

# **12<sup>th</sup> Standard Geography**

## **Planning and Sustainable Development in Indian Context**

### **Approaches of Planning**

There are two approaches of planning which are as follows:

- **Sectoral Planning Approach** In this approach, the development of various sectors of economy, e.g. agriculture, irrigation, manufacturing, power, construction, transport, communication, social infrastructure and services, etc, are taken into consideration to which various sets of schemes or programmes are to be formulated and implemented.
- **Regional Planning Approach** In this approach, the main emphasis is on to draw such plans which may help to reduce regional disparities and bring uniform economic development.

### **Target Area Planning**

The core focus of planning process is in promoting economically backward areas. It is important that for proper economic development of a region, there is a need of resource base as well as technology and investment simultaneously, because sometimes resources rich regions also remain backward.

After having about one and half decade planning experience, it is realised that our economic development is still facing the regional imbalances. In order to encounter both regional and social disparities, the Planning Commission introduced the 'Target area' and 'target group approaches' to planning.

Some of the programmes which are directed towards the development of these two approaches are as follows:

### **Target Area Programmes**

Target area has the following programmes such as:

1. Command Area Development programme
2. Drought Prone Area Development Programme
3. Desert Development Programme
4. Hill Area Development Programme

### **Target Group Programmes**

Target groups has the following programmes such as:

1. The Small Farmers Development Agency (SFDA)
2. Marginal Farmers Development Agency (MFDA)

In the Eighth Five Year Plan, hill areas, North-Eastern states, tribal areas and backward areas were taken into consideration in order to develop special area programmes.

## **Planning Related to Area Development Programme**

### **Hill Area Development Programme**

- It covers 15 districts comprising all the hilly districts of Uttar Pradesh (present Uttarakhand), Mikir hill and North Cachar hills of Assam, Darjiling district of West Bengal and Nilgiri district of Tamil Nadu. It was stated in Fifth five year plan.
- It was recommended in 1981, by the National committee on the Development of Backward Area, that the hill areas having a height above 600 m and not covered under tribal sub-plan be treated as backward hill areas.

The aims of Hill Area Development Programmes are as follows:

1. Development of horticulture, plantation agriculture, animal husbandry, poultry, forestry and small scale and village industry were the main objectives of the programme through which exploitation of local resources may become possible.
2. The detailed plans were based on topographical, ecological, economic and social conditions of the hill areas.

### **Drought Prone Area Programme (DPAP)**

This programme was started during the Fourth Five Year Plan. The main objectives of Drought Prone Area Programme are as follows:

1. This plan mainly emphasised on generating employment opportunities to the people of drought prone areas along with creating productive assets.
2. Besides, irrigation projects, land development programmes, afforestation, grassland development and creation of basic rural infrastructure such as rural electrification, roads, market, credit and services were also its main priorities.
3. The National Committee on Development of Backward Areas found that this programme was mostly confined to the development of agriculture and allied sectors along with restoration of ecological balance.
4. The society due to burden of population was bound to utilise the marginal lands for agriculture and as a result led ecological degradation.

Thus, it was observed that there is an urgent need to generate alternative employment opportunities in these regions.

### **Drought Prone Regions**

- There are 67 districts (entire or partly) in India identified by planning commission (1967) as drought prone regions.
- Irrigation commission (1972), demarcated the drought affected areas and also introduced the criterion of 30% irrigated land.
- These areas are semi-arid and arid tract of Rajasthan, Gujarat, Western Madhya Pradesh, Marathwada, region of Maharashtra, Rayalseema and Telangana plateaus of Andhra Pradesh, Karnataka plateau and HIGHLANDS and interior parts of Tamil Nadu.

Due to the advancement in irrigation facilities, Haryana, Punjab and Northern Rajasthan have become protected regions.

### **Integrated Tribal Development Project in Bharmaur Region**

- The region lies between  $32^{\circ} 11' N$  and  $32^{\circ} 41' N$  latitudes and  $76^{\circ} 22' E$  and  $76^{\circ} 53' E$  longitudes. Spread over an area of about 1818 sq km, the region mostly lies between 1500 m to 3700 m above the mean sea level.
- This region popularly known as the homeland of Gaddis and is surrounded by lofty mountains on all sides. It has Pir Panjal in the North and Dhaula Dhar in the South. In the east, the extension of Dhaula Dhar converges with Pir Panjal near Rohtang pass.
- The river Ravi and its tributaries, the Budhil and the Tundahen, drain this territory and carve out deep gorges.
- These rivers divide the region into four physiographic divisions called Holi, Khani, Kugti and Tundah areas. Bharmaur experiences freezing weather conditions and snowfall in winter. It means monthly temperature in January remains  $4^{\circ}C$  and in July  $26^{\circ}C$ .

### **Area and Life of People in Bharmaur**

The area and life of people of Bharmaur region are as follows:

1. The tribal area covers Bharmaur and Holi tehsils of Chamba district of Himachal Pradesh.
2. It is one of the most backward area economically as well as socially in Himachal Pradesh and also a notified tribal region since 21st November, 1975.

