

CUET · GEOGRAPHY · CLASS XII · CODE 313

Planning and Sustainable Development in Indian Context

CUET unit: Mineral and Energy Resources (Unit III — Resources and Planning; this chapter covers Planning and Sustainable Development)

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Snapshot

- India follows two approaches to economic planning — sectoral planning (sector-wise schemes) and regional planning (spatial perspective to reduce regional imbalance).
- The Planning Commission was replaced by NITI Aayog on 1 January 2015, marking a shift from centralised to decentralised multi-level planning.
- Target-area and target-group planning use named programmes: CADP, DPAP, Desert Development, Hill Area Development, SFDA, MFDA.
- Two case studies — Bharmaur ITDP (hill/tribal area, Himachal Pradesh) and Indira Gandhi Canal Command Area (desert region, Rajasthan) — show practical planning outcomes.
- Sustainable development is defined through the Brundtland Report (1987) "Our Common Future"; seven measures for sustainability in the Indira Gandhi Canal command area are frequently tested in CUET.

Detailed Notes

2.1 Core concepts

- Planning, as used in this chapter, is not the everyday "preparation for an examination or a visit to a hill station" usage but the structured process of **economic development** — a process of thinking, formulation of a scheme or programme, and implementation of a set of actions to achieve a defined goal. NCERT contrasts this with the traditional "hit-and-miss" methods of reform and reconstruction (NCERT §Introduction, p. 66). Planning is a deliberate, scientific exercise distinct from incremental, unplanned interventions.
- Two approaches to planning are recognised in India: **sectoral planning** — formulation and implementation of schemes/programmes for various sectors of the economy such as agriculture, irrigation, manufacturing, power, construction, transport, communication, social infrastructure and services; and **regional planning** — a planning approach with a **spatial perspective**, drawn because there is no uniform economic development over space in any country (some areas are more developed, some lag behind) and planners must reduce regional imbalance in development (NCERT §Introduction, p. 66).

- On **1 January 2015**, the **Planning Commission** was replaced by the **NITI Aayog**. India initially adopted **centralised planning** after Independence but subsequently graduated into **decentralised multi-level planning** at the Centre, State and district levels. NITI Aayog has been set up with the objective of involving the States in economic policy making for India and providing **strategic and technical advice** to the Central and State governments (NCERT box, p. 66). The shift signals India's move from a command-and-control planning model toward cooperative federalism.
- **Target area planning** was introduced because, with roughly one-and-a-half decades of planning experience, it was realised that **regional imbalances in economic development were getting accentuated**. The economic development of a region depends on its resource base, but sometimes resource-rich regions also remain backward because economic development also requires technology and investment. To arrest the accentuation of regional and social disparities, the Planning Commission introduced the 'target area' and 'target group' approaches. Examples of **target-area** programmes are the Command Area Development Programme, Drought Prone Area Development Programme, Desert Development Programme and Hill Area Development Programme. Examples of **target-group** programmes are the Small Farmers Development Agency (SFDA) and the Marginal Farmers Development Agency (MFDA) (NCERT §Target Area Planning, p. 67).
- In the **8th Five Year Plan**, special area programmes were specifically designed to develop infrastructure in hill areas, north-eastern states, tribal areas and backward areas (NCERT §Target Area Planning, p. 67).
- The **Hill Area Development Programme** was initiated during the **Fifth Five Year Plan**, covering **15 districts** — all the hilly districts of Uttar Pradesh (present Uttarakhand), Mikir Hill and North Cachar Hills of Assam, Darjeeling district of West Bengal, and Nilgiri district of Tamil Nadu. The **National Committee on the Development of Backward Areas in 1981** recommended that all hill areas in the country **having a height above 600 m** and not covered under the tribal sub-plan be treated as **backward hill areas**. Detailed plans were drawn keeping in view the topographical, ecological, social and economic conditions of these regions; the programmes aimed at harnessing indigenous resources through development of **horticulture, plantation, agriculture, animal husbandry, poultry, forestry and small-scale and village industry** (NCERT §Hill Area Development Programme, p. 67).
- The **Drought Prone Area Programme (DPAP)** was initiated during the **Fourth Five Year Plan** with the twin objectives of providing employment to the people in drought-prone areas and creating productive assets. Initially the programme emphasised the construction of **labour-intensive civil works**; later it stressed irrigation projects, land development programmes, afforestation, grassland development and creation of basic rural infrastructure such as electricity, roads, market, credit and services. The National Committee on Development of Backward Areas reviewed the programme and observed that it remained largely confined to

development of agriculture and allied sectors with major focus on restoration of ecological balance; it suggested that growing population pressure forcing utilisation of marginal lands and the resulting ecological degradation made it necessary to **create alternative employment** in such areas, and to adopt an **integrated watershed development approach at the micro-level** (NCERT §DPAP, p. 67).

