

7. Region and Regional Development



Try this.

Given below are some geographical areas given to you. Complete the table in your notebook thinking about similarities between them and their types. One has been done for you as an example. Answer the questions that follow :

Table 7.1

Geographical areas	Common factors / characteristics	Type (political/physical)
Ganga river basin, Amazon river basin, Mississippi river basin, Nile river basin	River	Physical
The Himalayan region, The Alps, The Western Ghats, The Rockies, The Caucasus		
Marathwada, Vidarbha, Khandesh, Konkan, Western Maharashtra		
The Thar desert, The Arabian desert, The Gobi desert, The Sahara desert		
Rajasthan, Madhya Pradesh, West Bengal, Kerala, Manipur		
Pune, Bhopal, New York, Manchester, Munich, Shanghai		
Parbhani, Nagpur, Palghar, Kolhapur, Solapur		

Hindi-speaking belt, Bengali-speaking belt, Marathi-speaking belt, Kannada-speaking belt, Urdu-speaking belt		
Delhi University campus, Punjab University campus, Mumbai University campus, Vanasthali University campus		

- 1) While completing the above table, how did you decide the common factor between these areas?
- 2) How did you differentiate one area from another?
- 3) Is the common factor the only basis of differentiation?
- 4) Make a list of characteristics which can be the basis of different areas separately.

Geographical explanation

You must have realized that small or large areas of land having common features help us to identify them separately. These features can be natural (physical) or man-made (administrative boundaries, political or linguistic). Generally, there is a boundary which demarcates one area from another. A geographical area that distinguishes itself from another area is called a region.

These regions can be very small or very large. Natural features which form the basis of a region are physiography, climate, vegetation, soil or wildlife. For example, we differentiate between the Himalayan ranges and the Northern Plains of India on the basis of their altitude and topography. Thus, they are considered as two



different regions. Socio-cultural factors like, language, ethnicity, etc., political factors like administrative boundaries and economic factors like GDP, are some man-made factors which define a region. For example, Madhya Pradesh and Maharashtra are two different regions because they have their own boundaries and governments. Similarly, Pune and Ahmednagar are two different districts. So they are two different regions. In a region, there can be two or more sub-regions. For example, within the Northern Plains of India, there are various sub-regions of different plains : the Indus and its tributaries, the Ganga-Yamuna plains and the Brahmaputra-Hooghly plains. Similarly, within a district, there can be talukas. Each of the taluka is a region in itself. Each city and village in the Taluka is also considered a region.

The classification of regions is thus based on common characteristics. The area which has common characteristics and is homogeneous in nature, constitutes a region. In geographical studies, a region is the basic unit. This helps us to differentiate one area from another. Every region has various attributes :

- i) **Location** : A region must have a geographical location. It can be expressed in latitudes and longitudes.
- ii) **Spatial extent** : Based on homogeneity, the extent of a region can be decided.
- iii) **Boundary** : A region must have a boundary. Beyond a boundary, there is another region.
- iv) **Hierarchical arrangement** : A region can be arranged into various orders or sub-regions on the basis of the common characteristics. For example, Northern plains and its subregions.



Do you know ?

The States Reorganization Act of 1956 made the state boundaries according

to languages after independence. Thus, Maharashtra became the State of Marathi-speaking people, Tamilnadu became the land of Tamil-speaking people, etc.



Use your brain power !

Can you tell what is the identifying characteristic in the following regions?

- 1) Pune Metropolitan Region
- 2) Nagpur hub
- 3) Dal Lake in Srinagar
- 4) Alleppey tourism centre

Types of regions :

Geographical explanation

On the basis of characteristics, a region can be divided into physical or political regions. For example, river basins are physical regions while districts are political regions. Both of these are formal regions. A formal region is an area inhabited by people who have one or more characteristics in common. Shared characteristics may be a common language, economic activities, such as a particular crop production, or physical characteristics, such as the climate of an area. Some formal regions have distinct boundaries which make them easy to identify, such as countries or states. Examples of formal regions are Europe, Africa, United States and Canada or Assam and West Bengal, etc.

