

Population Theory

Malthusian Population Theory:

- **Thomas Robert Malthus (1766 – 1834)**
- **Wrote “An Essay on the Principle of Population” in 1798 which described a forthcoming population catastrophe.**
- **It was quite revolutionary and controversial in his time**
- **His essay is often times described as pessimistic and barbaric, as it predicted nothing short of a catastrophe for the human race**

- **World population was then 0.9 BILLION**
- **World population has now grown to 7.6 BILLION.**

Malthus's Core Principles:

- **Food is essential for life**
- **Population increases faster than food supply**

Therefore, Malthus predicted that population would grow until it reached the limit of food supply, then there would be widespread poverty and famine.

Malthus recognized that:

Population, if left unchecked, will grow geometrically:

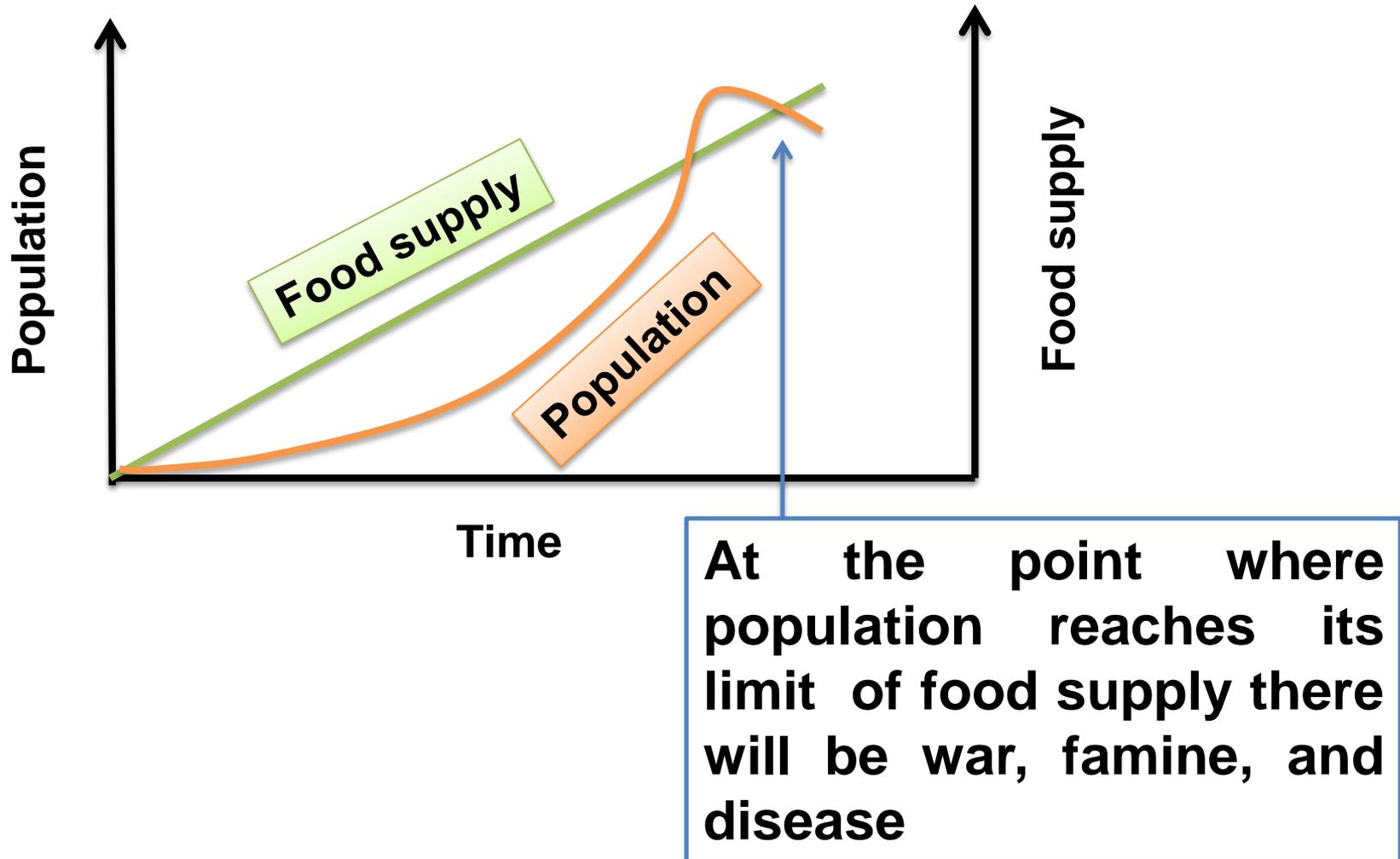
1 , 2. 4. 8, 16, 32, 64

**Whereas food supply increases arithmetically as
the amount of land is finite**

1, 2. 3. 4, 5, 8, 7

And therefore he said

..... there would be a Malthusian catastrophe:.



