

1. **What are the important findings of Global Burden of Disease study with respect to India? Discuss the significance of its findings to policymaking in health sector for Indian states. (250 Words)**

**Answer:**

Global Burden of Disease study chart the changing patterns of disease-related death and disability from 1990 onwards.

Health status of populations across the world changes over time in response to socio-economic, demographic, nutritional, scientific, technological, environmental and cultural shifts. Such health transitions have been especially profound in the past half-century due to sweeping industrialisation, rapid urbanisation and relentless globalisation in most parts of the world.

**Results of the finding**

**Positives**

**1. Life expectancy at birth improved**

Life expectancy at birth improved in India from 59.7 years in 1990 to 70.3 years in 2016 for females, and from 58.3 years to 66.9 years for males.

**2. Per person disease burden decreased**

The per person disease burden, from all causes, dropped by 36 per cent in the same period.

**3. Under five mortality rate reduced**

The under-five mortality rate has reduced substantially in all states in these 25 years.

Despite a decline from 1990 levels, child and maternal malnutrition remains the single largest risk factor, contributing to 15 per cent of the disease burden in 2016.

With its under-five mortality six times higher than Sri Lanka and burden of child and maternal malnutrition 12 times higher than in China, India has wide gaps to bridge.

**4. Communicable and other diseases burden decreased**

Communicable, maternal, neonatal, and nutritional diseases contributed to 61 per cent of India's disease burden in 1990. This dropped to 33 per cent in 2016.

**5. Sanitation related diseases decreased**

The disease burden due to poor water and sanitation decreased in these 25 years, but the per capita burden due to these factors is 40 times that in China.

**Negatives**

**1. Rise in non communicable diseases**

The share of non-communicable diseases in the disease burden increased from 30 per cent in 1990 to 55 per cent in 2016

**2. Non uniform distribution of diseases across states**

Life expectancy of women in Uttar Pradesh is 12 years lower than that of women in Kerala, while the life expectancy of men in Assam is 10 years lower than that of men in Kerala.

In disease burden per person, there is almost two-fold difference between the states in 2016, with Assam, Uttar Pradesh, and Chhattisgarh having the highest rates, and Kerala and Goa the lowest rates.

There was a four-fold difference in under five mortality rate between the highest, in Assam and Uttar Pradesh, as compared with the lowest in Kerala in 2016.

States in early stages of the health transition were coping with both the persisting challenge of infectious, nutritional and pregnancy-related health threats and the rising magnitude of non-communicable diseases. States in the advanced stage of the transition were grappling largely with non-communicable disorders.

**3. Past diseases threats not solved fully**

Five of the 10 individual leading causes of the disease burden in India in 2016 are a carry-over of past threats: Diarrhoeal diseases, lower respiratory infections, iron-deficiency anaemia, neonatal pre-term birth, and tuberculosis.

**Significance for states**

As health is a state subject and this kind of studies data reflects the varying efforts put on by state governments. The states like UP, Orissa, Jharkhand are lagging behind on various dimensions

This study help the central government to channel more funds towards the states where disease burden is more.

Study also links parameters like sanitation with diseases thus it contends for schemes aiding each other for example Swatch Bharat can help reduce infant mortality rate

Thus the report contends for large gaps on the health sector to be filled by the government to bring it at par with global standards and achieving sustainable development goals

## **PRACTICE QUESTIONS**

**Answer the following Questions**

1. What is DNA bar-coding? Discuss their applications, especially in conservation.
2. What are bio-toilets? Are they effective in managing sanitation problem in trains? Examine the alternatives that Indian railways can explore.