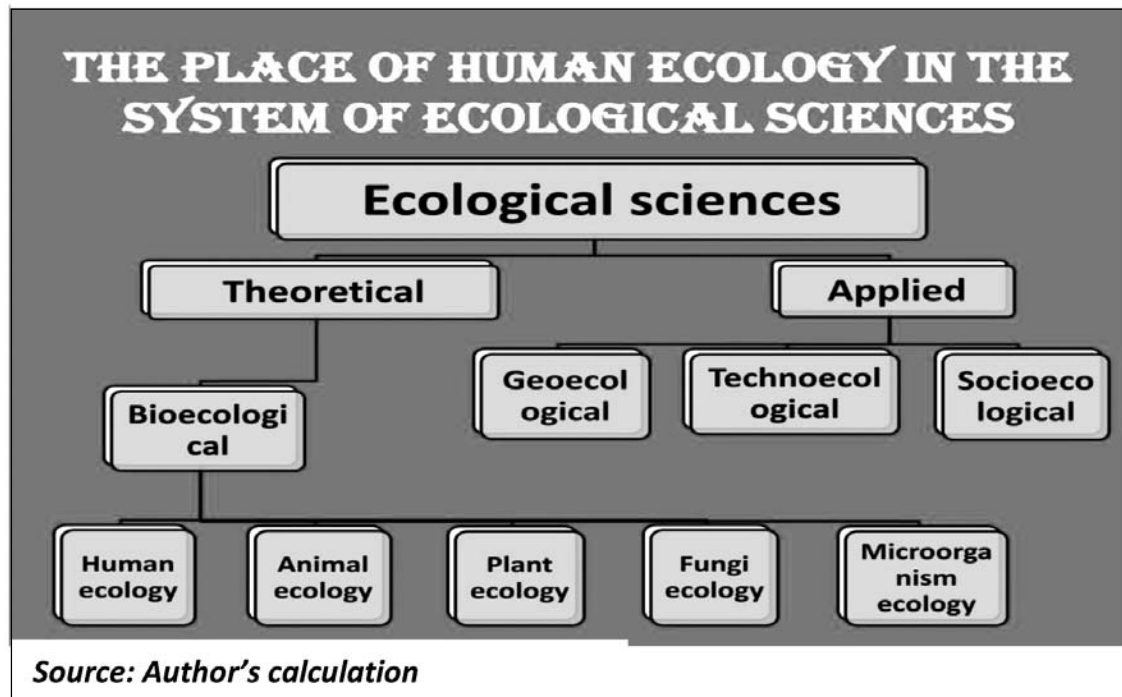
A. Origin of Human Ecology :

During the inter wars period of two World Wars, a shift towards social aspects away from the physical aspects took place. American geographers started to describe the unique features of places and regions. In this period, social Darwinism was under attack. Even the strong environmental determinism was rejected and the simple cause-effect relationship was also not accepted. Some new approaches developed during this period were:

i.   Human Ecology

ii.   Chorology- study of places and regions

iii. Historical Geography

iv.   Functional organization of space

The founder of the concept of "Human Ecology" was **Barrows**. To him, geomorphology, climatology and biogeography should be put away as the subject is too broad and argued that geographers should work at a unifying theme which is human ecology. Barrows put force on the fact that physical condition should not only be studied in relation to man. He explained that human ecology should be used for the study of man and environment, not

in a deterministic sense, but for man's place in the "web of life" or the "economy of nature" (Husain. M, 2013).

The term "human ecology" first appeared in Ellen Swallow Richards' 1907 *Sanitation in Daily Life*, where it was defined as "the study of the surroundings of human beings in the effects they produce on the lives of men". Richard's use of the term recognized humans as part of rather than separate from nature. The term made its first formal appearance in the field of sociology in the 1921 book "Introduction to the Science of Sociology" published by Robert E. Park and Ernest W. Burgess (also from the sociology department at the University of Chicago). Their student, Roderick D. McKenzie helped solidify human ecology as a sub-discipline within the Chicago school. These authors emphasized the difference between human ecology and ecology in general by highlighting cultural evolution in human societies. Even though the term 'human ecology' was popularized in the 1920s and 1930s, studies in this field had been conducted since the early nineteenth century in England and France.

### B. Scope of Human Ecology :

Human ecologists integrate mosaic perspectives from a broad spectrum of disciplines covering wider points of view. Scopes of topics in human ecology are:

- The role of social, cultural, and psychological factors in the maintenance or disruption of ecosystems.

- The analysis of global and regional problems of human ecology.

- The determination of value of boundary technologic load limit to human organism.

- Genetic, physiological, and social adaptation to the environment and to environmental change

- The relation of food quality and quantity to physical and intellectual performance and to demographic change

- Interrelations of technological and environmental changes.

C. The Relation of Geography to Human Ecology :

Geography deals with areas or with areal differentiation of the earth. There is a popular understanding that human ecology deals with the development of human community and its mutual interaction with the totality of the environment (Thornthwaite, 1940). As time has passed, there are various branches of geography; among them are astronomy, botany, zoology, geology, meteorology, ecology, and anthropology. Geography works again and again with new obligations

because of the frontier areas. In the recent past, the geographical domain has changed. Many geographers explained geography in favour of physical aspects and many in the favour of human aspects. In the same way many ecologists have elaborated the relation between geography and ecology. These two disciplines do have some common aspects but still have their differences. Geography has its main interest to study the correlation between habitat and social factors that is the so called direct relationship between man and his environment; while ecology focuses on human communities and concentrates upon man and his habitat. That means for geography place as a central concept is important but for ecology process in time holds central position. The concept of region also varies in two disciplines. For ecologist region is a unity in physical environment while for a geographer region is a product of contact and division of labour. The above discussion therefore clearly proves that human ecology is something different from human geography (e-Pathshala, 2020).
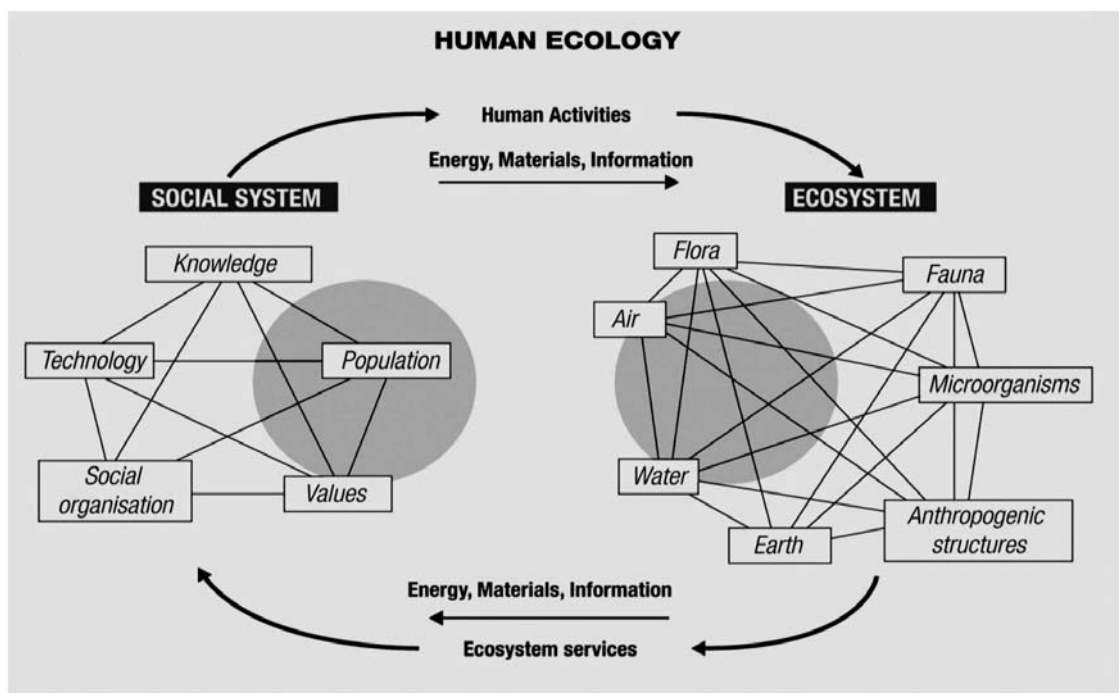
Source: Human Ecology: Basic Concepts for Sustainable Development. Gerald G. Marten

3. Concept of Space, Place and Locale :

A. Space :

The key concepts for understanding the functionality of social and environmental interactions are Space and Place. the term "space" is derived from the Latin word "Spatuim", which means the unlimited extension that contains the partial specified extensions. Space is the boundless, three-dimensional extent in which objects and events occur and have relative

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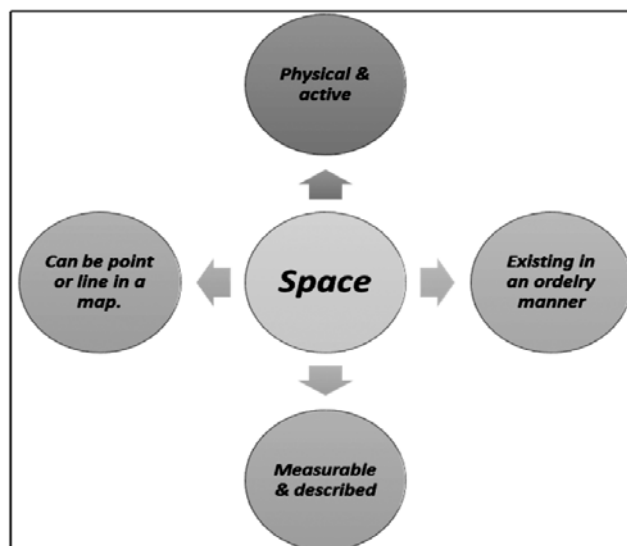position and direction. It is no more than the collection of spatial relations between objects in the world.

According to Yi-Fu Tuan "space can be described as a location which has no social connections for a human being. People don't add value to this space. Tuan says that it is an open space, but may marked off and defended against intruders (Tuan, 1977, p. 4). People don't feel like giving that kind of space a meaning. It is more or less abstract" (Tuan, 1977, p. 6).

German philosopher Immanuel Kant considered space to be represented by geography and time by history.

According to David Harvey space is "a thing in itself".

Characteristics of Space

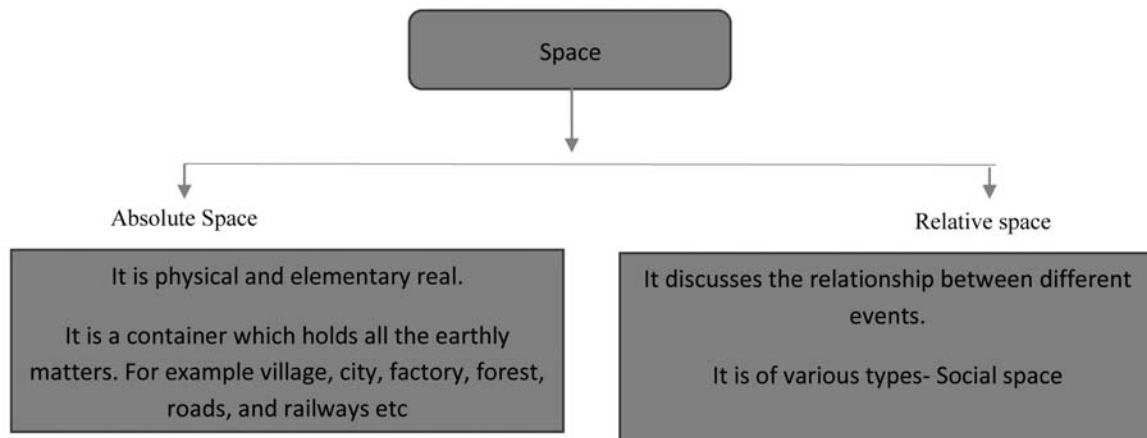i. It is physical, active, and measurable and can be described.

ii. Spaces are structured, perceived, organized and managed by people.

iii. Space is something abstract that is without any substantial meaning.

iv. It can be designed and redesigned, to achieve particular purposes.

v. The different natural and human components are distributed in the space.

Source: Author's Calculation

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Classification of Space :

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                          ┌─────────────┐
                          │    Space    │
                          └─────────────┘
                                 │
            ┌────────────────────┴────────────────────┐
            ▼                                          ▼
      Absolute Space                            Relative space
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Absolute Space	Relative space
It is physical and elementary real. It is a container which holds all the earthly matters. For example village, city, factory, forest, roads, and railways etc	It discusses the relationship between different events. It is of various types- Social space

The word place is derived from the Latin word "Loc", which means the place or the site. Aristotle (1952) considered the place to be composed of things, such as the elements, the images, the motions, and the time.

According to Tuan, "A *place* is a location with perceptible characteristics. A place has a sense of belonging, and an area does not become a place until the individual human has had some kind of interaction with it. By interacting with a space, the human becomes a part of it, henceforth making it a place".

A place needs a space to be a place. Places take possession of spaces on the Earth. Thus, space and place are "co-dependent".

To define place, John Agnew (1987) described three **key components of place** as follows:

1. **location** –aspecific point on the Earth's surface
2. **locale** - the material setting for social relations
3. **sense of place** - the subjective and emotional attachment people have to place.

Locale :

Locale is the key component of place. Locale is **the physical setting for relationships between people**. United States Geological Survey defined **locale** as a geographic place at which there is or was human activity.

The term "locale" was proposed by Anthony Giddens in his development of structuralization theory.

Locale is a place as a setting for particular practices that marks it out from other places shaped by the people, culture and customs within it. Generally, it is characterised by its physical and social landscape.

Difference between Space and Place :

Many philosophers and geographers differentiated space and place to clarify the confusion between these two terms

| Philosophers/ Geographers	Space	Place
Cresswell (2004)	Space is an abstract term used to measure geometric spaces and volumes.	Place represents the range of activities that people do, the opportunities for them, and the meanings they give to it.
Leibniz (1981)	Space is a system of relationships between existing physical elements that can be seen and can be measured.	Place is the relationship between physical material and nonphysical components.
Heidegger (1973)	He considered the space to be an existential reality; it is a social product that is constantly being created.	Places are a source of identity formation for their users through the social, emotional, and psychological relationships that arise between them.
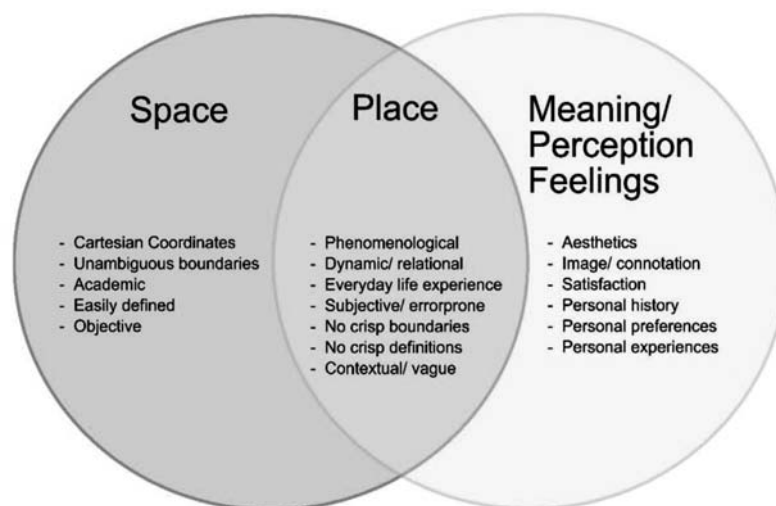
Fig: The notion of place in relation to space and perception
Source: mdpi.com/2220-9964/7/9/364

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3.   https://www.doorsteptutor.com/Exams/IAS/Mains/Geography/Study-Material/Topic-Perspectives-in-Human-Geography-5/Subtopic-History-of-Geographical-Thought-9/Part-62.html

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7.   http://www.wbnsou.ac.in/online_services/SLM/PG/PGGR-03-Gr-B.pdf

8.   https://eijest.journals.ekb.eg/article_169096_499d054d 65e2d0c6637cb16c4b0 10999.pdf

9.   http://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S000017GE/P001784/M025356/ET/1512625302humanecology.pdf

10.   https://www.bhattadevuniversity.ac.in/docs/studyMaterial/Dr.BharatiGogoi_Geography/UG_4thSem_M_Human_ecology_by_Dr._Bharati_Gogoi.pdf

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12.   https://en.wikipedia.org/wiki/Locale_(geographic)#:~:text=Locale% 20indicates % 20 locations % 20 of %20 more, human%20 activities %20 are %20 carried %20out.

13.   https://www.mdpi.com/335638

14.   https://epgp.inflibnet.ac.in/

Unit-2

Society: Elements, Structure and Processes; Social Exclusion and Inclusion

Concept of Society:

The term **"society**" has been derived from the **Latin word "Socius"** which means **a companion, association or fellowship**? Society refers not to a group of people only but to the complex pattern of the norms, interaction and relationships which arise among them.

- According to **Ginsberg**, "A society is a collection of individuals united by certain relations or modes of behaviour which mark them off from others, who do not enter into those relations or who differ from them in behaviour."

- According to **G.D.H. Cole**, "Society is the complex of organized associations and institutions within the community".

- According to **F.H. Giddings**, "Society is the union itself, the organization, the sum of formal relations in which associating individuals are bound together".

- According to **T. Parsons**, "Society may be defined as the total complex of human relationship in so far as they grow out of action in terms of means and relationship, intrinsic or symbolic."
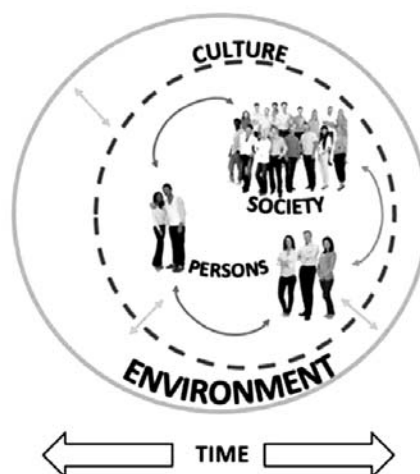
Source: costellohsie.info/the-social--cultural-world.html

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Elements of Society:

i.   A society must have **population.**

ii. **Likeness** is the most important element of society. Famous sociologist MacIver opines that society means likeness. Without a sense of likeness, there could be no mutual recognition of 'belonging together' and therefore no society.

iii. As man is a social animal, he is dependent on others. The survival and well-being of each member is very much depended on this interdependence. No individual is self-sufficient. So, **interdependence** is another important element of society.

iv. sociologist MacIver once remarked that "Society is cooperation crossed by conflict". **Co-operation** is an essential component for the formation of society. conflict is also necessary for society. It acts as a cementing factor for strengthening social relations. In a healthy and well-developed society both **co-operation and conflict** co-exist.

v.   Society is **a network or web of social relationship**.

vi. Society is **Abstract**.

vii. The very nature society is **dynamic and changeable**.

Social Structure or the structure of society:

Social structure is the term that is given to all of the interconnected relationships of the various social groups and institutions in which people create and become part of. These groups include but are not limited to: families, schools, religious organizations, social clubs, etc. Within the context of sociology, social structures help to provide a framework in which people interact on an interpersonal level based on their various traits, interests, and other aspects of who they are individually. These various groups help to create harmonious relationships within society by providing people opportunities to bond, grow, feel safe, and express themselves as individuals and as a collective.

Social relation → Social institutions → Patterning of various social institutions = Social structure.

- The concept of social structure has been defined in different ways by different thinkers and sociologists. **Herbert Spencer** was the first thinker who wrote about structure of a society. He came up with biological analogies (organic structure and evolution) to define the social structure.

- According to **Ginsberg,** "Social structure is concerned with the principal forms of social organization, i.e., types of Groups, associations and the complex of these which continue societies."

- According to **Radcliff-Brown,** social structure is a part of the social structure of all social relations of person to person.

- According to **Talcott Parsons**, the term social structure applies to the particular arrangement of the interrelated institutions, agencies and social patterns as well as the statuses and roles which each person assumes in the group. Parsons has tried to explain the concept of social structure in abstract form.

- According to **Johnson**, the structure of anything consists of the relatively stable inter-relationships among its parts; the term part itself implies a certain degree of stability. Since a social system is composed of the inter-related acts of people, its structure must be sought in some degree of regularity or recurrence in these acts.

Characteristics of Social Structure :

i. Social Structure is an abstract and intangible phenomenon.

ii. Social structure is related to the external nature of society.

iii. Every Unit of Social Structure has a definite Position.

iv. Social Structure is relatively a permanent concept.

v. Social structure is influenced by the local condition.

vi. Elements of disintegration are also found in the social structure.

Element of Social Structure :
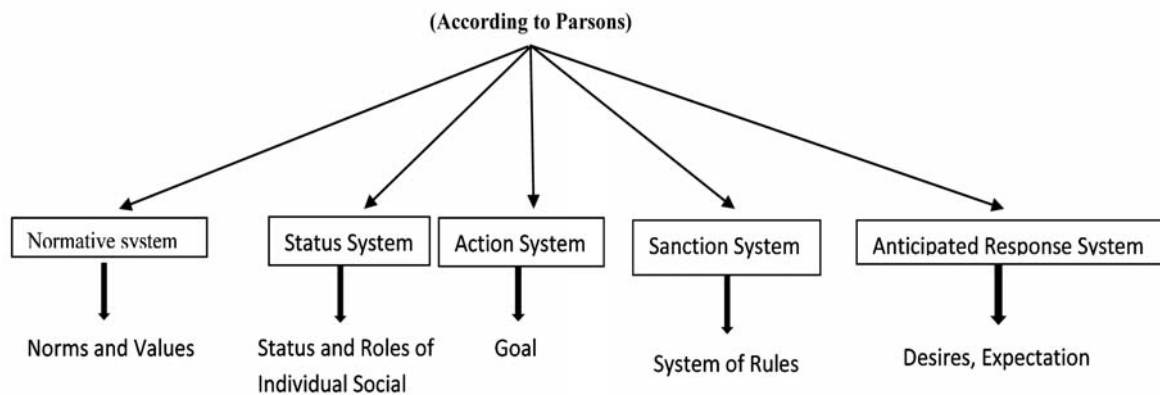
Source: Parsons, 2011

The concept of social process refers to some of the general and recurrent forms that social interaction may take. The interaction or mutual activity is the essence of social life. Interaction between individuals and groups occurs in the form of social process. Social processes refer to forms of social interaction that occur again and again.

- According to **MacIver**, "Social process is the manner in which the relations of the members of a group, once brought together, acquire a distinctive character".

- **Ginsberg** says, "Social processes mean the various modes of interaction between individuals or groups including cooperation and conflict, social differentiation and integration, development, arrest and decay"

- According to **Horton and Hunt**, "The term social process refers to the repetitive form of behaviour which are commonly found in social life".

- According to **Gillin and Gillin**, "By social process we mean those ways of interaction which we can observe when individuals and groups meet and establish system of relationships of what happens when changes disturb already existing modes of life."

Types of Social Process:

Socialpsychologists and sociologist have distinct ways of classifying social processes.There are three categories of social process:

1. On the basis of people involved in the process:

   a) One to one

   b) One with group and its reverse

2. On the basis of degree of intimacy of the individual and groups in interaction:

    a) Primary group

    b) Secondary group

    c) Tertiary group

3. On the basis of the nature of the types of processes:

    a) Associative process

    b) Dissociative process

- **On the basis of the nature of the types of processes :**

a. Associative Process :

Associative social processes are the social processes which work for the integration and development of society. The associative processes of social interaction are of positive type of interaction. The associative process is always worked for the integration and benefit of society. These processes bring progress and stability in society. Associative processes are also called as conjunctive processes. The associative processes include **cooperation, accommodation, adaptation, adjustment, integration and assimilation.**

I. Cooperation:

The term 'cooperation' has been derived from two Latin words – 'Co' meaning 'together and 'operari' meaning 'to work'. Hence, cooperation means working together for the achievement of a common goal or goals. When two or more persons work together to gain common goal, it is called cooperation. Co-operation is brought about by several factors which includes the following:

- desire for individual benefits

- desire to give and share

- total decision on common purposes

- situational necessity and

- desire to achieve larger goals

According to **Merrill and Eldregde**, "Cooperation is a form of social interaction wherein two or more persons work together to gain a common end".

As per **Green**, "Cooperation is the continuous and common endeavour of two or more persons to perform a task or to reach a goal that is commonly cherished."

Characteristics :

- Cooperation is a conscious process in which individuals or groups have to work consciously.

- Cooperation is a continuous process.

- Cooperation is a universal process which is found in all groups, societies and nations.

- Cooperation is based upon two elements such as common end and organised effort.

Types:

Maclver and Page have divided cooperation into two main types namely,

(i) **Direct Cooperation**- The essential characteristics of this kind of cooperation are that people do in company the thing which can also do separately. In this category cooperating individuals do things of common interest together and perform identical functions. Playing together, worshiping together are the examples of direct co-operation.

(ii) **Indirect Cooperation-** Under indirect cooperation are in included those activities in which people do unlike tasks together towards a common end. For example, when carpenters, plumbers and masons cooperate to build a house. This cooperation is based on the principle of the division of labour.

A.W. Green has classified cooperation into three main categories such as

(i) **Primary cooperation**- It is the cooperation which is found in primary groups such as family. Not only family but also peer groups is also called primary cooperation where people have to choose face to-face relations.

(ii) **Secondary cooperation**- Secondary cooperation is the characteristic feature of the modern civilized society and is mainly found in secondary groups. It is highly formalized and specialized. This type of cooperation is generally found in the secondary group, viz., government, industry, church and trade union etc.

(iii) **Tertiary cooperation**- This is the interaction between various big and small group to meet a particular situation. In such type of cooperation, the attitudes of the cooperating parties are purely opportunistic. It may be found between two or more political parties, castes, tribes, religious groups etc.

II. Accommodation:

Accommodation implies the process of social adjustment. Accommodation is the achievement of adjustment between people that permits harmonious acting together in social situation.

According to **Ogburn and Nimkoff**, "Accommodation is a term used by sociologist to describe the adjustment of hostile individuals or groups."

In the words of **Gillin and Gillin** "Accommodation is the process by which competing and conflicting individuals and groups adjust their relationship to each other in order to overcome the difficulties which arise in competition, contravention or conflict".

As **Maclver and Page** say, "the term accommodation refers particularly to the process in which man attains sense of harmony with his environment".

Characteristics:

- It is a form of adjustment.

- It is the End-result of Conflict.

- It is a Continuous Process.

- It is both Conscious and Unconscious Process.

III. Assimilation :

Whenever groups meet, some mutual interchange or diffusion of culture takes place. Even groups who seek to prevent such diffusion do not fully succeed in protecting their culture from all cultural interchange. This process of mutual cultural diffusion through which persons and groups come to share a common culture is called assimilation. Assimilation is a slow and gradual process. It takes quite some time before individuals or groups once dissimilar becomes similar. Acculturation is the first step to assimilation. **Acculturation** is the name given to the stage when the cultural group which is in contact with another borrows from its certain cultural elements and incorporates them into its own culture.

According to **Young and Mack**, "Assimilation is the fusion or blending of two previously distinct groups into one".

Ogburn and Nimkoff cited, "Assimilation is the process whereby individuals or groups once dissimilar become similar and identified in their interest and outlook".

Biesanz said, "Assimilation is the social process whereby individuals or groups come to share the same sentiments and goals".

Characteristics :

- Assimilation is a slow and gradual process.

- Assimilation is an unconscious process.

- Assimilation is a two-way process. It is based on the principle of give and take. Assimilation takes place when groups of individuals borrow cultural elements from each other and incorporates them to their own culture.

Dissociative Process :

Dissociative social processes are also called the disintegrative or disjunctive social processes. These processes hinder the growth and development of society, their absence results in stagnation of society. It includes

i. Competition :

Competition is the most important form of social struggle. Competition is the struggle for possession of rewards, which are in limited supply: money, goods, status, power, and love-anything. It may be formally defined as the process of seeking to obtain a reward by surpassing other rivals. While competition is present to some degree in all the societies, it differs greatly in degree from society to society.

According to **Anderson and Parker**, "Competition is that form of social action in which we strive against each other for the possession of or use of some limited material and non-material goods."

According to **Sutherland, Woodward and Maxwell**, "Competition is an impersonal, unconscious continuous struggle which, because of their limited supply, all may not have."

Characteristics :

- Competition is mainly an unconscious activity.

- Competition may create emotional disturbances.

- Competition is an innate tendency.

- Competition is a social phenomenon.

ii. Conflict :

Conflict is a conscious action. It is a deliberate intent to oppose. We can say that conflict is universal. Not only this, conflict lacks continuity. Besides this, it is a personal activity. Conflict is a competition in its more occasional, personal and hostile forms. It is a process of seeking to obtain rewards by eliminating or weakening the competitors. It is inherent in every society or social system.

