

## Per capita demand

- If 'Q' is the total quantity of water required by various purposes by a town per year and 'p' is population of town, then per capita demand will be

- Per capita demand = 
$$\frac{Q}{P \times 365}$$
 litres/day

- Per capita demand of the town depends on various factors like standard of living, no. and type of commercial places in a town etc.
- For an average Indian town, the requirement of water in various uses is as under-

Domestic purpose ----- 135 litres/c/d

Industrial use ----- 40 litres/c/d

Public use ----- 25 litres/c/d

Fire Demand ----- 15 litres/c/d

Losses, Wastage and thefts ----- 55 litres/c/d

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Total : 270 litres/capita/day

## Factors affecting per capita demand

- **Size of the city:** Per capita demand for big cities is generally large as compared to that for smaller towns .
- **Presence of industries-**
- **Climatic conditions-**
- **Habits of people and their economic status-**
- **Pressure in the distribution system-**

- **Quality of water:** If water is aesthetically & medically safe, the consumption will increase .
- **Efficiency of water works administration:** Leaks in water mains and services; and unauthorised use of water can be kept to a minimum by surveys.
- **Cost of water-**
- **Policy of metering and charging method:** Water tax is charged in two different ways: on the basis of meter reading and on the basis of certain fixed monthly rate.