- The **Planning Commission of India (1967)** identified **67 districts** (entire or partly) of the country prone to drought. The **Irrigation Commission (1972)** introduced the criterion of **30 per cent irrigated area** to demarcate drought-prone areas. Broadly, the drought-prone area in India spreads over semi-arid and arid tracts of **Rajasthan, Gujarat, western Madhya Pradesh, the Marathwada region of Maharashtra, Rayalseema and Telangana plateaus of Andhra Pradesh, the Karnataka plateau, and highlands and interior parts of Tamil Nadu**. Drought-prone parts of Punjab, Haryana and north-Rajasthan are largely protected on account of the spread of irrigation (NCERT §DPAP, p. 67).
- **Bharmaur ITDP (Case Study)** — Bharmaur tribal area comprises Bharmaur and Holi tehsils of Chamba district, Himachal Pradesh. It is a **notified tribal area since 21 November 1975** and is inhabited by the **Gaddi** community, who have maintained a distinct identity by practising **transhumance** and conversing through the **Gaddiali** dialect. The region lies between **32° 11' N and 32° 41' N latitudes and 76° 22' E and 76° 53' E longitudes**, covers about **1,818 sq km**, mostly between **1,500 m and 3,700 m** above mean sea level, is bounded by **Pir Panjal in the north and Dhaula Dhar in the south** (the two converging near Rohtang Pass), and is drained by the Ravi and its tributaries the Budhil and the Tundahen, which divide it into four physiographic divisions called **Holi, Khani, Kugti and Tundah**. Mean monthly temperature is **4° C in January and 26° C in July** (NCERT §Case Study, pp. 68–69). According to the **2011 census, total population was 39,113 (21 persons per sq km)** — one of the most economically and socially backward areas of Himachal Pradesh.
- The development of Bharmaur began in the 1970s when Gaddis were included among '**scheduled tribes**'. Under the Fifth Five Year Plan, the **tribal sub-plan was introduced in 1974** and Bharmaur was designated as one of **five Integrated Tribal Development Projects (ITDPs) in Himachal Pradesh**. The plan aimed at improving Gaddi quality of life and narrowing the development gap between Bharmaur and other parts of the State. The plan accorded highest priority to **transport and communications, agriculture and allied activities, and social and community services** (NCERT pp. 68–69).
- The **most significant contribution** of the tribal sub-plan in Bharmaur has been infrastructure development — schools, healthcare facilities, potable water, roads, communications and electricity. However, villages along the river Ravi in **Holi and Khani** areas are the principal beneficiaries, while the remote villages of **Tundah and Kugti** still lack sufficient infrastructure (NCERT p. 69–70).