According to **Gillin and Gillin**, "Conflict is the social process in which individuals or groups seek their ends up directly challenging the antagonist by violence or threat of violence."

Green defined, "Conflict is the deliberate attempt to oppose, resist and coerce the will of another or others."

Characteristics :

- Conflict is a competition in its more occasional, personal and hostile forms. It is a process of seeking to obtain rewards by eliminating or weakening the competitors. It is inherent in every society or social system.

- Conflict leads to social change.

- It is mainly an expression of disequilibrium.

- Conflict is an ever-present process in human relations.

- Conflict can occur within groups (intra-group conflict) and among groups (inter-group conflict).

- Asymmetrical social, political and economic relations coupled with the sense of relative deprivation as the root cause of social conflict.

Social Exclusion and Inclusion :

The term "social exclusion" and "social inclusion" are two terms most widely used in recent years by politicians, social scientists and the public as well.The concept of social exclusion/ inclusion figured prominently in the policy discourse in France in the mid-1970s. The concept was later adopted by the European Union in the late 1980s as a key concept in social policy and in many instances replaced the concept of poverty.
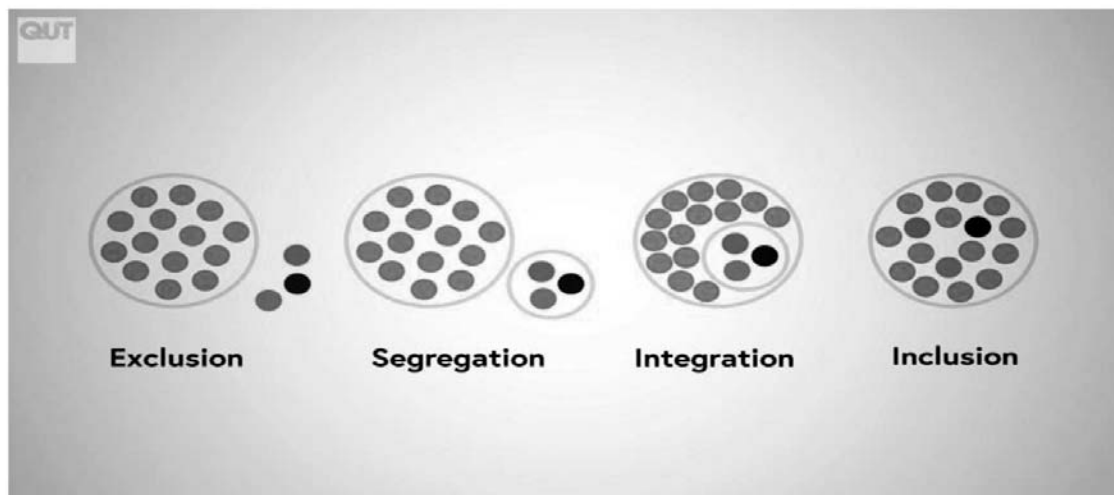
Source: Author Calculation

Social exclusion describes a process by which certain groups are systematically disadvantaged because they are discriminated against on the basis of their ethnicity, race, religion, sexual orientation, caste, descent, gender, age, disability, HIV status, migrant status or where they live. Discrimination occurs in public institutions, such as the legal system or education and health services, as well as social institutions like the household, and in the community.

"Social exclusion is what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime, poor health and family breakdown" (United Kingdom Office of the Deputy Prime Minister, 2004).

Characteristics :

- Social exclusion is a dynamic process.

- Social exclusion is a multi-dimensional phenomenon.Social exclusion cannot be measured by income alone but it's made up of various forms of exclusion combined, such as lack of employment, difficulty accessing or staying in education, poor housing or living in a deprived neighbourhood.

- The exclusion lies outside of the responsibility of the individual and it is the result of the actions of others.

- Social exclusion is about being disconnected from society. This means that there is inadequate social participation, little social integration and lack of power.
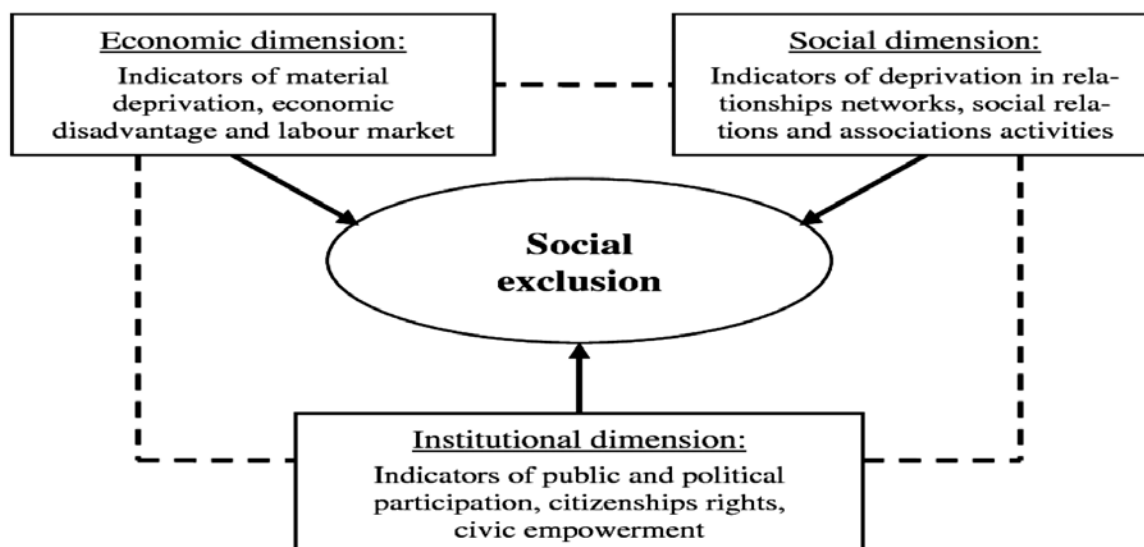
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Figure : Social exclusion

Social inclusion is understood as a process by which efforts are made to ensure equal opportunities, for all, regardless of their background, and so they can achieve their full potential in life. It is a multi-dimensional process aimed at creating conditions which enable full and active participation of every member of the society, in all aspects of life, including civic, social, economic and political activities, as well as participation in decision making processes. It is understood as a process by which societies combat poverty and social exclusion.

An inclusive society is a society that over-rides differences of race, gender, class, generation, and geography, and ensures inclusion, equality of opportunity as well as capability of all members of the society to determine an agreed set of social institutions that govern social interaction.
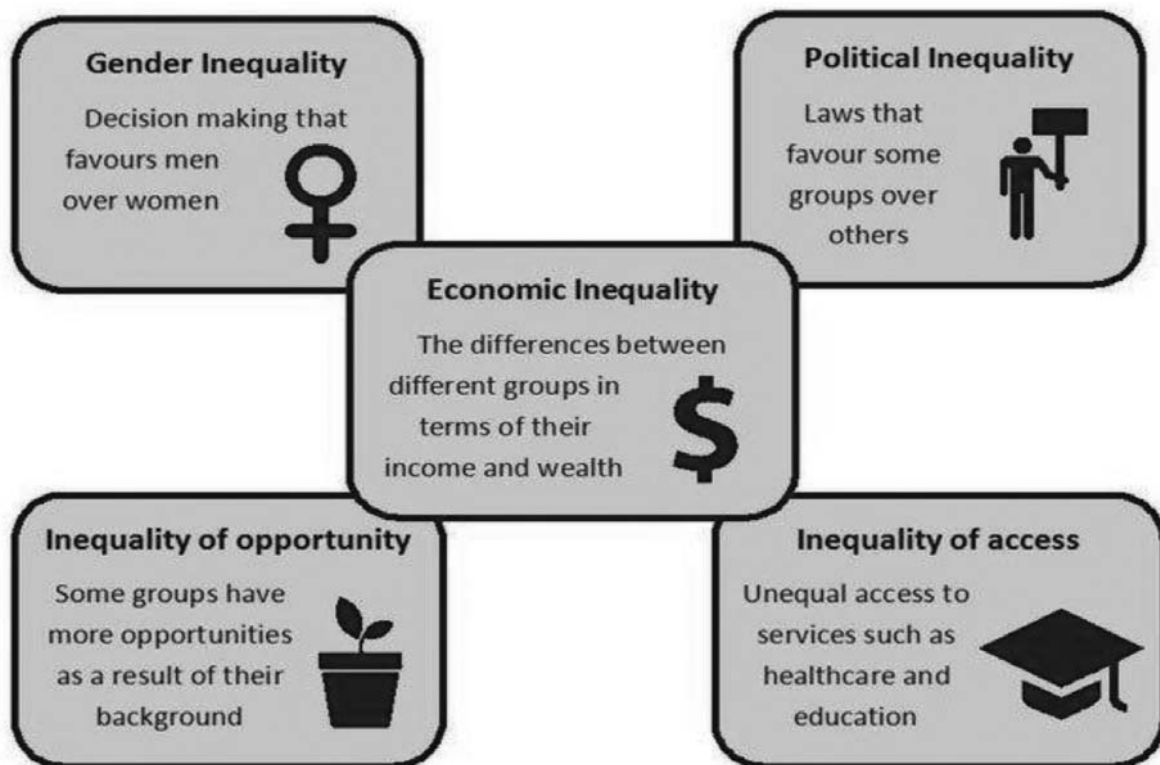
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Unit-3

Geography of Inequality: Race, Ethnicity, Gender and Caste; Ethno-ecology of PVTGs in India

Inequality in geography refers to the idea that different people experience different standards of living. This can be economically, with differing levels of wealth and income and politically through differing rights and freedoms, as well as through a variety of other spheres, such as access to health care or education. While it is impossible to have a completely equal global society, the scale of inequality in the world is growing both within and between countries and in terms of and economic measures of poverty as well as other forms of inequality.

Gender Inequality
Decision making that favours men over women

Political Inequality
Laws that favour some groups over others

Economic Inequality
The differences between different groups in terms of their income and wealth

Inequality of opportunity
Some groups have more opportunities as a result of their background

Inequality of access
Unequal access to services such as healthcare and education

Source: rgs.org/schools/teaching-resources/inequality-and-its-management/

Concept of Race :

The term "race" refers to dividing the human according to physical characteristics that are inherited. The most widely used human racial types are those based on visual traits (such as skin colour, facial features or type of hair).

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Hooton (1946) defined race 'as a group whose members present individually identical combinations of specific physical characters that they owe to their common descent.'

Mayr (1963) defined races in terms of subspecies saying '…a subspecies is an aggregate of local populations of a species, inhabiting a geographic subdivision of the range of a subspecies, and differing taxonomically from other populations of a species.

Brues (1977) defined race as 'a division of a species which differs from other divisions by the frequency with which certain hereditary traits appear among its members.

Classification of races :

CONTRIBUTION OF J. F. BLUMENBACH :

Johann Friedrich Blumenbach (1752-1840) was a German Physician. In 1775, after studying 60 human crania, he divided human species into five distinctive races based on skull shape. Blumenbach coined the term "Caucasian", derived from the mountain range between Russia and Georgia and for him the ideal skull type was the Caucasian, with degeneration in other skull types. His 1795 classification was similar to that of his teacher Linnaeus's classification who divided races into four major categories i.e., American, European, Asian and African (Chahal, 2011). Racial classification proposed by Blumenbach is:

1. **The Caucasian or White** : People of Europe (except Laplanders and Finns) also found in North Africa and in Western Asia as far as the Ganges.

2. **The Mongolian or Yellow** : Finns and Laplanders of Europe; Eskimos (now called Inuits) of America, Inhabitants of Asia (except Caucasians).

3. **The Malayan or Brown :** Inhabitants of the Pacific region. 159

4. **The Ethiopean or Black** : Rest

5. **Africans** (other than Caucasians).

6. **The American or Red: People of America** (except Eskimos)

CONTRIBUTION OF E. A. HOOTON :

In 1931, Hooton recognized three primary races i.e., Caucasoid, Negroid and Mongoloid along with several composite sub-races. However, in 1947, he modified his own classification. Following is the Hooton's modified classification of Human races (1947).

A) CAUCASOID:

   1.   Mediterranean

        a) Classical Mediterranean

        b) Atlanto Mediterranean

        c) Indo-Afgan

   2.   Nordic

   3.   Alpine

   4.   East Baltic

   5.   Dianaric

   6.   Armenoid

   7.   Keltic

   8.   Lapp

   9.   Indo-Dravidian

   10. Polynesian

   11. Ainu

B) (a) ARCHAIC CAUCASOID or AUSTRALOID (subdivision of Caucasoid)

   1.   Australian Aborigines

   2.   Pre-Dravidian or Australoid or Veddoid

C) MONGOLOID

   1.   Classical Mongoloid

   2.   The Archaic or Eskimoid

   3.   Indo-Malayan Mongoloid

        a)   Malay type

        b)   Indonesian type or Nesiot

   4.   Amerindian or the American Indian

        a)   Paleo-Armenoid

        b)   Northern Amerind

c) Neo-Amerind

d) Tehucleche

e) North-west coast Amerind

D) NEGROID:

1) African Negro

a) True Negro

b) Nilotic Negro

c) Bantu

d) Bushman-Hottentot

e) Negrillo (African Pygmy)

2) Ocenic Negro

a) Negrito

b) Papuans and Melanesians

3) American Negro

CLASSIFICATION OF MAJOR RACES :

The variety of the mankind has been described by the anthropologists in three major groups or races. These are known as the Negroid, Caucasoid and Mongoloid.

Negroid :

Negroid race is mainly distributed in Sub-Saharan Africa. The distinguishing characteristics of the Negroid group are:

- Skin colour is dark brown to black

- Head hair is woolly and tightly curly

- Head form is more elongated but less broad

- Nose is broad and flat in shape

- Lips are thick and everted

- Body hair is sparsely distributed

Fig 1: Negroid

Caucasoid:

The major characteristics of this group include:

- Head hair is generally wavy but may be straight or somewhat curly

- Skin colour may range from white to brown

- Shape of the head shows a large variety from narrow headed to broad headed

- Narrow and pointed nose

- Face is straight and does not show prognathism.

- Lips are generally thin.

Fig 2: Caucasoid

- Forehead and chin are relatively prominent.

Mongoloid :

Mongoloids have probably originated in Central Asia and moved to different directions. This group has vast and diverse geographical distribution. People of China and Japan are key representatives of this group. The Mongoloid group is characterized as follows :

- Skin colour varies from yellowish-to-yellowish brown.

- Head form is broad (brachycephalic).

- Hair colour is black and texture of hair is generally straight.

- Upper eyelid has a fold of the skin known as the epicanthic fold.

Fig. 3 : Mongoloid

- Hair density per unit of body surface area is very less.

Ethnicity :

- Ethnicity denotes towards identification of a group of people on the basis of certain criteria or markers which they are supposed to share with each other. These markers include culture, race, language, religion, customs, history, economic experiences, etc.

- Ethnicity pertains to the word ethnic which is a distinction of mankind based on race. Ethnicity has now lost the original connotation. "It is now employed in a broader sense to signify self-consciousness of a group of people united, or closely related,

by shared experience such as language, religious belief, common heritage, etc. While race usually denotes the attributes of a group, ethnic identity typifies creative response of a group who consider themselves marginalised in Ethnicity 59 society". Barth and Benedict Anderson feel that boundary is an important criterion for self-definition by ethnic group, to separate themselves from 'others'.

- Ethnicity is state of belonging to a social group that has a common national or cultural tradition. This is, by definition, a fluid concept; ethnic groups can be broadly or narrowly construed. For example, they can be as broad as "Native American" or as narrow as "Cherokee". Another example is the Indian subcontinent — Indians may be considered one ethnic group but there are actually dozens of cultural traditions and subgroups like Gujarati, Punjabi, Bengali, and Tamil that are also bona fide ethnic groups. Yet another example is people in Great Britain — they may be considered British, or more precisely English, Scottish or Welsh.

Difference between Ethnicity and Race

Subject	Ethnicity	Race
Definition	An ethnic group or ethnicity is a population group whose members identify with each other on the basis of common nationality or shared cultural traditions.	The term race refers to the concept of dividing people into populations or groups on the basis of various sets of physical characteristics (which usually result from genetic ancestry).
Significance	Ethnicity connotes shared cultural traits and a shared group history. Some ethnic groups also share linguistic or religious traits, while others share a common group history but not a common language or religion.	Race presumes shared biological or genetic traits, whether actual or asserted. In the early 19th century, racial differences were ascribed significance in areas of intelligence, health, and personality. There is no evidence validating these ideas.
Genealogy	Ethnicity is defined in terms of shared genealogy, whether actual or presumed. Typically, if people believe they descend from a particular group, and they want to be associated with that group, then they are in fact members of that group.	Racial categories result from a shared genealogy due to geographical isolation. In the modern world this isolation has been broken down and racial groups have mixed.
Distinguishing Factors	Ethnic groups distinguish themselves differently from one time period to another. They typically seek to define themselves but also are defined by the stereotypes of dominant group.	Races are assumed to be distinguished by skin color, facial type, etc. However, the scientific basis of racial distinctions is very weak. Scientific studies show that racial genetic differences are weak except in skin colour.

Gender :

   Gender refers to the socially constructed roles, behaviours, expressions and identities of girls, women, boys, men, and gender diverse people. It influences how people perceive themselves and each other, how they act and interact, and the distribution of power and resources in society. Gender identity is not confined to a binary (girl/woman, boy/man) nor is it static; it exists along a continuum and can change over time. Some societies have specific genders besides "man" and "woman", such as the hijras of South Asia; these are often referred to as *third gender* (and *fourth genders*, etc.). There is considerable diversity in how individuals and groups understand, experience and express gender through the roles they take on, the expectations placed on them, relations with others and the complex ways that gender is institutionalized in society.

Source: dreamstime.com

Castes :

   To define 'caste', has always been very difficult, because of its intricate nature. The term 'caste' has also been variously understood in different ways as time passed by. However, some scholars have tried to define what 'caste' is from their own understanding. Some of them have tried to understand caste in terms of 'class'. Other scholars have defined caste as non-class divisions such as 'race' and 'racism'. However, their definition of caste lacks the crux of the concept of caste because in actual sense, 'caste' surely does mean 'race', though the root word 'caste' comes from the Portuguese word 'casta' which denotes 'lineage' or 'race'. Rather

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the concept of caste brings to mind the idea of a society which generates fixed categories or statuses of life and professions with firmly congealed by rules of endogamy. These features which define the caste are fundamentally sanctified by or based upon certain religiously-governed principles of 'purity' and 'pollution' which automatically gives birth to a social system of hierarchy. Caste stratification of the Indian society has its origin in the Varna system. This system literally means colour which was prevalent during the Vedic period. According to this doctrine of colour, the Hindu society was divided into four main Varnas: Brahmins, Kshatriyas, Vaishyas and Shudras. A fifth category of untouchables lie outside the fold of the Varna scheme

According to **Lundberg**,A caste is merely a rigid social class into which member are born and from which they can withdraw or escape only with extreme difficulty. It is the type of stratification system which is most rigid in matters of mobility and distinctness of status.

E.A.H. Blxmt Defines Caste, "An endogamous or a collection of endogamous groups, bearing a common name, membership of which is hereditary; imposing on the members certain restrictions in the matter of social intercourse; either following a common traditional off occupation or clarming a common origin; and generally regarded as forming a single homogenous community.

FEATURES OF CASTE SYSYTEM :

- Caste membership is determined by birth and not by selection and accomplishments. Hence, caste status is termed as being ascribed (by birth).

- Caste system has a specific scheme of social preference in which they are arranged in a social and ritual hierarchy.

- It has Restrictions on Feeding and Social Interaction.
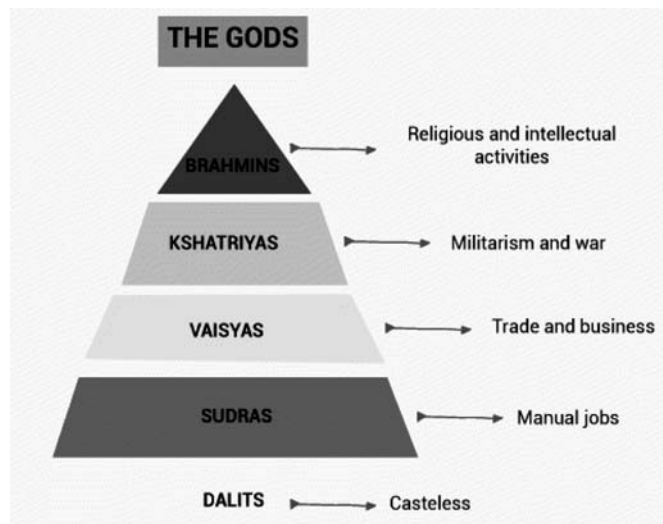
Source: milione.net/en/the-caste-system-in-india/

- Marriage within one's own caste or sub-caste is an essential feature of caste system.

- Traditionally each caste was associated with an occupation. They were ranked higher and lower on the basis of ritual purity and pollution of their associated occupation.

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Ethno-ecology of PVTGs in India :

- **Particularly vulnerable tribal group (PVTG)** is a government of India classification created with the purpose of enabling improvement in the conditions of certain communities with particularly low development indices.

- The Dhebar Commission (1960-1961) stated that within Scheduled Tribes there existed an inequality in the rate of development.

- **During the fourth Five Year Plan** a sub-category was created within Scheduled Tribes to identify groups that considered to be at a lower level of development.

- This was created **based on the Dhebar Commission report** and other studies. This sub-category was named "Primitive tribal group".

- In 2006 the government of India proposed to rename "Primitive tribal group" as Particularly vulnerable tribal group"

- Presently, there are **75 PVTGs in 18 States and UT of Andaman & Nicobar Islands**.

- Among the 75 listed PVTG's the **highest number are found in Odisha (13),** followed by Andhra Pradesh (12), Bihar including Jharkhand (9) Madhya Pradesh including Chhattisgarh (7) Tamil Nadu (6) Kerala and Gujarat having five groups each.

- The criteria followed for determination of PVTGs are as under:

- A pre-agriculture level of technology;

- A stagnant or declining population;

- Extremely low literacy; and

- A subsistence level of the economy.

- Government of India designed a procedure to identify PVTGs.

- According to the procedure, the state governments or UT governments submit proposals to the Central Ministry of Tribal Welfare for identification of PVTGs.

- After ensuring the criteria is fulfilled, the Central Ministry selects those groups as PVTGs.

States / UTs Name	PVTGs Name
Andhra Pradesh and Telangana	1. Bodo Gadaba 2. Bondo Poroja 3. Chenchu 4. Dongria Khond 5. GutobGadaba 6. Khond Poroja 7. Kolam 8. Kondareddis 9. Konda Savaras 10. Kutia Khond 11. ParengiPoroja l2. Thoti
Bihar &Jharkhand	13. Asurs 14. Birhor 15. Birjia 16. Hill Kharia 17. Konvas 18. Mal Paharia 19. Parhaiyas 20. SaudaPaharia 21. Savar
Jharkhand	Same as above
Gujarat	22. Kathodi 23. Kohvalia 24. Padhar 25. Siddi 26. Kolgha
Karnataka	27. JenuKuruba 28. Koraga
Kerala	29. Cholanaikayan (a section of Kattunaickans) 30. Kadar 31. Kattunayakan 32. Kurumbas 33. Koraga
Madhya Pradesh and Chhattisgarh	34. Abujh Macias 35. Baigas 36. Bharias 37. Hill Korbas 38. Kamars 39. Saharias 40. Birhor
Chhattisgarh	Same as above
Maharashtra	41. Katkaria (Kathodia) 42. Kolam 43. Maria Gond
Manipur	44. Marram Nagas
Odisha	45. Birhor 46. Bondo 47. Didayi 48. Dongria-Khond 49. Juangs 50. Kharias 51. Kutia Kondh 52. LanjiaSauras 53. Lodhas 54. Mankidias 55. PaudiBhuyans 56. Soura 57. ChuktiaBhunjia
Rajasthan	58. Seharias
Tamil Nadu	59. KattuNayakans 60. Kotas 61. Kurumbas 62. Irulas 63. Paniyans 64. Todas
Tripura	65. Reangs
Uttar Pradesh and Uttarakhand	66. Buxas 67. Rajis
West Bengal	68. Birhor 69. Lodhas 70. Totos
Andaman & Nicobar Islands	71. Great Andamanese 72. Jarawas 73. Onges 74. Sentinelese 75. Shorn Pens

Source: PVTGs

PVTGs depend on various livelihoods such as **food gathering,Non-Timber Forest Produce (NTFP), hunting, livestock rearing, shifting cultivation and artisan works**. Most of their livelihoods depend on the forest. The forest is their life and livelihood.

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Unit-4

Welfare Geography : Social well-being, HDI, GEM

WELFARE APPROACH IN GEOGRAPHY

- Welfare, or commonly social welfare, is a type of government support intended to ensure that members of a society can meet basic human needs such as food cloth and shelter

- Oxford Dictionary: Defines welfare as-" Satisfactory state, health and prosperity, well-being".

- The welfare geography approach deals with the issues related to inequality and injustice approach grew up as a reaction to the quantitative and model-building traditions of the 1960s.

- In the 1970s there was a major redirection of human geography towards social problems like poverty, hunger, crime, racial discrimination, access to health, education, etc.

- **Nath,** has defined welfare geography as that area of geographical study where we can study the possible impacts of different geographical policies for the well-being of society

- **Smith,** defined welfare geography as the study of "who gets what, where and how."

- **Welfare geography is based on four principles :-**

  1. Humanism

  2. Radicalism

  3. post-behaviouralism

  4. Existentialism

The welfare geography approach deals with the issues related to inequality and injustice. The approach grew up as a reaction to the quantitative and model-building traditions of the 1960s. In the 1970s there was a major redirection of human geography towards social problems, viz., poverty, hunger, crime, racial discrimination, access to health, education, etc. The issues such as the distribution of the fruits of economic development received attention mainly as a result of dramatic socio-political changes in Eastern Europe and South Africa.

Therefore, the basic emphasis of welfare geography is on who gets what, where and how. The 'who' suggests a population of an area under review (a city, region or nation). The 'what' refers to various facilities and handicaps enjoyed and endured by the population in the form of services, commodities, social relationships, etc. The 'where' refers to the differing living standards in different areas? And 'how' reflects the process by which the observed differences arise.

According to the Dictionary of Human Geography edited by R.J. Johnston, D. Gregory and David M. Smith (1994), "in a spatially disaggregated society, the general level of welfare may be written as:

$$W = f\ (S1\ldots\ldots\ Sn),$$

Where, S is the level of living or social well-being in a set of n territorial subdivisions. In other words, welfare is some function of the distribution of good and bad among groups of the population defined by area of residence.

Social well-being may be defined in terms of what people actually get, as follows:

$$S = f\ (X1\ldots\ Xm),$$

Where, X represents the quantity of the m good and bad consumed or experienced. Social well-being may also be expressed in terms of the distribution within the area in question:

$$S = f\ (U1\ldots\ Uk)$$

Where, U is the level of well-being, satisfaction or 'utility' of each of the k population subgroups. In all the above expressions, the terms may be weighted differentially and combined according to any function, to represent the combination of territorial levels of well-being, good and bad or group well-being that maximises the objective function (W or S). For identifying disparity in territorial distribution, developing social indicators is of extreme importance. Such indicators may be as follows: income, employment, housing, education, social orders, social participation, etc.

The welfare approach found Neo-classical economics least suitable to explain social inequality. The Marxian economics provides a useful tool for analysing social problems, because of the inherent tendency of capitalism to create disparity.

The second level of explanation deals with the process of how specific elements of a socio political- economic system operate. D.M. Smith (1977), in his Human Geography: A Welfare Approach first suggested the approach which later merged with other approaches of geography dealing with the issues of inequality.

The issues dealt by welfare geography demand an interdisciplinary approach of the highest order. And, in a rapidly changing era of globalisation where the developing South stands deprived vis-à-vis the advanced North, there has been a renewed interest in welfare geography.

Welfare approaches

The welfare approach in geography was developed against quantitative and locational analysis. As quantitative and location analysis is similar to the capitalist policy, it created many social and economic problems, and welfare approach is developed to make positive changes of common men, and it deals with social and economic justice such as:

- Inequality

- Poverty

- Gender discrimination

- Women inferiority

- Crime

- Education and health care facilities.

- Welfare for all

- Environment control & Sustainable planning

For example, the main victim of inflation would be poor people; development should be focus to reduce inflation at an optimum level.

Approaches in welfare geography

There are two approaches to welfare geography.

Descriptive approach and Process oriented approach

Descriptive approach:

The descriptive approach is used to identify injustice & inequality in a particular population in a particular area. For example, to identify the beneficiary of toilet construction, fertilizer subsidy the descriptive approach is based on the following principles;

● **Who?**

Identifying the subgroup of the population to whom should give preferential treatment or give overburden, for example, for the welfare of the society, the poor should get the subsidy and rich should pay tax.