On the other hand, functional regions are not bound by any formal characteristic but by a function. A functional region may not be heterogeneous in nature. It may involve more than one type of physical or political regions but still it can be one functional region because that function binds these regions together. For example, Pune Metropolitan Region has various physical regions, many political regions, various villages, talukas and cities in its area. But, the



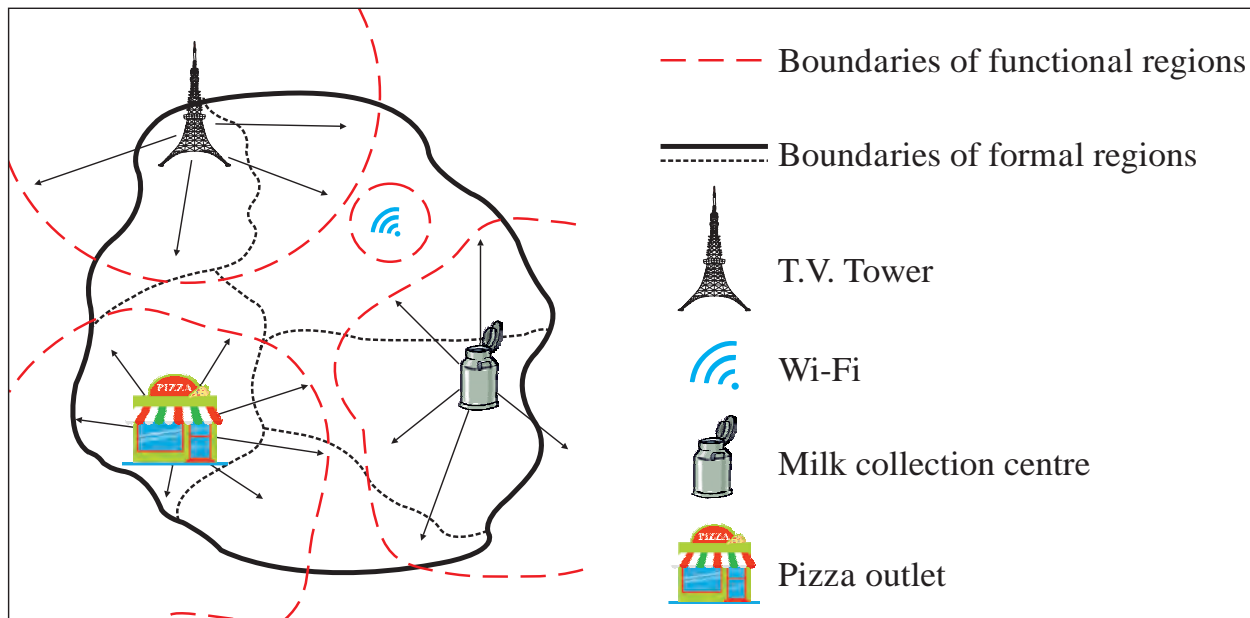


Fig. 7.1 : Difference between formal and functional region

area which comes under Pune Metropolitan Region is bound by the economic activities. The regions in the periphery serve the core region with vegetables, flowers and other perishable items. The core area pays the surrounding region value for their products. A functional region is an area organized to function socially and economically as a single unit. Functional regions are centred on a focal point that connects other areas by various systems, such as transportation, communication or economic activities. Cities can be considered functional regions because highways, railroads, subways and buses move people from the suburbs to the central areas of the city. Other examples of functional regions are television signal areas of a TV tower, Wireless, Wi-Fi hotspots or pizza delivery areas served by a pizza outlet or milk served by a milk centre. (See fig. 7.1)



Try this.

Here is a list of regions. Classify them into Formal or Functional regions :

Ujani Dam catchment area, area served by Pune Municipal Transport (PMT), area served by Citi Cable Service, Uttar Pradesh,

District Kolhapur, Taluka Haveli, rice – producing region of Konkan, Black cotton soil region of India, areas served by Local trains of Mumbai, area served by a Primary Health Centre.

Formal Regions	Functional Regions



Use your brain power !

- Identify your formal region.
- Can you identify and demarcate your own functional region?
- Which one is larger?

Regional Development :

We have seen that not all regions are the same in size and population and also in resources. Some regions like the desert regions might have



fewer resources while forested regions have huge resources.



Can you tell ?

Read the table 7.2 and answer the questions that follow :

Table 7.2

Region	Per Capita Income (₹)	Population Below Poverty Line (%)	Urbanization (%)	Net irrigated area to Total sown area (%)	Per capita consumption of electricity per year (in units)
A	15466	14	45	64	557
B	10432	32	31	42	332
C	5000	48	16	28	145

- 1) In which region do you think there are more resources available?
- 2) In which region do you think people are richer?
- 3) In which region do you think people may be more happier? Why?
- 4) Do you think the given indicators or factors are enough to decide the standard of living of people in the region?
- 5) In which region would you like to stay and why ?

