UNIT 26 POPULATION IN MUGHAL INDIA

Structure

26.0 OBJECTIVES

This Unit will enable you to know :

● the various estimates of population of Mughal India in 1601;

● the different methods of estimating pre-census Indian population;

● the average annual rate of population growth during the 17th-18th centuries;

● the size of urban population in Mughal India.

26.1 INTRODUCTION

As is well known, the Indian population statistics properly begin only with the census of 1872. For the Mughal Empire, there is practicallly absolute dearth of demographic data: Akbar is said to have ordered a detailed account of population, but its result have not come down to us. Even the **Ai'n-i Akbari** with all the variety of statistical information that it contains, offers no estimate of the number of people for the whole of Akbar's Empire or any part of it.

26.2 ESTIMATES OF POPULATION OF MUGHAL INDIA

It was, however, hard to rest content with an admission that a definitive demographic history of India from c. 1601 to 1872 is impossible. No phase of economic history can be studied without allowing for demographic factor. For pre-modern societies, population growth is often considered as a major index of economic growth. It is, therefore, legitimate to attempt estimating the Indian population on the basis of quantitative data of diverse kind that are available to us.

26.2.1 On the Basis of the Extent of Cultivated Area

Moreland made the first attempt to estimate the population with the help of the data of the **A'in-i Akbari**. He tried to determine the population of Northern India on the basis of the figures given in the **A'in**. This work gives figures for **arazi** (measured area) which he took to represent the gross cropped area. Comparing the **arazi** with the gross cultivation at the beginning of this century and assuming a constant correspondence between the extent of cultivation and the size of the population right through the intervening period, he concluded that from "Multan to Monghyr" there were 30 to 40 million people at the end of the 16th century.

For the Deccan and South India, Moreland took as the basis of his calculations the military strength of the Vijaynagar Empire and Deccan Sultanates. Taking a rather arbitrary ratio of 1:30 between the soldiers and civilian population, he estimated the population of the reign at 30 millions. Allowing for other territories lying within the pre-1947 limits of India but not covered by his two basic assumptions, he put the population of Akbar's Empire in 1600 at 60 millions, and of India as a whole at 100 millions.

These estimates received wide acceptance. Nevertheless, Moreland's basic assumptions (and therefore his figures) are questionable. For estimating the population of Northern India he makes the assumptions that (a) measurement was made of the cultivated land only; and (b) it was carried out by the Mughal administration to completion in all localities for which any figures are offered.

It has been shown on the basis of textual as well as statistical evidence that the **arazi** of the **A'in** was area measured for revenue purposes which included, besides the cultivated area current, fallows and some cultivable and uncultivable waste. Moreover, measurement by no means was completed everywhere.

Thus, Moreland's estimate of the population of Northern India loses much of its credibility. It is weaker still for Deccan and South India. The army: civilian ratio is not only arbitrary but undependable; the comparison with the pre-World War I France and Germany seems, in particular to be quite inept, since the military: civilian ratios maintainable in modern states and economies are so variable. Any of these can by no stretch of the imagination be used to set limits for the range of military: civilian ratios in pre-modern regimes in the tropical zones. This is apart from the fact that Moreland's count of the number of troops in the Deccan kingdoms was based on very general statements by European travellers.

However, Moreland has given inadequate weight to the areas outside the two regions. To make an appropriate allowance for these regions, Kingsley Davis raised Moreland's estimate for the whole of India to 125 millions in his book **Population of India and Pakistan**. This modification, reasonable insofar as it goes, does not, of course, remove the more substantial objections to Moreland's method indicated above.

In spite of the various objections to the estimates of Moreland, it still remains legitimate to use the extent of cultivation to make an estimate of population. The **arazi** figures of the **A'in** can provide the means of working out the extent of cultivation in 1601.

Making allowance for cultivable and uncultivable waste included in the **arazi** and establishing the extent of measurement in various parts of the Mughal Empire, Shireen Moosvi in her book **Economy of the Mughal Empire** has concluded that the area under cultivation in Mughal Empire in 1601 was about 55 per cent of the cultivated area in the corresponding region in 1909-10.

This estimate receives further reinforcement from the extent of cultivation worked out by Ifran Habib from a detailed analysis and comparison of the number and size of villages in various regions of the Empire in the 17th century and in 1881. Irfan Habib suggests that the area under plough in the 17th century was more than one-half but less than two-thirds of the ploughed area in 1900.

On the basis of the above mentioned analysis, Shireen Moosvi makes the following three assumptions:

i) The total cultivation in 1601 was 50 to 55 per cent of what it was during the first decade of the present century.

ii) The urban population was 15 per cent of the total and, thus, the rural population was 85 per cent of the total population.

iii) The average agricultural holding in 1601 was 107 per cent larger than in 1901.