● **What?**

Who gets what, what should be given to the targeted population? It can be:

➢ Cloth, Food grains, House

➢ Water, roads, LPG

➢ Education, health, social justice, etc.

● **Where?**

Who gets where it deals with identifying the region of the target and welfare should be based on the region-specific. Livelihood and requirement of the different region are different, for example,

➢ city planning model can't be implemented in the village

➢ Plain area development not suited in the hilly area

➢ designing of houses in the city is not fitted for the village

● **How? Who gets how it deals with the process involved in welfare geography, such as**

➢ Top-down approach

➢ Bottom to up approach

➢ What cost they are going to pay to get a particular service

➢ How much they are working to get basic service

Contribution of geographer in welfare geography

● **Pareto Optimality:**

➢ Poor people cannot be sustained or get better without at expense of rich people. Someone must be compromised for better or for others.

➢ Pareto supported the special treatment of poor people for welfare, for example, subsidies scheme for the poor.

- **Smith & Knox:**

Smith was the first geographer who coined the welfare geography, and he has written book "welfare geography". He stated that:

➢ A quantitative tool such as GDP & GNP is not necessarily a direct measurement of quality of life.

➢ There should be a qualitative tool such as happiness index, HDI (both later developed) to measure the welfare of society.

➢ The main focus in geography should be the focus on the welfare of people.

Social Well-being and its indicators

'Social well-being' is an important and contemporary concept of human and social geography and more precisely that of humanistic geography. The concept emphasizes on the distributional Perspectives of various welfare and humanistic aspects of man and the human society. The Basic focus of this humanistic approach is on 'who gets what, where and how'. Social well-being Refers to a condition in which the needs and wants of people are satisfied. Social well-being is an end state in which basic human needs are met and people are able to coexist peacefully in communities with opportunities for advancement.3is end state is characterized by equal access to and delivery of basic needs services (water, food, shelter, and health services), the provision of primary and secondary education, the return or resettlement of those displaced by violent conflict, and the restoration of social fabric and community life.

Well-being is a complex phenomenon and it is necessary to mix objective and subjective methods to understand this complexity (Forgeard et al. 2011, 98). Well-being is the presence of positive effects and evaluation; the absence of negative effects of one's life taking into consideration past experiences, current life situations, and expectations and well-being must include good physical health, a healthful physical environment, the benefits of love and the possibility of communication, and a sense of faith. Therefore, wellbeing phenomenon is a very complex and multi-dimensional concept and even elusive state for social scientists to understand. Well-being concepts and definitions are related to the idea of how good life is or how satisfied any person is with his own life (Saari 2011, 10). According to Michaelson the well-being is a "dynamic process that gives people a sense of how their lives are going through the

interaction between their circumstances, activities, and psycho-logical resources" (Forgeard 2011. Many scholars believed that well-being is a cultural construction (Gergen, 2009-20; Diener, 2009). The idea of well-being is created in a specific cultural set-ting with specific cultural values and perceptions about what is good or not. According to Paul Knox well-being is the satisfaction of the needs and wants of the population, and the needs associated with different elements of well-being may be resolve in different ways. Generally, there are three types of well-being which are mutually related. They areI. Physical well-being/ material well-being (health, fitness, physical safety, finance or income, quality of the living environment, and privacy, possessions, meals or food, transport, neighbourhood, security, and stability or tenure) II. Social well-being (the quality and breadth of interpersonal relationship with the family and relatives in the surrounding people and friends) III. and Emotional or Psychological wellbeing (affect or mood, satisfaction, or fulfilment, self-esteem, status/respect, and religious freedom and faith. (Felce and Perry, 1995, p. 60).Social well-being is associated with the total condition of individual and community life. The social well-being is largely depends on the level of material possessed or accessed as that supports all other parts of life and maintain social status.

Now, the basic question is that there is any relationship or linkage between well-being and social well-being? Social well-being and the well-being of the individual are inseparable. Kenneth Wilkinson, in his book Community in Rural America (1991), explicitly reveals that the connection when he writes that "the well-being of the individual is not possible without the well-being of the community" (p. 18). For understanding of the concept social well-being, it is necessary to a comparative understanding of structure (economic and social system) and stage of a society or a country. Every society or country passes through

Source: NHS Forth Valley

different developmental process or stages, first phase of development indicates economic growth and in its later phase it is the social well-being. The study of socially relevant issues and concepts (social problem, social space, standard of living, social welfare et cetera) has been started in the 19th century and the early part of the 20th century, although the real development of these studies was basically started by 1960s. However, D.M. Smith (1973, 1977), P.L. Knox

(1974) and others social scientists build up a social welfare approach as a central theme in geography. The beginning of social well-being studies in geography is embedded in the real-world problem.

Accd. to Eyles, the renowned Human geographer of the contemporary world, 'A well society is One in which people have sufficient income for their basic needs, where poverty has been eradicated, where people are socially and economically mobile and respectful of the dignity of others, and where they have access to goods and services in a stable and participatory environment'. This is a kind of ideal situation from the social and geographical points of views. It is mainly a concept associated with the American school of geographical thought and came into prominence after 1970s with the advent of the 'Critical revolution in Geography'. Smith, Knox and Grey were the pioneers carrying out studies in this particular field. Indicators of Social well-being social well-being are a condition of man/community/society that can be measurable qualitatively as well as quantitatively. For the assessment and judgment of well-being in a society,

Source: canstockphoto.com

various social-economic-cultural indicators/ parameters can be applied. However, unlike the other well-known concept of 'Human Development', there is no fixed standard for the set of indicators in this case. Depending upon the socio-economic-political status of the society/ population under

Review, the well-being indicators are selected. Some major well-being indicators applied worldwide.

- **Income and wealth**
- **Social environment**
- **Education and educational attainment**
- **Health and medical care**
- **Cultural order**
- **Political awareness**
- **Recreation and leisure**
- **Social disorder**

DIMENSIONS OF SOCIAL WELL-BEING :

Social well-being consists of several elements that, together, indicate whether and to what degree individuals are functioning well in their social lives-for examples as neighbours, as co-workers and as citizens (keyes, 1998). According to Keyes (1998) there are five dimensions of social well-being that operational zed at the level of the individuals. These five dimensions are-Social integration, social contribution, Social coherence, Social actualization and Social acceptance. Fig: Dimensions of social well-being.

I. **Social Integration**: is individual's evaluation of the quality of **Social integration:** relationships to the society and self. Social integration draws on conceptions of social cohesion (Durkheim), cultural estrangement and social isolation (Seeman), and class consciousness (Marx).

II. **Social contribution:** is individual's evaluation of his/her own social value as well as belief in having something valuable to share with the society.

III. **Social coherence:** is individual's perception of the quality organization, and the soundness of the living world and it is analogous to meaning lessness in life (Mirowsky and Ross 1989; Seeman 1959, 1991), and involves appraisals that society is discernable, sensible, and predictable.

IV. **Social actualization:** individual's belief in the evaluation of society and the possibility of progress and actualization through it.

V. **Social Acceptance :** Social acceptance is the construal of society through the character and qualities of other people as a generalized category. Social acceptance is the social analogue to personal acceptance: People who feel good about their personalities and accept both the good and the bad aspects of their lives exemplify good mental health (Fey, 1955; Ryff, 1989).

SIGNIFICANCE OF SOCIAL WELL-BEING IN GEOGRAPHICAL RESEARCH:

Geography of social well-being deals with the analysis of social patterns and processes derived from the distribution and access to, scarce resources. The idea of social well-being

has great importance not only in the field of physiological and sociological literature but also in the field of Geographical literature and also different disciplines related to humanities and social sciences.

a. **Health of population :** Several factors regulate the social well-being and the well-off of the society, population characteristics (rates of fertility, mortality, migration, marriage, divorce, dependency, and the like etc) is vital one. Levels of well-being and characteristics of populations are directly and positively correlated. Changes in several population parameters are influence the levels of well-being, similarly, changes in levels of well-being affect various aspects of population. Emotional and physical health as an aspect of well-being determinants trends of population, but the range of well-being phenomenon is very limited. A high level of interest in social issues is an international phenomenon, in which social well-being take place a significant role for developing the economic prosperity of a nation or a community/The utility of social wellbeing is recognised by Governments and policy makers.

Government and policy makers developed a policy reminding socio-cultural areas including health, education, employment and family. Government and societies seek economic growth and also increasingly concerned about its impact on natural and social environment (OECD, 2001).

b. **Social relationships in locality and livelihood :** Social relationships are necessary for an individual or family well-being and activities considering the locality and livelihood conditions. Social well-being and social relationships are closely related to each other i.e., status and pattern of social well-being of an individual or a community and also a society is highly reflected on its social relationships with the changes of space and time. Social relationships play an important role in housing decisions, residential relocation, quality of life, employment opportunities et cetera and all these elements affects social well-being. The improvement of local well-being take place not only in relation to industrial location, land use, and transport facilities but also in relation to health, education and social welfare which is an important indicator of social well-being. Social well-being is as important as physical well-being. For making good social health, good relationship with others, personal relationships, social connections, social order etc. of an individual as well as community and society social well-being is necessary. Social well-being also provides healthy social life with full filling the basic human needs, conserve value system. Peace

cannot be sustained over the long term without addressing the social well-being of a population. Therefore, social well-being maintains the balance of a society providing opportunity for advancement keep in the mind value or public policy relevance. However, Social well-being denotes Socio-Economic profiles of a region and takes place a significant role for developing the economic prosperity of a Nation or a Community. Long-term sustainability of livelihood and peace of a community or a region can develop only maintaining the balance of social well-being considering socio economic scenario of a region.

c. **Cultural and technological overtones :** Social well-being of any society across the globe has cultural as well as technological overtones, although there are disparities at an international level in various aspects as well as individual level. Many scholars believed that well-being is a cultural construction (Gergen 2009, 20; Diener 2009). The idea of well-being is created in a specific cultural setting with specific cultural values and perceptions about what is good or not.

d. **Judge the socio-spatial structure of a region or community :** There is a history of social and spatial discrimination in Indian society mainly due to unequal resource distribution as well as unjust social structure at regional and national level prevailing among the religions, culture and social hierarchy.

Spatial structure of region or city and distributional pattern of amenities and facilities highlights, socio economic and political processes taking place. The socio-spatial structure of a region or city can be judged through the extent of spatial inequality in the social well-being of the relevant social groups in a region or a city.

e. **Social Well-being and policy development :** Government policy of a region or a country takes place a vital role for developing the status and conditions of social well-being of an individuals or communities and vice versa. Government is encouraging opportunities for national and local services to develop and deliver services related to wellbeing. It is also necessary to develop wellbeing strategies in the long term if the concept is to have any value or public policy relevance. This means developing a long-term perspective on how to encourage wellbeing through the life-course and associated life-stages. It also entails delivering policy aligned to wider issues of economic cycles and social change. The other requirement for wellbeing policy formulation will be the continued consumerization and globalisation of healthcare (Jones-Devitt, 2011).

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Human Development Index (HDI) :

Human development has moved to the centre of the global development debate. It is being incorporated in the development strategy of the world. Now it is in the core of the UN'S International Development Strategy. Human development as a concept is broad and comprehensive. But it is guided by simple idea – people always come first. The real objective of development is to increase people's choices. Income is one aspect of these choices- and an extremely important one- but it is not the sum total of human existence. Health, Education, a good physical environment and freedom are also important.

The concept of human development was largely developed by UNDP. Since 1990 the UNDP is publishing annual report known as Human Development Report which is of immense use for students, teachers, researchers as well as policy makers. These reports are so popular that many countries and even some states of India have prepared similar reports. The National Human Development Reports, 2001 was prepared by Planning Commission of India. Besides the state of Madhya Pradesh, Karnataka and Maharashtra also prepared similar report for respective states.

Human development is defined as a process of enlarging people's choices. In principle these choices can be infinite and charge over time. But at all level of development the three essentials are

1. To lead long and healthy life

2. To acquire knowledge

3. To have access to the resources needed for a decent standard of living.

If these choices are available, other opportunities will become accessible. However, there could also be additional choices such as:

Political, Economic and Social freedom.

Opportunities to be creative and productive.

Enjoy personal self-esteem/respect.

Guaranteed Human Rights.

These choices can be met through

Equality of opportunity for all people in society

Sustainability of such opportunities from one generation to the next

Empowerment of people so that they participate in and benefit from development processes.

The term human development denotes both the process of widening people's choices and the level of their achieved well-being. Thus, Human Development has two sides:

1. Formation of Human capabilities such as improved health, knowledge and skill.

2. To make use the acquired capabilities:

    ■ for productive purposes

    ■ for leisure and

    ■ for being active in cultural, social and political affairs.

Balance between the two sides is essential

The major elements in concept of Human Development are :

Productivity

    ■ Equity

    ■ Sustainability

    ■ Empowerment

Productivity

    ■ People must be able to increase their productivity

    ■ People must be able to participate fully in the process of income generation and remunerative employment

Equity

    ■ People must have access to equal opportunities

    ■ All barriers to economic and political opportunities should be eliminated

    ■ People should be able to participate in and benefit from, these opportunities.

Sustainability

    ■ Access to opportunities must be ensured for present as well as future generations

    ■ All forms of capital – physical, human and environmental should be replenished.

Empowerment

- Development must be by people not only FOR them.

- People must participate fully in the decisions and processes that shape their lives.

Human Development Index (HDI)

The HDI is summary measure of human development. It measures the average achievements in country in three basic dimensions of human development, namely, health, knowledge and the standard of living. The indicators used in- quantifying the above dimension are given below.
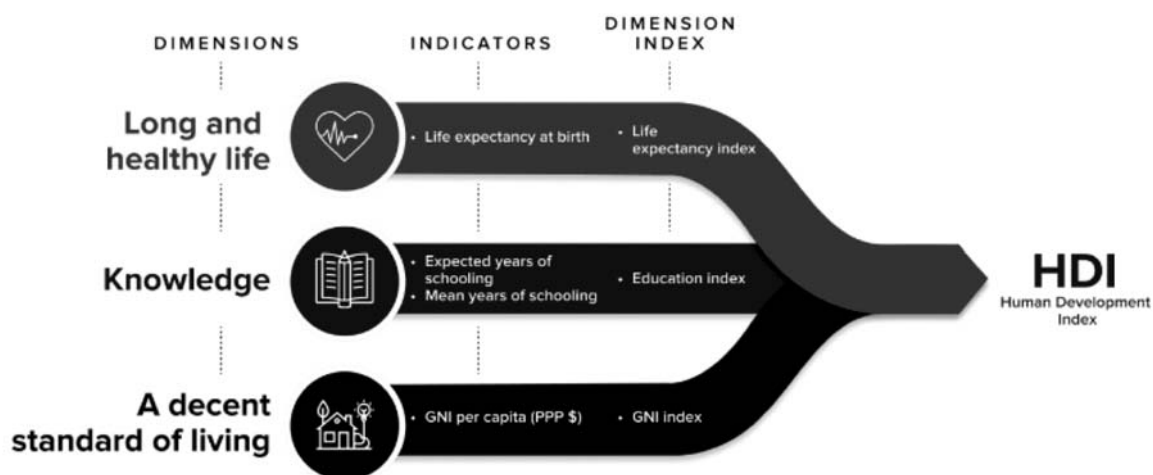
Source: UNDP, 2017

- A long and healthy life, measured by life expectancy at birth.

- Knowledge, measured by the adult literacy rate (with two- thirds wight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight).

A decent standard of living, as measured by GDP per capita (PPP US$).

The computation of HDI involves two steps.

Step 1: Compute Dimensional Index of education, health and income

Step 2: Human Development Index = 1/3 (Dimensional Index of Health + Dimensional Index on Education + Dimensional Index on Income).

To calculate these dimension indices- the life expectancy, education and GDP indices – minimum and maximum values (goal posts) are chosen for each underlying indicator.

Performances in each dimension is expressed as a value between 0 and 1 by applying the following general formula:

$$\text{Dimension Index} = \frac{\text{Actual Values-Minimum Value}}{\text{Maximum Values-Minimum Value}} = Xb" - X\tilde{}\ b"^{TM} / X\tilde{} \bullet\ " - X\tilde{}\ b"^{TM}$$

Where X max is the maximum value

     X min is the minimum value

     Xb" is the value of i-th observation

The HDI is then calculated as a simple average of the dimension indices

The HDI is then calculated as a simple average of the dimension indices

Indicator	Maximum value	Minimum Value
Life expectancy at birth (years)	85	25
Adult literacy rate	100	0
Combined gross enrolment ratio (%)	100	0
GDP per capita (PPP US$)	40000	100

To calculate these dimension indices- the life expectancy, education and GDP indices- minimum and maximum values (goal posts) are chosen for each underlying indicator. Performance in each dimension is expressed as a value between 0 and 1.

This illustration of the calculation of the calculation of the HDI using data for India is given below.

1. Calculating life expectancy index: The life expectancy index measures the relative achievement of a country in life expectancy a birth. For India with a life expectancy of 63 years in 2000 (say), the life expectancy index is 0.63.

Life expectancy index $= \frac{63-25}{85-25} = 0.63$

2. Calculating the education index: The education index measures a country's relative achievement in both adult literacy and combined primary, secondary and tertiary gross enrolment. First, an index for adult literacy and one for combined gross enrolment are calculated. Then these two indices are combined to create the literacy and two-third weight to combined gross enrolment. For India with an adult literacy rate of 56% in 2000 and in a combined gross enrolment ratio of 75% in 1991 (say),

Adult literacy index $= \frac{56-0}{100-0} = 0.56$

Gross enrolment index $= \dfrac{75-0}{100-0} = 0.750$

Education index = 2/3 (adult literacy index) + 1/3 (gross enrolment index)

$\qquad$ = 2/3 (0.56) + 1/3 (0.750) = 0.63

3. Calculating the GDP Index: The GDP index is calculated using adjusted GDP per capita (PPP US$). In the HDI income serves as a surrogate for all the dimensions of human development not reflected in a long and healthy life and in knowledge. Income is adjusted because achieving a responsible level of human development does not require unlimited income. Accordingly, the logarithm of income is used for India with a GDP per capita of $2,240 (PPP US$) in 2000.

GDP index $= \dfrac{\log(2240)-\log(100)}{\log(40,000)-\log(100)} = 0.52$

4. Calculation the HDI: Once the dimension indices have been calculated, determining the HDI is straightforward. It is a simple average of the three-dimension indices.

HDI = 1/3 (life expectancy index) + (education index) + 1/3 (GDP index)

$\qquad$ = 1/3 (0.63) + 1/3 (0.63) + 1/3 (0.52) = 0.59

Gender Empowerment Measure (GEM):

Focusing on women's opportunities rather than their capabilities, the GEM captures gender inequality in three key areas:

- Political participation and decision-making power, as measured by women's and men's percentage shares of parliamentary seats.

- Economic participation and decision-making power, as measured by two indicators –
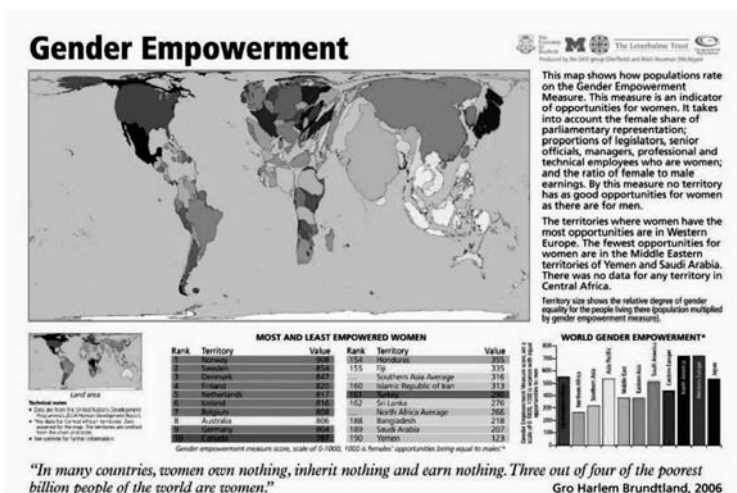
Source: www.worldmapper.org

women's and men's percentage share of positions as legislators, senior officials and managers and women's and men's percentage share of professional and technical positions.

- Power over economic resources, as measured by women's and men's estimated earned income (PPP US$)

For each of these three dimensions, an equally distributed equivalent percentage (EDEP) is calculated, as a population-weighted average, according to the following general formula:

EDEP = {[female population share (female index^1-K")] + [male population share (male index^1-K")] ^{11} 5 K"

 = measures the aversion to inequality. In the GEM (as in the GDI)

 = 2, which places a moderate penalty on inequality. The formula is this:

EDEP = {[female population share (female index 5 ^{1})] + [male population share (male index 5 ^{1})]} 5 ^{1}

For political and economic participation and decision-making, the EDEP is then indexed by diving it by 50. The rationale for this indexation: in an ideal society, with equal empowerment of the sexes, the GEM variables would equal 50% that is, women's share would equal men's share for each variable.

Finally, the GEM is calculated as a simple average of the three indexed EDEPs.

Illustration of the GEM Methodology: We choose Lithuania to illustrate the steps in calculating the GEM. The parameter of inequality aversion, õ, equals 2.

Population (millions)

Total	3.694
Females	1.949
Male	1.745

Percentage share of population

Females	52.77
Males	47.23

Step One: Calculating indices for parliamentary representation and administrative and managerial, and professional and technical, positions.

Percentage share of parliamentary representation

       Female   17.52

       Males   82.48

Percentage share of administrative and managerial positions

       Females   35.67

       Males   64.33

Percentage share of professional and technical positions

       Females   69.74

       Males   30.26

Calculating the EDEP for parliamentary representation

$$[0.528(17.52)\ 5^{1} + 0.472(82.48)\ 5^{1}] = 27.9$$

Calculating the EDEP for administrative and managerial positions

$$[0.528(35.7)\ 5^{1} + 0.472(64.3)\ 5^{1}]\ 5^{1} = 45.2$$

Calculating the EDEP for professional and technical positions

$$[0.528(69.7)\ 5^{1} + 0.472(30.3)\ 5^{1}]\ 5^{1} = 43.2$$

Indexing parliamentary representation

$$27.9/50 = 0.558$$

Indexing administrative and management positions

$$45.2/50 = 0.903$$

Indexing professional and technical positions

$$43.2/50 = 0.863$$

Combining the indices for administrative and managerial, and professional and technical, positions

$$(0.903+0.863)/2 = 0.883$$

Step Two : Calculating the index for female and male income

    Percentage share of the economically population

       Female   47.9

       Males   52.1

Ratio of female non-agricultural wage to male non-agricultural wage (w): 0.764

Per capita GDP (PPP US$): $5,436 (PPP US$)

Total GDP (PPP US$): $6,436 x 3.694 million - $23,772 (PPP US$)

$$ss'' = \frac{0.764*0.479}{(0.764*0.479)+0.521}$$

$$= \frac{0.366}{0.366+0.521}$$

$$= 0.413$$

Female total GDP (PPP US$) = 0.413 * $23,772 million (PPP US$)

$$= \$9,818, \text{ million (PPP US\$)}$$

Male total GDP (PPP US$) = $23,772, million (PPP US$) - $9,818 million (PPP US$)

$$=\$13,954 \text{ million (PPP US\$)}$$

Per capita female GDP (PPPS US$ = $9,818 million / 1.949 million

$$=\$5,037 \text{ (PPP US\$)}$$

Per capita female GDP (PPPS US$ = $13,954 million / 1.745 million

$$=\$7,998 \text{ (PPP US\$)}$$

Index of female per capita GDP $= \frac{5,037-100}{40,000-100}$

$$= \frac{4,937}{39,900}$$

$$= 0.124$$

Index of male per capita GDP$= \frac{7,998-100}{40,000-100}$

$$= \frac{7,898}{39,900}$$

$$= 0.198$$

Calculating the equally distributed income index

$$[0.528(0.124) \; 5 \; ^1+0.472(0.198) \; 5 \; ^1] \; =0.150$$

Step Three : Computing the GEM

$$1/3(0.558+0.883+0.150)$$

$$= 1/3(1.591)$$

$$= 0.531$$

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Unit-5

Development of Cultural Geography and Cultural Ecology

Development of Cultural Geography

Cultural geography is a vibrant sub-branch of human geography. In the Earth and different nations, the first traces of cultural studies by the ancient geographer such as Ptolemy and Strabo. The Cultural geography study relationship between Culture and Place. Cultural geography examines the cultural values, practices, discursive and material expressions and artefacts of people, the cultural diversity and plurality of society, and how cultures are distributed over space, how places and identities are produced, how people make sense of places and build senses of place, and how people produce and communicate knowledge and meaning (Rogers et.al, 2013). In 20th century Cultural geography as academic study firstly emerged to the environmental determinist which had believed people and society are controlled by the environment (Peet & Richard, 1990).

During the period of 1750-1920 most of the geographer believed human occupancy or activities patterns was controlled by the God's made environment and some ST of plans control by man. Since early 21th century role of cultural technologies and human societies for chosen human occupations patterns. So, Physical environment determinism and Cultural environment determinism dispute was growing in this period.

Some geographers in the twentieth century categorize themselves as interest in cultural geography as a specialized sub-division within the broad orientation of human geography. In the United States, the dichotomy normally has been started as physical geography and cultural geography (meaning anything non\physical).

In the early nineteenth century, European geographers, American geographers, Indian/ Chinese/Greek contains a bias in favour of physical geography in its professional development. Since in the late nineteenth and early twentieth centuries most geographers came into subject discipline from the earth science with concerns focusing on landforms and showing a tendency to rely on the writing of historians in accounting for the human side of spatial development.

In fact, Cultural Geography has its ancestry in German Scholarship particularly in Ratzel's Anthropogeographic and the works of Schluder, Ricthofen, Meitzen and Gradman, to name

a few. In Germany, it attained a degree of Specialization where prominent universities instituted and development separate Institute of Kultugeographic or abteilungs (departments) of Kulturgeographie in the Institute of Geogarphy. It was in Germany that studies in Kulturlandschafi were pursued with vigour and commitment and continue to be so (Grover & Singh, 2004).

Cultural geography developed in Europe by Carl.O. Sauer and major theme of geography study in the USA especially Berkeley. Sauer saw on the landscape an evident rapport between man and nature concertised as creations on the landscape which reflected not only man's perception of his micro-cosm but also an inherited value system and tradition intercepted by this technological know-how. Focusing on simpler, folk culture, his methodology stemmed from the problem in the field itself and observation along with explanation sough not only in the physical settlement but in the inhabiting groups perception of space in nature it transformed,remained fundamental (Grover & Singh, 2004).

Sauer approached the human use of the earth ecologically, and although deeply critical of the school of Environmental Determinism that was current in American Geography in the early part of the century. Sauer's understanding the culture was strongly influenced all American anthropologist A. I. kroceber. From geography he borrowed the concept landschaft which he (Sauer) translated as landscape. In 1925, Sauer outlined the method of Cultural geography in "The morphology of Landscape".

Despite such continuities, it is possible to draw distinctions between the Berkeley project and some new directions in cultural geography (Cosgrove & Jackson, 1987). The relative decline of the former during the period of the Quantitative Revolution with its promotion of Space rather than environment as the central geographical concept has yielded to a rapprochement of culture and social geography in recent year. The cultural geography has responded to the Multiculturalism of contemporary urban societies in Europe and North America and to the claims of Postmodernism to give a voice to the 'other' that is to discourse of those traditionally excluded from consideration in Western social science and humanities. The new perspective places emphasis on issues of representation and cultural geography today is faced with a problem: common to all social science of a crisis of representation, because any claims to represent the 'other' is partially a denial of the integrity of that 'other' and its own separate language. (Johnstion, Dictionary of Human Geography).

Most of the contributions of lasting value have come from American geographers, two among them-David Sopher and Fredrick Simoons being Student of Carl O. Sauer. A whole large group of American and Indian students all trained in the USA emerged in the task of

investigating India's Cuktural Geography. Deryck Lodrick, Robert Stoddard, William A Nobel, Allen G Noble, Charles J. Bennen, Michael J. Libbee, Thomas J Wilbanks, James Duncan, Nancy Duncan, Surendra M Bhardwaj, Ramesh C. Dhussa, Bharat Bhatt, Surendra Aggarwal, Satish Devegan, Kiran Banga, H N sharma, M. hasan to name some. From amongst them it was A.B. Mukherjee who was pioneer in venturing the field of Cultural Geography in India. A.B Mukherjee has practiced in India a brand of Cultural Geography which is 'Home grown, home bred and home spun" (Grover & Singh, 2004). Not only did he introduce the idea of Cultural Geography as a systematic sub-discipline he also applied Cultural Geography to Rural settlement and initiated studies of the Cultural Geography of Rural Settlements in India.

The late 1920s also saw the rise of concern with the human element, in which view points from anthropology and sociology broadened the practice of geography. During 1940s the growth of urbanism produced a wide range of interests in the city and patterns of urban growth. The most recent expansion of the outlook of the geography have included quantification, perception studies, environmental quality, social problems and the philosophical structure of geography.