3. The area is occupied by a tribal group of community named 'Gaddi', who practised transhumance and speak 'Gaddiali' dialect.
4. According to 2001 census, the total population of the area was 39113 i.e. 21 persons per sq km.
5. People of the area face major problems as the economy is mostly affected by its harsh climate, low resource base and fragile environment.

### **Economy in the Area of Bharmaur**

Traditionally, subsistence agriculture-cum-pastoral activities such as growing food grains and animal husbandry like sheep and goat are the main activities of these people.

### **Integrated Tribal Development Project (ITDP)**

- In 1970s, Gaddis were included in the list of scheduled tribes and in the same period the development process of tribal area of this region started.
- Later in 1974 under the Fifth Five Year Plan, the tribal sub-plan was introduced and Bharmaur was designed as one of the five Integrated Tribal Development Project (ITDP) in Himachal Pradesh.

Aims and priorities of the Intergrated Tribal Development Project are as follows:

1. Improving the quality of life of the Gaddis.
2. Narrowing the gap in the level of development between Bharmaur and other districts of Himachal Pradesh.

3. The highest priority was on development of transport and communications, agriculture and allied activities as well as social and community services.

The main achievements of the tribal sub-plan are as follows:

### **Infrastructural Facilities**

Infrastructural facilities of tribal sub-plan are as follows:

1. Development of infrastructure i.e schools, health care facilities, potable water, roads, communications and electricity supply.
2. Villages located along the river Ravi in Holi and Khani areas are main beneficiaries infrastructural development.

### **Social Benefits**

Social benefits of tribal sub-plan are as follows:

1. There are tremendous increase in literacy rate, e.g, the female literacy rate in the region increased from 1.88% in 1971 to 65% in 2011.
2. Decline in gender inequality i.e. between male and female literacy rate.
3. Improvement in sex-ratio.
4. Decline in child marriage.

### **Economic Benefits**

As the Gaddis had practiced traditionally, subsistence agriculture cum-pastoral economy, later on during the last three decades of twentieth

century, pulses and other cash crops became one of the main crops of the region.

### **Some Shortcomings to ITDP**

1. In terms of infrastructural facilities, the remote villages in Tundah and Kugti areas are still remained unaffected.
2. The technology is still traditional in nature.
3. The importance of pastoralism has been decreasing day-by-day as only about one tenth of the total households practice transhumance.
4. But, still a sizeable portion of the Gaddis migrate to Kangra and its Fringing Zone in order to earn living from wage labour during cold season.

### **Overview of Planning Perspective in India**

India has centralised planning and the Planning Commission has been assigned to administer the functions of planning in India.

Being a statutory body, Planning Commission is headed by the Prime Minister and has a Deputy Chairman and members. Five year plans are responsible to carry out the planning in India which are as follows:

- The First Five Year Plan launched in 1951 and covered the period, 1951-52 to 1955-56.
- Second and Third Five Year Plans covered the period from 1956-57 to 1960-61 and 1961-62 to 1965-1966, respectively.



- Two successive droughts during mid sixties (1965-66 and 1966-67) and war with Pakistan in 1965 forced plan Holiday in 1966-67 and 1968-69. This period was covered by annual plans which are also termed as rolling plans.
- The Fourth Five Year Plan began in 1969-70 and ended in 1973-74.
- Following this the Fifth Five Year Plan began in 1974-75, but it was terminated by the government one year earlier i.e. in 1977-78.
- The Sixth Five Year Plan took off in 1980.
- The Seventh Five Year Plan covered the period between 1985 and 1990.
- Once again, due to the political instability and initiation of liberalisation policy, the Eighth Five Year Plan got delayed. It covered the period from 1997 to 2002.
- The Tenth Five Year Plan began in 2002 and ended in 2007.
- The Eleventh Five Year Plan started in 2007 and ended in 2012. It was entitled "Towards faster and more inclusive growth".
- The Twelfth Five Year Plan in 2012 and it is still in progress. It will come to an end in 2017.

### **Sustainable Development**

- In the 1960, this was the period when people throughout the world were much concerned about the environmental issues because of undesirable effects of industrial development and thus, the concept of sustainable development emerged in western world.
- This level of fear among environmentalists and common people reached at its peak with the publication of 'The population Bomb' by Ehrlich in 1968 and 'The Limits to Growth' by Meadows

## **Aims of Sustainable**

### **Development**

- The main aim of sustainable development is to take care of economic, social and ecological spheres of development during the present times as well as conserve all the resources in such a manner that these can be retained for future generations.
- So, there is a need of changing our attitude towards nature as well as economic development.

### **Concept of Development**

- Development is a dynamic concept and has evolved in the second half of twentieth century, used to describe the state of particular societies and the process of changes experienced by them.
- In early human history, the main criteria of determination of a society's state was the interaction process between human societies and their bio-physical environment.
- Societies helped in the development of various levels of technology and institutions upon which human-environment process depend.
- These have helped in increasing the pace of human environment interaction, therefore, the momentum generated and festinated technological progress and transformation and creation of institutions.
- After the period of World War II, the two important terms i.e. development and economic growth considered as one concept. But due

to unequal distribution, a faster rate of growth in poverty is experienced by even the developed nations having high economic growth.