- Social benefits of the ITDP include a tremendous rise in literacy, improvement in the sex ratio, decline in child marriage and a narrowing of gender inequality in literacy. **Female literacy rose from 1.88% (1971) to 65% (2011)**. Traditionally, the Gaddis had a subsistence agricultural-cum-pastoral economy with emphasis on foodgrains and livestock; in the last three decades of the 20th century the cultivation of **pulses and other cash crops** has expanded, though cultivation is still done with traditional technology. The declining importance of pastoralism is reflected in the fact that **only about one-tenth of total households now practise transhumance**, although a large number of Gaddis still migrate to **Kangra and surrounding areas in winter** for wage labour (NCERT p. 70).
- **Concept of development:** development describes the state of particular societies and the process of changes they experience. In the **post-World-War-II era** development was synonymous with **economic growth** measured by **GNP and per-capita income/consumption**. But high-growth countries still saw rising poverty because of unequal distribution; so in the **1970s** phrases such as "**redistribution with growth**" and "**growth and equity**" were incorporated into the definition. The realisation that development cannot be restricted to the economic sphere alone led, by the **1980s**, to development being conceived as a concept encapsulating widespread improvement in **social as well as material well-being** of all in a society, including health, education, equality of opportunity, and political and civil rights (NCERT §Sustainable Development, p. 70).
- The notion of **sustainable development** emerged in the wake of rising environmental awareness in the **late 1960s** in the Western world, reflecting concern about the undesirable effects of industrial development on the environment. Two publications were particularly influential — '**The Population Bomb**' by Ehrlich (1968) and '**The Limits to Growth**' by Meadows and others (1972) — which raised the level of fear among environmentalists and the public. This set the scenario for sustainable development as a new model (NCERT §Sustainable Development, p. 70).
- The United Nations established the **World Commission on Environment and Development (WCED)** headed by the Norwegian Prime Minister **Gro Harlem Brundtland**. The Commission gave its report "**Our Common Future**" in **1987** (also called the Brundtland Report) which defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable development takes care of ecological, social and economic aspects of development during the present and pleads for conservation of resources to enable future generations to use them; it takes into account the development of the whole human kind, which has a common future (NCERT §Sustainable Development, pp. 70–72).
- **Indira Gandhi Canal (Nahar) Command Area (Case Study)** — Indira Gandhi Canal, previously known as the **Rajasthan Canal**, is one of the largest canal systems in India. **Conceived by Kanwar Sain in 1948**, the canal project was launched on **31 March 1958**. The canal originates at **Harike barrage in Punjab**

(just below the confluence of the Sutlej and Beas) and runs parallel to the Pakistan border at an average distance of **40 km** in the Thar Desert (Marusthali) of Rajasthan. The total planned length is **9,060 km** catering to the irrigation needs of a culturable command area of **19.63 lakh hectares**. About **70 per cent** of the total command area was envisaged to be irrigated by the **flow system** and the rest by the **lift system** (NCERT §Case Study, pp. 71–72).

- Construction has been carried out in **two stages**. **Stage-I** lies in **Ganganagar, Hanumangarh and northern Bikaner** districts; it has gently undulating topography and a culturable command area of **5.53 lakh hectares**, with irrigation introduced in the **early 1960s**. **Stage-II** covers **Bikaner, Jaisalmer, Barmer, Jodhpur, Nagaur and Churu** districts, has a culturable command area of **14.10 lakh hectares**, comprises desert land dotted with shifting sand dunes and temperatures soaring to **50° C in summers**, and began receiving irrigation in the **mid-1980s**. In the **lift canals** water is lifted against the slope of the land; all lift canals of the IGNP originate on the **left bank** of the main canal, while all right-bank canals are **flow channels** (NCERT p. 72).
- **Positive impacts:** availability of soil moisture for longer periods, afforestation and pasture development under CAD greening the land, reduced wind erosion and reduced siltation of canal systems; in agriculture, increase in cultivated area and intensity of cropping; replacement of traditional crops (gram, bajra, jowar) by **wheat, cotton, groundnut and rice**; tremendous initial rise in agricultural and livestock productivity (NCERT pp. 72–73).
- **Negative impacts:** intensive irrigation and excessive use of water have caused the **twin environmental problems of waterlogging and soil salinity**, threatening the long-run sustainability of agriculture (NCERT pp. 72–73).
- **Seven measures for sustainable development** in the command area, of which **five aim at ecological balance** — (i) strict implementation of a water management policy (protective irrigation in Stage-I, extensive irrigation and pasture development in Stage-II); (ii) a cropping pattern that excludes water-intensive crops and encourages plantation crops like **citrus fruits**; (iii) effective CAD programmes — lining of water courses, land development, levelling, and **warabandi** (equal distribution of canal water in the outlet command) to reduce conveyance losses; (iv) reclamation of waterlogged and saline areas; (v) eco-development through **afforestation, shelterbelt plantation and pasture development**, especially in the fragile Stage-II; (vi) social sustainability through financial and institutional support to land allottees from poor economic backgrounds; (vii) economic sustainability through **diversification of the economic base** linking basic villages, agro-service centres and market centres (NCERT §Measures, p. 73).