Whatever the orientation, geography has always had an ecological viewpoint, with orientation toward the interface at which there meet inanimate phenomena and process, to form the changing spatial dynamic of the surface of the earth.

In these respects, Saur's cultural geography found itself in marked contrast opposition to the then popular thesis of ENVIRONMENTAL DETERMINISM, and much of its early success as well as its strength was derived from the richness of perspective which this allowed. Sauer's proposals which, through the character of this own empirical work and that of his students, became embodied in the very fabric of the famous BERKELEY SCHOOL also did much to bring about a general reorientation in American geography in the 1930s, 1940s, and 1950s cultural geography even within this limit has developed wide variety of themes though the number have proved exceptionally stimulating and have established traditions of their own.

Currently, one of the most vibrant and contested sub-field within human geography 'cultural geography' has both a long scholarly tradition and multiple contemporary expressions. The outcome in American geography was a scholarly project emphasizing the active role of human groups in transforming natural environment, interpreting and mapping the cultural ecologies which resulted.

Highlights the impacts of MODERNIZATION on traditional lifeways, the Sauerian project inevitably raised ethical questions about the impacts of human use of the Earth as a significant theme in cultural geography. Revivals of environmental concern in the early 1970s and again

in the late 1980s have seen writers within geography and beyond turning to Sauer as a pioneer figure in global and local ENVIRONMENTALISM, which the continued significance of this ecological concern is evidenced in a 1990 re-examination of the issues raised in 'Man's role in changing face of the earth'.

Cultural geography became interested in Cultural landscape(Peet & Richard, 1990). his was led by Carl O. Sauer (called the father of cultural geography), at the University of California, Berkeley. As a result, cultural geography was long dominated by American writers. Sauer defined landscape is the defining unit of geographical studies. But culture and society create our landscape that means cultural landscape (Sauer, 1925). This break initiated a strong trend in human geography toward Post-positivism that developed under the label "new cultural geography" while deriving methods of systematic social and cultural critique from critical geography (Tuan, 1977 & Relph, 1976).

Contemporary trends in economy and society such as globalization, bring people into ever closer and more immediate contract with one another, the growth and economic significance of such 'culture industries' as advertising , the arts, sports and media in many economics , the social impact of virtual space and information technologies, and the end of GEOPOLITICS domination by socio-economic IDEOLOGIES ,have all contributed to a material increase in the significance of cultural matter within human affairs at the turn of the millennium and account for the significant increase of interest in geographical question of space , PLACE and TERRITORIALITY within cultural studies.
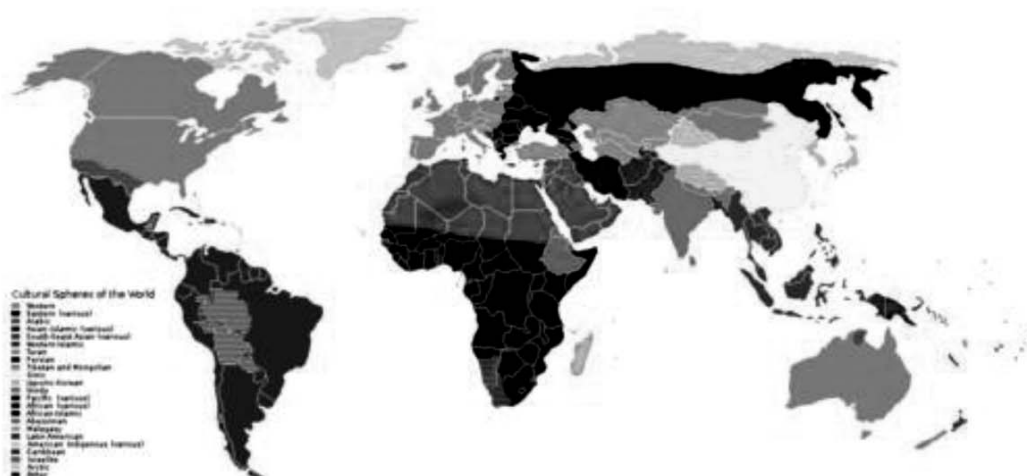
A world map illustrating Cultural areas.
Source:https://en.wikipedia.org/wiki/Cultural_geography,2023.

Cultural Ecology

Cultural ecology is the study of human adaptations to social and physical environments (Frake & Charles, 1962). It also focuses on how the overall environment, natural resources available, technology, and population density affect the rest of the culture and how a traditional system of beliefs and behaviour allows people to adapt to their environment. The main subject of ecological studies is the interrelationship between environment and population. Human adaptation refers to both biological and cultural processes that enable a population to survive and reproduce within a given or changing environment (Joralemon & David, 2010). Cultural ecologist deals with how human being plays their role in society and their specific cultures effects the large environment. In the case of human beings, much of the behaviour involved in interaction with the environment is learned behaviour that has become part of the reserve of learned skills, technology, and other cultural responses of people in a society.Cultural ecology became an influential approach within anthropology, particularly archaeology. Elements of the approach are still seen today in ethnoecology, political ecology, human behavioural ecology, and the ecosystems approach (Tucker, 2013).

For example, we discussed the changes in Haitian culture and environment. We may discern that Haiti was once lush and forested, and assume that the natives adapted accordingly. However, after the colonization of Haiti by the Europeans, the forests were razed to clear land for sugar plantations activities, and slaves from many African nations were brought to work the fields. Today, Haitian culture is comprised of the various cultural traditions brought by slaves from many different nations. As for the environment of Haiti, Haiti now has only 2% forest cover, and has lost virtually all of its topsoil, making it impossible to grow food and its results causing widespread drought. As such, a staple of Haitian culture has become its dependence on imports for 93% of its food, and Haiti's resultant poverty.

*Source: September 13, 2015 by Clpomper.*

History

Julian Steward, an anthropologist (1902-1972) coined the term, envisioning cultural ecology as a methodology for understanding how humans particularly adapt to such a wide variety of environments. In his Theory of Culture Change: The Methodology of Multilinear Evolution (1955), cultural ecology deals with "ways in which culture change is induced by adaptation to the environment." Human adaptation is in part historically inherited and involves the technologies,knowledge and practicesthat allow people to live in an environment. That means the environment deeply influences the character of human adaptation, it does not determine it. Particularly, Steward wisely separated the vagaries of the environment from the inner workings of a culture that occupied a given environment. Observe over the long period, this means that environment and culture are on more or less separate evolutionary tracks and that the ability of one to influence the other is dependent on how each is structured. In this scenario - that the physical and biological environment affects culture - that has proved controversial, because it implies an element of environmental determinism over human actions, which some social scientists find problematic, particularly those writing from a Marxist perspective. Cultural ecology refers that ecological locale plays a significant role in shaping and their footprint inthe cultures of a region.

Steward's method was to :

1. Technologies and varies methods used to exploit the environment to get a living from it.

2. Find out the patterns of human behaviour/culture associated with Appling the environment.

3. Assess the patterns of behaviour directly influenced other aspects of culture (e.g., In a drought-prone region, rainfall patterns are the vital factor became central to everyday life, and led to the development of a religious belief system in which rainfall and water figured very strongly. This belief system may not applicable in a society where good rainfall for crops can be taken for granted, or where irrigation was available).

In the mid-20th century, Steward's concept of cultural ecology became widespread among anthropologists and archaeologists, though they would later be critiqued for their environmental

determinism. Cultural ecology was one of the central tenets and driving factors in the development of processual archaeology in the 1960s, as archaeologists understood cultural change through the framework of technology and its effects on environmental adaptation.
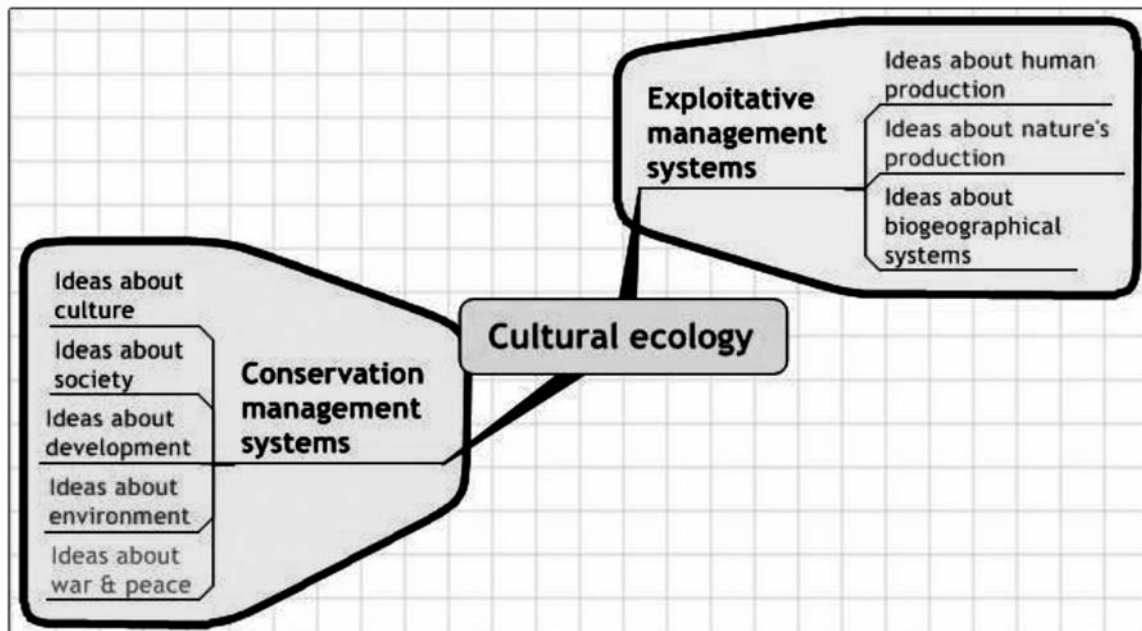

Source: https://en.wikipedia.org/wiki/Cultural_ecology.

Cultural ecology in Geography :

In, geography, Cultural ecology developed or rooted by the "landscape morphology" approach of Carl O. Sauer. Sauer's school was criticized by various aspects due to unscientific and later this concept was established "reified" and "Superorganic" conception of Culture (Duncan & James, 2007). Cultural ecology deals various ides from ecology and system theory to understand the relationship between human and environment. Cultural ecologists focused on energy and materials, examining how belief and institutions in a culture regulated its interchange the natural environment.In this context human are the major part of the ecology as any other organism. Karl Butzer and David Stoddart are the important practitioners in this field.

The second form of cultural ecology discussed by the decision theory from agricultural economics, mainly by the Alexander Chayanov and Easter Boserup.These cultural ecologists were concerned how human groups interacted with their natural environment. Harold Brookfield and Billie Lee *Source: cultural ecology (environment-ecology.com)*

Turner II were the notable cultural ecologist in the second tradition.In 1980s, Cultural ecology criticized by the Political ecology. They are dealing the ecology and human in global level and studied on global political economy.
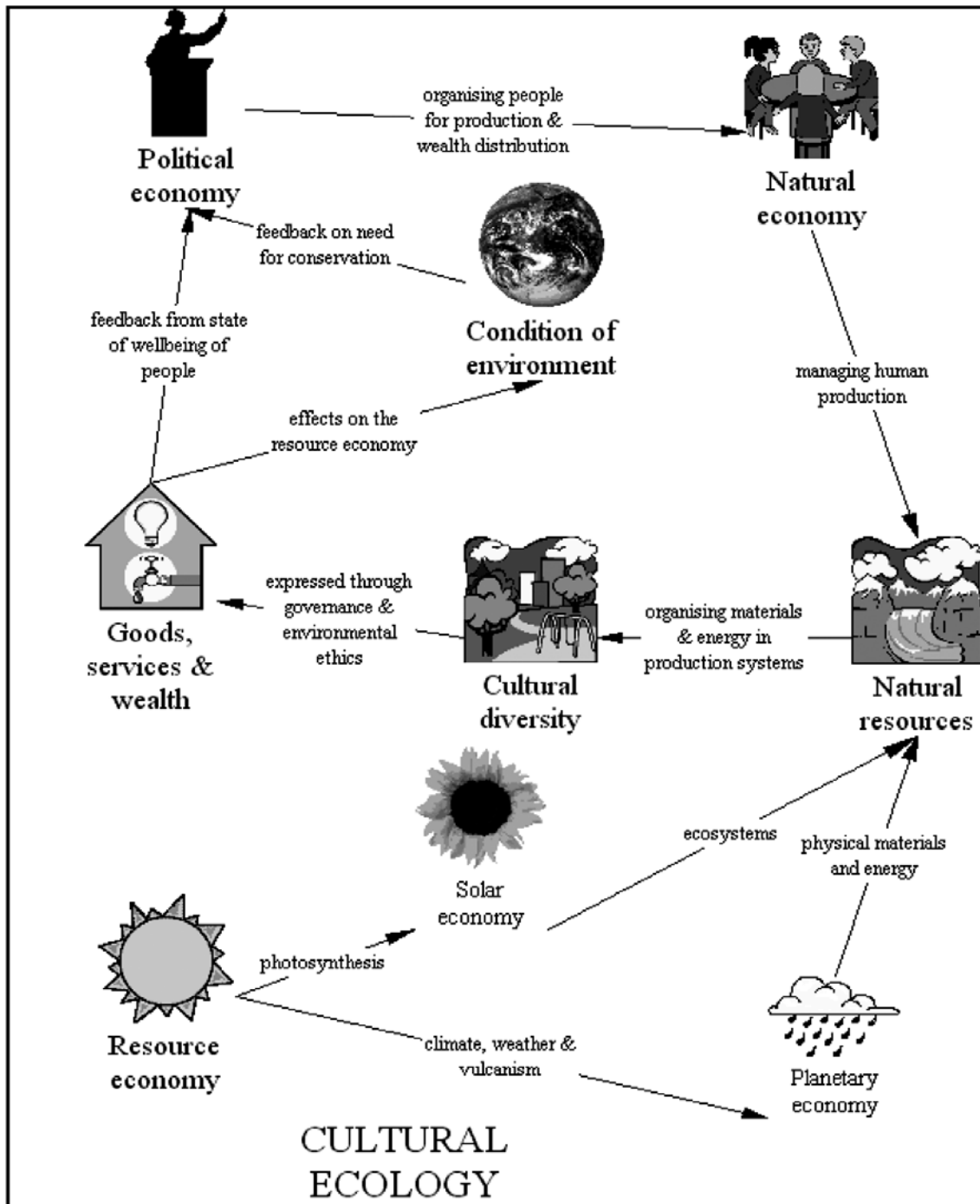
Source: cultural ecology (environment-ecology.com)

Cultural ecology in 21ˢᵗ Century:

In the first decade of the 21ˢᵗcentury, there are more studies deals with the ways in which human are built more favourable cultural relationship with environment. An example is sacred ecology, a sub-topic of cultural ecology, produced by FikretBerkes in 1999. In this output traditional ways of life in Northern Canada to shape a new environmental perception for urban dwellers. This particular relationship was created by cultural levels of local knowledge about species and place, resource management systems using local experience, social institutions with their rules and codes of behaviour, and a world view through religion, ethics and broadly defined belief systems. Culture is the knowledge or balancing act between use or exploitation of natural resources and conservations. The best model of cultural ecology in this context is, paradoxically, the mismatched of culture and ecology that founded when Europeans suppressed the traditional or age-old native methods applied in land use and tried to established European farming cultures on soils manifestly of supporting them. There is a limited ecology associated with create environment awareness, and major task of cultural ecology is inspiring the urban dwellers to develop a more favourable, sustainable, suitable, balanced and cultural relationship with the environment.

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Unit-6

Mosaic of Culture, Culture, Language, Religion and Customs

Language

Language is one of the most important methods for bringing human beings nearer to closer to each other. It is a system of communication though the use of speech, a collection of sound that are understood by a group of people to have the same meaning. Language is one of the identical marks to find the different culture and medium of expression in our society(Sen, 2011).

Definition :

i)   "Language is such expression and communication to or from human beings by means of speech and hearing, the sound uttered or heard being so combined in systems evolved, conventionalized and recognized by common usage at any given period in the history of human race, within a given community or within given communities that they are mutually intelligible to all approximately normal members thereof" (Gray,1939).

ii) Jacob and Stem language is the "complex medium of oral expression of a speech community".

iii) The American linguists Bernard Bloch and George L. Trager formulated the following definition: "A language is a system of arbitrary vocal symbols by means of which a social group cooperates".

What is Dialect

A dialect is a sub-categorization of a language, linguistically differentiated via grammar, lexis, and in terms of speech–phonology (Bowen, N. 2011).

A dialect is defined by linguists as a variety of a language that is distinguished from other varieties of the same language by its pronunciation, grammar, vocabulary, discourse conventions, and other linguistic features. Dialects are rule-governed systems, with systematic deviations from other dialects of the same language (Crystal, 1997).

Spatial distribution of Major Language:

Total 95 percent world population speak at least one of the most common 100 languages and 50 percent of the world population speak at least one of the 10 major languagesthat is,

Table 1 : Ten Major languages of the world, 2018

Rank	Languages	Population Size(Million)
1.	English	1452
2.	Chinese	1118
3.	Hindi	602.2
4.	Spanish	548.3
5.	French	274.1
Rank	**Languages**	**Population Size(Million)**
6.	Arabic	274.0
7.	Bengali	272.7
8.	Russian	258.2
9.	Portuguese	257.7
10.	Urdu	231.3

Sources : Ethnologue: languages of the world. (2018)

Linguistic Classifications of major language family

Every language spoken in the world belongs to a family. Now, what are language families? A language family refers to a group of languages that have developed from a common ancestor

called a protolanguage (Xavier,2020). On the basis of Genealogical familiarity, Structural familiarity, Geographic distributions arethree criteria (Xavier,2020), the below are the important language family groups:

i) Indo-European languages family

ii) Sino-Tibetan languages family

iii) Semito- Hametic languages family

iv) African languages family

Above the classification most commonly spoken are languages in the Indo-European and Sino-Tibetan language groups.

i). Indo-European languages family

The Indo-European language family is spoken in most of Europe, European settlements and Southwest, and South Asia. The Indo-European language family has about 2.6 billion speakers, which constitute about 45% of the world's population, making it the language family with the most significant number of speakers or most dominated in the world. (Xavier, 2020,) It included several groups of language family which are Indian, Iranian, Armenian, Germanic, Italic, Hellenic, Albanian, Balto-Slavic and Celtic group of languages family.The sub-families of each group of these languages have been shown in Fig:1 (Sen, 2011).

Germanic : The Germanic sub-family of the Indo-European languages is most prominent and it has the important language like English, German, Yiddish, Frisian, Faroese, Dutch, Danish, Swedish, Norwegian, and Icelandic (Xavier**,** 2020).

Italic (Latin linguistic family) : Italian, Romanian, Spanish, Portuguese, French, and several others are all languages that belong to the italic languages. However, Latin is the principal language of the Italic group, which was the original language spoken in Rome (Husain, 2011).

Balto-Slavic : The other Indo-European branch with large numbers of speakers is belonging to this linguistic group. The Balto-Slavic languages areSlavik, Bulgarian, Czech, Polish, Russian and Serbo-Croatian, Ukrainian, Byelorussian, Macedonian(Xavier, 2020;Husain,2011).

THE INDO-EUROPEAN FAMILY OF LANGUAGES
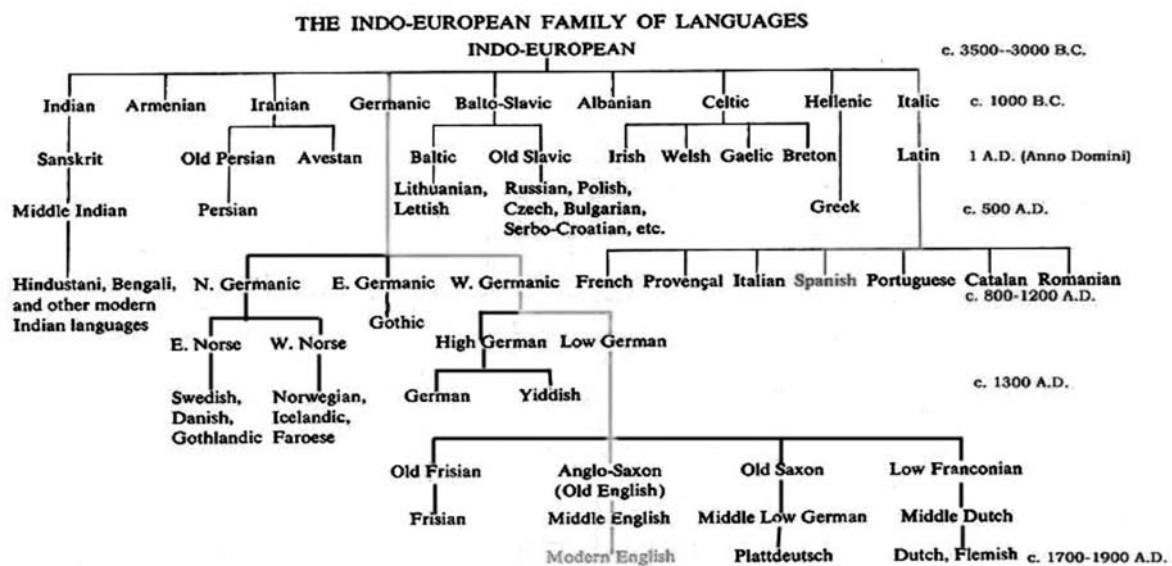
Sources: Husain, 2011

Indo-Iranian : The Indo-Iranian group of languages is located in India, Bangladesh, Pakistan.Some important languages are Sanskrit, Bengali, Urdu, Hindustani, Punjabi, and other modern Indian languages (Husain,2011).

Iranian : Iranian languages were languages that have been spoken since the 1st millennium BCE in Iran, Afghanistan, modern Hungary and Turkistan, (Xavier, 2020). Persian, Avestan is mordent languages that belong to this sub- group of family (Husain,2011).

Celtic : The term "Celtic" was first used to describe this language group by **Edward Lhuyd** in 1707 (Cunliffe, Barry.W.2003). There are six living languages and four continuously living languages Breton, Irish, Scottish Gaelic and Welsh, and the two revived languages Cornish and Manx. (https://en.wikipedia.org/wiki/Celtic_languages).

Armenian : Armenian remained a single language spoken as early as the 6th century BCE. Speakers of Armenian resides in Armenia and eastern turkey. (Xavier,2020).

Hellenic : Greek is the only one language in Hellenic sub-language group family. (Browning ,1983; Husain,2011).

ii) Sino-Tibetan languages family

Sino-Tibetan languages family is the second important linguistic group of family in the world. The people of china and south-east Asia speak the languages of Sino-Tibetan languages family. Mandarin is the one of the important languages under of this linguistic family, which is specks about the people of china. Other languages are in this linguistic family are Cantonese, Min,

Wu, Hakka(all chine's languages and speck in China). Second branches of Sino-Tibetan language family are Tibeto-Burman, It used mainly in South-East Asia. The main important languages under Tibeto-Burman languages branch are Thai, Myanmari, Korean, and Japanese(Sen, 2011, Husain, 2011).

iii) Semito- Hametic languages family

There are two most important languages Arabic and Hebrew under Semito-Hametic language family. Several numbers of less important languages are under this languages family which are found in north Africa and south-western Asia. This language is most popular because Judeo-Christian Bible and the Islamic Holy Quaran was writ up this language family. Arabic language is found as a official languages in the twenty country in the world like south-west Asia country, North African country. Hebrew language found manly in Israel. Famous book 'Old Testament' was written by Hebrew languages. (Husain, 2011).

iv) African languages family

In Africa, there are several kinds of dialects and nearly 1000 distinct languages are found but estimated that only 40th languages are used by the more than one million of speakers.In North Africa people manly use of Arabic language. Parts of South Sahara are used toWest Atlantic, Mande, Gur, Kwa, Adamawa, Benue-Congo languages, All are the branches of Negro-Congo languages (Rubenstean,*et,al* 1990). The Khoisan language family is found South-West African region and Nilo-Saharan languages are used in north-central Africa. In Nigeria, Yoruba and Ibo are important languages (Sen, 2011; Husain, 2011).

Religion

The word religion has been derived from the root word*Religional* which means 'to bind together' (Sen,2011).It is a social-cultural system of designated behaviors and practices, morals, beliefs, worldviews, texts, sanctified places, prophecies, ethics, or organizations, that generally relates humanity to supernatural, transcendental, and spiritual elements("Merriam-Webster"2021). Edward Burnett **Taylor (1871)** defined religion in as "the belief in spiritual beings". Clifford **Geertz(1993)** defined religion as 'system of symbols which acts to establish powerful, pervasive, and long-lasting moods and motivations in men by formulating conceptions of a general order of existence'

The main characteristic of religious life is: (i) Traditionalism ii)Sacred places and objects iii) Myth and symbol iv) Concept of salvation v) Sacred actions or rituals vi) sacred writings

vii) the sacred community or monastic order viii) The sacred experiences. (Husain,2011)

Classification :

Approximate estimated that the total 10,000 distinct religions worldwide(African Studies Association,2005). About 84% of the world's population is affiliated with Christianity, Islam, Hinduism, Buddhism, or some form of folk religion. (The Global Religious Landscape, 2012), On the basis of special distribution world religion groups are three types(Park &Chris,2005; Husain,2011) which are :

i)   **Universal religion:** Islam, Christianity, Buddhism is the example of Universal religious groups (Husain,2011).

ii)   **Ethnic religion:** Ethnic religions have strong territory and cultural group identification. Hinduism, Jainism, Japanese Shintoism, Judaism, are the example of ethnic religions(Husain ,2011).

iii)   **Tribal religion:** The belief of tribal religion also knows as Animism. Tribal people believed that the life exists in all object like rock, tree, lakes and mountain(Husain,2011).

Religious population of the world, 1993	
Religion	**Percentage**
Christens	33.4
Muslims	18.2
Non-religious	16.4
Hindus	13.5
Buddhists	6.0
Atheists	4.3
Chinese folk religions	2.5
New religionists	2.2
Tribal religionists	1.8
Sikhs	0.4
Jews	0.3
Others	1.0

Source : Statistical Abstract of the United States, 1994, p. 855.

Judaism :

It is one of the most ancient monotheistic religions of the world. Judaism originated from Middle East region (People of ancient Israel and Judah), dating about 1000B.C (Sen,2011). There name of the famous foundational text is Torah, and the name of large part of this text is Tanakh or Hebrew Bible. One of the famous divisions of Judaism is Rabbinic Judaism, which believe that God revealed his laws and commandments to Moses on Mount Sinai in the form of both the Written and Oral Torah,***Encyclopedia Britannica***). Actually, Judaism is a cultural group and there have a strong cultural identification. People have not to joint easily this religion group but it possible by birth or by a complex cultural identification. Presently, there are about 13milion jews, about 40 present living in America and 40persent in Israel.

Christianity :

Height percentage of people belongs to christen religion in the world. It is found about 1st century A.D by Jesus of Nazareth (Husain, 2011). According to Statistical Abstract of the United States, (1994) total 33.4 percent population belongs to this religion community in the world. The Bible is a sacred scripture of Christen. Ii is the monotheistic religions of the world. Actually, Christianity is the official religion of Roman Empire and spread to become a dominant force in western culture. Christianity has divided many divisions in the world like Roman Catholicism, Protestantism, and Eastern Orthodoxy. In Catholics division have a highly developed spatial hierarchy system in the world (Sen, 2011).

Islam :

Islam is a monotheistic, Universal, and second largest religion community in the world. Islam means 'total surrender to God'. It is founder by Prophet Mohammad in 7th century AD. The Quran is a sacred scripture of Islam. (Husain,2011) According to the Islam God is absolutely unique, omnipotent, omniscient, and merciful. Islam tries to maintain five law of religion which are: (i)There is no god but God and Mohammad are his prophet (ii)Pray five time in a day (iii) No eating, drinking, smoking, or sexual intercourse from dawn until sunset of Ramdan month in a year (iv) Yearly saving money to help the poor people (v) Performing Haj. In a short of time Islam religion spread in Asia, Africa, southern shore of Mediterranean

Sea, Spain and after death of Mohammad it was spread about France. The total Islam community divided between two groups i) The Sunnis ii) The Shiahs. About 90% Muslim belongs to Sunnis groups. The shiaism grew out of the claim of the shiah that following the prophet, rule over Muslims belongs rightfully only to Ali, prophet Muhammad's cousin and son-in-law and to his descendants. The holiest city of Muslims is Mecca and second is Madina. If we can see the distribution of Muslim population are heights in Asia, Africa and followed by Europe, North America, Latin America, and Oceania. (Husain,2011)

Buddhism :

It is an important religion founded by Siddhartha Gautama in India in the 6th century B.C. Buddhism is the very popular religion which is rapidly spreading from India to Central Asia, South-East Asia, China, Korea, Japan etc.Actually,Siddhartha Gautama, who was a Hindu prince in a small kingdom in south Nepal but they say human beings can escape the reincarnation cycle by the renunciation of desire.The path of salvation lies in a life of self-discipline and meditation, separated from the tasks of the mundane world(sen,2011). Attainment of 'Nirvana' is the main objective of Buddhism. Goutama Buddha's was said to be four noble truths:

   i.   Life is fundamentally disappointment and suffering.

   ii.   Suffering is a result of one's desires for pleasure, power, and continued existence.

   iii.   To stop disappointment and suffering one must stop desiring.

   iv.   The way to stop desiring and thus suffering is the noble eightfold path: Right views, right Intention, Right speech, right conduct, Right livelihood, Right effort, Right mindfulness and Concentration. If the people follow these eight rules of life than may achieve 'Nirvana'.