Malthusian Checks:

➤ **Malthus stated that once population reached this point. Checks would come into play to readdress the balance between population and resources:**

1. Positive checks – increased levels of misery (war, famine and disease)

2. Preventive checks – celibacy, later marriage. etc.

Preventive and Positive Checks:

Preventive Checks

- Infanticide
- Abortion
- Delays in marriages
- Strict celibacy

➤ Which all would lower the fertility rate

Positive Checks

- War
- Disease
- Famine

➤ Which would increase the mortality rate and reduce life expectancy

Was Malthus Right ?

Did his rather gloomy theory have any basis in truth? Critics argue that Malthus did not foresee the advancements mankind has made in technology and agriculture. So is his theory relevant to today's society?

Was Malthus Right ?

❖ Evidence to support Malthus:

- **There has been a population explosion**

- **Repeated wars and famines in Sahel region of Africa suggest population growth has outstripped food supply**

- **FAO says that more than 800 m people are chronically malnourished**

- **UN say that by 2050, 4.2 billion people will be living in areas that can not provide enough water for basic needs.**

But

❖ Critics say that Malthus did not allow for:

- **The development of new technology**
- **The opening of new land for cultivation (mainly in LEDW – Less Developed World)**

- **The development of irrigation systems which have allowed for increased yields**
- **The Green Revolution – widespread introduction of high-yield crop varieties, pesticides, fertilizers etc.**
- **The slowdown in population growth as countries develop economically and progress to the later stage of the DTM – Demographic Transition Model.**

Demographic Transition Theory /

Demographic Cycle:

The history of world population since 1650 suggests that the nation's population pass through different stages. Moving from one stage of higher birth rates and higher death rates to other stages of lower birth rates and lower death rates is called demographic cycle. This is a part of demographic transition and others involve changes in age-sex structure, urbanization and related demographic variables.