2.2 Definitions to memorise

Term	Definition	Page
Planning (this chapter)	Process of thinking, formulating a scheme and implementing actions for economic development, distinct from hit-and-miss reform	66
Sectoral planning	Formulation and implementation of schemes/programmes for sectors like agriculture, irrigation, manufacturing, power, construction, transport, communication, social infrastructure and services	66
Regional planning	Planning with a spatial perspective to reduce regional imbalance in development	66
NITI Aayog	Body formed on 1 January 2015 replacing the Planning Commission, set up to involve States in economic policy making and to provide strategic and technical advice	66
Target area planning	Approach targeting backward areas to arrest accentuating regional and social disparities; CADP, DPAP, DDP, HADP are examples	67
Target group programme	Programme aimed at specific social/economic groups, e.g. SFDA (Small Farmers Development Agency), MFDA (Marginal Farmers Development Agency)	67
Command Area Development Programme	Target-area programme for the integrated development of areas commanded by major and medium irrigation projects	67
Hill Area Development Programme	Initiated in Fifth Five Year Plan covering 15 hill districts; 1981 NCDBA recommended hills > 600 m not under tribal sub-plan be treated as backward	67
Drought Prone Area Programme	Initiated in Fourth Five Year Plan to provide employment and create productive assets in drought-prone districts	67
Desert Development Programme	Target-area programme for arid and semi-arid desert tracts	67
SFDA / MFDA	Small Farmers Development Agency / Marginal Farmers Development Agency — target-group programmes	67
ITDP	Integrated Tribal Development Project/Programme — area development plan under the tribal sub-plan introduced in the Fifth Five Year Plan (1974)	68
Tribal sub-plan	Sub-plan introduced in 1974 under the Fifth Five Year Plan for areas with scheduled-tribe concentrations	68
Transhumance	Seasonal migration of pastoralists with livestock — practised traditionally by the Gaddis of Bharmaur	68
Gaddi		68

Term	Definition	Page
	Tribal community of Bharmaur in Chamba district, HP, with Gaddiali dialect, included among scheduled tribes in the 1970s	
Sustainable development (Brundtland)	"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" — Our Common Future, 1987	70
WCED	World Commission on Environment and Development; UN body headed by Gro Harlem Brundtland; produced Brundtland Report 1987	70
Brundtland Report	"Our Common Future" (1987), the WCED report that mainstreamed the sustainable-development definition	70
Indira Gandhi Canal	Formerly Rajasthan Canal; conceived by Kanwar Sain in 1948, launched 31 March 1958; one of India's largest canal systems	71
Harike barrage	Origin point of the Indira Gandhi Canal in Punjab, below the Sutlej–Beas confluence	71
Culturable Command Area (CCA)	Area within a canal command that can be irrigated and cultivated; 19.63 lakh ha for IGNP	72
Stage-I / Stage-II command	IGNP construction stages — Stage-I (5.53 lakh ha; Ganganagar, Hanumangarh, N Bikaner; early 1960s); Stage-II (14.10 lakh ha; Bikaner, Jaisalmer, Barmer, Jodhpur, Nagaur, Churu; mid-1980s)	72
Lift canal	Canal in which water is lifted to flow against the slope of the land; all IGNP lift canals are on the left bank	72
Warabandi	System for equal distribution of canal water in the command area of an outlet, reducing conveyance loss	73
Eco-development	Restoration of ecological balance through afforestation, shelterbelt plantation and pasture development	73

2.3 Diagrams / processes to remember

- **Fig. 6.1 (p. 68)** — Photo plates of Bharmaur: terrace farming, traditional method of extracting wheat, people engaged in primary activity, settlements in the Bharmaur region, and traditional Gaddi dress. These photographs anchor the Gaddi subsistence-cum-pastoral economy and the harsh, fragile environment in which the ITDP operates.
- **Fig. 6.2 (p. 69)** — Map of Bharmaur Tribal Region. Shows the four physiographic divisions (Holi, Khani, Kugti, Tundah), the Ravi and its tributaries Budhil and Tundahen, the Pir Panjal–Dhaura Dhar enclosure, and the location of the region inside Chamba district. The lat-long frame is 32°11'–32°41'N and 76°22'–76°53'E and the area is shown to be ~1,818 sq km.