Geographical explanation

In the above table, three regions with their performance in few indicators are shown. On the basis of the given data, we can say that region A performs better in the given indicators than region B or C. Per capita income suggests that region A's income is high and production is high. It also indicates that population is lower than the other regions. Lower per capita income could mean that either the population is high or the total income is also less. In general, this indicates the presence of fewer resources and lesser utilisation of these resources. In region A, urbanisation is more than regions B and C. At the

same time, net irrigated area to total sown area is also higher. This indicates that the region has good irrigation facilities. Also, consumption of electricity is higher than in the other two regions. These indicators point to the fact that life in this region may be better than in the other two.

At the same time, these indicators are not enough to give a complete picture of the region. Indicators like literacy rate, enrolment ratio/dropout ratio, sex ratio, crime rate against women/children, etc. will give a better picture. There are a number of indicators based on various social, economic, political, cultural and environmental conditions of a region.

Thus, development of a region is a function of its resources and its population. There are many factors which affect the development of a region. For the holistic development of a region, skilled human resources and optimum utilisation of natural resources is necessary. Thus, regional development is the development of all the regions simultaneously, raising their per capita income and living standards by exploiting their natural and human resources fully.



Think about it.

- Does development mean maximum utilisation of resources?
- Does development consider environment as an indicator?
- Can a region be called developed if it has sparse population or no population?
- Discuss this in your class.



Try this.

In the following table, regions are given. At the same time, some geographical factors and effects are also given. Complete the table 7.3 accordingly, with the help of solved examples.

Table 7.3

Region	Geographical Factors	Effects on the region
Nile River basin		Agricultural Development, Development of Industries, Hydro-electricity project, Irrigation etc.
	Coniferous forest area	
Japan	Island location, low mineral resources, narrow geographical extent	
Indonesia, Malaysia		Agriculture Development, Trade, Tourism

Factors affecting regional development :

In geographical studies, we consider many factors when we talk about the development of a region. Development itself is a very relative term. There are many indicators of development. Income of the region through various activities, quality and quantity of population, education, life expectancy, poverty, etc. are some indicators of development, but no one indicator can be the only factor to decide the development of a region. Considering only one or few factors will never give a holistic view of the region. Generally, development is considered when it takes into account the physical, economic, social, environmental, etc. aspects of a region.

Till now, we have studied various aspects of geographical studies like population, land use, various economic activities, etc. Let us now see how each of these will affect the regional development of a region.

Physical factors and regional development :

The physical factors like climate and relief of a region affects its development. Areas where land is less fertile, water is scarce, diseases flourish will be less developed. For example, the regions located in the tropical rainforests. On the other hand, fertile land, favourable climate and good rainfall promote the development. For example, Mediterranean region.

The physical setting of a region is also very important. If regions are landlocked or located in high mountain ranges or if there is a lack of navigable rivers, long coastlines or good natural harbors, then even in presence of other natural resources, the region may not develop well. Sometimes, there is presence of large resources but climate may not be favourable or population may not be present to exploit the same. For example, Antarctica

Population and regional development :



Can you tell ?

- Looking at the five stages of Demographic Transition Theory, countries in which stage do you think, will be called developed?
- Having looked at the various shapes of pyramids, which pyramid will represent a developed country? (fig. 2.1)
- After having answered both the questions above, what can you comment upon the role of population in regional development?

Geographical explanation

Population and development are closely interrelated. In fact, all the parameters of development are measured, keeping in mind the population of a region. Population influences development and in turn, is also influenced by development. Quality and quantity of the



population are important for development of a region.

Population density, age, sex, fertility, mortality, occupational structure, literacy rate, life expectancy, etc. determine the pressure on resources in the region. At the same time, they can also determine how efficiently the resources in a region will be used by the population.

In the five stages of Demographic Transition, the later stages have low birth rates and death rates. This will imply that the regions with such low growth will have greater development because there will be less population to spend on. At the same time, the quality of the population will be equally important.

Population pyramids help to explain employment and consumption patterns, social needs and perhaps the psychological characteristics of population. The high dependency ratio may force a huge amount of capital resources to be consumed in supporting the dependents. The existence of a relatively large population of working age is associated with higher economic development and high living standards. If migration is high in a region, the region will face problems of using the population for various activities. Regions, where people are migrating in large numbers, shows that it has a good employment opportunities or better living conditions, which is a pull factor. Similarly, the migrated population can bring pressure on resources and facilities in the recipient region.

You know that higher the population, lower will be the per capita income. Per capita income is an important indicator of development. On the other hand, if the population is very low in a region, it may hamper further development, as there will be lack of human capital to exploit the resources.



Give it a try.

