#### EARTH'S CARRYING CAPACITY BARBARA A. EICHLER

- Worldwide population is increasing by 90 million people annually.
- What is population carrying capacity?
- It is an approach that many ecologists use to mark and provide a sustainable limit philosophy that measures needed ecological policy.
- Carrying capacity can be defined as the number of people the planet can support without irreversibly reducing its capacity or ability to support people in the future.

## THE REASON WHY ECONOMISTS TEND TO VIEW CARRYING CAPACITY WITH MORE FLEXIBILITY

- The reason why economists tend to view carrying capacity with more flexibility
- Economists tend to see carrying capacity with more flexibility due to technological and policy interventions so that the approach has a less fixed value.

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## THE FACTORS THAT ARE INVOLVED IN THE STUDY OF EARTH'S CARRYING CAPACITY:

- Food and energy supplies
- Ecosystem services such as provision of fresh water and recycling of nutrients
- Human capital
- People's life styles
- Social institutions
- Political structures
- Cultural constraints

# THE TWO POINTS THAT ARE INVOLVED IN DETERMINING CARRYING CAPACITY (THE STUDY OF CARRYING CAPACITY IS CLOSELY TIED WITH THE CONCEPT OF SUSTAINABLE DEVELOPMENT)

- Carrying capacity is ultimately determined by the component that yields the lowest carrying capacity.
- Human communities must learn to live off the interest of environmental resources

#### THREE PRINCIPAL STOCKS OF RENEWABLE ENERGY

- Forests
- Grasslands
- fisheries

### WORLD HUNGER PROJECT'S OBSERVATION WITH RESPECT TO FOOD PRODUCTION

• The planetary ecosystem could, with present agro-technologies and with equal distribution of food supplies, satisfactorily support 6.5 billion people if they all lived on a vegetarian diet. If 15% of the calories are to be derived from animal products, the total would decline to 3.7 billionif 25% of calories are derived from animal products, the earth could support only 2.8 billion people.

#### THE IMPORTANCE OF GREEN REVOLUTION

- Boosted agricultural production
- 2.6 fold increase in in world grain produce
- Raised per capita production by more than one third

## THE REASON FOR NOT HAVING UNIVERSAL AGREEMENT ON THE DEFINITION OF 'CARRYING CAPACITY

- Natural conditions, technology, consumption and distribution patterns are constantly in flux and therefore no universal agreement on the definition of carrying capacity.
- Human choices like lifestykes and environmental protection acts determine this.

#### EXPLICIT AND IMPLICIT PLANNING

- Explicit planning decisions by people
- Implicit planning by daily lives