



# Population- The increasing number & rising problems.

- Organisms belonging to a particular species inhabiting a definite area which can reproduce among themselves and produce fertile offspring is called population.
- Humans are the most intelligent animal among the species inhabiting the world. He has learnt the way in which he can protect himself from natural calamities, disease etc. This leads to undue increase human population.

## World Populations (Some important dates and figures)

- 11 July → Population crossed the 5.0 billion mark.
- 1995 → Population was nearly 5.6 billion.
- 12<sup>th</sup> October 1999 → Population crossed 6 billion.
- 11 July → World population day.

## Rapid Rise in Population

# Major Reasons for the rise in population over the past years are as follows.

3.



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|----------------------|----------------------------|
| Better Healthcare    | Large scale Immunisation   |
| Better Medical Aid   | More number of children    |
| Availability of food | Reaching reproductive age. |
| Improved Nutrition   |                            |

## Important terms related to population are as follows.

- Demography → Statistical study of human population with reference to size, density, distribution and other vital statistics.
  - Population Density: The number of individuals per square kilometre at any given time.
    - Birth rate: The number of live births per 1000 people population per year.
    - Death Rate: The number of deaths per 1000 people population (Mortality) per year.
    - Growth rate of population: The difference b/w the birth rate and the death rate.
      - When the birth rate exceeds the death rate, the population grows.
      - When the birth rate is lower than the death rate, the population declines.
    - Vital Index: The percentage ratio of natality and mortality in a unit population in a unit time is called the vital index.  
Formula for calculating vital index is:  
$$\text{Index} = \frac{\text{Natality}}{\text{Mortality}} \times 100$$
- Zero population growth: When the individuals added to the population

## Family Welfare

1. Family welfare is represented by an inverted red triangle.

2. Offices and hospitals with this symbol displayed are known as family welfare centres. These centres provide help or advice about family planning.

### Three aspects of family welfare are:

1. Family planning in terms of having a small family.
2. Total welfare of the small family, including the diet and nutrition of the child and the pregnant mother.
3. Subsequent care of children, such as immunization and oral rehydration therapy, to ensure the survival of young ones.

### Methods of contraception.

1. Hormonal Method	: Various hormones preparations comes in the form of tablets or pills commonly called contraceptive pills.
2. Barrier Method	<p>I. Condom Used by men, prevents sperm from being deposited in the vagina</p> <p>II. Diaphragm It is fitted deep in vagina, prevent the entry of sperm into the uterus</p> <p>III. Spermicides These chemicals are placed in the vagina near the cervix to kill the sperm.</p>