

**INTRODUCTION:**

- Understand the rationale for overall human development in our country, which includes the rise of income, improvements in health and education rather than income.

**INCOME AND OTHER CRITERIA**

- When we looked at individual aspirations and goals, we found that people not only think of better income but also have goals such as security, respect for others, equal treatment, freedom, etc. in mind.
- Similarly, when we think of a nation or a region, we may, besides average income, think of other equally important attributes.

Category of a Person	Development Goals Aspiration
Landless rural labourers	More days of work Better wages, Social and economic equality, Low price foodgrains
Rich farmer	Cheap labour, Higher price for their produce, Cheap inputs like seeds machinery, etc.
Trader	Infrastructure facilities, Less taxes, Cheap labour, High price for their products.

*Analysis:*

- Table 1.3 gives the per capita income of Haryana, Kerala and Bihar.
- We find that of the three, Haryana has the highest per capita income and Bihar is at the bottom.
- On an average, a person in Haryana earned Rs 1,62,034 in one year whereas, on an average, a person in Bihar earned only around Rs 34,168.
- This indicates employment status and scope of earnings is quite less in Bihar.
- So, if per capita income were to be used as the measure of development, Haryana will be considered the most developed and Bihar the least developed state of the three.

State	Per Capita Income for 2015-16 (in Rs)
Haryana	1,62,034
Kerala	1,55,516
Bihar	34,168

*Source : Economic Survey 2016-17, Vol. 2, p. A24.*

**TABLE 1.4 SOME COMPARATIVE DATA ON HARYANA, KERALA AND BIHAR**

State	Infant Mortality Rate per 1,000 live births (2015-16)	Literacy Rate %	Net Attendance Ratio (per 100 persons) secondary stage (age 14 and 15 years) 2013-14
		2011	
Haryana	36	82	61
Kerala	12	94	83
Bihar	42	62	43

Sources : Economic Survey 2016-17 Vol. 2, Government of India; National Sample Survey Organisation (Report No. 575)

**Explanation of some of the terms used in this table:**  
**Infant Mortality Rate (or IMR)** indicates the number of children that die before the age of one year as a proportion of 1000 live children born in that particular year.  
**Literacy Rate** measures the proportion of literate population in the 7 and above age group.  
**Net Attendance Ratio** is the total number of children of age group 14 and 15 years attending school as a percentage of total number of children in the same age group.

*Analysis:*

- IMR is lowest in Kerala (12) and Highest in Bihar (42). High IMR implies that healthcare facilities are poor in Bihar.
- Also High Per Capita Income as in case of Haryana doesn't guarantee for better healthcare facilities.
- Literacy Rate is highest in Kerala (94%) and lowest in Bihar(62%).
- Net Attendance Ratio is highest in Kerala (83%) and lowest in Bihar (43%).

**NOTE AND THINK**

- The year to which this data pertains is 2015.
- So we are not talking of old times; it is nearly 70 years after independence when our metro cities are full of high rise buildings and shopping malls!
- Thus, these aspects indicate that Per CapitalIncome is not the best criteria to decide development.
- Other basic facilities and quality of life also matter and must be properly counted for development.

## **PUBLIC FACILITIES**

- Money cannot buy all the goods and services that you may need to live well. So, income by itself is not a completely adequate indicator of material goods and services that citizens are able to use.
- For example, money cannot buy a pollution-free environment , unadulterated medicines, protection from infectious diseases, unless the whole of your community takes preventive steps.
- Actually for many of the important things in life the best way, also the cheapest way, is to provide these goods and services **collectively**. Like public facilities – schools, cleanliness, healthcare, etc.

### **A. Public Distribution System**

- In some states, like in **Tamil Nadu** the Public Distribution System (PDS) functions well. Here 75% of the people in rural areas use a ration shop for buying food grains. Health and nutritional status of people of such states is certainly likely to be better.
- Whereas in **Jharkhand** only 8% of rural people are benefitted by PDS, thus, affecting their health and nutritional status.

### **B. Education and Health care facilities**

- Kerala has a low Infant Mortality Rate because it has adequate provision of basic health and educational facilities.

