CHAPTER – 9

REGIONAL STUDY

Regional study is a significant component of Geography. Basically, it is an basic point of learning through which we learn about human beings and its surroundings of a particular region. This knowledge greatly helps in understanding the man – environment relationship. Difference in social, cultural and economic conditionsis found in different regions . There is obvious effect on the lives of people, living in a particular region of land form, climate, drainage, agricultural productivity, industrial development, urbanisation etc. The living style of the people is connected to all these factors. The human activities also affect their surroundings. Regional study is essential to understand these things. We collect direct information through this method of study and analyse it from different methods.

WORKING PROCESS OF REGIONAL STUDY:

For regional study, at first, observation of the region is made by visiting it. Keeping in mind the objective of this study, the focus of studyis given to all the aspects and then related questionnaire is prepared. Whatever, written information is received from questionnaire; it is collected then studied and analysed. They are the sources of primary data.

In regional studies primary and secondary, both types of data are used. To choose a region, it has to be kept in mind that burning aspects of that region should be

Primary Data – This data is collected by visiting the chosen region.
Secondary Data – This is made available through some sources.
e.g. Municipality, Village panchayat, Agriculture department, census department etc.

included in it e.g. falling water level in a region, land use, different types of pollution such as air pollution, water pollution, noise pollution etc.

ACTIVITY

(A) What are the causes of increasing pollution in the cities?

(B) The number of motor vehicles has increased or not?

QUESTIONNAIRE:

In this method questions are asked to the people. Questions are prepared with the support of the teachers according to the necessity. For survey, several types of questions may be asked. The nature of the questions depends upon the nature of the required data and background of the people living there. The answer to some of the questions can be in yes or no e.g. are you in service?

The answer to this question will be in yes or no. In the answer of the multiple choice questions, some options are given and out of these options only one option is correct.

The surveyors, at first, try to know the existing burning problem by visiting that area. After that, information is collected from the people living in that area through questionnaire. The collected data is studied and a report is prepared which gives sufficient information regarding the problems of that region e.g. Study of flood affected regions of Bihar. What changes has been experienced in the land use of a village or city? How much rise in pollution level has been experienced due to increase in number of vehicles in the city? As an example details of the causes of falling underground water level and solution for its conservation are being given –

DO YOU KNOW

What is underground water table?

CAUSES AND REMEDY OF FALLING UNDERGROUND WATER TABLE:

Rapid growth in population, agriculture and industrial development have led to large scale utilisation of underground water, as a result of which the level of underground water table is falling. In some regions the underground water table has fallen below the dangerous level. There has been remarkable fall in the underground water table in both urban and rural areas. The demand for water has increased in the cities, due to population explosion and modern amenities like sewer

System. Irrigation is done through tube wells in the rural areas which causes the fall in the level of underground water table. Due to tube well irrigation in the districts of Gaya, Nawada, Nalanda, Jehanabad, Aurangabad etc. a clear fall in the underground water table has been experienced and this has created a water crisis in this area. The daily solid wastes of the cities are disposed of on the outskirts of the cities. These wastes mix with the rainwater that seeps in to the underground water and contaminates it. The measurement of the depth of the subsoil water is determined by measuring the water level of the wells with the help of the measuring tape. While setting up the tube well, at the time of digging, the depth of the underground water table is measured with the help of the pipes. Change is experienced in the underground water level during rainy and dry seasons. The data should be recorded according to the date and weather. The measurement of the depth of water of the wells should be recorded according to the seasons. By measuring the depth a contour line map of the underground water can be prepared.

MEASURES TO PREVENT FALLING UNDERGROUND WATER TABLE:

The urban population should construct planned colony or multi storied buildings with facilities of rain water harvesting system on the roof of the buildings which will help in recharging the underground water through this harvested water. The rain water can be stored by digging pits called 'charging pit' through which level of underground water table can be improved. In Bihar, for the improvement of the underground water table, it has been planned to connect water tanks on the ground through pipes with the rain water being collected on the roofs of the government offices. This process is called 'water harvesting'. By adopting this method in every home, the level of underground water can be improved.

To survey the falling level of underground water, select few wells and tube wells of any village or city and compare it with the water level of previous 4-5 years. To measure the water level of the well put a rope in to the well and measure it with the help of measuring tape and note down its depth. Compare it with the previous 4-5 year data which can gauge the changes that has come about in water level. The underground water level can be measured before and after the rainy season. Through this the effect of rainfall on the water level can be gauged. For this, following table can be prepared –

No.	Serial Number of tube wells	Present water level	Previous water level	Change in water level	Rate of water
1.					
2.					
3.					
4					

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DO YOU KNOW?

In which form the land is being used around you? Collect information on the issue.

CHANGE IN THE FORM OF THE LAND USE:

The main aim to study the land use is to find out the present use of the land. In the regional study of the land use, whole village or any of its locality can be considered. This selection will depend upon the size of the region. If the region is large then any of its part and if it is small then whole region can be studied.