Table 7.4

Region	Percentage of malnourished children about to enter school	Government expenditure on education (% of total budget)
	Year 2016	Year 2016
A	29.3	4.70
B	19.2	4.17
C	3.4	7.10
D	12.8	5.40
E	31.7	4.09
F	27	4.45
G	3.1	3.82
H	5.9	5.95

Draw a conclusion on the basis of the data given in table 7.4. Use Spearman's Rank Correlation, find the correlation between the two variables. What can you comment about the development in this region?

Land use and regional development :

When we analyse the existing patterns of land-use in regions which are developed and regions which are not developed, we find a difference in the percentages of land use. The demand for land changes due to the changing needs of the society. As socio-economic conditions change, land use keeps on changing. Rural as well as urban areas have land under different uses. In rural areas, much of the land is used for agricultural purposes and other uses have less land. On the other hand, in urban areas much of the land remains under residential, commercial, industrial and other uses. The way the people of a region use their land will help the region develop faster.

As population and human aspirations increase, land becomes an increasingly scarce resource. Deciding how to use land is important to reduce the negative effects of land use and to increase the efficient use of resources in a region with minimal effect on future generations.



With faster economic development and changes in land use, the transition of rural area to urban area also increases at a faster rate.



Try this.

Look at the land use of the following regions and answer the questions that follow :

Table 7.5

Region	Arable land (%)	Land under permanent crops (%)	Land under permanent meadows and pastures (%)	Land under Forests (%)	Other land (%)	GDP in billion dollars (2017)
A	11.8	0.3	46.0	2.1	39.9	76.48
B	4.0	0.04	44.0	20.1	32.1	1364.83
C	52.0	16.0	4.1	9.7	17.9	837.58
D	27.4	0.8	15.3	22.4	32.6	567.48
E	6.5	1.0	16.7	57.0	19.2	3456.35
F	57.8	0.6	5.5	14.3	21.8	312.84
G	2.8	1.0	0.0	0.1	95.6	1391.25
H	33.6	1.8	16.8	31.0	16.4	3061.14
I	50.1	4.1	3.1	21.8	20.8	11325.66
J	13.7	13.0	5.7	48.5	19.0	3737.48
K	11.0	0.8	2.6	66.0	19.7	5747.49
L	2.5	0.5	37.5	37.7	21.8	206.22

- 1) What does the table show?
- 2) Which region has the highest land use under agriculture ?
- 3) Which region has the highest GDP?
- 4) Which country has more land use under forests?
- 5) Which region has highest land use under the category 'other land'? What is its GDP?
- 6) Write your conclusion in few sentences.

Primary, secondary and tertiary economic activities and regional development :

Look at the following data and answer the questions that follow :

Table 7.6

Regions	Contribution of Primary Sector to GDP (%)	Contribution of Secondary Sector to GDP (%)	Contribution of Tertiary Sector to GDP (%)	Human Development Index (HDI)
	2018	2018	2018	2018
A	1	34	65	0.93
B	2	32	66	0.85
C	2	37	61	0.71
D	6	33.2	60.8	0.81
E	14	30	56	0.65

- 1) In which region is contribution of primary activities the least?
- 2) In which region is contribution of primary activities the most?
- 3) In which region is contribution of tertiary activities the most?
- 4) Which region has the highest HDI?
- 5) Can you draw a conclusion on the basis of the answers from Q1 to Q4?

Geographical explanation

These three types of activities that are carried out in any region, give an idea about the regional development in that region. It is generally seen that the regions are developed if they contribute more in tertiary sector and depend less on primary activities. There are various indices like the Human Development Index (HDI) which are used to assess various aspects of development in a region. Generally, tertiary activities contribute more to the income of the region and hence more development is seen.

Regional imbalance :

Balanced regional development as a policy is considered both on economic, social and political grounds. The policy is considered in order to redress inequalities between different



regions of a country and also for raising the standard of living to a higher level at a uniform rate.

Causes of Regional Imbalances in India :

You have already studied how various factors affect the development of a region. Considering India as a region, we know that there is regional imbalance as levels of development are not similar in all sub-regions. Physical factors like location, relief, altitude, availability of resources, accessibility have been responsible for imbalanced regional development.

While some regions have a better position in terms of geographical location, mineral and other natural resources, the others are lagging behind in these. For example, the states located in difficult terrains surrounded by hills and dense forests like the states of Himachal Pradesh, Uttarakhand, several north-eastern states are behind the other regions having more mineral and other resources. Regions which have ports and airports have an advantage over others. For example, you know that while determining the location of iron and steel industries, nearness to raw material is a criteria.