### **C. Nutrition levels through Body Mass Index (BMI)**

- One way to find out if we are properly nourished (an international standard) is to calculate what nutrition scientists call Body Mass Index (BMI).
- BMI is used to determine whether an adult person is nourished or not.
- If we divide the weight of a person (in kg) by the square of his/her height (in metres), we get a ratio called BMI.

$$\text{BMI} = \text{Weight (in kg)} / (\text{Height in metres})^2$$

- Analysis of BMI:
  - a. If the BMI is below 18.5, the person is considered undernourished
  - b. If the BMI is over 25, the person is considered to be overweight (obesity).
  - c. If the BMI ranges between 18.5 to 25, the person is considered to be within the normal range.
  
- How to maintain a healthy BMI?
  - a. exercise at least 60-90 minutes most days of the week.
  - b. staying hydrated
  - c. eat a nutritious balanced diet
  - d. enough sleep
  - e. cut out high calorie drinks
  - f. Avoid random snacking
  
- Numerical - Example (3 steps to be followed)

Step 1: (Data given in question / conversion to particular units if required)

$$\begin{aligned} \text{Weight} &= 68 \text{ kg,} \\ \text{Height} &= 165 \text{ cm} = (165/100) = (1.65 \text{ m}) \quad [\text{Conversion to metres}] \end{aligned}$$

Step 2: Calculation:

$$\text{BMI} = \text{Weight (in kg)} / (\text{Height in metres})^2$$

$$= 68 \div (1.65 \times 1.65)$$

$$\text{BMI} = 24.98$$

Step 3: Analysis of BMI/ Nutritional status:

As the BMI calculated is 24.98, which ranges between 18.5 to 25, the person is considered to be within the normal range (neither undernourished nor overweight).

## Assignment

Q.1.

Study Table 1.5 carefully and fill in the blanks in the following paragraphs. For this, you may need to make calculations based on the table.

**TABLE 1.5 EDUCATIONAL ACHIEVEMENT OF RURAL POPULATION OF UTTAR PRADESH**

Category	Male	Female
Literacy rate for rural population	76%	54%
Literacy rate for rural children in age group 10-14 years	90%	87%
Percentage of rural children aged 10-14 attending school	85%	82%

- (a) The literacy rate for all age groups, including young and old, is \_\_\_\_\_ for rural males and \_\_\_\_\_ for rural females. However, it is not just that these many adults could not attend school but that there are \_\_\_\_\_ who are currently not in school.
- (b) It is clear from the table that \_\_\_\_\_ % of rural girls and \_\_\_\_\_% of rural boys are not attending school. Therefore, illiteracy among children in the age group 10-14 is as high as \_\_\_\_\_% for rural females and \_\_\_\_\_% for rural males.
- (c) This high level of illiteracy among \_\_\_\_\_ age group, even after more than 68 years of our independence, is most disturbing. In many other states also we are nowhere near realisation of the constitutional goal of free and compulsory education for all children up to the age of 14, which was expected to be achieved by 1960.

Ans.

- a) 76% , 54%  
15% males and 18% females
- b) 18% rural girls and 15 % rural boys  
10% for rural girls and 13% for rural boys
- c) 10-14 years

Q.2. The following table shows the proportion of adults (aged 15-49 years) whose BMI is below normal (BMI <18.5 kg/m<sup>2</sup>) in India. It is based on a survey of various states for the year 2015-16. Look at the table and answer the following questions.

State	Male (%)	Female (%)
Kerala	8.5	10
Karnataka	17	21
Madhya Pradesh	28	28
<b>All States</b>	<b>20</b>	<b>23</b>

Source: National Family Health Survey-4, 2015-16, <http://rchiips.org>

- (i) Compare the nutritional level of people in Kerala and Madhya Pradesh.
- (ii) (ii) Can you guess why around one-fifth of people in the country are undernourished even though it is argued that there is enough food in the country? Describe in your own words.

### Long Questions:

Q.3. Kerala, with lower per capita income has a better human development ranking than Haryana. Hence, per capita income is not a useful criterion at all and should not be used to compare states. Do you agree? Discuss.

Q.4. "Money cannot buy all the goods and services that one needs to live." Do you agree? Support your answer with suitable reasons and examples.

### Numericals:

Q.5. Rakesh is 150 cm tall and have weight of 40 kg. Find out his BMI and then analyse his BMI report.

Q.6. Sunita is a 25 year old woman who lives in a village. Her height is 1.45 m and weight is 36 kg, while her friend Nisha of the same age and height weighs 48 kg. Examine their nutritional condition.

Q.7. Priya weighs 68 kg and her height is 165 cm. Her BMI is 24.98. Analyse the statement.