She gives the estimate of the population of India in the 17th century as between 140 and 150 millions.

Another significant attempt to estimate population, by using different kinds of data was made by Ashok V. Desai. This required rather complex assumptions. Desai compared the purchasing power of the lowest urban wages on the basis first of prices and wages given in the A'in and, then, of all-India average prices and wages of the early 1960s. The yields and crop-rates given by Abul Fazl provide him with a means of measuring the total food consumption in Akbar's time which was 1/5th of what it was in the 1960s (cultivation was then concentrated in the areas with highest yields). He found that the productivity per unit of the area should have been 25 to 30 per cent higher in 1595 than in 1961. This in turn enables him to estimate the productivity per worker in agriculture at a level twice as high in 1595 as in 1961.

Basing himself on the statistics of consumption in the 1960s, Desai extrapolated the level of consumption in 1595 and found that the consumption level was somewhere between 1.4 and 1.8 times the modern level. He then proceeds to breakdown the average consumption at the end of the 16th century for each major agricultural item.

With these figures at hand and taking into account other relevant modern data, Desai worked out the area under the various crops per capita which he then multiplied by the revenue rates, to estimate per capita land revenue.

Dividing the total **jama** (which Desai treats as the total land revenue) by this estimated per capita revenue, the population of the Empire works out at about 65 millions which confirms Moreland's estimate.

Desai's assumptions and method have been criticised by Alan Heston and Shireen Moosvi. Heston's main objection is that the yields for 1595 have been overestimated. While Shireen Moosvi makes some more serious objections, namely, he used modern all-India statistics to compare with 16th century data. Since the prices and wages in the A'in are those of the imperial camp and, therefore, apply to Agra (and possibly to Lahore), it is surely inappropriate to compare these with modern all-India average. In the same way, the A'in's standard crop-rates applied either to the immediate vicinity of Sher Shah's capital, Delhi, or at the most to the region where the later **dastur-ul amals** (schedules of revenue rates) were in force, i.e., mainly Uttar Pradesh, Haryana and Punjab. These are thus not comparable to all-India yields. Moreover, Desai divided the total **jama** of the Empire by the hypothetical land-tax per capita without making any distinction between the **zabt** provinces (for which the various cash-revenue rates had been framed) and the other regions where the tax incidence might have been at a different level altogether. Another assumption of his which requires correction is that the **jama** was equal to the total land revenue whereas, given the purpose for which it was fixed, it could have only been an estimate of the net income from tax-realization by the **jagirdars** to whom the revenue were assigned.

Moveover, the pattern of consumption in Akbar's India was not comparable to that of 1960s because the Mughal Empire was mainly confined to wheat-eating region, and oil-seeds consumption could not possibly be as high in 1595 as in the 1960s.

Shireen Moosvi makes use of the basic method suggested by Desai but modifies his assumption for 1870s to meet the objections raised. She uses the data available for 1860-70 for purposes of comparison and extrapolations; first, working out the population for five provinces of Akbar's India that were under **zabt** and then assuming that the population ratio of these provinces to that of the Empire, and of the latter to the whole of India, have remained constant since 1601, estimates the population of Akbar's Empire at 100 millions and that of India (pre 1947 boundaries) at 145 millions.

Check Your Progress 1

1) Discuss the objections raised against Moreland's methodology of the estimation of population of the Mughal Empire.

....

....

....

....

....

2) Critically analyse Ashok Desai's methodology to estimate population in Mughal India.

....
....
....
....
....

26.3   AVERAGE RATE OF POPULATION GROWTH

Taking the population of India to be around 145 millions in 1601 and 225 millions in 1871—this being the total counted by the first census of 1872 (as modified by Davis to allow fuller territorial coverage), the compound annual rate of growth of the country's population for the period 1601 to 1872 comes to 0.21% per annum. Adopting this rate and given the two population figures for 1601 and 1872, one gets for 1801 a population of some 210 millions. This offers a welcome corroboration of our estimates: the most acceptable estimates for 1801 based on quite different arguments and calculations range from 198 millions to 207 millions.

The rate of population growth during the last three decades of the 19th century (1872-1901) was 0.37 per cent per annum—a rate higher than the one we have deduced for the long period of 1601-1801, but not in itself a very high rate of growth.

26.3.1 Comparison with Contemporary Europe

The accompanying Table gives population growth rates (compound) calculated from estimates of European countries drawn from a well-known text book of European economic history.

