

WRAP Exams · wrapexams.com

Prelims PYQ, Mains model answers, and copy evaluation. Write to the desk for this paper, a doubt, or the AI waitlist.

ask@wrapexams.com · +91 85951 84903 · wrapexams.com

Q2(c)

How political economy is integrated with ecological and adaptability perspectives in bio-cultural anthropology?

UPSC Civil Services Mains 2025 · Anthropology GS 1 · 15 marks · Concepts and methods of Ecological Anthropology: Bio-cultural Adaptations

9.7 Concepts and methods of Ecological Anthropology: Bio-cultural Adaptations-Genetic and Non-genetic factors. Man's physiological responses to environmental stresses: hot desert, cold, high altitude climate.

Core demand of the question

- Define political economy, ecological and adaptability perspectives in anthropology
- Show how they are integrated in biocultural approaches
- **Give mechanisms:** constraint, embodiment of inequality, adaptive strategy under power
- Show that ecology is not politically innocent

Revision summary

Adaptability is plasticity, acclimatisation and subsistence flexibility.

Ecology is energy, season, pathogen and land, and it is not a neutral stage.

Political economy is class, market, state and colonial history, as in Wolf and Mintz.

The join is **political ecology** and the embodiment of inequality, as in Goodman and Leatherman.

The household is the hinge of diet, labour and exposure.

Poverty is not an adaptation.

Introduction

Bio-cultural anthropology studies how bodies and environments make each other through culture. Political economy asks who owns the land, water and labour. The question wants the join: adaptation is never only a clever fit to climate. It is a fit to a climate already shaped by prices, stigma and the state.

Body

Three lenses, one field

- **Adaptability:** Humans adjust by acclimatisation, developmental plasticity and shifts in subsistence. **Julian Steward's cultural ecology**, and later human biology of high altitude, heat and cold, sit here. Andean chest morphology and Tibetan responses to hypoxia are standard biological examples.
- **Ecology:** Energy, seasonality, pathogens and soils matter. **Cultural ecology** sometimes treated "the environment" as a neutral stage.
- **Political economy:** Production, class, colonial and post-colonial markets, and household labour. **Eric Wolf** in Europe and the People without History and **Sidney Mintz** on sugar showed

that people do not adapt to nature in the abstract. They adapt to nature as already claimed.

How the join is made

Political ecology puts power inside the ecosystem. Deforestation, dams, slum heat islands and occupational dust are ecological facts with owners. **Alan Goodman, Thomas Leatherman** and other biocultural medical anthropologists treat nutrition, growth and blood pressure as biological outcomes of those conditions. **Paul Farmer** called the same process structural violence.

- **Constraint versus strategy:** A high-altitude chest or a seasonal hunger season can be adaptability. The same chest working in a mine, or hunger in a landless household, is political economy written as physiology.
- **Embodiment of inequality:** Growth failure, anaemia and reproductive outcomes track class, caste, tribe and gender. Biology is not the opposite of politics. It is one of politics' archives.
- **Household as hinge:** Who eats last, who migrates, and who faces indoor smoke is the ecology of the hearth under kinship and wage.

A concrete Indian join is Adivasi nutrition near mines and plantations, or urban gig-workers in heatwaves: season and pathogen are real, but so are land loss, informal wages and weak housing. COVID-19 reverse migration made the same point: infection ecology met political economy on the highway.

Anthropological payoff

Pure adaptability talk can naturalise poverty as "they are adapted to scarcity". Pure political-economy talk can forget pathogens, altitude and developmental windows. Bio-cultural work holds both. Plasticity is real, and so is the unequal distribution of stressors. Nutritional status is the same architecture in a health key.

Flow diagram

Ecology -> Bio-cultural body
 Adaptability -> Bio-cultural body
 Political economy -> Bio-cultural body
 Bio-cultural body -> Inequality embodied

Conclusion

Integrate the three by treating environment as political and the body as historical. Adaptability is the capacity. Political economy decides which bodies must use it, and how far. That is bio-cultural anthropology after the critique of **cultural ecology's** innocent ecosystem.

Facts & figures

Cultural ecology (Steward)

A method for relating subsistence and environment to social organisation. It was later criticised for underplaying power and history.

Eric Wolf

Europe and the People without History argued that local communities sit inside global political-economic fields, not as closed ecological isolates.

Biocultural synthesis

Medical and biological anthropologists such as Goodman and Leatherman treat nutrition, growth and disease as biological outcomes of political-economic conditions.

Political ecology

It reads environmental change in land, water and toxins as structured by property, state and market, not by nature alone.

WRAP Exams · Write. Read. Analyse. Practice. · <https://wrapexams.com/upsc/mains-answers/anthropology-gs-1/2025/how-political-economy-is-integrated-with-ecological-and-adaptability-perspectives-in-bio-cultural-anthropology/> · ask@wrapexams.com · wrapexams.com