Question:

A washing machine manufacturing company wants to enter the Indian Market. Estimate the number of washing machines they would sell, assuming their market share to be 2%?
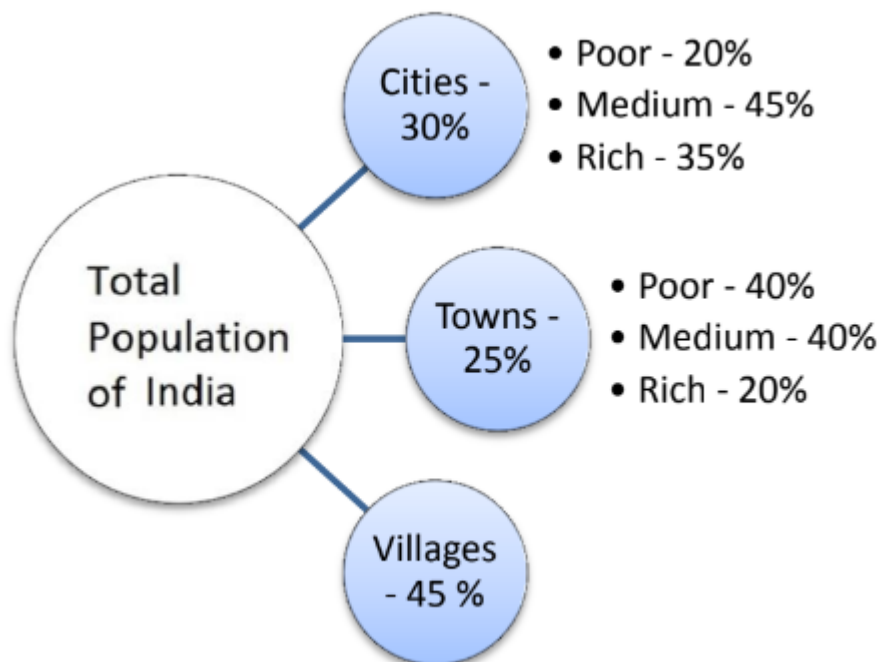
Solution:

Simple Guesstimation. Should be proceeded from the demand side, for simplicity reasons.
Major users: Household and other small scale Commercial users (Very small ratio.)

Estimating the number of Machines:
Total Population: 120 crores.
Population Distribution Cities: 30 % Towns: 25% Villages: 45%
(Assumption based on the recent information from the latest Indian Demographics.)

ASSUMPTIONS:

1. Every family has on an average 4 members.
2. In Villages : 1/100 families have washing machines.
3. In Cities:
    a. Poor : 20% - 1/50 families have washing machines.
    b. Medium : 45% - 4/5 families have washing machines.
    c. Rich : 35% - 1/1 families have washing machines
4. In Towns:
    a. Poor : 40% - Minimal
    b. Medium : 40% - 1/5 families have washing machines.
    c. Rich : 20% - 4/5 families have washing machines..

Total number: (Calculating from the above data) 8.37 crores washing machines in India.

Average age of a washing machine – 8 years
Market Share – 2 %
Therefore, Total washing machines sold = 8.37*(1/8)*(2/100) = 2.09 lakhs

Now this is the number machines sold to the customer sold to the customers who actually came to replace their washing machines,

Calculating the number of washing machines sold to the customers who purchased washing machines for the first time:-

Average Growth rate of Market :- 10 %
Therefore, New customers = 0.837 crores
Market share = 2%
Therefore, Washing machines sold to new customers = 1.67 lakhs

Therefore, total machines sold = 2.09 + 1.67 = 3.76 lakhs