- **Fig. 6.3 (p. 71)** — Map of the Indira Gandhi Canal Command Area. Shows the **main canal originating at Harike barrage** (Punjab) below the Sutlej–Beas confluence, the **Main Canal Head near Ganganagar** and the **Main Canal Tail near Jaisalmer**, the parallel run to the Pakistan border, and the four-fold legend separating **Stage-I and Stage-II** areas into **under flow** and **under lift** command. Districts named on the map — Ganganagar, Hanumangarh (implied), Lunkaransar, Bikaner, Churu, Jaisalmer, Barmer.
- **Figs. 6.4 and 6.5 (p. 72)** — Photo plates showing the Indira Gandhi Canal and its adjoining greened-up areas after irrigation, illustrating the visible transformation of the Marusthali landscape.
- **Process flow — Bharmaur transformation:** scheduled-tribe notification (1970s) → tribal sub-plan (1974) → ITDP designation → infrastructure (schools, health, water, roads, electricity) → social outcomes (female literacy 1.88% → 65%, child-marriage decline, sex-ratio improvement) → partial economic transformation (pulses and cash crops introduced; transhumance now only ~1/10 households; wage migration to Kangra in winter).
- **Process flow — IGNP transformation:** Kanwar Sain conception (1948) → project launch (31 March 1958) → Stage-I irrigation (early 1960s) → Stage-II irrigation (mid-1980s) → positive impacts (greening, reduced wind erosion, crop replacement to wheat/cotton/groundnut/rice, productivity rise) → negative impacts (waterlogging, soil salinity) → seven sustainability measures (five ecological + one social + one economic).

2.5 Key data table (NCERT figures from this chapter)

#	Item	NCERT figure	Page
1	NITI Aayog replaced Planning Commission	1 January 2015	66
2	HADP Five Year Plan of initiation	Fifth	67
3	HADP district coverage	15 districts (UP/Uttarakhand hills, Mikir & North Cachar in Assam, Darjeeling, Nilgiri)	67
4	NCDBA backward-hill threshold	Above 600 m (not under tribal sub-plan)	67
5	DPAP Five Year Plan of initiation	Fourth	67
6	Planning Commission drought districts identified	67 districts (1967)	67
7	Irrigation Commission drought-area criterion	< 30% irrigated area (1972)	67
8	Bharmaur — area	1,818 sq km	68
9	Bharmaur — elevation range	1,500–3,700 m	68

#	Item	NCERT figure	Page
10	Bharmaur — population (2011)	39,113 (21 persons per sq km)	68
11	Bharmaur — female literacy	1.88% (1971) → 65% (2011)	70
12	Households still practising transhumance	About one-tenth (~10%)	70
13	IGNP — conception year	1948 (Kanwar Sain)	71
14	IGNP — launch date	31 March 1958	71
15	IGNP — total planned length	9,060 km	72
16	IGNP — Culturable Command Area	19.63 lakh hectares	72
17	Flow vs Lift share	~70% flow, ~30% lift	72
18	Stage-I CCA / Stage-II CCA	5.53 lakh ha / 14.10 lakh ha	72
19	Brundtland Report year	1987 — "Our Common Future"	70
20	Sustainability measures (IGNP)	7 total; 5 ecological	73

2.4 Common confusions / NTA trap points

- ITDP = **Integrated Tribal Development Project/Programme**, not Tourism / Travel / Transport (NCERT Exercise 1.ii, p. 74).
- DPAP began in the **Fourth Five Year Plan**, HADP began in the **Fifth Five Year Plan** — students often swap these.
- Indira Gandhi Canal was **conceived by Kanwar Sain (1948)** and **launched on 31 March 1958** — two different dates; do not confuse them.
- The canal was formerly called the **Rajasthan Canal**, not the Thar Canal or the Bhakra Canal.
- **Harike barrage** (origin of the canal) lies in **Punjab**, not Rajasthan; the canal then enters Rajasthan parallel to the Pakistan border at an average distance of 40 km.
- Irrigation Commission (**1972**) used a **30%** irrigated-area criterion; Planning Commission (**1967**) identified **67 districts** — keep the agency, year and number paired correctly.
- About **70% of the command area was envisaged to be irrigated by FLOW**, not by lift. NTA frequently swaps the flow/lift share.
- All **lift canals are on the left bank**; right-bank canals are **flow channels** — a classic two-statement trap.
- The Brundtland Report is also called **Our Common Future (1987)** — produced by **WCED**, headed by **Gro Harlem Brundtland** (Norway), not by UNEP, FAO or the Club of Rome.