Thus, regional imbalances arise due to such locational advantages attached to regions which are rich in resources and locational disadvantages attached to regions which don't have. Adverse climate and vulnerability to disasters like floods and cyclones are also responsible factors for poor rate of development. This in turn may result in low agricultural productivity and lack of industrialisation.

Moreover, human factors like skilled labour, technology, transportation, access to markets, communication facilities, power, technology, banking and insurance etc. have played a dominant role in disparity in development. Due to adequacy of such factors, some regions fare better than others. For example, North-Eastern Region, Himachal Pradesh, etc. are less developed as compared to other regions.

Moreover, investments made by the private sector are generally concentrated in those regions having basic infrastructural facilities. This has an impact on the government's decision of locating industries and projects which contribute by increasing employment and other advantages for the residents there.

Strategies to reduce Regional Imbalance :

In India, many policies have been considered and implemented to reduce this regional imbalance. Regions which were not developed were initially identified. The reasons behind non-development are also identified. These can be physical, social or economic reasons. Different types of criteria are considered for identifying such areas. Funds are allocated to those regions which need them in particular sectors or fields. Sectorwise investments are then done to improve the conditions in these areas. Such funds are given in the form of subsidies, and investments in roads, schools, agriculture, irrigation, industries, housing, medical and health facilities, etc. Special care is taken for regions which have been identified as drought-prone, deserts, hilly and tribal-dominated areas. Decentralisation of industries is also a strategy to reduce regional imbalance.



Give it a try.

Go through the fig. 7.2 and write two sentences on each factor. Tell how they will help in reducing regional imbalance. Also add some more to the list, if necessary.

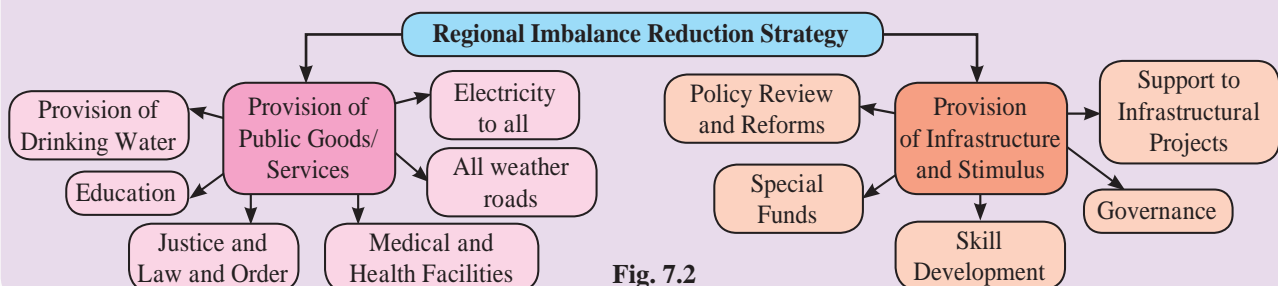


Fig. 7.2





Find out !

Find out information about 'Human

Happiness Index'. Relate its correlation with regional development and discuss in the class.



Exercise

Q. 1) Identify the correct group :

- | | |
|------------------------------|-------------------------|
| 1.A) 1) Satpuda | B) 1) Yavatmal |
| 2) Deccan | 2) Amravati |
| 3) Alps | 3) Solapur |
| 4) Rockies | 4) Greater Mumbai |
| C) 1) Thar | D) 1) Marathwada |
| 2) Sahara | 2) Khandesh |
| 3) Himalaya | 3) Vidarbha |
| 4) Gobi | 4) Konkan |
| 2.A) 1) Plain | B) 1) Pressure |
| 2) Lakes | 2) Rivers |
| 3) Mountain | 3) Temperatures |
| 4) Plateaus | 4) Humidity |
| C) 1) Tropical forest | D) 1) Fishing |
| 2) Thorny forest | 2) Lumbering |
| 3) Mangrove forest | 3) Agriculture |
| 4) Deciduous forest | 4) Bakery |

Q. 2) Differentiate between :

- 1) Functional region and formal region.
- 2) Physical region and political region.

Q. 3) Write short notes on :

- 1) Factors affecting regional development.
- 2) Measures to reduce regional imbalance.

Q. 4) Give geographical reasons :

- 1) Regional development is dependent on physical setting.
- 2) Factors like illiteracy, poverty affect the regional development.
- 3) Development is not seen in the Himalayan region.

Q. 5) Answer in details :

- 1) What is a region?
- 2) On what factors are the regions differentiated? Give examples.
- 3) Per capita income is not the real indicator of regional development. Explain.

Q. 6) Find the correlation between land under permanent crops and GDP given in Table 7.5 using Spearman's Rank Correlation. Write the conclusion in your own words :