- Then, redistribution with growth and 'growth and equity' broaden the term development in 1970s. Now, the concept of development not only restricted to economic sphere alone, but also incorporates balance and equality among people in term of welfare and quality of life of people, health education and other facilities, equal opportunity to all and ensuring political and civil rights.
- Hence, the concept of development has become multi-dimensional and stands for positive, irreversible transformation of the economy, society and environment.

### **World Commission on Environment and Development (WCED)**

- The United Nations established a World Commission on Environment and Development (WCED), after concerning the opinion of world community on the environmental issues.
- The WCED was headed by the Norwegian Prime Minister, Gro Harlem Brundtland. The commission gave its report entitled 'Our Common Future' in 1987, also known as Brundtland Report.
- In this report, 'sustainable development' took into consideration and defined as 'A development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

### **Measures for Promotion of Sustainable Development**

As we have seen that this project has affected the ecological sustainability and physical environment of the region badly. So, attaining the goal of sustainable development in command area requires such measures that can achieve ecological, social and economic sustainability, simultaneously.

Hence, five of the seven measures have been proposed in this respect such as:

1. Rigorous implementation of water management policy is the first and foremost requirement of this project. Stage I and Stage II comprising of protective irrigation and extensive irrigation for crops and pasture development, respectively according to the canal project.
2. By and large water intensive crops shall be avoided and plantation crops such as fruits shall be encouraged by folks.
3. In order to reduce the conveyance loss of water, few important programmes shall be taken into account such as the CAD (Command Area Development) programmes i.e.
  - Lining of water courses.
  - Land development and levelling.
  - Warabandi system (means equal distribution of canal water in the command area of outlet).
4. The areas should be reclaimed that got affected by water logging and soil salinity.
5. The eco-development is a must, especially in the fragile environment of Stage II, through afforestation, shelterbelt, plantation and pasture development activities.

6. By providing a decent financial and institutional support for cultivation of the land, allottees who have poor economic background, can be prove a positive step towards achieving the social sustainability in the region.
7. The economic sustainability can be attained through expanding the economic sector which must include agriculture and allied activities along with other economic sectors, as a whole. Hence, we will then find diversification of economic base and establishment of functional linkages between basic villages, agro-service centres and market centres.

### **Promotion of Sustainable Development in Indira Gandhi Canal Command Area**

- It is one of the largest canal systems in India, conceived by Kanwar Sain in 1948. This project was launched on 31st March 1958 that transformed a desert into green land.
- The origin place of the canal is at Harike barrage in Punjab state and goes parallel to Pakistan Border at an average distance of 40 km in Thar Desert of Rajasthan (Marusthali).
- 9060, km is the total planned length of the system catering to the irrigation needs of a total culturable command area of 19.63 lakh hectares.
- The canal has two irrigation system such as 'flow system' and 'lift system'. Around 70% land of the command area is irrigated by flow system and rest 30% land by lift system.

There are tw'O stages through which the construction work of the canal system has been done such as:

### **Stage I of Indra Gandhi Canal Command Area**

- This command area covers Ganganagar, Hanumangarh and Northern part of Bikaner districts.
- Its culturable command area is 5.53 lakh hectares along with gentle undulating topography.
- In this stage, the irrigation system was introduced in early 1960s.

### **Stage II of Indira Gandhi Canal Command Area**

This stage covers 14.10 lakh hectares culturable area of Bikaner, Jaisalmer, Barmer, Jodhpur, Nagpur and Churu districts.

The main characteristics of the area are:

1. Hot desert with shifting sands dunes.
2. Summer temperature upto 50°C.

Irrigation system was introduced in this stage in mid- 1980s. In the lift canal, water is lifted up to make it to flow against the slope of the land. All the lift canals of this system originate at the left bank of main canal while all the canals on the right bank of main canal are flow channels.

### **Effects of Indira Gandhi Canal Irrigation**

There are various effects of Indira Gandhi Canal irrigation on environment and on agricultural economy:

### **Effects on Environment**

The environment of the areas is influenced by this project both positively and negatively:

- **Positive Effect** Now, there is sufficient soil moisture availability for a longer duration. Various afforestation and pasture development programme came into being. A considerable reduction in wind erosion and siltation of canal systems have also been recorded.
- **Negative Effect** Due to intensive irrigation and excessive use of water, an alarming rate of water logging and soil salinity have been recorded.

### **Effects on Agriculture**

There are some positive and negative effect on agriculture:

- **Positive Effect** This canal irrigation led to increase in cultivated land and intensity of cropping. Main commercial crops i.e. wheat, rice, cotton, groundnut replaced the drought resistant crops like gram, bajra, and Jowar.
- **Negative Effect** Intensive irrigation has also become a cause of water logging and soil salinity. So, in the near future it may hampers the sustainability of agriculture.