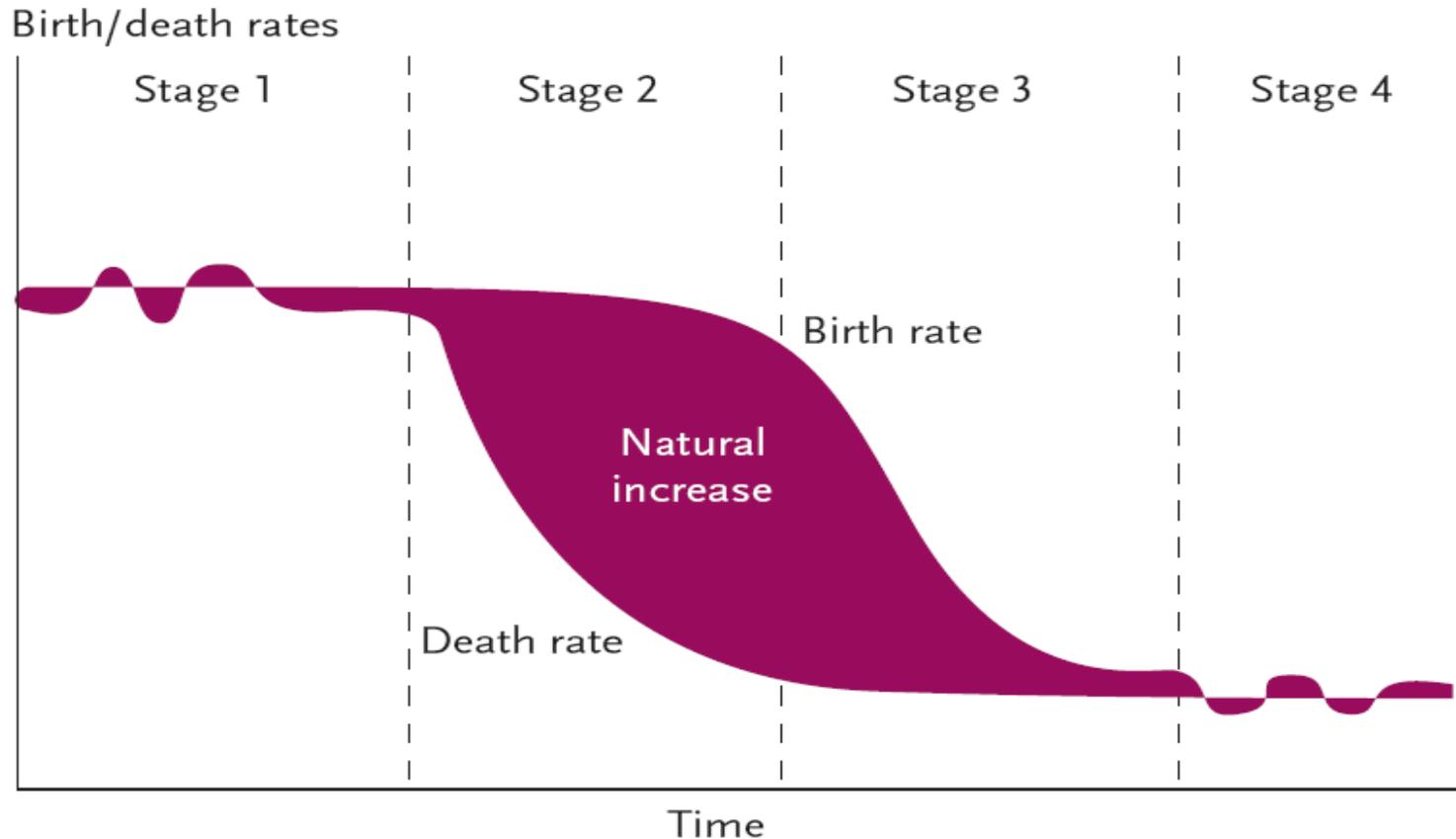
1. First Stage (High stationary)

The first stage is characterized by **a high birth rate, and a high death rate** which cancel each other and the population remains stationary.

2. Second Stage (Early expanding)

The **death rate begins to decline, while the birth rate remains unchanged**. This resulted in higher population growth rate. Birth rates have increased in some countries, in South Asia and Africa, possibly as a result of improved health conditions, and shortening period of breast feeding.

The Classic Stages of Demographic Transitions



Note: Natural increase or decrease is produced from the difference between the number of births and deaths.

From: Joseph A. McFalls, Jr. *Population: A lively introduction*, 5th ed, Population Reference Bureau *Population Bulletin*; 62(1), March 2007.

3. Third Stage (Late expanding)

The **death rate declines still further, and the birth rate tends to fall**. The population continues to grow because births exceed deaths.

4. Fourth Stage (Low stationary)

This stage is characterized by **a low birth and low death rate** with the result that the population becomes stationary. Zero population growth in Austria and growth rates as little as 0.1 in UK, Denmark, Sweden and Belgium were recorded during 1980-85.

5. Fifth Stage (Declining)

The population begins to decline because birth rate is lower than the death rate. Some countries notably Germany and Hungary are experiencing this stage. This is more of an exception than the rule.

❑ Falling death rates are due to better health facilities, nutrition and higher standards of living.

❑ Falling birth rates are due to social and economic changes. Some trend that followed along with this change include:

- **Women stay in school longer**
- **More women work outside the home**
- **Women marry later**
- **Women postpone childbearing**
- **People choose to have fewer kids**

For reference:

Review Questions: Malthus Population Theory

- 1. Describe briefly Malthusian population theory.**
- 2. Make comment on the validity of Malthusian population theory at the present situation of the world.**
- 3. What do you understand by preventive and positive checks in Malthusian population theory?**
- 4. Discuss briefly on the validity of Malthus population in Nepalese context.**

For reference:

Review Questions: Demographic Transition Model

- 1. What is demographic transition theory?**
- 2. How is demographic transition theory applicable in developed and developing countries?**
- 3. Do you think this demographic transition theory is applicable in case of developing countries like Nepal? Give reasons to support your answer.**
- 4. Write down all the stages of demographic cycle with explanation.**