Hinduism :

Hinduism is the oldest and third largest religion in the world. They have believed many gods and goddess-all of whom, however, are regarded as manifestation of the one divine sprit.There are numerous temple of Hindus, each housing one or more God (sen,2011). On the basis of factional activities, The Aryans was divides Hinduism into four castes which are Brahmins, Kshatriyas, Vaishyas and Shudras. The Brahmins were the top administration and priests in this religion. Kshatriyas engaged in warriors and Vaishyas engaged in businessmen. Shudras is the most deprived and they were engaged in menial job like scavenging, cremation,

and landless labourers. Manly, shudras served the upper castes as slaves (Husain,2011). Most Hindu accepts the doctrine of the cycle of reincarnation- the belief that all living being are part of an eternal process of birth, death and rebirth.For the dead people, the Hindu generally practices cremation rather than burial. The body is burned at a fire on a funeral pyre. Cremation is considered an act of purification(Sen,2011) In 2000, Total hindu population was about 755milion. Distribution of hindu population was heights in Asia(99.3%) flowed by Africa(1.6%), Europe, North and Latin America. Largest Hindu situated in India, followed by Nepal, Bangladesh, Indonesia. The Hindus consider a pilgrimage as an act of purification.In India,some popular holy places are Hardwar, Varanasi, Puri, Duwarka, Amarnath, Venkateshwara etc. (Husain,2011).

Confucianism :

Confucianism was founded by Confucius in China. They lived from 551 to 497B.C. Confucius was not a religious leader but a teacher. They prescribed a serial of ethical principles for the conduct of public life, emphasized the importance of tradition and moral obligation. They give importance family and members. The family was extolled as the nucleus of the state and filial piety was the loftiest of virtues. There are no churches in Confucianism but give importance an ancestor worship as a mark of gratitude and respect. Confucianism included as an official state religion in the 2nd century B.C (Sen, 2011 & Husain, 2011).

Taoism :

It is a contemporary of Confucius. Taoism was founded by Lao Tze (604-517 B.C). Lao's writings emphasized the mystical or magical aspect of life. According to this belief, everything is not knowable. He asserted that myths and legends develop to explain event and the universe is not ultimately the subject of rational analysis. The eternal happiness lies in total identification with nature and deploring passim, unnecessary invention, unneeded knowledge (Husain,2011).

Tribal Religion : Tribal community belief about 'Animism' (Tylor,1871),Therefore, the religious belief and its performances among the tribal's consist with their life cycle rites, communal rites and worship practices along with their ancestral worship practice follows by their different totems and taboos. They belief in God and Goddesses, witchcraft, magic, and disaster are attributed to displeasure and malicious acts of the supernatural forces, malevolent spirits. Their religious belief associated with birth, death, and marriage which performing by priests. They have a belief of Priests that is have a magical power which connects with God and sprite

for their blessing. Tribal religion belief arranged on nature and the creativity the Godes are fast placated and the sing (Chakraborty, P.2018).

Shintosim :

It is a poplar religion of Japan. Shintosim developed out of nature and ancestor's worship. Shintosim as the state religion of Japan up toSecond world War. It observed a complex set of deities, family spritis, rivers, trees, certain animal, and particularly the sun and the moon. In Shintosim, the place of worship are the numerous shrines and temple in which the god is believed to dwell and which are approached through ceremonial torii, or gateway arches (Sen,2011 & Hussan,2011).

Above the description we are understand that, Religion and languages one of the important components of our cultural. It helps to identify and categorize individuals within a Society and separated peoples and nations of different language and faiths.

Major Religions in the world
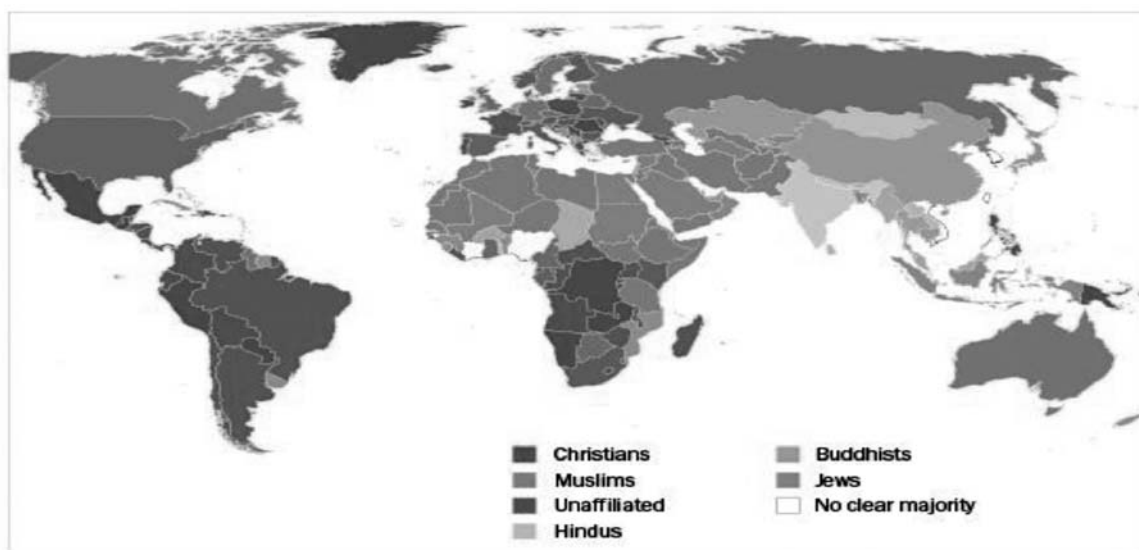
Sources : The Global Religious Landscape 2012

Customs :

In human geography, Customs is a very strong cultural component.It is a frequent repetition of an act, to the extent that it becomes characteristic of the group of people performing the

act. Customs has been adopted by most of the people of the ethnic group or society. In geography, customs flow two aspects that is, the spatial distribution of social customs and the relationship between social custom and landscape (Husain,2011). Customs classifying between two aspect (i) Necessary activities (Food, Clothing, and shelter) ii) Leisure activities (Art, recreations). On other hand, social customs divide in to two (i) Folk (ii) Popular. Folk customs are also known as vernacular customs which are traditionally practices homogeneous rural group. Due to increases urbanization and communication technology, the folk custom also threatened. Popular customs have different from folk customs. It is much famous in industrialized countries like Japan, USA, and Western Europe (Husain, 2011).

Food: Food habits are strongly influences by cultural traditions, derived from events and condition in the physical environment. People in many folk societies believed that everything in nature carries a signature, or distinctive characteristic, based on its appearance and natural properties. Consequently, certain foods are avoided in response to perceived beneficial or harmful natural Characteristic. Many regions in our world have deferent popular food which are eat dog in Nagaland, Snakes in North Myanmar, bustard in Thar Desert, fox and white bear in Tundra, fish in Europe etc. Food habit are not just matters of sustenance but are intimately connected with the totality of culture or custom(Husain,2011).

Clothing and other Wearing :

People living in deferent physical environments may require different type Clothing. Folk people are generally very rigid and their clothes are prepared according to prevailing environmental condition. In western countries, different clothing habits generally reflect different occupation rather than particular physical environmental condition(Like; Lawyear-wear black coat, and dark gowns, light shirts and neckties). (Husain,2011).

Folk Medicines :

All folk societies have developed elaborate diversities of medicines, cures, and folk health based on the plants, barks, leaves, roots, and fruits of their areas of settlement and familiarity. Example: quinine form the bark of south American cinchona tree, boiled chervil roots eaten cold were healthful for the aged. (Husain,2011)

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Unit-7

Role of Technology for the Evolution of Culture

Introduction :

The English word 'Culture' is derived from the Latin term 'cult or cultus' meaning tilling, or cultivating or refining and worship. In sum it means cultivating and refining a thing to such an extent that its end product evokes our admiration and respect (NIOS). Culture refers that complex whole which includes knowledge, beliefs, arts, morals, law, custom, and any other capabilities and habits acquired by man as a member of society (F.B. Taylor). the development over time of systematic techniques for making and doing things. The term *technology*, a combination of the Greek *technç*, "art, craft," with *logos*, "word, speech," meant in Greece a discourse on the arts, both fine and applied. By the early 20th century the term embraced a growingrangeofmeans,processes,andideasinaddition to tools and machines. Technology was defined by such phrases as "the means or activity by which man seeks to change or manipulate his environment" (Britannica). There has always been a connection between technology and culture. From the first use of stone tools to the development of handheld Personal Digital Assistants (PDA), technology has influenced human culture just as much as culture has sparked advancements in technology. In the 19th, 20th and 21st centuries, technology and culture have significantly influenced one another. As cultures change so does the technology they develop. With developments in manufacturing, communications and engineering, cultures have been re-shaped around the world by freeing people from small family farms by choice or by force, dispersing information and changing the landscape. These technological developments have changed the cultures positively but negatively as well. Cultures in turn drive technological development. While it is difficult to explain all of the examples of how technology has influenced culture and vice versa, reviewing a few examples from the last few centuries it is clear the technology developed during and after the Industrial Revolution has changed cultures from simple farming villages to modern bustling cities and sprawling suburbs.

Ancient time : Culture and Technology

The material that gives its name and a technological unity to these periods of prehistory is stone. Though it may be assumed that primitive humans used other materials such as wood,

bone, fur, leaves, and grasses before they mastered the use of stone, apart from bone antlers, presumably used as picks in flint mines and elsewhere, and other fragments of bone implements, none of these has survived.

The stone tools of early humans, on the other hand, have survived in surprising abundance and over the many millennia of prehistory important advances in technique were made in the use of stone. Stones became tools only when they were shaped deliberately for specific purposes, and, for this to be done efficiently, suitable hard

How Stone Age Humans Made Hand Axes

1. The process started with a large piece of rock.

2. The humans roughly shaped the rock with a stone hammer.

3. Using a hammer made of wood, stone, or antler, they sharpened the edge.

4. They trimmed the edge by prying off tiny flakes with a pointed stick.

finished hand ax

front view   side view

Source: Britannica

and fine-grained stones had to be found and means devised for shaping them and particularly for putting a cutting edge on them. Flint became a very popular stone for this purpose, although fine sandstones and certain volcanic rocks were also widely used. There is much Palaeolithic evidence of skill in flaking and polishing stones to make scraping and cutting tools. These early tools were held in the hand, but gradually ways of protecting the hand from sharp edges on the stone, at first by wrapping one end in fur or grass or setting it in a wooden handle, were devised. Much later the technique of fixing the stone head to a haft converted these hand tools into more versatile tools and weapons (Britannica).

Medieval: Culture and Technology

In the time of medieval period, the implication of technology was found in agricultural sector.A type of heavy wheeled plough commonly found in Northern Europe (Hoyt, Robert.S. 1967). The device consisted of four major parts. The first part was a coulter at the bottom of the plough.This knife was used to vertically cut into the top sod to allow for the ploughshare to work theploughshare was the second pair of knives which cut the sod horizontally, detaching it from the ground below. The third part was the

Source: WikiPedia

mouldboard, which curled the sod outward (Wigelsworth, Jeffery R. 2006). The fourth part of the device was the team of eight oxen guided by the farmer. This type of plough eliminated the need for cross-ploughing by turning over the furrow insteadof merely pushing it outward(Hoyt, Robert S 1967). This type of wheeled plough made seed placement more consistent throughout the farm as the blade could be locked in at a certain level relative to the wheels. A disadvantage to this type of plough was its poor maneuverability. Since this equipment was large and led by a small herd of oxen, turning the plough was difficult and time-consuming. This caused many farmers to turn away from traditional square fields and adopt a longer, more rectangular field to ensure maximum efficiency (Wigelsworth, Jeffery R. 2006).

Modern : Culture and Technology

Nowadays, whenever we look around us in our home, in public spheres, we will definitely see a tool of technology. Modern technology occupies an important position in our daily life by providing a sense of independence and connectedness. Human societies and their technology have become inseparable from one another, they have a co-dependent relationship

Manifested in co-influence and co-production. Technology influences socio-culture as much as socio-culture influences technology production. Technology has strongly influenced the course of history and continues to do so. Thus, it is largely responsible for the change of our culture today, not only locally but also globally.

Source: India Today

Agriculture

Technological innovations have greatly shaped agriculture throughout time. From the creation of hoes, plows, and traditional irrigation techniques, to the global positioning system (GPS). Allowing farmers to monitor their crop conditions by mapping field boundaries, irrigation systems, and problem areas such as weeds, insects, or disease. It also gives greater control over plant and animal production, processing, distribution, and storage.

Medicine

Technological advancements have remarkably impacted the medicine field as well. By discoveries regarding treatments, data collection, disease and cure research, human-aiding devices (like sight glasses and hearing devices), and highly advanced diagnostic tools. Through the help of technology, medical and health experts can take better care of patients and can treat diseases in a better way.

Education

Modern technology has inevitably influenced the field of education as well, but probably not so radically. While the foundational system is still there, where a teacher instructs students, and students use their studies to learn and pass knowledge along to the next generation. On the other hand, the development of online educational programs had a fundamental shift on the interactions between teachers and students. Where the interactions often take place online rather than with physical presence, as it is the most adapted way during the covid times. Furthermore, with technology, particularly navigation to the internet, students have access to a wide sea of information to support their studies and expand their learning. However, as more and more schools provide their students with I-Pads or laptops, the need for standard textbooks will become non-existent.

The examples are endless. Technology plays a role in absolutely every aspect of our lives. It is not only the machine itself but also a whole set of relationships between human beings, utensils and fields of knowledge. (YOAIR Blog).

Technology transforms culture in unforeseen and powerful, but generally positive ways, in contrary, Technology attacks and eventually destroys culture and the term /technology/ is viewed as a devil term All technological innovation is conceived of as progress and responsible for moving a culture toward an increasingly prosperous and efficient life. This approach is illustrated by the ready acceptance of technological innovation. Technology and culture stand in a paradoxical relation to each other. This position adopts the technological innovation but also seek to preserve the culture. The relationship between technology and culture is not simple, and one should neither reject technological innovation outright nor accept it unconditionally,

rather the two realities must be reconciled in some fashion in every culture in order to fashion a good and just world. Information technologies are transforming the culture. The internet, video games, IPods, cell phones and PDAs are reshaping the information landscapes of our lives. (Grant and Morris, 2008).

The first major influence of manufacturing allowed people to purchase goods in a store instead of having to make everything from scratch. This freed up a lot of time for people because they no longer had to spend all of their time producing food, clothing and other goods for their families. Reilly discusses how industrialization allowed machines to mass produce interchangeable parts. This meant that a machine could be built to make one particular item much faster than any skilled artisan could. Machinery eliminated the need for skilled workers. "Interchangeable parts were first invented for muskets to meet the needs of war or expected war" (Reilly, 2004). This technology also translated into farming and household goods. Consumers could go to a store and purchase a replacement part instead of having to make one from scratch. No longer was a Taylor needed to make a suit; a seamstress on an industrial sewing machine could be trained to sew one portion of the suit very quickly. With an increase in production speed without skilled labour, companies were able to mass produce goods much cheaper than a skilled artisan could and exact copies of replacement parts could be easily obtained. Industrialization freed up individuals' time that had previously been spent making goods by hand. The relationship between technology and culture is not just an American phenomenon. It can also be seen throughout the world. In the 19th century, European countries like Great Britain collected and catalogued exotic plants and seeds from around the world. The study of plants for commercial use and profit made it clear that those who controlled the natural resources, like plants, had the most global power. Even in the 19th century, scientists were using bio-technology. Foster (1999) describes an incident in 1876 where a British planter secretly took Hevea brasiliensis seeds, better known as the rubber plant, from the Amazon region back to Great Britain: Technology and culture are two forces that greatly influence one another. As new technology is introduced into a society, the culture reacts in a positive or negative way and is thus changed forever. Consequently, as cultures change so does the technology they develop. "Anthropologists have noted that culture consists of all learned beliefs and behaviours, the rules by which we order our lives, and the meanings that human beings construct to interpret their universes and their place in them" (Robbins, 2008).

The technology created to make life better often has negative effects on cultures even if it initially appears to provide benefits. Ultimately, advances in technology directly affect how cultures evolve; thus, when cultures evolve, they tend to create new technology.

Positive Impacts of Technology on Culture

One of the aspects that technology has had a great impact on society is how it affects learning. It made learning more interactive and collaborative. Thanks to the invention of the Internet, it helps people better engage with equipment, and get better access to information at a twenty-four-hour rate. In addition, it expands the boundaries of the classroom, encouraging self-paced learning.

Source: Pinterest

While technology has a remarkable positive impact in the agricultural field as well. The introduction of technological innovations has facilitated agriculture and increased crop production, which in turn keeps food prices down.

Farmers no longer have to apply water, fertilizers, and pesticides uniformly across entire fields, thanks to the machines.
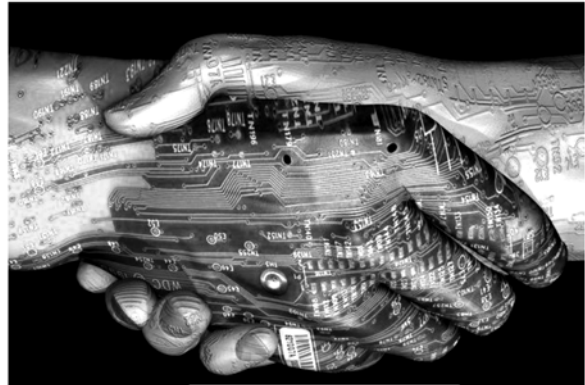
Negative Impacts of Technology on Culture

Technologies have its fair share of negative impacts on other aspects of life as well. Within agriculture, the excessive use of chemicals by the help of machines reduces the fertility of the land. As well as the introduction of machines that can till, thresh, plant, and harvest greatly reduced the need for manual labour. In turn, it meant there were fewer rural jobs, which led to the urbanization of society.

Source: deccanherald.com

In education, the internet and devices such as e-readers, e-books, and smartphones has dramatically influenced reading printed books. There can be no denying that printed book sales have taken a massive hit with the riseof digital technologies.

Technology has both positive and negative impacts on our lives. But the usage of technology is completely our choice. It is nearly impossible to imagine our life without technology, thus separation of technology from human life is unbearable. Indeed, technology is brought by a massive development in our society, but we should also remain aware of its excessive use and reliance. (YOAIR Blog).

Cultural Diffusion

Cultural diffusion describes the way cultures merge and spread around the world. Ideas can spread within a culture or from one culture to another. Sometimes people use the phrase transcultural diffusion to call out an idea spreading across cultures instead of within cultures.

Definition

the term **cultural diffusion** describes how different pieces of culture spread and merge

Cultural diffusion happens through

- times of conflict

- migration

- trade

Cultural Diffusion Examples

Examples of ideas that spread via cultural diffusion include

- philosophy

- religion

- fashion

- language

- technology

Source: dhsworldgeo.weebly.com

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Below you can learn about the different types of cultural diffusion, along with examples

Name	Definition	Example
Relocation Diffusion	Relocation diffusion is the spread of cultures when people migrate to different places. People who move from one place to another and often adapt to the new culture. Sometimes, if many immigrants migrate together, they might be able to integrate and establish their culture in the new location.	An example of relocation diffusion is the development and popularity of places like Chinatown in New York and San Francisco. The people who brought these cities to life were able to integrate their culture in new locations.
Expansion Diffusion	is when a cultural idea spreads to a new place but remains popular where it began. It has expanded in popularity.	A book may be popular in the United States and then become popular in another country. It doesn't become less popular in the United States. Its popularity expands.
Contagious Diffusion	is a type of expansion diffusion. It describes how ideas can spread through one-on-one interactions between individual people.	The way viral videos are spread is a great example. Imagine that a friend sends you a funny video, and then you send it to two friends. Then they send it to a few friends, and the pattern repeats.
Hierarchical Diffusion	is another type of expansion diffusion. It describes how an idea can move from the top of the social pyramid to the bottom.	Fashion is an excellent example of hierarchical diffusion. You might see a celebrity, famous athlete, or influencer wearing a particular brand of shoe, so you buy and wear the identical shoe.
Stimulus Diffusion	Stimulus diffusion is the third type of expansion diffusion. It describes how culture may change as it moves from one place to another. It may or may not stay the same in its point of origin, but it evolves as it spreads to other places.	A popular restaurant menu varies based on the country the branch is located in. For example, a branch near the ocean may offer more seafood on its menu.
Maladaptive Diffusion	Describes occasions where a culture spreads to a new area, but it might not be relevant and does not adapt to the new surroundings.	Trying to make a sport popular in a climate that does not support it.

Cultural Landscape

Carl Sauer defined 'A cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent; the natural area is the medium. The cultural landscape the result.'

Landscape 'is never simply a natural space, a feature of the natural environment. [E]very landscape is the place where we establish our own human organization of space and time' (John B. Jackson).

Cultural Landscapes define a cultural landscape as a geographic area (including both cultural and natural resources), that is associated with a historic event, activity or person, or exhibiting any other cultural or aesthetic values (Alana Coons).

Landscapes are complex phenomena. In addition to the assemblage of physical features on which geographers and others focused until the last thirty years or so, it is now widely accepted that landscapes reflect human activity and are imbued with cultural values. They combine elements of space and time, and represent political as well as social and cultural constructs. As they have evolved over time, and as human activity has changed, they have acquired many layers of meaning that can be analysed through historical, archaeological, geographical and sociological study. Our research theme of Understanding Cultural Landscapes has the potential to develop applied research projects of international significance, bringing together scholars from diverse disciplines.Landscape can also be viewed as a place of cultural exchange, a site at which practices and processes of cultural exchange become forms of cultural heritage. Shaped by ideological discourse, landscapes can also be understood as texts susceptible to analysis by means similar to those in which literary and other texts are analysed (Leader-Elliott, L., Maltby, R., & Burke, H. 2004).

Cultural Landscape: the imprint of human activity on Earth's surface. "A" cultural landscape: a certain area where cultures have left detectable artifacts. "The" cultural landscape: generic term recognizing human contribution to most natural landscapes on Earth.

Characteristics of the Cultural Landscape

Boundaries and characteristics of a landscape are **subjective**. One area can be designated as different types of cultural landscape.

Some might experience a certain urban place as a landscape of fear, while others characterize it as a landscape of economic development, and yet others as a religious landscape.

Cultural landscapes include tangible and intangible characteristics, including:

- Natural systems and features

- Spatial organization

- Land use

- Cultural traditions

- Cluster arrangement

- Circulation

- Topography

- Vegetation

- Buildings and structures

- Views and vistas

- Constructed water features

- Small-scale features

- Archaeological sites

Why cultural landscapes are important

1. Cultural landscape studies focus on how the importance of place in our heritage requires recognition beyond the structures of the built environment.

2. Beginning in the 1920s, through the writings of cultural geographers, the concept of cultural landscapes was created through studies of how humans influence physical landscapes in subtle and overt ways.

3. Popularized in the 1950s through the writings of J.B. Jackson and the work and writings of modern landscape architects, landscape design began to be recognized and understood as equivalent to architecture in shaping the urban environment.

4. Cultural landscape preservation seeks to recognize significant landscape features and place-making as a way to understand evolving community and cultural values. Everywhere people live and move about they interact with their environment, creating cultural values through the use and transformation of their surroundings.

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Unit-8

Migration and Diaspora: Indian Diaspora in USA

Introduction :

The study of migration is imperative for researchers and it has not only fascinated demographers and population scientists, rather economists, sociologists, human geographers, political scientists, policymakers and planners, public administrators, social pathologists, and social psychologists have been magnetized to explore the different aspects of this phenomenon. Migration may be considered as a symptom of fundamental social change. In most countries, it has been observed that industrialization and economic development are accompanied by large-scale movements of people from farm areas to towns, from towns to other towns, and from one country to another (Bogue, 1961). For instance, countries in Asia, Africa and Latin America, which are at present undergoing deep changes, which is largely driven by technological advancements, are experiencing some type of migration from rural to urban areas (Bhende and Kanitkar, 2006; Connell et. al., 1976; Todaro, 1976). Globally importance of migration has been increasing and migrants are becoming important contributors in the population of big cities of the world (World Migration Report, 2015). In the cities like Sydney, London and New York more than a third of the people are migrants. Also, in some cities such as Dubai
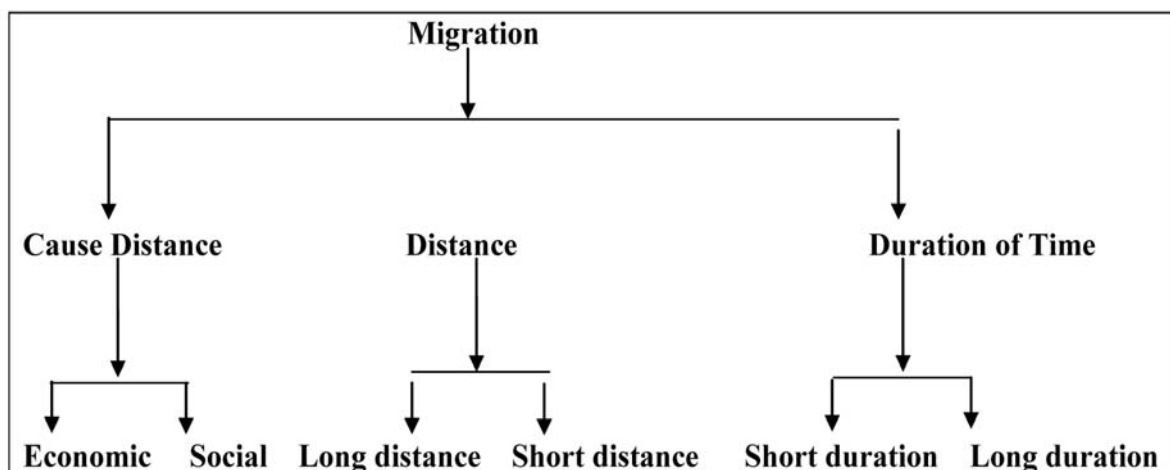

Fig :1 Concept of Migration

(Source: D.R Khullar book: India a Comprehensive Geography)

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and Brussels, more than half of the population is of migrants (United Nations Department of Economic and Social Affairs, 2014). Various streams of migration have given rise to metropolitan cities, like Mexico-city, Mumbai, and Kolkata in the developing countries also.

Concept of Migration:

The United Nations' multilingual dictionary defines "migration" as a form of spatial mobility that involves a change in usual place of residence and implies movement across an administrative boundary (Demopaedia, 2017). This kind of mobility can be between one geographical unit and another, involving a permanent change of residence. Permanent change of residence means that there is detachment from the organization of activities at one place and the movement of the total round of activities to another. Thus, the most important aspect of migration is that it is spatial in its characteristic and, therefore, involves the following aspects:

A) Change of residence

B) Crossing of a pre-defined administrative boundary

There are, however, advantages and disadvantages with this definition of migration. The advantage is that much useful information is usually available about the characteristics of place of origin and definition, which permits a better analysis of the factors associated with migration. The disadvantages are that it excludes other types of short-term, cyclical, circulatory, or temporary movements which are equally 2 important for study. Moreover, there is also the risk of non-comparability over time due to change in administrative boundaries as well as great difference in the size and shape of these boundaries. A migrant is a person who has changed her (or his) usual place of residence from one migration-defining area to another at least once during the migration interval (usually, interval may be one year, five years, or ten years, or an intercensal period).

Difference between movement and migration

Migration needs to be distinguished from casual movements such as commuting to and from the place of work, shopping, visiting, and travelling for business or for pleasure, etc. that do not involve change in place of residence. Even when one changes permanent residence, and her (or his) new home is only a short distance away and one does not need to alter

her round of activities (she still goes to the same school, has the same job, shops at the same stores), then she is a mover, but not a migrant. All migrants are movers, but not all movers are migrants. This boundary given to the concept of migration also excludes other types of movement, such as the movement of nomads, or population groups that have no fixed place of residence, or the seasonal movements of persons who have two or more places of residence during a year

In addition, highly localized moves, such as a change of neighborhood to another in the same town cannot, in the strict sense of the term, be considered as migration. The concept of migration also covers a change of milieu that is environment, along with the change of dwelling place. Indeed, theorists consider the change of milieu as an important aspect of migration. In such cases, it is not possible to measure easily the change in milieu or place of residence. A more measurable characteristic is, therefore, taken as a substitute is distance and thus, only those moves which involve some reasonable distance should qualify for the use of word 'migration' (Bhende and Kanitkar, 2006).