- The "limits to growth" idea is from **Meadows et al. (1972)**, and **The Population Bomb** is by **Ehrlich (1968)** — the authors and titles are often mismatched.
- The most crucial factor for sustainable development in the IGNP command area is **eco-development**, not agricultural development or land colonisation (NCERT Exercise 1.iii, p. 74).
- Bharmaur tribe is **Gaddi**, not Gujjar, Bhotia or Lahauli; their dialect is **Gaddiali**.
- The tribal sub-plan was introduced in **1974** under the **Fifth Five Year Plan**, not the Sixth — and Bharmaur was one of **five** ITDPs in Himachal Pradesh.

Practice MCQs

PYQ Alignment

This chapter is a recurring source of CUET Geography MCQs — typically 6–9 questions per year across 2023–25 — clustered around (a) definitions/identification of programmes (ITDP, DPAP, HADP, SFDA, MFDA), (b) the Brundtland definition and date of "Our Common Future", and (c) factual specifics of the Indira Gandhi Canal (origin at Harike, length, Stage-I vs Stage-II districts, CCA figures, twin problems of waterlogging/salinity, warabandi, and the seven sustainability measures). For drill sets and previous-year analyses see [/pyq/geography](#).

CUET 2025 — Actual PYQs from this chapter

Q.29 (CUET 2025) Which of the following is a target group development programme?

- A) Command Area Development Programme B) Drought Prone Area Development Programme C) Desert Development Programme D) Small Farmers Development Agency Tests: Target-group vs area-based development programmes (SFDA) Answer: Not in extracted key

Q.31 (CUET 2025) Identify the correct statements about Common Property Resources (CPR): (A) According to ownership, land can be classified as Private land and Common Property Resources. (B) Land owned by the state meant for use of the community is called Common Property Resource. (C) CPR is particularly important for the livelihood of landless and marginal farmers. (D) Ownership of CPR lies with a group of people living in that area.

- A) (A) and (D) only B) (A), (B) and (C) only C) (A) and (C) only D) (B), (C) and (D) only Tests: Common Property Resources — definition and significance Answer: Not in extracted key

CUET 2024 — Actual PYQs from this chapter (Jhabua case study)

Q.30 (CUET 2024) Petlawad block of Jhabua is located in which part of the district?

- A) Southwestern B) Westernmost C) Northernmost D) Easternmost Tests: Jhabua case study — block locations Answer: Not in extracted key

Q.31 (CUET 2024) Which tribal community has high concentration in the district of Jhabua?

- A) Bhils B) Mundas C) Santhals D) Meena Tests: Jhabua case study — Bhil tribal community Answer: Not in extracted key

Q.32 (CUET 2024) The Watershed Management Programmes, which have been successfully implemented in Jhabua district, are funded by the _____.

- A) Ministry of Tourism B) Ministry of Rural Development and Agriculture C) Ministry of Road Transport and Highways D) Ministry of Tribal Affairs Tests: Jhabua case study — funding ministry for watershed programmes Answer: Not in extracted key

Q.33 (CUET 2024) Which among the following was adopted by Bhils to revitalise Common Property Resources?

- A) Plantation of fodder grass B) Plantation of trees C) Open grazing D) Social fencing Tests: Jhabua case study — social fencing by Bhils Answer: Not in extracted key

Q.34 (CUET 2024) Jhabua district is located in which agro-climatic zone of Madhya Pradesh?

- A) Northernmost B) Southernmost C) Easternmost D) Westernmost Tests: Jhabua case study — agro-climatic location Answer: Not in extracted key

CUET 2023 — Actual PYQs from this chapter

Q.27 (CUET 2023) The Petrofils Cooperative Limited (PCL), a joint venture of Government of India and Weavers' Cooperative Society is located at:

- A) Pithoragarh B) Vadodara C) Lucknow D) Jodhpur Tests: Industrial location / joint-sector enterprises (uncertain match — PCL is a joint-sector cooperative; may also belong to a Manufacturing chapter not in extracted MD set) Answer: Not in extracted key