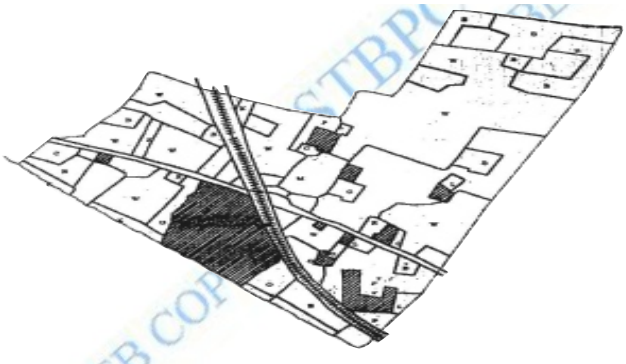
While surveying the land use of any village, on the Cadastral map of the village, it is important to show all types of land use. On the Cadastral map of the village, size of the agriculture fields and its number is exhibited. Before the beginning of the survey work any permanent structure of the region is selected as the reference point. The land use can be shown on the map through symbolic indications e.g. Wheat fields can be indicated by 'C' and Rice fields can be indicated by 'F'.

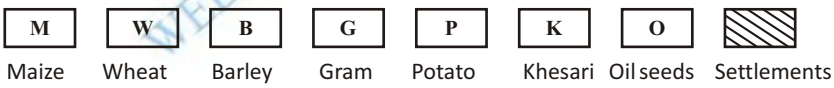
On a separate map, types of soil can be shown according to their colour and structure. On the map some questionnaire can be prepared on the topic - such as slope of the fields, drainage, irrigated and unirrigated crops, etc. for the conversation with the farmers and gathering information from them. By making separate groups of the students table can be prepared after collection of the data. Crops, sources of irrigation etc. are to be exhibited in different colors. Maps of land use, soil, land forms etc. can be superimposed on each other and a composite map can be prepared.

Prepare your report by analysing these data and maps. Attach maps and tables at suitable places in the report.

TABLE OF LAND USE DATA COLLECTED FROM FARMERS THROUGH INTERVIEW

Sl. No.	No. of fields	Name of the farmer	Area of the field (in hectares)	Type of soil Red, black, loamy etc.	Name of the crops produced				Irrigation	
					Kharif Paddy, Jowar, Millets	Rabi Wheat	All seasons	Kharif	Rabi	In all seasons





Field - Boundaries and Agriculture Forms (Rabi Crops)

POLLUTIONS: TYPES, CAUSES AND PREVENTION –

Pollution is a serious problem. Amongst pollutions - soil pollution, air pollution, water pollution and noise pollution are important.

On local level, students can select any factory or crossroads to study pollution. Agricultural region or pond adjacent to the agricultural region can be selected to study pollution caused by the use of chemical materials.

Through discussion with the people living in the region, information

can be gathered about causes of pollution and polluting solid waste materials. Information regarding factors responsible for the spread of the pollution, effect of pollution on surrounding areas, problems faced by the people and lack of fertility of the soil can also be gathered.

In regional studies air and water pollution are chiefly studied. Effect on the health of the local people can also be determined. In pollution studies, polluted region is fixed and with the help of the teachers by forming the groups of the students, necessary data should be collected.

This type of report on regional studies will provide solution to the problems on the one hand where as on the other hand it will help in studying that region on micro level. Local problems can also be controlled through such studies.

EXERCISE QUESTIONS

OBJECTIVE TYPE QUESTIONS

1. What do we call the data collected by visiting the region?
   (a) Secondary data (b) Primary data
   (c) Tertiary data (d) quaternary data

2. Regional studies in Geography is -
   (a) A Origin Point (Ek Upagam) (b) A Law mechanism (Ek Vidhitantra)
   (c) A Theory (d) A Model

SHORT ANSWER TYPE QUESTION

1. Through light on the importance of Regional studies in Geography.
2. In which region is land more used for agriculture?
3. What type of damage is caused by air pollution?
4. Discuss the ill effects of water pollution?
5. How is the rain water harvested?
6. Show rain water harvesting with the help of graph.

7. What do you understand by regional studies?
8. What are the benefits of regional studies?
9. On which points should attention be given while selecting regions?

LONG ANSWER TYPE QUESTION

1. Answer the following questions by studying the table given below:

Major Land use	YEAR					
	1801	1850	1920	1950	1980	2000
Forest	6215	5960	5675	5382	5052	3454
Cropped Areas	6862	6832	6745	6780	6788	3426
Grass lands	265	538	915	1170	1500	1513

(A) Name that land use category whose area is declining constantly.

(B) What is the main cause of constant increase in cropped area? Explain.

(C) In which category of the land use has the least land area been used?

2. Discuss the different methods of questionnaire for regional studies?
3. Describe the four sources of air pollution?

REGIONAL STUDIES: QUESTIONNAIRE MODEL

1. Name of the region –
2. Name and address of the person interviewed –
3. Has the agriculture region increased?
4. Does your village have tube well?
5. Has the water level of well increased or decreased in previous five years?
6. What are the irrigational facilities available in this region?

7. Which are the major diseases that spread in large scale in that region in last one year?
8. Which type of pollution exists in study region?
9. What are the causes of reduction in water level?
10. Do you collect rain water?
11. What are the crops you grow in a year?

Name of the interviewer
and Signature

PROJECT WORK

1. Survey the land use of any Mohalla or village situated nearby you and prepare a project report?
2. Find out the ill effects of water and soil pollution in the region around your School?
3. Make a group of Teacher and students, and visit a local region. Give clear knowledge to the students about the Geographical specialties of that region. After that get a Geographical report prepared from the students.