In practice, however, data on residential movements or mobility are seldom available. Because of all these practical difficulties, it is necessary to have a working definition of migration which may be used as a criterion of migration within the field of available data. One operational definition of migration is a 3 change of residence from one civil division to another or across the administrative boundary of a civil division. In other words, a migrant is a mover who changes his residence from the political area of his usual residence (Seigal, et. al., 2004).

Causes of Migration :

- People are generally emotionally attached to their birthplace. However, millions of people leave their homes and birthplaces.

- There could be a number of reasons for this. These reasons can be divided into two groups:

- **Pull factors**, which attract people from different places, and **Push factors**, which cause people to leave their place of origin or residence.

- People in India migrate from rural to urban areas for a variety of reasons, including poverty, high population pressure on the land, and a lack of basic infrastructures such as health care and education.

- Natural disasters such as floods, droughts, cyclonic storms, earthquakes, tsunamis, wars, and local conflicts, in addition to these factors, provide an additional push to migrate.

- People from rural areas, on the other hand, are drawn to cities by a variety of factors.

- The majority of rural migrants to urban areas are attracted by better opportunities, the availability of regular work, and relatively higher wages.

- Better educational opportunities, health care facilities, and entertainment options, among other things, are all significant pull factors.

Impact of migration :

Positive Impact

- Unemployment is reduced and people get better job opportunities.

- Migration helps in improving the quality of life of people.

- It helps to improve social life of people as they learn about new culture, customs, and languages which help to improve brotherhood among people.

- Migration of skilled workers leads to a greater economic growth of the region.

- Children get better opportunities for higher education.

- The population density is reduced and the birth rate decreases.

Negative Impact

- The loss of a person from rural areas, impact on the level of output and development of rural areas.

- The influx of workers in urban areas increases competition for the job, houses, school facilities etc.

- Having large population puts too much pressure on natural resources, amenities and services.

- It is difficult for a villager to survive in urban areas because in urban areas there is no natural environment and pure air. They have to pay for each and everything.

- Migration changes the population of a place; therefore, the distribution of the population is uneven in India.

- Many migrants are completely illiterate and uneducated; therefore, they are not only unfit for most jobs, but also lack basic knowledge and life skills.

- Poverty makes them unable to live a normal and healthy life.

Children growing up in poverty have no access to proper nutrition, education or health.
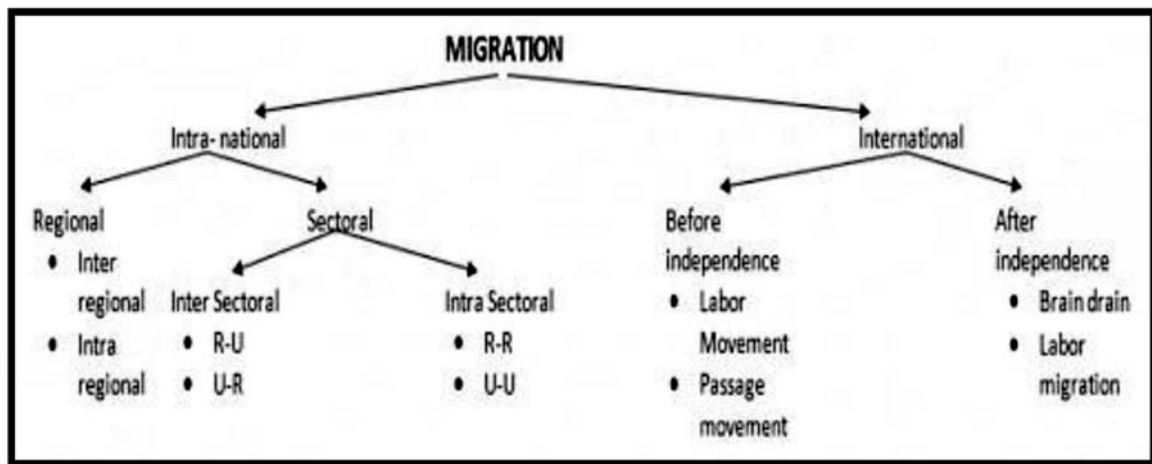
Types of Migration :

Fig 2 : Types of migration (source: Prepp by Collegedunia)

- Internal migration: moving within a state, country, or continent

- External migration: moving to a different state, country, or continent

- Emigration: leaving one place to move to another

- Immigration: moving into a new place

- Return migration: moving back to where you came from

- Seasonal migration: moving with each season or in response to labour or climate conditions.

Internal Migration

- Internal migration is the movement of people within a country from one defined area to another.

- It is generally divided into the following

    - Rural to Rural (47%)

    - Rural to Urban (32%)

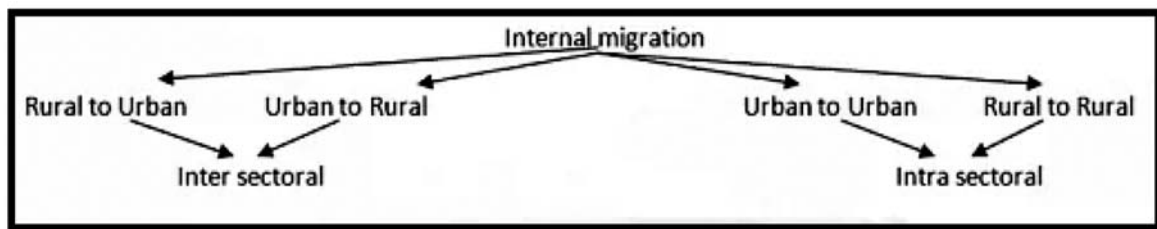   - Urban to Urban (15%)

    - Urban to Rural (6%)

Fig 3 : Types of Internal Migration (source: Prepp by Collegedunia)

Rural to Rural

- According to the 2011 Census, this is the country's most dominant migratory movement.

- Intra-regional and inter-regional characteristics are linked to intra-sectoral migration.

- In comparison to inter-regional migration, intra-regional migration involves larger migratory volumes.

- Marriage ceremonies and working as agricultural laborers are the two main reasons for this migration.

- For example, agricultural laborers moving from overpopulated to underpopulated areas, such as the Awadh-Rohilkhand plains to the Delta plains.

- Government decisions can sometimes have a significant impact.

- The resettlement of Sikhs in the Tarai region of Uttar Pradesh is an excellent example.

- The government also provided for the resettlement of 20,000 families as part of the Dandakaranya project.

Rural to Urban

- It is the second most noticeable migratory pattern.

- Since independence, inter-sectoral migration has been the most dominant migratory trend.

- It is the result of both push and pulls factors in rural and urban areas.

- However, since the 1981 census, the positive impact of rural development programs has resulted in a reduction in push factors, causing this trend to fall to second place.

- Megacities serve as a destination, with rural residents primarily from population surplus states like Uttar Pradesh, Bihar, and MP serving as source areas.

- Rural-urban migration is primarily responsible for the country's exponential growth in population and the number of megacities.

- There are intra-regional and inter-regional subcategories within this migratory trend.

Urban to Urban

- It primarily involves people moving from small towns to larger cities.

- This migration takes place in stages, with people moving from rural areas to small towns and then to larger cities (Class II to Class I towns)

- The majority of urban-to-urban migration occurs in search of better opportunities and a higher standard of living.

- It is dominated by middle-class individuals. In small towns, it creates a void.

Urban to Rural

- It is a reversal or push-back migration.

- It occurs at a high level of urbanization when cities are characterized by overcrowding, haphazard growth, and high living costs.

- It is less because it involves the elderly population migrating primarily after their professional commitments are completed.

- The technical term for this migratory movement is "counter-current migration".

External Migration

India's external migration can be divided into three categories :

- Emigration: India's emigration to various parts of the world.

- Immigration: People from various countries are immigrating to India.

- Refugee Migration: Involuntary or forced migration to India in the form of refugees has also been a significant trend.

Emigration

- India (17.5 million), Mexico (11.8 million), and China are the top three countries of origin for international migrants (10.7 million).

- India ($78.6 billion), China ($67.4 billion), and Mexico ($35.7 billion) were the top three remittance recipients.

- The United States ($68 billion) remained the leading remittance-sending country, followed by the United Arab Emirates ($44.4 billion) and Saudi Arabia ($36.1 billion).

Immigration

- Immigration is the process by which people become permanent residents or citizens of a different country.

- Immigration has historically benefited states in terms of social, economic, and cultural benefits.

- According to the UN Department of Economic and Social Affairs (UNDESA) International Migrant Stock 2019 report, India has overtaken China as the world's leading country of origin for immigrants.

- The UAE was the most popular destination for Indian migrants, followed by the United States and Saudi Arabia.

- Bangladesh, Pakistan, and Nepal were the countries with the most international migrants in India. One-third of all international migrants come from ten countries or less.

- India has the highest number of international migrants (17.5 million), followed by Mexico (12 million), China (11 million), Russia (10 million), and Syria (10 million) (8 million).

Refugee Migration

- A refugee is defined as "a person who is outside his country of nationality because of a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group, or political opinion."

- After leaving his mother country, a refugee does not change his nationality. In India, for example, Tibetan refugees.

- Sri Lankan Tamils are another large group of refugees in India, having fled the island nation as a result of active discriminatory policies by successive Sri Lankan

governments, as well as events such as the 1983 Black July Riots and the bloody Sri Lankan civil war.

- After 40,000 Rohingya Muslims fled Myanmar and sought refuge in India, the refugee debate resurfaced in the United States.

Theories of Migration:

1.   Ravenstein Law of Migration:

In 1885, Ravensien was the first to generalize the migration pattern based on the birthplace in Britain during that time. This generalization of migration is named the " law of migration ".

As per Ravensien, there are three basic factors of migration:

Motive: The motive behind the migration may be economic, better security, political, cultural, marriage, or social.

Distance : How far do migrants want to travel?

Migrants' composition: Such as gender, and age. Culture, etc.

Based on the above three factors, Ravenstein gave the following law of Migration

- Distance: decay model or inverse relationship between distance and volume of migration.

- Support: large migration happened in the nearest city.

- Criticism: A large number of Indians prefer to go the USA as compare to China despite long- distance>

- Step migration:

- Support:generally, it has been seen the following pattern

  Village > Town > City> Mega City

- Criticism: A large number of a village from Bihar directly migrates to West Asia.

- Every migration produces a counter- current

- Support: India gets large remittances from abroad.

- Criticism: This is not true in the case of permanent migration.

- Female is more flexible in- migration than male.

- Migration is age- specific.

- Migration mostly happened because of economic reasons

- Rohingya and Syrian migrants are not because of economic reasons but insecurity.

- The large infusion of migration in India during the 1950s was not for economic reasons.

- Migration is the main reason for the population growth of a large city than natural birth.

- The majority of migrants are young.

- More migration happened in rural areas as compared to urban areas.

2. *Gravity Model of Migration*:

The gravity model of migration was developed by William J. Reilly in 1931 based on the newton's gravitational force. It predicts the movement of people, goods, services knowledge,technology, and capital between two places.

Newton Gravitational force=$G*m1*m2/r^2$

The gravitational force of migration:

$Pf = P1*P2/r^2$

Where Pf is the migration force of attraction.

P1=population of place 1

P2=Population of place 2

r=distance between two place

Basic assumptions:

- Should have uniforms topography

- There should not be a human-made barrier

Major variables:

- Distance

- Population size

As per the Gravity model of Migration :

- Larger the cities larger the attraction of people, goods, knowledge, talents, and capital than the smaller place.

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- Migration is inversely proportional to distance. Smaller the distance more migration.

Supporting examples :

- Larger interaction between Delhi and Mumbai as compared to Delhi & Lucknow and Mumbai & Lucknow.

- Large "in migration" can be noticed in Mumbai as compared to Lucknow.

Opposing examples :

- Migration between India and China is very less as compared to between India and USA despite the following facts:

- India's population; is 134 Crore

- China's population: 140 crores

- USA population: 33 crores

- Distance between India and China: approx. 3,000 km.

- Distance between India and the USA: 13500 KM.

Criticism of the gravity model :

- Technological advancement in the transport sector is not taken into consideration.

- Connectivity is the deciding factor of migration, not the distance.

The number of opportunities is the deciding factor of the migration rather than population size and distance between the cities.

3. Principal of Least Effort:

In 1940, George K Zipf applied the 'principal of least effort' to the movement of goods, information and people within the social system. According to him, inter- community movement occurs in a way to minimize the total work of the system.

The amount of movement between any two communities is expressed as

$$M_{ij} = k \cdot P_i P_j / D_{ij}$$

Were,

M_{ij} = Magnitude of movement between any two communities i and j.

P_i = Population size of community i.

P_j = Population size of community j.

D_{ij}= Distance between community i and j.

K= Proportionality constant

According to Zipf "magnitude of migration between two cities was the function of distance separating them. Thus, as the distance increased, the number of migrants reduced.

4. *Intervening Opportunities Model*:

As per Stouffer, migration is not related to the distance and population size of the city as the gravity model claimed but it is depended on the number of opportunities available in that location.

As per Stouffer law, the number of migrants moving from a source location to destination locations are directly proportional to the opportunities available at the destination location and inversely proportional to the number of intervening opportunities available between source and destination.

Opportunities and Intervening Opportunities are:

- Economic opportunities such as job opportunities, proper housing
- Sanitation, health, and education facilities
- Entertainment facilities
- Clean environment
- Political stability, security, and political opportunities.
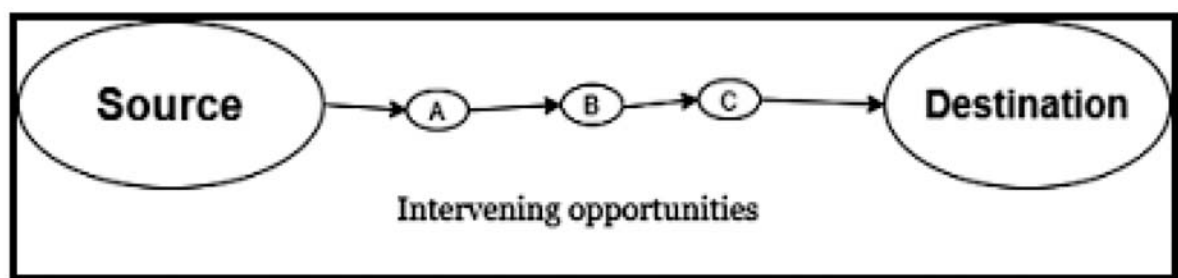- Cultural and social opportunities

Fig 4 : Intervening opportunities by Stouffer (Source: onlyiasexam.com)

Stouffer express his thought as

$Y=X^*/X$

Were,

Y= Expected number of migrants from a place to particular concentric zone or distance band

X^*= No. of opportunities within this band

X = No. of opportunities intervening between origin and mid- way into band in question.

K = proportionality constant.

Supporting example:

- A large number of Indian migrants to West Asia/Europe/USA as compared to central Asia/China/Russia because of the number of opportunities available in West Asia/ Europe/USA is more as compared to central Asia/China/Russia.

- Students from India will not go abroad to study if they get admission to IIT/AIIMS.

5. *Lee's Model of Migration*:

Everett Lee propounded a Model of Migration in 1965. According to him, following factor influence migration:

Factor operating in area of origin and destination

- Adverse economic conditions cause by poverty, low productivity, unemployment, natural calamities etc. may compel people to leave their native place.

- Opportunities for better employment, higher wages, better working conditions and better amenities of life attract migrants to an area.

Intervening Barriers:

- Geographical barriers:

- mountain, rivers, human-made barriers, etc.

- A political barrier:

- Permit system, strict visa rules, etc.

- A social, cultural, and religious barrier:

- Language problems, intolerance, enmity.

Personal factors:

- Personal factors like attachment to a place and proximity to family and friends may prevent a potential migration from moving.
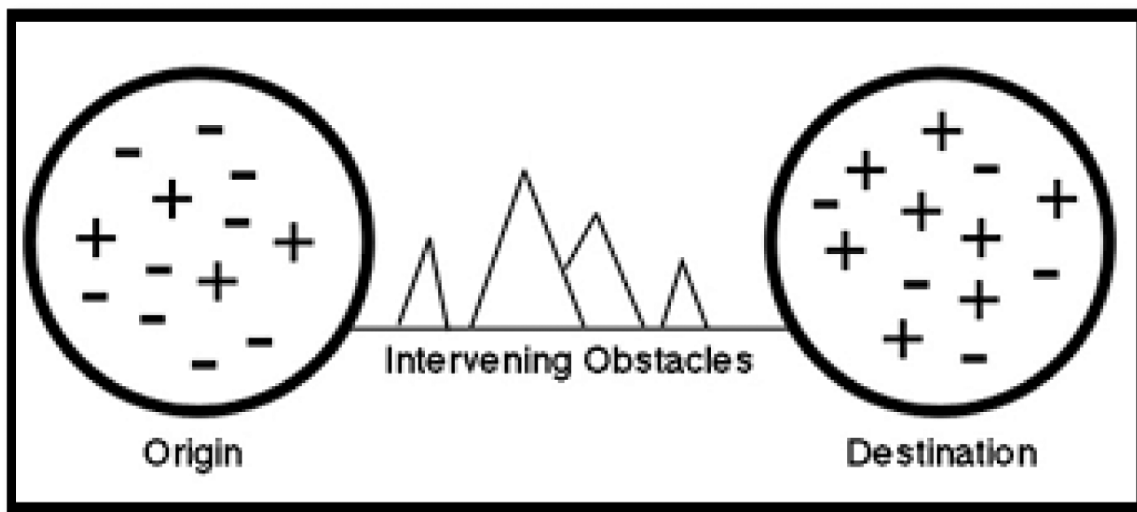
Fig 5 : Lee's Model of Migration(source: ResearchGate)

Characteristics :

- Migrations are selective and they may be positive or negative selective

- Positive selective: those who migrate because of pull factors.

- Negative selective: those who migrate because of push factor

6. Mobility Transition Model:

As per Zelinsky, migration of any country or region is dependent on the following two factors:

Development of the sources and destination places.

Types of the society of the source and destination places.

The main idea of the migration transition model of Zelinsky is taken from the demographic transition model.

As per Zelinsky, the following are the five stages of migration.

Stage 1 : (Premodern traditional society):

- High birth rate and high death rate; the natural growth of the population is zero.

- No international migration

- In high levels of nomadism, people move to search for food for survival.

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Stage 2: (Early transitional society)

- High birth rate and low death rate; rapid population growth.

- The source region is in process of modernization.

- Migration is mainly for jobs.

- High migration from rural to urban

- High emigration

Stage 3: (late transitional society)

- Low birth and low death rate.

- High economic development

- More immigration than emigration

Stage 4. Advanced society

- Urban to suburban migration in search of a peaceful life and a clean environment.

- Stable population

Stage 5. Future super-advanced society

- Declining population trends

- Urban-to-suburban migration

7. Todaro's Theory of Rural- Urban Migration :

In 1969 Todaro has tried to develop a theory of migration in the context of this apparently contradictory situation. The main characteristics of his theory is-

- Migration is decided on the basis of expected, rather than actual, urban- rural wage differentials.

- Migration is decided on the basis of expected, rather than actual, urban – rural wage differentials.

- Probability of obtaining urban job is inversely related to the urban unemployment rate.

8. *Sjaastad's Human Investment Theory*:

Sjaastadin 1962suggests that international migration is related to the global supply and demand for labor. Nations with scarce labor supply and high demand will have high wages that pull immigrants in from nations with a surplus of labor.

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This theory also recognizes the effect of the individual characteristics of potential migrants. Older people are less likely to move because differential income returns from migration accrue over a shorter remaining life span. And educated youth tend to be more mobile because their lifetime origin destination income differences are usually larger.

Indian Diaspora:

Indian Diaspora is a generic term used for addressing people who have migrated from the territories that are currently within the borders of the Republic of India. It constitutes NRIs (Non-resident Indians) and PIOs (Persons of Indian origins). The Indian Diaspora is estimated to be over 30 million.

There have been three waves of Indian Diaspora at three different times in history of India-

- 1st wave : this wave took place during the period when a large number of labourers were sent to Mauritius, Caribbean Island, Fiji and South Africa by British from Uttar Pradesh and Bihar; to Reunion Island, Guadeloupe, Martinique and Surinam by French and Dutch and by Portuguese from Goa, Daman and Due to Angola, Mozambique to work as plantation worker.

- 2nd wave : the migrant went to settle in the neighbouring countries like Thailand, Malaysia, Singapore, Indonesia, Brunei and some African countries, this is a recent development under which professionals, artisans, traders, factory workers went out of the country in search of better quality of life. This trend is still continuing.

- 3rd wave : it was started in 1960s and still continuing to operate. In this period high profile professionals like doctors, engineers, etc. migrated out of India. In 1980s software engineers, management consultants, financial expert, media persons etc., moves out of the country to work country like U.S.A, Canada, U.K, Australia. New Zealand, Germany, etc. After liberalization in 1991, education and knowledge based Indian migration has made Indian Diaspora most powerful in the world.

Indian Diaspora USA :

Large-scale Indian immigration to the United States is relatively recent, following the move by Congress in 1965 to abolish national-origin quotas that largely limited immigration to Europeans. The pace of arrivals from India and other non-European countries in subsequent decades has been rapid. Today, Indians represent the second largest U.S. immigrant group, after Mexicans and ahead of Chinese and Filipinos. The 2.7 million Indian immigrants living

in the United States as of 2021 made up 6 percent of the total foreign-born population, and their numbers continue to grow.

Unlike predominately low-skilled migrant workers who arrived from India during the 19th century and the early 20th century, most post-World War II Indian migrants came to work in professional jobs or study in U.S. colleges and universities. Today, most Indians arrive through employment- and family-based pathways. India is the source of the second largest number of international students enrolled in U.S. higher education and its nationals receive the majority of employer-sponsored H-1B temporary visas for high-skilled workers. These pathways are reflected in characteristics that set Indians apart: four-fifths of Indian immigrant adults have at least a bachelor's degree and their median household incomes are more than double those of all immigrants and the U.S. born.

Globally, the United States is the second most popular destination for Indians living abroad, after the United Arab Emirates (3.5 million). Other top destinations include Saudi Arabia (2.5 million), Pakistan (1.6 million), Oman (1.4 million), and Kuwait (1.2 million), according to the most recent, mid-2020 United Nations Population Division estimate.

The Indian diaspora is comprised of approximately 4.9 million U.S. residents who were either born in India or reported Indian ancestry or origin, according to MPI tabulation of data from the U.S. Census Bureau's 2019 ACS. The Indian diaspora is the tenth largest in the country.
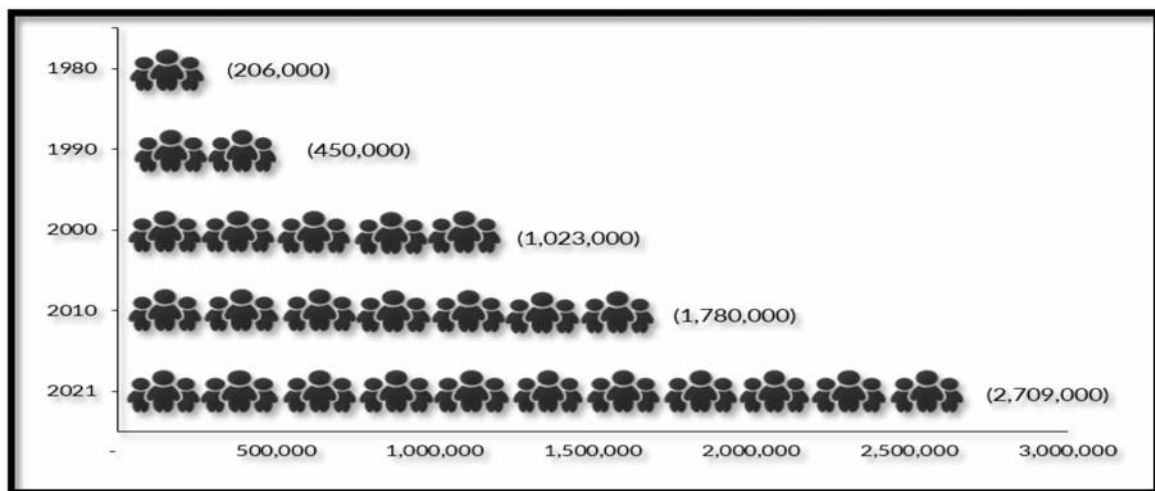

Fig 6 : Indian Immigrant Population in the United States, 1980-2021
Sources : Data from U.S. Census Bureau 2010 and 2021 American Community Surveys (ACS), and Campbell J. Gibson and Kay Jung, "Historical Census Statistics on the Foreign-Born Population of the United States: 1850-2000" (Working Paper no. 81, U.S. Census Bureau, Washington, DC, February 2006)

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Unit-9

Concept of Agricultural Region, Changing Perspective of Agriculture; Concept of Industrial Region, Changing Perspective of Industry

Concept of agricultural region

An agricultural region is defined as an area having homogeneity in relief, soil type, climatic conditions, farming practices, crops produced and crop association.

India is a vast country and is endowed with diverse geographical conditions which are bound to bring in regional variations in agriculture.

Several scholars have attempted to delineate the agricultural regions of India. Prominent among them are E. Simkins (1926), D.Thomer (1956), M.S. Randhawa (1958), L.D. Stamp (1958), Chen Hang-Seng (1959), O.H.K. Spate and A.T.A. Learmonth (1960), Ramchandran (1963), F. Siddiqui (1967), O. Slampa (1968), Miss P. Sengupta (1968), R.L. Singh (1971) and Jasbir Singh (1975) The scheme suggested by the Indian Council for Agricultural Research (ICAR) is simple and comprehensive and is reproduced here. It is based on the predominance of crops and crop associations. Accordingly India can be divided into following agricultural regions :

1. Rice-Jute-Tea Region :

This vast region includes lowlands, valleys and river deltas in the states of Assam, Arunachal Pradesh, Tripura, Meghalaya, West Bengal, Orissa, northern and eastern Bihar parts of Jharkhand and Chhattisgarh and Tarai region of Uttar Pradesh. The rainfall vanes from 180 to 250 cm. Rice are the predominant crop due to fertile alluvial soils, abundant rainfall and high summer temperatures. Jute is mainly grown in the Hugli basin of West Bengal but some areas have been brought under jute cultivation in Assam, Meghalaya, Tripura, Orissa and Tarai region of U.P. Tea is mainly grown in Assam, Darjeeling and Jalpaiguri areas of West Bengal and Tripura. Sugarcane and tobacco are grown in Bihar. Coconut is grown in coastal areas. Mango, pineapple, betal leaves, bananas, jack fruits, and oranges are the main fruit crops.

2. Wheat and Sugarcane Region :

This region comprises Bihar, Uttar Pradesh, Punjab, Haryana, Western Madhya Pradesh and north eastern. Rajasthan. Most of the areas have rich fertile alluvial soils with some parts having black and red soils. Rainfall is moderate, large part of which is caused by south-west monsoons in summer. Some rainfall is caused by western disturbances in winter.

Irrigation is a vital input in drier areas. As its name indicates, this region is dominated by wheat and sugarcane cultivation. The main wheat belt of India extends over Punjab, Haryana, Ganga-Yamuna doab of Uttar Pradesh and north-eastern Rajasthan. Sugercane is mainly grown in Uttar Pradesh and contiguous parts of Bihar. Rice, pulses and maize are the other important crops

3. Cotton Region :

It spreads on the regur or black cotton soil area of the Deccan plateau, where the rainfall varies from 75 to 100cm. Obviously, cotton is the main crop but jowar, bajra, gram, sugarcane, wheat, etc. are also grown.

Fig: Agricultural Regions (Source: lotusarise.com/agricultural-regionalisation-upsc)

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4. Maize and Coarse Crops Region:

Western Rajasthan and northern Gujarat are included in this region. The rainfall is scanty and is normally below50 cm. Agriculture is possible only with the help of irrigation. Maize is mainly grown in the Mewar plateauwhere wheat and ragi are also produced. In the southern part, rice, cotton and sugarcane are grown. Bajra andpulses are grown throughout the region.

5. Millets and Oilseeds Region :

This region includes areas of poor soils and broken topography in Karnataka plateau, parts of Tamil Nadu,southern Andhra Pradesh and eastern Kerala. The rainfall varies from 75 to 125 cm. The millets include bajra,ragi and jowar while the oilseeds grown are groundnut and caster. Pulses are also grown. Mangoes and bananasare important fruit crops.