	1600-1700
Spain and Portugal	0.12
Italy	0.00
France	0.08
British Isles	0.31
Germany	0.00
Switzerland	0.18
Russia	0.12
Total	0.10

These estimates show that compared to the European demographic experience, the Mughal Empire was by no means exceptionally sluggish in raising its population. The rate of 0.21 per cent on the contrary suggests an economy in which there was some room for 'national savings' and net increase in food production, although the growth, on balance, was slow. The slowness must have come from natural calamities like famines as well as man-made factors (of which the heavy revenue demand could have been one). If one had data for estimating populations of some intermediate points, such as the year 1650 and 1700, one could perhaps have worked out the rate of population growth for shorter periods and obtain a closer view of the efficiency of Mughal economy within those periods. Such estimates would have been helpful, too, in indicating whether the rate of population growth in the 18th century (period of the dissolution of the Mughal Empire) signified any different movement in the economy than the one for the 17th century (the classic period of that Empire).

26.3.2 Implications of the Rate of Growth

An overall annual rate of growth of 0.2 per cent for the period 1601-1801 suggests some interesting inferences about the Mughal Indian economy. If population growth is regarded as an index of the efficiency of a pre-capitalistic economy, the Mughal economy could not be deemed to have been absolutely static or stagnant for the population tended to grow between 36 and 44% in two hundred years. Davis, on the basis of arguments that have been heavily criticised, believed in a stable population of 125 millions continuing for practically through the two hundred years from 1601 to 1801, thus yielding a zero rate of growth.

8

26.4 COMPOSITION OF THE POPULATION : RURAL AND URBAN

There is again no direct data about the proportion of urban population. Ifran Habib has made an attempt to estimate urban population on the basis of the pattern of consumption of agricultural produce. The Mughal ruling class tended to lay claim on one half of the total agricultural produce, but all of it was not taken away from the rural sector. Assuming that about a quarter of the total agricultural produce was reaching towns, and, making allowance for the higher ratio of raw material in the agricultural produce consumed in the towns, he assumes the urban population to be over 15 per cent of the total population.

Estimated Population in Various Towns

Nizamuddin Ahmad in his **Tabaqat-i Akbari** (c. 1593) records that in Akbar's Empire there were 120 big towns and 3,200 townships. Taking the total population of Akbar's Empire to be nearly 100 millions and the urban population as 15 per cent of it, the average size of these 3,200 towns works out at about 5000 each. However, in the Mughal Empire there were quite a few big towns. The European travellers provide estimated population of some major cities as follows :

Town	Year	Estimate
Agra	1609	500,000
Delhi	1659-66	500,000
Lahore	1581	400,000
Thatta	1631-35	225,000
Ahmedabad	1663	100,000–200,000
Surat	1663	200,000
Patna	1631	200,000
Dacca	1630	200,000
Masulipatam	1672	200,000

Check Your Progress 2

1) Comment on the rate of growth of population of the Mughal Empire. Does it reflect a stagnation in the Mughal economy?

   ....

   ....

   ....

   ....

   ....

2) Discuss the pattern of urban population in Mughal India.

   ....

   ....

   ....

   ....

   ....

26.5 LET US SUM UP

Moreland did the pioneering work in analysing population estimate of Mughal India. He used land:man and civilian: soldier ratios to estimate the then Indian population. But, his methodology carries two major flaws :

i) during the reign of Akbar measurement was not complete;

ii) the military: civilian ratio used to analyse the population of the Deccan kingdoms is those of modern states.

Ashok Desai made use of average prices and wages and on that basis he worked out per capita area under various crops during the reign of Akbar and multiplied it with current revenue rates to estimate per capita land revenue and then divided this estimated per capita revenue by the total **Jama** of Akbar's period; this yielded the total population of the Mughal Empire. But his methodology is also questioned by scholars. Shireen Moosvi modified Ashok Desai's methodology to meet the objections raised. She puts the population of Akbar's Empire at 100 millions and that of India at 145 millions. Interestingly, if one compares the growth of the 16th century population of India with other European countries one finds that the growth rate of Indian population was in no way sluggish. Indian economy, thus, was not absolutely static.

26.6 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1) See Sub. sec. 26.2.2. Discuss that Moreland has used land : man and civilian : soldier ratios to estimate the population. However, there are major flaws in his methodology. Critically examine them.

2) See Sub. sec. 26.2.3. Discuss the methodology adopted by Ashok Desai to estimate the population and mention the objections raised by scholars over his methodology.

Check Your Progress 2

1) See Sub. sec. 26.3.1, 26.3.2. Compare the population of India in the 17th century with the rate of growth of population in European countries. Analyse that the growth rate was in no way stagnant. This was sign of developing economy.

2) See Sec. 26.4.