6. Fruits and VegetableRegion :

This region extends fromKashmir Valley in the westto Assam in the east.Therainfall varies from 60 cm inthe west to 200 cm in theeast. Apple, peach, cherries,plum, apricot are grown inthe west whileoranges areimportant in theeast.Besides, rice, maize, ragipotatoes, chilies andvegetables are also grown

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Changing perspective of agriculture :

The dichotomy of Indian agriculture is unique. India ranks second in terms of global food production and, at the same time, is home to the world's largest undernourished population. Agriculture provides livelihood to more than 50% of the population, yet contributes less than 20% to Gross Domestic Product (GDP). Even after seven decades since independence, Indian farmers continue to battle low productivity and profitability. Considering the complexity of Indian agriculture, a single policy or technology cannot reform the agricultural sector.

However, consistent digital transformation efforts along with government incentives and intervention can strengthen the agricultural model in India. In the past few years, the agriculture landscape in India has witnessed a spike in innovative inventions, use of technology and improved farming models. An influx of investments, AgriTech start-ups and innovation are bent on changing the dynamics of Indian agriculture and paving the way for a futuristic model.

Farm diversification for supplementing income :

The state of small and marginal farmers in India has been dismal, struggling with inadequate farmlands, low incomes and mounting debts. As per the stats – 100 million farmers out of 140 million own less than an acre of land, while many others own less than 2 acres. These farmers depend on mono-crop culture, wavering weather, informal lenders and fluctuating output prices. And farmers who seek to venture into aquaculture or animal husbandry don't have appropriate investments, marketing channels and knowledge.

But with the advent of AgriTech start-ups and digital tools, many Indian farmers are supplementing their income with farm diversification. These start-ups are empowering farmers to integrate livestock rearing and aquaculture into their existing operations with micro-farm installation requiring minimum space and labour. Non-crop diversification is helping farmers increase and earn round-the-year income, improve productivity and profitability and adopt sustainable farming systems.

Improving digital & market connectivity :

Before the internet and smartphones, farmers could only access their local or closest markets, often suffering low returns for their produce. Moreover, due to a lack of storage infrastructure, farmers were forced to sell their produce at the first price offered. However, with ever-increasing internet and smartphone penetration, digital connectivity is reaching Indian villages. As a result, farmers can access a slew of information about farming inputs, climate conditions and market prices. It has further improved the market linkage of farmers, who can now sell their produce at higher prices. Many AgriTech start-ups are increasing awareness among the farming communities and connecting them to a network of traders, retailers and exporters willing to buy their produce at higher prices.

Availability of affordable & innovative farming inputs :

Currently, the market for farming inputs in India is highly unorganized and a majority of farmers have to deal with middlemen to procure materials. Thus, they end up paying premium prices or borrowing money for farming inputs. However, technological improvements and competition among private companies have led to a surge in the supply of quality and affordable farming inputs. Consequently, farmers can order innovative inputs, better seeds and fertilizers, customized farm machinery and feed for animals online at cost-effective prices.

Technological advances in supply chain platforms have also resulted in the supply of high-quality live input materials to farmers engaged in livestock rearing and aquaculture.

Formal Credit Inclusion :

For ages, Indian farmers have been stuck in a vicious loop of low income, piling debts and lack of formal credit, thereby resorting to high-interest rate charging moneylenders. But with the emergence of Fintech and AgriTech start-ups, the lending landscape of the country is changing. Previously underserved small and marginal farmers can now secure loans from formal institutions at low-interest rates. A plethora of easy financing options and government initiatives have alleviated the burden of interest on farmers. With accessible and affordable credit, farmers can adopt entrepreneurial strategies.

The road to digital agriculture :

The initiation of the Digital Agriculture Mission by the government is set to pave the way for a new and futuristic farming model in India. The use of technologies like blockchain, artificial intelligence (AI), remote sensing, drones and robots can improve agriculture production, profitability and sustainability. A unified AgriStack platform will provide farmers with end-to-end services and timely technological and data interventions. A robust digital infrastructure can help revolutionize India's agricultural landscape. By arming farmers with information and technology, India can achieve twin benefits of profitability and sustainability.

Wrapping Up :

With a burgeoning population, climate change and a looming food security crisis, the need for Indian agriculture to transition from the traditional industrial model into a new futuristic and sustainable model has never been more pressing. Small but consistent changes in the agricultural sector can propel India's farming community to the next level. Greater support for AgriTech firms, digital infrastructure and innovative technologies can usher in a digital and green agricultural model.

Concept of industrial region :

Industrial regions form when a group of industries cluster together and enjoy the benefits of their proximity. They prefer to focus on specific places due to favourable geographic characteristics. Industrial zones are frequently built around a natural resource, such as coal or iron ore, or a water supply. It is generally well served by transportation arteries, such as

rail, and may not be homogeneous, that is, there may be numerous unrelated types of production in the same region. This article will explain to you the **Industrial Regions of India** which will be helpful in Geography preparation for the UPSC Civil service exam.

Industrial Regions - Concept

- **Industrial regions** are locations where industries have consolidated due to advantageous geo-economic circumstances.

- These are places where the **manufacturing activity** is carried out on a huge scale and employs a substantial part of the people.

- It is frequently built around a natural resource, such as coal or iron ore, or a water supply.

- It is generally well served by **transportation arteries,** such as rail, and may not be homogeneous, that is, there may be numerous unrelated types of production in the same region.

- Steel manufacturing, electricity generation, primary food processing, and service sectors such as education may all be found in an industrial region.

- This is due to the fact that large places require more labor than a complex, and then there are residential areas nearby or even mixed together.

- A lot of **geographers** have tried empirical delineation of industrial areas. Their criteria, however, differ from one another.

- Industrial areas form when a group of industries cluster together and enjoy the benefits of their proximity.

- They prefer to focus on specific places due to favourable geographic characteristics.

- Several indices are used to detect industry clustering, the most prominent of which are:

  ❖ The number of industrial units

  ❖ Total number of industrial employees

  ❖ The population was engaged in secondary activities.

  ❖ The proportion of industrial employees to the total workforce.

  ❖ A unit of power that is utilized for industrial reasons.

❖ Total industrial production (Gross industrial output).

❖ Manufacturing adds value, for example.
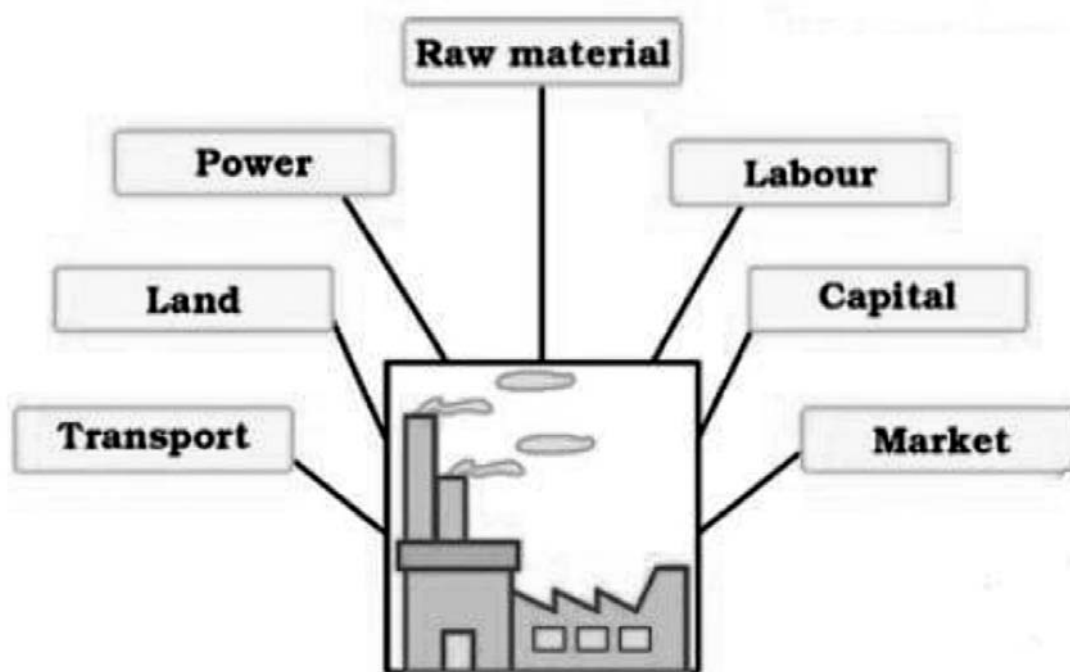
Fig: Locational factors for Industries
(Source: lotusarise.com/locational-factors-for-industries-upsc)

Industrial Regions - India

- Industrial areas form when a group of industries cluster together and enjoy the benefits of their proximity.

- They prefer to focus on specific places due to favourable geographic characteristics.

- When a collection of industries clusters together and profit from their closeness, industrial areas arise. Because of favourable geographic attributes, they choose to concentrate on certain locations:

  ❖ Mumbai-Pune region

  ❖ Bangalore-Tamil Nadu region

  ❖ Hugli region

  ❖ Ahmedabad-Baroda region

- ❖ Chota Nagpur industrial region
- ❖ Vishakhapatnam-Guntur region
- ❖ Gurgaon-Delhi-Meerut region
- ❖ Kollam-Thiruvananthapuram industrial region.
- Industrial Regions can be classified into two types:
  - ❖ Major Industrial Regions
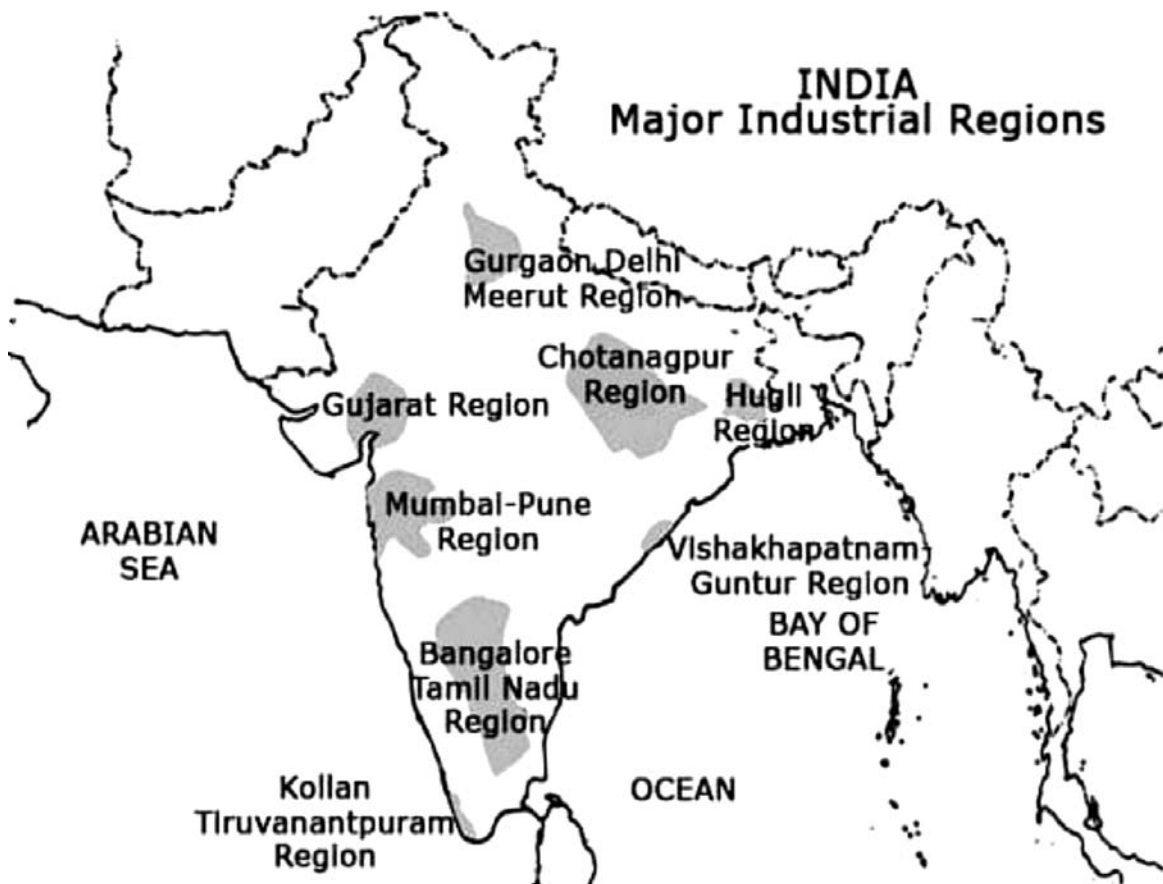 - ❖ Minor Industrial Regions

Fig : Major Industrial Regions (Source: lotusarise.com)

Major Industrial Regions :

The Mumbai-Pune Industrial Region

- This is the country's major industrial area. The region grew following the entrance of the British in India, who built the Mumbai harbor.

- The sea route between India and Europe was significantly restricted once the Suez Canal opened in 1869.

- The history of the cotton textile industry in India is intertwined with the growth of this industrial region.

- The humid environment, natural port facilities, availability of hydro-power, skilled labor, and a wide cotton-producing hinterland all played important roles in the development of this industrial region.

- Only in **Greater Mumba**i are around 8000 registered factories, 350 of which are cotton textile companies.

- The region's other industries include engineering products, chemical industries, food processing industries, leather goods, pharmaceutical industries, and film industries.

- The majority of the output in Mumbai is light-textured, fine, and ultra-fine cotton fabrics. This region's industrial sector employs around 15 lakh people.

- Pune is the region's second most important industrial center. It is home to about 1200 registered industries. Its industries manufacture metallurgical, chemical, engineering, and automotive products. Pune has two plants that manufacture scooters and mopeds.

- This industrial zone has nearly reached saturation. Among the major issues confronting this industrial zone are:
  - ❖ Inadequate power supply
  - ❖ Outdated and obsolete machinery
  - ❖ The land is expensive, and commercial space is expensive to rent.
  - ❖ Unrest in the workplace
  - ❖ Regionalism is growing.
  - ❖ High crime rate
  - ❖ Increasing pollution in the environment

- The division of the nation in 1947 had a negative impact on this region since Pakistan received 81 percent of the entire irrigated cotton acreage cultivating long-staple cotton.

- Mumbai, the industrial region's hub, is now constrained by a lack of available area for industry growth.

- Decongestion can only be achieved by the dispersal of industries.

Bangalore Tamil Nadu region

- It is a major industrial hub that stretches throughout Tamil Nadu and the southern sections of Karnataka.

- It achieved significant growth following independence.

- This is mostly a cotton-producing region of the country.

- The favourable environment, disciplined skilled and unskilled labor, consistent electricity supply (from Mettur, Papanasam, Pykara, Savitri, and Sivasamudram), and proximity to Chennai, Kochi, Mangalore, and Tuticorin seaports have all contributed to the rapid growth of this industrial region.

- The textile sector employs around 60% of the workforce, followed by engineering (18%) and food processing (12%).

- The loom business grew significantly with cotton mills. In Bangalore, several heavy engineering businesses converged.

- This region's industrial monuments include HAL aircraft, machine tools, HTL telephones, and Bharat Electronics.

- Textiles, rail wagons, diesel engines, radio, light engineering products, rubber goods, pharmaceuticals, aluminium, sugar, cement, glass, paper, chemicals, film, cigarettes, matchbox, leather goods, and so on are important industries.

- Recent projects include a petroleum refinery near Chennai, an iron and steel mill in Salem, and fertilizer factories.

Hugli region

- The Kolkata-Hugli industrial zone is located along the **Hugh River**'s banks.

- Industries have also sprouted up in the western region of Midnapur. The Hugli River provided the greatest location for the creation of an inland river port as the core for the development of the Hugli industrial zone.

- The availability of **Agro-Raw materials** (jute, indigo, and tea), proximity to coal mines (Raniganj and Jharia), the quantity of water, inexpensive labor, and export facilities are the primary elements that have contributed to the rapid rise of this industrial region.

- Furthermore, from 1773 to 1911, Kolkata served as the capital of British India. Kolkata's status as the capital drew numerous businessmen to situate their businesses in the city.

- This belt specializes in the manufacture of jute, silk, cotton textiles, engineering, electrical goods, automobiles, chemicals, pharmaceuticals, transport equipment, leather footwear, iron and steel, food processing, light machine, locomotives, iron and steel, and spare parts for various types of machines.

- Naihati, Bhatpara, Shamnagar, Krishnanagar, Serampore, Titagarh, Rishra, Kolkata, Haora, and Budge are the important industrial cities and towns in this region.

- The following are the primary issues confronting this industrial region:

  ❖ Traffic bottlenecks and a lack of space

  ❖ There is a shortage of drinking water, sanitation, and infrastructure.

  ❖ The silting of the Hugli River causes the silting of Kolkata port.

  ❖ Outdated machinery

  ❖ Political turmoil and the Naxalites' movement

  ❖ Lockouts and strikes

  ❖ Power supply failure

- To address these issues, the West Bengal government is pursuing a liberalization agenda and inviting domestic and global investors to invest in the region.

- In recent years, some progress has been made in this direction.

Ahmedabad Baroda region

- This is the country's third-largest industrial region.

- The abundance of cotton in the hinterland, inexpensive land, cheap skilled and unskilled labor, port facilities, and proximity to petroleum, thermal, hydel (Ukai project), and nuclear power stations are the key reasons for the growth of this industrial region (Kakrapara).

- In this region, there are about 11,000 registered industries employing over 15 lakh people.

- It is the country's second-largest cotton textile industry centre. It also specializes in the chemical and technical sectors, as well as medicinal items.

- Vadodara is a major producer of woollen textiles and petrochemical products.

- Surat is famous for its silk textiles and diamond cutting. Anand, AnkleshwarBhavanagar, Bharuch, Godhra, Jamnagar, Kalol, Kheda, Rajkot, and Surendranagar are also prominent industrial centres in this region.

- Water scarcity and a lack of high-quality cotton are two of the region's major issues.

- Communal tensions have hampered investment in this region's industry in recent years.

Chota Nagpur Industrial Region

- This industrial zone encompasses Jharkhand, Odisha, Southern Bihar, and western West Bengal.

- It is sometimes referred to as the "Ruhr of India" due to its high concentration in the iron and steel industry.

- This region is abundant in fossil fuels as well as metallic and nonmetallic materials. Damodar Valley Corporation provides electricity.

- The states of Bihar, Jharkhand, Odisha, Uttar Pradesh, and West Bengal have a large source of inexpensive labor.

- Asansol, Bokaro, Burnpur, Durgapur, Kulti, Jamshedpur, and Rourkela are the region's primary iron and steel production hubs.

- Sindri for fertilizer, Chittranjan for locomotives, Ranchi for HMT, and Ramgarh and Bhurkunda for glass are the region's other key industrial centers.

- Thermal and hydroelectric projects have been built in the Damodar Valley to supply the electricity demand.

- The neighboring densely populated regions supply inexpensive labor, and the Hugli region provides a large market for its companies.

- The region's primary concerns include a lack of power and political upheaval, such as that produced by Naxalites.

- Many investors in this region have been put off by the labor upheaval.

Vishakhapatnam Guntur Region

- This industrial zone stretches from Visakhapatnam to Kurnool and Prakasam in the south.

- This region's industrial growth is dependent on the ports of Visakhapatnam and Machilipatnam, as well as the developed agriculture and mineral deposits in their hinterlands.

- The **Godavari basin** coalfields supply energy. Vishakhapatnam's shipbuilding industry began in 1941.

- The development of petroleum refineries based on imported petroleum aided the expansion of various petrochemical businesses.

- This region's main industries include sugar, textile, jute, paper, fertilizer, cement, aluminum, and light engineering. Visakhapatnam, Vijayawada, Vijaynagar, Rajahmundry, Guntur, Eluru, and Kurnool are important industrial centres.

Gurgaon Delhi Meerut region

- This location is remote from mineral and energy resources, the industries are small and focused on the market.

- The region's main industries include electronics, light engineering, and electrical items.

- There are also large-scale enterprises in cotton, woollen, and synthetic textiles, hosiery, sugar, cement, machine tools, tractor, bike, agricultural equipment, chemical, and vanaspati.

- The **software sector** is a relatively new addition to the industry.

- The Agra-Mathura industrial sector, which specializes in glass and leather items, is located to the south. Mathura is a petrochemical complex since it has an oil refinery.

- Gurgaon, Delhi, Shahdara, Faridabad, Meerut, Modinagar, Ghaziabad, Ambala, Agra, and Mathura are just a few of the industrial cities mentioned.

- The primary issues in this location include expensive land prices, transportation congestion, and a high crime rate.

Kollam Thiruvananthapuram Industrial region

- This **industrial zone** encompasses the districts of Thiruvananthapuram, Kollam, Alwaye, Ernakulam, and Alappuzha.

- This region's industrial foundation is based on plantation agriculture and hydropower.

- Agricultural goods processing and market-oriented light industries prevail in this region, which is located distant from the country's mineral belt.

- **Cotton textiles, sugar, rubber, matchboxes, glass, chemical fertilizers,** and fish-based businesses are among the most significant.

- The industries of food processing, paper, coconut coir products, aluminium, and cement are all important.

- Kollam, Thiruvananthapuram, Alluva, Kocchi, Alappuzha, and Punalur are important industrial centres.

Minor Industrial Regions

- **Kanpur-Lucknow Industrial Region** - Cotton, woollen, and jute textiles, leather products, fertilizers, chemicals, medications, pharmaceuticals, electric goods, and light machinery are all produced in the Kanpur-Lucknow Industrial Region.

- **Assam valley industrial zone** - Petrochemical, jute and silk textiles, tea processing, paper, plywood, match, and food processing industries are all found in the Assam valley industrial zone.

- Bongaigaon, Dibrugarh, Digboi, Guwahati, Noonmati, and Tipsukia are important industrial centres.

- **Darjeeling-Siliguri Industrial Region** - This area is well-known for its tea processing industry and tourism.

- **North Bihar and Eastern Uttar Pradesh Industrial Region** - Sugar, cement, glass, jute, fertilizers, locomotives, paper, and food processing are the primary industries of the North Bihar and Eastern Uttar Pradesh Industrial Region.

- Allahabad, Dalmianagar (Bihar), Gorakhpur, Patna, Sultanpur, and Varanasi are important industrial centres.

- **Indore-Ujjain Industrial Region** - Cotton textiles, chemicals, medicines, electrical and technical items, and food processing are the main industries of the Indore-Ujjain Industrial Region.

- **Amritsar Jalandhar-Ludhiana Industrial Region** - Sports products, cotton and woollen, textiles, hosiery, food production, and tourism are all part of the Amritsar Jalandhar-Ludhiana Industrial Region.

- **Nagpur-Wardha Industrial Region** - Textiles, engineering, chemicals, and food processing are the key sectors of the Nagpur-Wardha Industrial Region.

- **Godavari-Krishna Delta** - Iron and steel, shipbuilding, fertilizer, rice milling, cotton textile, sugar, fish processing, engineering, and chemicals are the main industries in the Godavari-Krishna Delta.

- Guntur, Machilipatnam, Rajahmundry, and Visakhapatnam are the main industrial centres.

- **Dharwad-Belgaum Industrial Region** - Cotton textiles, chemicals, spice packing, and food processing are the key industries of the Dharwad-Belgaum Industrial Region.

- **Kerala coast industrial region** - Coconut oil extraction, rice milling, fish packaging, paper, coir matting, shipbuilding (Kochi), petroleum refining (Kochi), and chemical and electronic goods are the main industries of the Kerala coast industrial region.

Conclusion

India is divided into eight key industrial areas. Because of their advantageous geoeconomic foundations, these locations have a higher concentration of industries. These places will feature large-scale manufacturing units or industries, providing a greater number of employees for the population. The location of industries is usually determined by the proximity of raw materials as well as market availability. Raw materials can be classified as either Gross raw materials, which lose a significant amount of weight throughout the manufacturing process or Pure raw materials, which do not lose weight.

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Unit-10

Theories and Models of Spatial Interaction (E. Ullman and M.E. Hurst)

Spatial interaction is the estimated flow between locations, this flow includes- journeys to work, migrations, tourism, the usage of public facilities, the transmission of information or capital, the market areas of retailing activities, international trade, and freight distribution. These flows help in the evaluation of demand of transport services.

American geographer **Edward Ullman** gave the concept of spatial interaction. IT was given in the year 1957 and 1980." He stated that trade diverting effect of an intervening opportunity could eventually facilitate interaction between more distant complementary locations."He said that flow between locations was an interaction based on the three phenomenon—

1. **Complementarity**

2. **Transferability**

3. **Intervening opportunities**.

1. Complementarity :

It postulates that when two place interact, one place must have a supply of an item for which there is an effective demand at the other place. If location A produces something that location B requires, then an interaction is possible because a supply/demand relationship has been established between those two locations, they have become complementary. The same applies in other direction (B to A) which creates a situation of mutual interchange in commuting or international trade. So, it is a function of physical, cultural and technical differences between regions, which are also closely related to economic development. (Fig: 1)
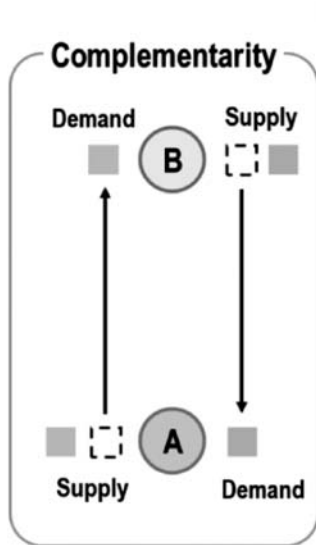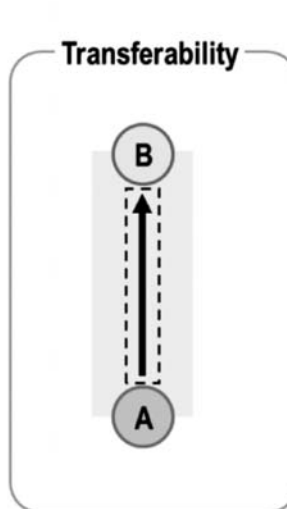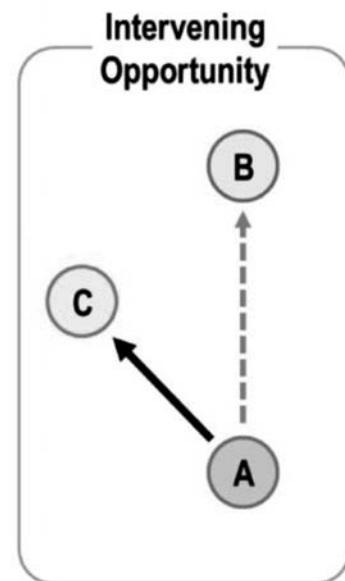
Fig:1

Fig: 2

Fig: 3

Transferability :

It is referred to mobility of a commodity. It occurs only when acceptable cost of an exchange is met. Cost includes both time and money. Transferability can be accomplished by different transport modes depending on the weight and value of goods as well as distance involved. Steel factories and petroleum refineries are more inclined to locate in port cities where iron ore and petroleum are commonly imported. The cost of overcoming distance is known as the friction of distance, which is subject to factors such as existing transportation technology and the cost of energy. (Fig:2)

Transferability is a combination of 3 considerations-

1. The characteristics and value of the commodity.

2. The distance over which the interactions need to take place (as measured in both time and money penalties).

3. The ability of the commodity to bear the costs of movements.

If it costs too much money to transport or it takes too long time to arrive then interaction will not take place.

Intervening Opportunity :

In this phenomena, closer opportunities will reduce the attractiveness and interaction between more distant supply and demand pairs. The trade diverting effect of an intervening

opportunity could eventually facilitate interaction between more distant complementary locations. If location C offers similar characteristics like location B and is also close to A, an interaction between location A and B will not occur and will be replaced by an interaction between location A and C. An intervening opportunity can also be partial as only a part of the interaction is captured. (Fig:3)

"M. E Hurst (1973) in his book "Transportation Geography: Comments and Readings," **established the basic principles of transport geography**. According to him, transportation is essentially a geographic concept and reflects relations and connections between areas."

WTO in International trade: Role of GATT in LPG Economy and its impact on Industry and trade forwarding trading and E-Commerce

The World Trade Organization (WTO) is a multilateral organization headquartered in **Geneva**, Switzerland. It came into existence on January 1, **1995,** as a successor to the General Agreement on Tariffs and Trade (GATT). The organization functions as a central body that facilitates global trade. The WTO provides a common platform to negotiate trade agreements among member countries and to resolve any trade disputes. It manages 60 global and about 300 regional trade agreements. The 60 trade agreements are accorded the status of international law. The WTO comprises **164 member states**. There are also observer states that are not signatories to the WTO agreements, and they do not participate in free trade.
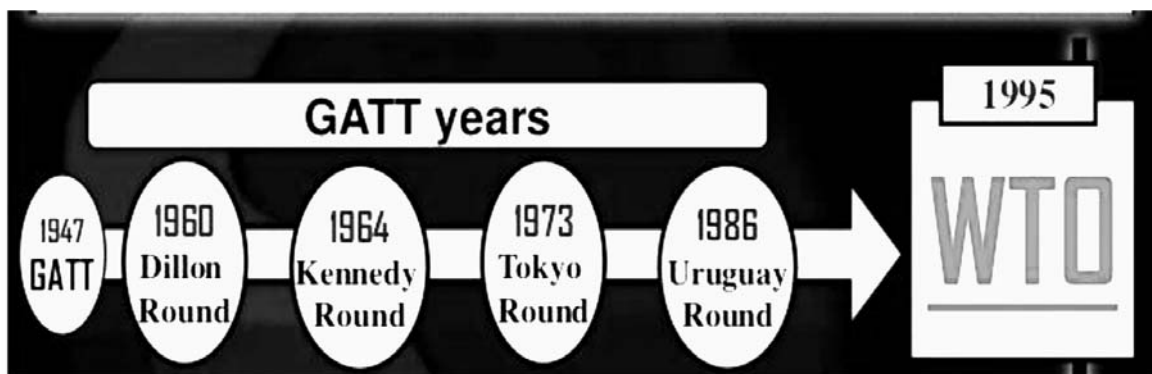
Evolution of WTO

Structure of WTO:
- The Ministerial Conference, which must meet at least every two years, is the WTO's highest authority.
- The daily work is handled between Ministerial Conferences by three bodies whose membership is the same; the only difference is the terms of reference under which each body is created.
  - ❖ The General Council
  - ❖ The Dispute Settlement Body
  - ❖ The Trade Policy Review Body

- The General Council is the highest governing body of the United Nations.

Structures of WTO

Role of WTO in International Trade :

- WTO made 'international legal framework' which makes sure that there is proper exchange of goods and services between member countries.

- Any trade negotiations between member countries are supervised by WTO.

- WTO solves any kind of conflict and problems between member countries regarding trade.

- If any member countries negotiate among them and signs agreement, WTO ensures that the countries follow the agreement properly and it also sees the impact of the agreement in the economy of those countries.

- If WTO sees that the trade policies of any member country is not according to the agreement, they signed they file complaint against that country.

- WTO has special programmes that help developing countries to strengthen their trade capacity and also supports the developing countries to trade with developed countries.

- "WTO carries out lobbying and outreach across the world as a part of its larger objectives to promote free trade. They try to persuade governments to reduce barriers to trade to free, fair, and open markets around the world."

Functions of World Trade Organisation

Settlement of Trade Disputes

Implementation of Trade Policy Review Rules

Administrating and Carrying out Bilateral and Multilateral Trade Agreements

Discussion of Plans of Member Nations

Best Possible Use of the World's Resources

Source : geeksforgeeks.org/world-trade-organization

Effect of WTO on India :

India is a developing country and has a vast geographical area and population. That's why it needs more capital to feed its citizens. India is good in agriculture, as its geographical condition is very good for crops, so they are self-sufficient in feeding their people and exporting edible products, but some things are imported. So, it has a perfect balance of imports and exports, and India, as one of the founding members of the WTO, has a very **positive** impact on it. There are some points listed below that helped in the development of India through the World Trade Organization:

- India's export competitiveness has been improved by the WTO.

- The lower tariff has helped integrate with the global economy more efficiently.

- India's growth and development have been pursued by transferring and exchanging technology and ideas.

- There is a reduction in cost and time due to market access.

- The WTO helped better settle trade disputes in a well-defined and structured manner.

Every positive impact carries a **negative** with it. Even after so many positive things, the WTO has also harmed India in some ways, which are listed below:

- The TRIPs agreement went against the Indian Patents Act (1970).

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- The introduction of product patents in India by MNCs caused a hike in drug prices, which left no generic option for the poor.

- India and its research institutions have been negatively affected by the extension of intellectual property rights to agriculture.

- The MFN (most favoured nations) clause proved detrimental to India's interests and provided grounds for the Chinese invasion of the Indian market through dumping.

- India's service sectors are backward compared to those in developed countries.

ROLE OF GATT IN LPG ECONOMY AND ITS IMPACT ON INDUSTRY AND TRADE

- **The General Agreement on Tariffs and Trade (GATT),** was a legal agreement that aimed to reduce trade barriers by abolishing or reducing quotas, tariffs, and subsidies while retaining considerable restrictions.

- This was signed on October 30, 1947, by 23 countries.

- The GATT was created to help the world economy recover after WWII by rebuilding and liberalising global trade.

GATT in 1948.

■ Original GATT signators ■ Government overthrown shortly after signing GATT Independent ▨
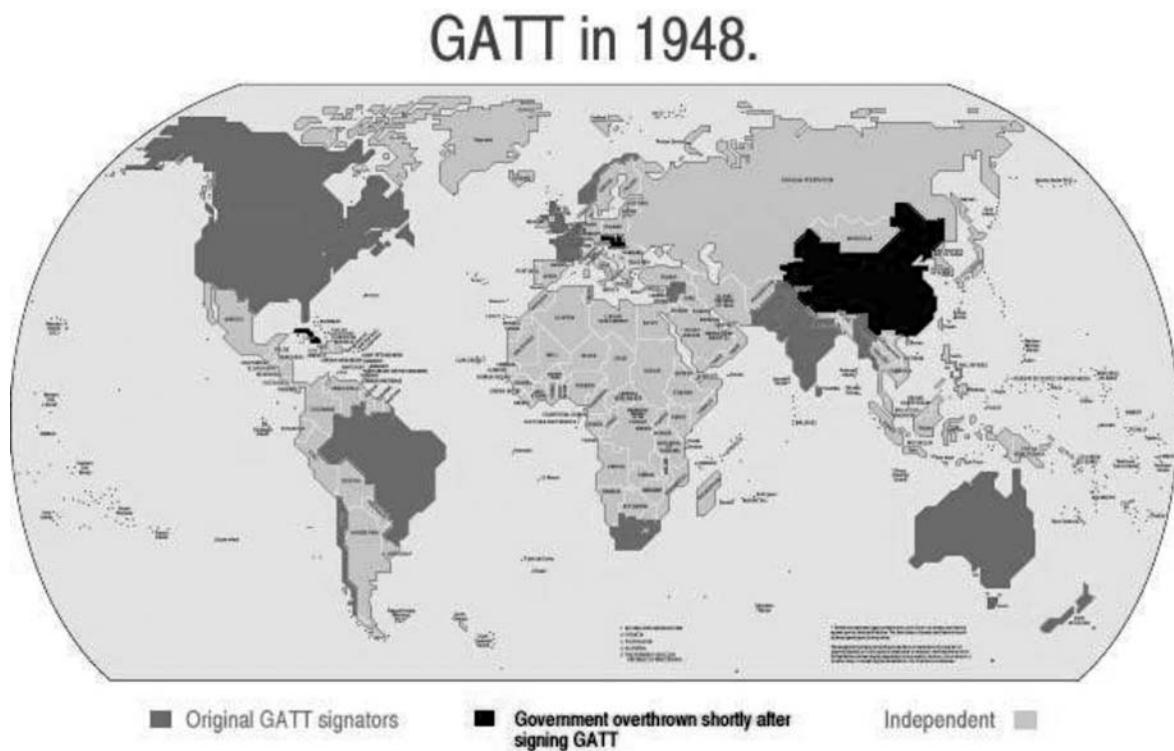
Purpose :

- The GATT was created to establish regulations to eliminate or limit the most costly and inefficient characteristics of the **pre-war protectionist period**, notably quantitative trade barriers like trade controls and quotas.

- The pact also established a system for resolving international commercial disputes, as well as a framework for multilateral tariff reduction negotiations.

- In the post war years, the GATT was seen as a significant success.

Liberalisation, Privatisation, and Globalisation, or the LPG :

In the early 1990s, India faced a major crisis followed by a foreign exchange deficit, resulting in its economic downfall. To overcome the crisis, the government came up with adjustments to the economy by bringing new reforms. The reforms introduced were called 'structural reforms' and launched under the '**New Economic Policy (NEP)**'. The **New Economic Policy** was introduced in **1991** under the leadership of **PM P. V. Narasimha Rao and** then Finance Minister Manmohan Singh.It refers to the economic activities of the government and includes various policy and structural perform methods like stabilization measures to control inflation and correct BoP (Balance of Payment), improving the efficiency of the economy, and increasing international competitiveness.

Components of New Economic Policy, 1991 :

The New Economic Policy has been divided into three broad concepts that are: Liberalisation, Privatisation, and Globalisation, or the LPG Model.

Liberalization-It refers to process of making policies less constraining of economic activity and also reduction of tariff or removal of non-tariff barriers.

Privatization- It refers to the transfer of property or business from a government to a private owned entity.

Globalization- It refers to the expansion of economic activities across political boundaries. More importantly perhaps it refers economic independence between countries in the world economy.

Features of LPG Policy in 1991 :

- Abolition of Industrial licensing/ Permit Raj

- Public sector role diluted

- Beginning of privatisation

- Free entry to foreign investment and technology

- Industrial location policy liberalized

- Abolition of phased manufacturing programmes for new projects

- Removal of mandatory convertibility clause

- Reduction in import tariffs

- Deregulation of markets

- Reduction of taxes

ROLE OF GATT IN LPG ECONOMY

- It regulates the contracting parties in order to fulfil the agreement's goals of lowering tariffs and other trade obstacles and achieving international trade liberalization.

- It provides more opportunities to increase exports and earnings.

- As a result of solid and clear trading standards, also leads to better planning and execution of investment and trade activities.

- It reduced the tariffs on trades.

- The main role of GATT in the international trade was regulating the contracting parties to achieve the purpose of the agreement which were reducing tariffs and other barriers, and to achieve the liberalization in international trade.

- GATT protected the benefits of the developing countries to a certain extent to international trade. One of the basic objectives of GATT was that "raising of standards of living and the progressive development of the economies of all contracting parties, and considering that the attainment of these objectives is particularly urgent for less-developed contracting parties."

- GATT reduced the discrimination in tariff and trade which promoted to reduce other trade barriers.

- GATT reduced the tariff on the basis of mutual benefit, accelerate the trade liberalization after the World War II.

- It benefited LPG economies by increasing interconnectedness, which lowered the likelihood of war and improved communication.

IMPACT OF GATT ON INDUSTRY AND TRADE

- "The GATT reduced tariffs, which boosted trade among countries. As they traded more freely with each other, more countries saw the benefits of free trade and wanted to join the agreement. By the time the GATT was replaced by the WTO, more than 100 countries had joined the original 23 signatories.

- Low tariffs can destroy some domestic industries, contributing to high unemployment in those sectors.

- Governments with more money or policy power can manipulate industries for their benefit more than smaller countries can.

- A rich country can spend money subsidizing industries to make them more competitive on a global scale.

- By the 1980s, the nature of world trade had changed. The GATT did not address the trade of services that allowed them to grow beyond a single country's ability to manage them.

- Like other free trade agreements, the GATT reduced the rights of a nation to rule its own people. The agreement required them to change domestic laws in order to gain trade benefits.

- By reducing tariffs, GATT boosted world trade by 8% a year during the 1950s and 1960s.

- Low tariffs can ruin some domestic industries, leading to high unemployment in those sectors. Governments need to subsidize many industries and agriculture to make them more competitive on a global scale."

FORWARD TRADING AND E COMMERCE

"Forward trading is the transaction between the buyer and the seller to trade a financial asset at a future date, at a specified price. The price of this asset and trade date is agreed beforehand as a part of a forward contract. A forward contract is a type of derivative product that shares similar characteristics to futures and options trading. Its means that the contacts value is based on the stability of underlying assets. For example, an exchange rate can affect the value of a currency pair, or political unrest can affect the value of a commodity, as seen in coal or oil trading."

E-Commerce or Electronic Commerce means buying and selling of goods or services over the internet. E-commerce is also known as electronic commerce or internet commerce.

There are four main types of ecommerce models that can describe almost every transaction that takes place between consumers and businesses.

1. *Business to Consumer (B2C): When a business sells a good or service to an individual consumer (e.g., we buy clothes from an online retailer).*

2. *Business to Business (B2B): When a business sells a good or service to another business (e.g. A business sells software-as-a-service for other businesses to use)*

3. *Consumer to Consumer (C2C): When a consumer sells a good or service to another consumer (e.g., we sell our old TV on OLX to another consumer).*

4. *Consumer to Business (C2B): When a consumer sells their own products or services to a business or organization (e.g., an influencer offers exposure to their online audience in exchange for a fee, or a photographer licenses their photo for a business to use).*

Few examples of e-commerce are— Amazon, Flipkart, eBay, Fiverr, Upwork, Olx, Quikr, etc.

"Three primary processes are enhanced in E- Commerce:

1. Production processes- This which include procurement, ordering and replenishment of stocks, processing of payments, electronic links with suppliers, and production control processes among others.

2. Customer-focused processes- This includes promotional and marketing efforts, selling over the Internet, processing of customers' purchase orders and payments, and customer support among others.

3. Internal management processes- This includes employee services, training, internal information-sharing, video-conferencing, and recruiting. Electronic applications enhance information flow between production and sales forces to improve sales force productivity. Workgroup communications and electronic publishing of internal business information are likewise made more efficient."

ADVANTAGES

- E-Commerce allows individuals to reach customers all across the country and all around the world. E-Commerce gives business owners the platform to reach people from the comfort of their homes.

- E-commerce businesses are open as long as the internet doesn't crash, since you don't need to be available every time someone makes a purchase.

- With the advancement of the E Commerce platforms, it has become very affordable and easy to set up and run an E Commerce business with a lower overhead. Business people no longer need to spend a big budget on TV ads or billboards, nor think about personnel and real estate expenses.

- E-commerce has speed up the whole buying process for customers. They do not need to visit physical outlets for shopping and can purchase products by just sitting at their home. It saves huge times and performs faster transactions.

- E-Commerce platforms give people in business the opportunity to provide personalised content and product recommendations for registering customers. These targeted communications can help in increasing conversion by showing the most relevant content to the visitor.

DISADVANTAGES

- No matter how good a video is made, customers still can't feel and touch a product. It is never an easy task to deliver a brand experience that could often be including the sense of touch, taste, smell, and sound via the two-dimensionality of any screen

- Phishing, malware, and ransom ware can compromise or shut down your e-commerce business. .

- Credit card frauds are a natural and growing problem for online businesses. It can lead to many charge backs, which result in the loss of penalties, revenue, and a bad reputation.

- Customers cannot get ensured regarding the quality of products available online. They may be cheated by companies and receive faulty products.

- E-Commerce businesses rely solely or heavily on their websites. Even just some minutes of downtime or technology glitches could be resulting in substantial revenue loss and customer dissatisfaction.

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Unit-12

From Export Processing Zone to Special Economic Zone; Exclusive Economic Zone

Export Processing Zone, or EPZ, is a specific type of economic zone designated by the government to promote export-oriented businesses. These zones offer a number of incentives to companies that set up operations within them, including tax breaks and exemption from certain labour laws. The main objective of establishing EPZs is to promote export-oriented industrialisation and to provide an environment that is conducive to the establishment and growth of Export Processing Enterprises.

"Special Economic Zones emerged as a divergence from the traditional import-substitution policies. EPZs are normally fenced-in estates with strict customs controls, and most of the products (normally over 80%) produced in the zones have to be exported. It represents a unilateral economic development strategy of using domestic laws instead of IELs (such as GATT and WTO later) to promote trade and attract foreign investments. While international treaties require sometimes difficult implementation at the scale of the entire national territory, SEZs allow states to test and develop new policies at a smaller scale under a 'special' economic regime." SEZ has much more flexibility and is much larger in size than EPZ and has proved successful in almost all countries.SEZ is open to different fields of businesses but EPZ focused more on manufacturing.EPZ had frequent custom inspection of cargo while in case of there was relaxation in custom inspection. Imported raw material consumption has to be done within 1 year in case of EPZ but in case of SEZ this period was 5 years. Moreover, countries got more tax benefits from SEZ. Certification laws of import goods was much more relaxed in case of SEZ. Therefore, countries decided to shift from EPZ to SEZ.

Special Economic Zone:

Special Economic Zones are specific geographical locations within the national boundary of a country which has different laws regarding trade and business than the rest of the country. Every country has their own definitions of special economic zones. According to the world bank in 2008, the modern day special economic zones typically include a "geographically limited are, usually physically secured (fenced-in); single management or administration; eligibility for benefits based upon physical location within the zone; separate customs area (duty-free benefits) and streamlined procedures"

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History of SEZ:

The first SEZ was established in China in four areas namely Shenzhen, Zhuhai, Shantou and Xiamen. The first SEZ in India was established in Kandla, Gujarat in 1965. Special Economic Zones Act was passed by the Parliament of India in 2005 which came into force in 2006.

SEZ OF INDIA :

- Asia's **first EPZ** (Export Processing Zones) was established **in 1965 at Kandla, Gujarat.**

- While these EPZs had a similar structure to SEZs, the government began to establish **SEZs in 2000** under the **Foreign Trade Policy** to redress the infrastructural and bureaucratic challenges that were seen to have limited the success of EPZs.

- The Special Economic Zones **Act was passed in 2005.** The Act came into force along with the **SEZ Rules in 2006.**

- However, SEZs were **operational in India from 2000 to 2006** (under the Foreign Trade Policy).

- India's SEZs **were structured closely with China's** successful model.

- Presently, **379 SEZs are notified,** out of which 265 are operational. About 64% of the SEZs are located in five states – Tamil Nadu, Telangana, Karnataka, Andhra Pradesh and Maharashtra.

- The **Board of Approval is the apex body** and is headed by the Secretary, Department of Commerce (**Ministry of Commerce and Industry**).

Baba Kalyani Committee :

The **Baba Kalyani led committee was constituted by the Ministry of Commerce and Industry** to study the existing SEZ policy of India and had submitted its recommendations in November 2018. It was set up with a broad objective to evaluate the SEZ policy towards making it **WTO (World Trade Organisation)** -compatible and to bring in global best practices to maximise capacity utilisation and to maximise potential output of the SEZs.

Features of SEZ in India :

1. Both government and private sector together developed SEZ so as to provide equality in opportunities in both local and international level.

2. **"**100% of Foreign Direct Investment is allowed for all endowments in Special Economic Zones, apart from activities catalogued under the unconstructive record like,

- ❖ Arms and ammunition and other items of defense
- ❖ Narcotic and Psychotropic substance
- ❖ Hazardous Chemicals
- ❖ Distillation and Brewing of alcoholic drinks
- ❖ Cigarettes and Tobacco.

3. Government has allocated a least favourable area of 1,000 hectares for Greenfield SEZs. Although, there are no limitation in context of favourable area in constructing sector specific SEZs.

4. SEZ divisions are obligatory to be encouraging net foreign exchange yielders and are not entitle to any least amount of value addition guidelines or export responsibilities.

5. Commodity surge from Domestic Tariff Area (DTA) into a SEZ is recognized as exports and commodity surge into DTA from SEZ are recognized as imports.**"**

OBJECTIVES:

- **"**Generation of additional economic activity
- Promotion of exports of goods and services
- Promotion of investment from domestic and foreign sources
- Creation of employment
- Development of Infrastructural facilities.
- Simplified procedure for development, operation and maintaining of the special Economic Zones and for setting up units and conducting business
- Single window clearance for setting up of a SEZ and an unit in SEZ
- Single window clearance on matters relating to Central as well as State Governments.
- Easy and Simplified compliance procedures and documentations with stress on self-certification.**"**

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Positive Impacts of SEZ		
To Nation	**To Business houses**	**To prople**
• World class business environment • Increased FDI • Higher economic growth • Infrastructural development • Export growth • Employment opportunities • Exposure to technology and global markets.	• Hassle free operating environment • Single wondow clearance • Simplified procedure for setting up business, compliance procedure with self certification • Infrastructural development • Duty free import • Tax exemption-VAT, CST, ST, other levies • External commercial borrowings • 100% proft repatriation from export earnings	• Employment opportunities • Impact on lifestyle and standard of living • Business infrastructure combined with social facilities • Better work culture, good education, leadership vision

Hurdles posed by SEZ			
To Nation	**To Business houses**	**To prople**	**To environment**
• Loss of revenue	• Land acquisition • Single window actually is not • No strategic planning for electricity, water	• Grabbing of fertile land • Water scarcity • Food scarcity • Exploitation of labour • Landless farmers	• Mangrove dstruction • Destruction of ground water recharge system • Pollution

Special economic zones

Gujarat

Operational SEZs	Approved
19	28

Industry specific SEZs (Operational)

Multi-product	6
IT/ITES	5
Chemical and engineering goods	3
Textile	2
Pharmaceutical	1
Multi-services	1
Non-renewable Energy products	1

Andhra Pradesh

Operational SEZs	Approved
19	31

Industry specific SEZs (Operational)

Multi-product	6
Pharmaceutical	4
IT/ITES	3
Textile	3
Building products	1
Food Processing	1
Footwear	1

Maharashtra

Operational SEZs	Approved
29	56

Industry specific SEZs (Operational)

IT/ITES	16
Engineering	3
Multi-product	3
Pharmaceutical and biotechnology	3
Free Trade Warehousing Zone (FTWZ)	1
Electronics and gem and jewelry	1
Multi-services	1
Power sector	1

Karnataka

Operational SEZs	Approved
28	62

Industry specific SEZs (Operational)

IT/ITES	21
Engineering & Precision engineering	2
Aerospace and industry	1
Biotechnology	1
Multi-product	1
Pharmaceutical	1
Textile	1

Tamil Nadu

Operational SEZs	Approved
36	50

Industry specific SEZs (Operational)

IT/ITES	18
Engineering	5
Electronics and hardware	4
Textile and footwear	3
Multiproduct and services	3
Food processing	1
FTWZ	1
Automobile	1

Source : https://www.dezshira.com/library/infographic/special-economic-zones-india.html

Concern of Present SEZ :

1. SEZs in India have not been as successful as their counterparts in many other countries. Several Asian economies, particularly China, Korea, Malaysia, and Singapore, have greatly benefited from these zones.

2. Most of India's new generation SEZs came up not for exporting, but for avoiding taxes. Large fiscal sops, in the form of a bunch of reliefs from central and state taxes, lured developers into building SEZs.

3. Most manufacturing SEZs in India have performed below par due to their poor linkages with the rest of the economy. Weak connections of coastal SEZs with their hinterlands inhibited these zones from utilising their full potential.

4. Many states did not match the central SEZ Act with State-level legislation, which rendered the single window system ineffective.

5. Lack of a robust policy design, efficient implementation and effective monitoring have seriously jeopardized India's effort to industrialise through SEZs.

EXCLUSIVE ECONOMIC ZONES

"An Exclusive Economic Zone (EEZ) is a sea zone prescribed by the United Nations Convention on the law of the sea over which a state has specific rights regarding the exploration and use of marine resources, including energy production from water and wind. It stretches from baseline out to 200 Nautical miles."

"The Maritime Zones Act of 1976 under section 7 provides that the exclusive economic zone of India, is an area beyond and adjacent to the territorial waters, and the limit of such zone is 200 nautical miles from the baseline from where territorial waters is measured."
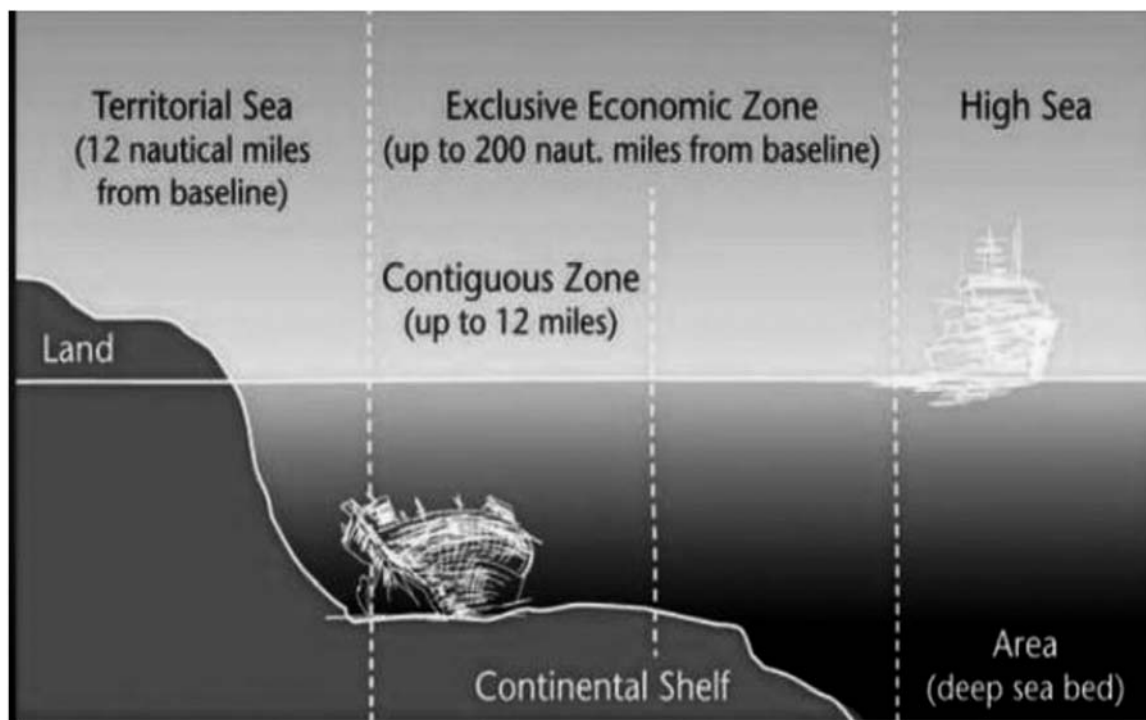
Source : brainkart.com

Baseline :

A baseline is a straight line along the coast of a nation from which the sea's territorial area and other maritime zones are measured. A sea baseline follows a coast's low water line. The regular baseline used to measure the breadth of the territorial sea is the low water line.

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Territorial Sea :

As defined by UNCLOS in 1982, the belt of coastal waters that extends from the baseline of a coastal state to up to 12 nautical miles (22 km) is called the territorial sea. The territorial sea also comes under the state's sovereignty. Both military and civilian foreign ships are allowed for innocent passage through the territorial sea.

Contiguous Zone :

The contiguous zone is the water territory extending up to 24 nautical miles (44 km) from the coastal state's baseline. The state has limited control over the contiguous zone for preventing and punishing offences like fiscal, infringement of customs, immigration or sanitary laws and regulations.

Exclusive Economic Zone :

An Exclusive Economic Zone extends from the baseline to up to 200 nautical miles (370.4 km). The contiguous zone is also included in the EEZ. A state has all the control over the EEZ for all economic activities.

Rights of the country in EEZ :

In the Exclusive Economic Zone, every country has these particular rights:

● Exploration or exploitation, conserving and managing the natural resources, whether living or non-living.

● Economic exploration or exploitation of the zone for producing energy from the water currents or winds.

● Establishment and use of artificial islands, structures and installations.

● Scientific research of the marine.

● Protecting and preserving the marine environment.

The idea of allotting nations EEZs to give them more control of maritime affairs outside territorial limits gained acceptance in the late 20th century. Initially, a country's sovereign territorial waters extended 3 nautical miles or 5.6 km beyond the shore. In modern times, a country's sovereign territorial waters extend to 12 nautical miles (22 km) beyond the shore.

Importance of India's EEZ :

Exclusive Economic Zone in India provides access to many resources like natural gas, oil, minerals, commercial fishing, international trade, and most importantly, national security. India has a greater benefit as it has a coastline stretch of 7,500 km and an Exclusive Economic Zone of more than 2 million sq km. India's exclusive control over the EEZ resources is the navigation of seafaring trade and transport vessels in the zone. India's exploitation of marine fishery resources is at only 3.2 million tonnes per year, where the potential of exploitation in India is 3.92 million tonnes per year in the coastal areas.

India's Claim over Increased EEZ Area :

The UNCLOS has permitted EEZ extension beyond the usual limit of 200 nautical miles to the maximum 350 nautical miles. The extension is only possible if there is any evidence showing that the continental shelf runs beyond 200 nautical miles. Based on sedimentary and scientific evidence with over 6,000 pages, India petitioned the United Nations to increase their current 200 nautical miles EEZ to 350 nautical miles. The Ministry of Earth Sciences (MoES) in India had initiated a project in 1999 for the integrated management and mapping of the Exclusive Economic Zone in India, which is still going on. The project achieved only 30% completion in the year 2018.

A team of 60 scientists from different national institutes begin the multi-disciplinary study on various topics like physiography, sedimentology, geoscientific mapping, palaeoclimatology and Himalayan tectonics, hydrology of India, and availability of mineral resources. These studies in various aspects are also helping the nation prepare against any environmental hazard and ensure the well-being of the people living in the coastal areas.

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